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PUBLIC DOCUMENTS

OF THE

STATE OF WISCONSIN

BEING THE REPORTS OF THE VARIOUS

State Officers, Departments and Institutions,

For the Fiscal Term ending June 30, 1906.

VOLUME 2



MADISON

DEMOCRAT PRINTING COMPANY, STATE PRINTER

1907

PUBLIC DOCUMENTS

FOR 1905-1906.

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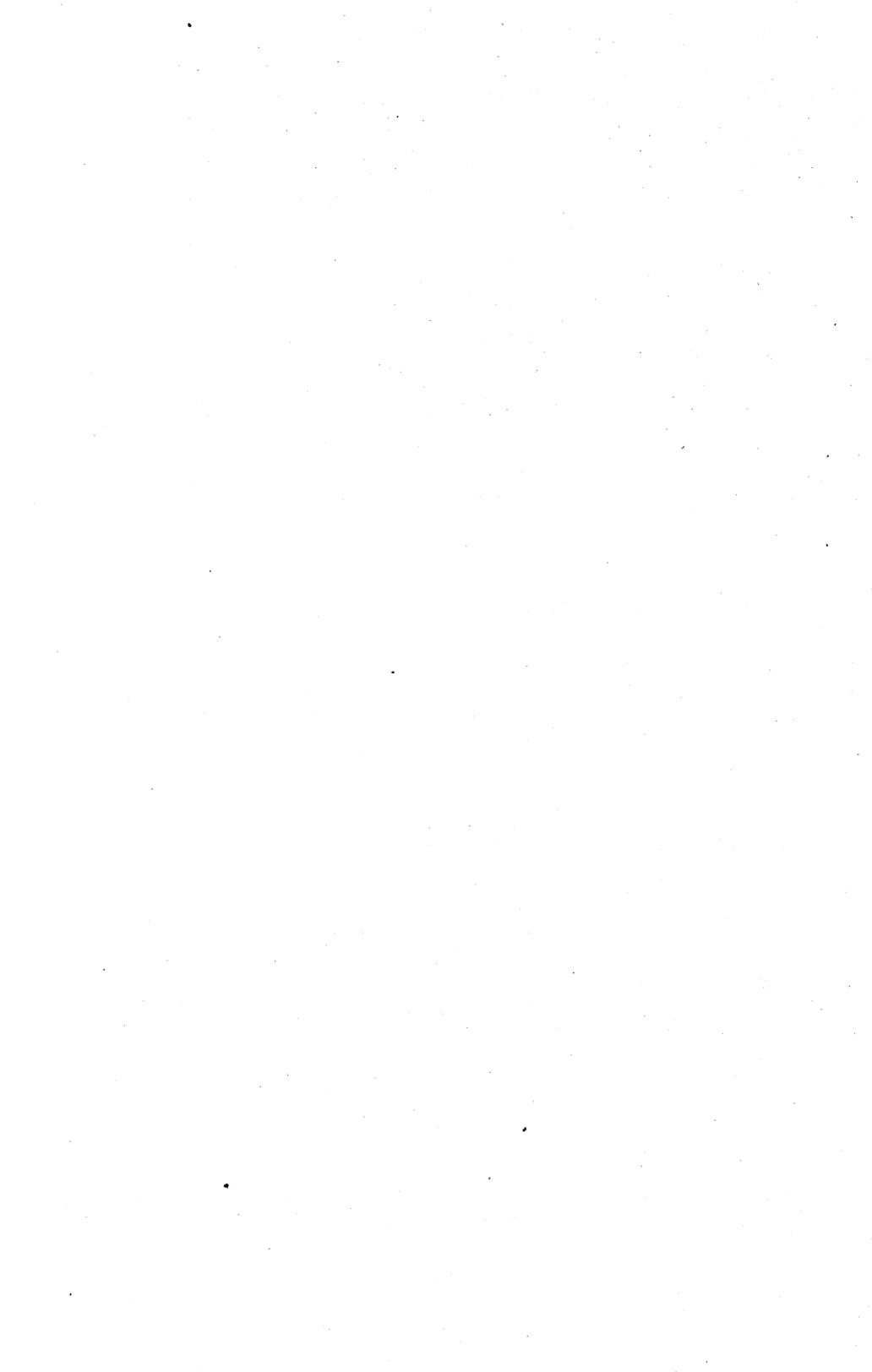
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BIENNIAL REPORT

And Special Report of Investigations Relating to
Back Taxes

OF THE

Railroad Commissioner

OF THE

STATE OF WISCONSIN

FOR THE

Fiscal Years Ending June 30, 1905, and December 31, 1906.



MADISON:
DEMOCRAT PRINTING COMPANY, STATE PRINTER
1906.

Personnel of Office:

JOHN W. THOMAS,	- - - - -	COMMISSIONER
SARAH A. GILBERT,	- - - - -	STENOGRAPHER
J. C. BRIDGE,	- - - - -	MESSENGER





TWELFTH BIENNIAL REPORT
OF THE
RAILROAD COMMISSIONER.

PART I.

General Report.

MADISON, WIS., December 1, 1906.

To His Excellency, JAMES O. DAVIDSON,
Governor of Wisconsin

SIR:—In accordance with Section 1795 of the Revised Statutes of Wisconsin, I submit herewith the twelfth biennial report of this department, from December 1st, 1904, to June 16th, 1905, at which time Section 1795 was repealed by transferring the power of this section to an appointive Railroad Commission, under the provision of Chapter 362, Laws of 1905. The only statistical matter contained in this report relates to the taxes paid by the several roads due February, 1905. Other statistical reports were not required to be made by the railroad companies until June 30th, 1905, at which time Chapter 362 was in force and, consequently, are to be reported by the State Board of Railroad Commissioners.

COMPLAINTS.

Complaints were made to the office from December 1st, 1904, until June 16, 1905, at the rate of about twenty-five per week.

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These complaints embraced nearly every form of railroad transportation, but probably complaints of shortage of cars predominated. Nearly all complaints were amicably adjusted. After June 16th, 1905, they were turned over to the Railroad Commission of Wisconsin. While complaints have continued to be directed to this office, they have been referred to that body with a few exceptions where the familiarity of the department with the existing conditions has warranted us in taking up the matter in behalf of the shipper where we knew a quick adjustment could be made.

NORTHERN SUPPLY COMPANY.

I would most earnestly call your attention to that part of my eleventh biennial report contained on pages ten to fifteen relating to the Northern Supply Company. Complaint was made to this department in June, 1904, by a county official of Polk County that an elevator company known as the Northern Supply Company had been able to run out all competition on the line of the Minneapolis, St. Paul & Sault Ste. Marie Railway in the state of Wisconsin, through their officials being identified, either officially, or by close relationship, with the officials of the railway company. This department, being elective, it was deemed its duty to investigate this question at once, without submitting it to the executive of the state, and the facts ascertained by such investigation were reported to your predecessor, but received no attention or consideration; hence its repetition in this report with renewed recommendation.

From the Congressional records it would appear that United States Senator, Robert M. La Follette, has asked for a public investigation of the elevator question by the Interstate Commerce Commission. From the standpoint of a United States Senator, there can be no doubt of the propriety of such an investigation, but this would not affect the conditions now existing in Wisconsin, or have any bearing on a company organ-

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ized as is the Northern Supply Company. The duty of this department is to give some relief to the producers who are so unfortunate as to be located on the line of the Minneapolis, St. Paul & Sault Ste. Marie road, and while I commend the action of Senator La Follette, I wish to call your attention to the fact that the Northern Supply Company is entirely a Wisconsin product, although there is no doubt that its main stockholders are residents of Minnesota or Canada at present. Every elevator, so far as I have been able to ascertain, is located in this state and if no interstate shipments are made, where is the Interstate Commerce Commission to give us any relief? Located on a line running direct from St. Paul to Canada, it is very easy to send shipments to Canada and rebill them to any point in the East where they have a market for them, or they could have an agent anywhere in the state of Wisconsin to whom they could be sent and rebilled direct on any other road as state shipments. The Interstate Commerce Commission would have no power over a local company that does not do interstate shipping. At present, the Northern Supply Company ships very extensively to the Eastern States. No doubt they make many shipments via Chicago, but their principal business is East over the Canadian Pacific road, and I would earnestly ask that Section 1840 be so amended as to include elevators, and let the state of Wisconsin test its authority in this matter as soon as possible.

EXTRACT FROM THE ELEVENTH BIENNIAL REPORT OF RAILROAD
COMMISSIONER.

“Complaint was made to this department that the Northern Supply Company, whose main office is located at Amery, Wis., was composed of officials of the Minneapolis, St. Paul & Sault Ste. Marie Ry. Company, and through their influence as such officials, had been able to practically run out all competition in the field where they operate. Section 1804 of the Re-

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vised Statutes of Wisconsin provides that no president, director, officer, agent or employe of any railway, freight, or transportation corporation company, shall be interested directly or indirectly in the (furnishing of supplies or materials to such corporations or in the) business of transportation of freight or passengers over the line owned, leased, controlled or operated by such corporations. Under this section, I deemed it the duty of this department to give this matter some consideration. On investigation, it was found that the Northern Supply Company was incorporated in 1898 by Henry B. Dyke, Paul Filzen, and John Langenbach. The present officers of the Northern Supply Company are, President, John Langenbach; Secretary, H. B. Dyke; Treasurer, S. L. Pennington. The capital stock is \$40,000, of which \$20,000 is paid up and is owned by Henry B. Dyke, Claim Agent and Assistant Solicitor of the M., St. P. & S. S. M. Ry. Co., S. L. Pennington, son of the 2d Vice-President and General Manager of this road, Mr. Patten, father-in-law of S. L. Pennington, and John Langenbach.

This corporation purchased all the elevators heretofore owned and controlled by Schneider & Filzen, which I understand amount to 15 or 20, all situated on the said line of railroad or its branches in the state of Wisconsin.

It is very clear that this Northern Supply Co. with its secretary also claim agent and solicitor of the railway company over whose line it does nearly all of its shipping, is in a position to get special rates or privileges that would not be granted a shipper who was not so closely associated with the officials of the railway company. There can be no doubt that a company so organized would be able to stifle all competition.

As soon as all the facts were ascertained in the matter, the question was submitted to the Attorney General in the following letter:

General Report.

HON. L. M. STURDEVANT,
Attorney General,

December 20, 1904.

DEAR SIR:—I would most respectfully ask your opinion as to the right and legality of any officer of a railroad company operating its line in this state to become a stockholder and one of the chief officers of a company operating a system of elevators which handles flour, feed, and all kinds of farm produce which are shipped over the line of road which he represents as a railroad official.

Yours very respectfully,
(Signed) JOHN W. THOMAS,
Railroad Commissioner.

HON. JOHN W. THOMAS,
Railroad Commissioner.

MY DEAR SIR:—Your communication of December 20th, 1904, asking for my opinion as to the right and legality of any officer of a railroad company operating its line in this state to become a stockholder and one of the chief officers of a company operating a system of elevators, which handles flour, feed, and all kinds of farm produce which are shipped over the line of road which he represents as a railroad officer.

In reply thereto, I call your attention to Section 1804 of the Wisconsin Statutes of 1898, which is, so far as I am aware, the only statutory provision which has any bearing upon the subject of your inquiry in this state.

It is provided by section 1804 as follows: "No president, director, officer, agent or employe of any railroad, freight or transportation corporation shall be interested directly or indirectly in the furnishing of supplies or materials to such corporation or in the business of transportation of freight or passengers over the lines owned, leased, controlled, or operated by such corporation. No officer of any railroad corporation shall be an officer of any other railroad corporation which owns or controls the parallel or competing line to be determined by jury; but this shall not apply to cases where one corporation becomes responsible for the liability of another, either by advances made or a guarantee of bonds previous to the first day of March, 1876, nor to any corporation which had prior to that date been authorized to purchase or hold stock in any other railroad corporation so far as thus authorized."

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For the purpose of determining the construction to be placed upon the above quoted statute, I have examined into the history of the enactment of the same, and I find that this legislation had its origin in Chap. 273 of the Laws of 1874, which chapter is entitled, "An act relating to railroads, express and telegraph companies in the state of Wisconsin," and is, in fact, an act to regulate the passenger and freight rates of the railroads then operating in the state, and for that purpose creating a railroad commission, consisting of three members. This act was amended two years later by the enactment of Chap. 57, of the Laws of 1876, entitled, "An act to amend Chapter 273 of the Laws of 1874, entitled, 'An act relating to railroads, express and telegraph companies in the state of Wisconsin,' and to repeal other sections and acts named therein."

Chap. 57 of the Laws of 1876 repealed the provisions with reference to the establishment of a railroad commission, consisting of three members, and provided for the appointment of a state officer, to be known as the Railroad Commissioner, and clothed such commissioner with certain duties and powers, therein enumerated. Chap. 57 of the Laws of 1876, like Chap. 273 of the Laws of 1874, was an act designed to regulate the management of railroad corporations in Wisconsin and the rates of transportation to be charged by such companies and to prevent discrimination.

It is provided by Section 8, of Chap. 57 of the Laws of 1876, as follows:

"No railroad corporation shall consolidate the stock, property or franchises of such corporation with, or lease or purchase the works or franchises of, or in any way control, any other railroad corporation owning or having under its control a parallel or competing line, nor shall any officer of such railroad corporation act as the officer of any other railroad corporation owning or having control of parallel or competing lines, and the question whether such railroads are parallel or competing lines shall when demanded by the complainant, be decided by a jury, as in other civil issues; provided, that the provisions of this section shall not apply to any contracts now existing where one corporation has become responsible for the liabilities of another, either by advances heretofore made, or by the guarantee of bonds previous to the passage of this act; nor shall it apply to any railroad corporation

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which, prior to the passage of this act, shall have been authorized to purchase or hold stock in any other railroad corporation."

Section 9 of Chap. 57 of the Laws of 1876, provides as follows:

"No president, director, officer, agent or employe of any railroad or transportation company shall be interested directly or indirectly in the furnishing of material or supplies to such company, or in the business of transportation as a common carrier of freights or passengers over the lines owned, leased, controlled or operated by such company."

Section 10 provides:

"In the construction of this act, the phrase 'railroad' shall be construed to include all railroads and railways operated by steam, and whether operated by the corporation owning them, or by other corporations, or otherwise. The phrase 'railroad corporation' shall be construed to mean the corporation which constructs, maintains, or operates a railroad operated by steam power."

It will be observed upon examination of the sections above referred to, that Sec. 1804, of the Wisconsin Statutes of 1898, is nothing more or less than a condensation of the provisions of Sections 8 and 9 of Chap. 57 of the Laws of 1876, and, so far as the construction to be placed upon Section 1804 is concerned, it is obvious that the same interpretation should be given to Section 1804 as was intended by the Legislature to be given to Sections 8 and 9 of Chapter 57 of the Laws of 1876. At the time of the passage of the act, provision was made in Sections 8 and 9 to meet conditions then existing concerning the relationship of certain railroad corporations in Wisconsin, and it was expressly provided that

"The provisions of this Section shall not apply to any contracts now existing where one corporation shall have become responsible for the liabilities of another," etc.

But it was evidently the legislative intention to prevent a recurrence of such conditions in this state by prohibiting in the future any railroad corporation from consolidating the stock, property or franchises of such corporations, or from leasing or purchasing the works or franchises, or in any way controlling

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any other railroad corporation owning or having under its control a parallel or competing line; and it seems clear that the legislative intention was to prevent the absorption of competing lines by other corporations, and thus insure compliance with the provisions of the act and prevent the discrimination in rates, the evident purpose being to secure to the public the advantages of competitive rates. And it is provided in said Section 8 that the question of whether or not any line of railway operating in this state which might be consolidated or in any way leased or controlled by another railroad company was or was not a competing line should be "decided by a jury as in other civil issues."

Further, to insure compliance with the conditions of the law, it was enacted, as provided in section 9, that "No president, director, officer, agent, or employe of any railroad or transportation company shall be interested directly or indirectly * * * in the business of transportation *as a common carrier* of freights or passengers over the lines owned, leased, controlled or operated by such company."

The phrase "as a common carrier" is significant as conveying the real intention of the Legislature which was evidently to provide against the accomplishment by indirect means, through the intervention of interested officials, that which the law had specifically forbidden to be accomplished by direct means, through the consolidation of stocks, or the leasing or controlling of competing lines. The phrase "as a common carrier" is eliminated in Section 1804, but it seems to me that the language of Section 1804 is capable of only such interpretation as would be given it at the time of the enactment of Chapter 57 of the Laws of 1876, when the legislative intention was more clearly and fully expressed.

There is a suggestion in your inquiry to the effect that, where officers or employes of a railway company are also the chief officers in a company operating a system of elevators which handles all kinds of farm products, which products are shipped over the line of road in which such officers are interested, there is a possibility through such relationship, that the public may be deprived, by discriminations made for the benefit of such officials or through their influence or direction, of the benefits which this legislation was designed to secure; but, inasmuch as the law in question was enacted with direct reference to com-

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mon carriers and, as subsequent legislation and amendment has in no way enlarged its scope, by suggestion or otherwise, I am of the opinion that the present law is not broad enough in its application to meet the conditions which you suggest. In other words, I do not think that the statute prohibits an officer in a railroad corporation from owning stock or being interested in an elevator company.

In the limited time which I have devoted to this investigation, I have been unable to discover any decision bearing directly upon the matter of your inquiry. Certainly there is no decision in Wisconsin which covers the case. If such conditions exist as above suggested, the matter should be brought to the attention of the legislature and the Statute made sufficiently comprehensive to meet the necessities of the case.

Yours very truly,

(Signed) L. M. STURDEVANT,
Attorney General."

In view of the Attorney General's rulings on section 1804, I would most earnestly recommend the amending of the present law so as to provide against railroad officials and employes becoming interested in elevator companies which have to do their business over the line of road with which they are connected

MAPS.

Under the provisions of section 1795 A, this department is required to publish 22,000 mounted maps and 3,000 unmounted maps of the state of Wisconsin.

Of the mounted maps, 12,230 are to be distributed equally among the members of the Legislature and 8,000 to be delivered to the Superintendent of Public Instruction, the balance to be distributed by this department. Previous to the issue of 1904, the cost of the publishing of the maps has always exceeded \$9,711.00. The issue of 1904 was let to the lowest bidder and cost the state \$6,110. The issue of 1906 was also let to the lowest bidder and cost \$5,750.00 delivered at the depot in the city of Madison. The demand for these maps is beyond the

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resources of the office to furnish and I would call attention to the fact that the life of a map in the school room should certainly cover a period of four years. As they are issued biennially, I can see no necessity of supplying the 8,000 to the schools every two years and I would recommend that they be furnished every four years and the alternate issue be given to the general public by any means the Legislature shall deem most economical to the state.

BRIDGES.

Several complaints were made relating to railroad bridges as follows:

Defective Bridges.

Of the safety of the bridges across the Nemadji River in Douglass County, a bridge over which heavy ore trains are run to the ore docks. This bridge crosses the river and a large deep valley and is some 1,400 ft. in length and from 40 to 50 ft. in height. An examination of the piling which supports the trestle developed the fact that nearly two-thirds of the timber was decayed and on notification of this fact, the Great Northern Railroad Company repaired the bridge by putting in all new piling so as to make it safe.

Overhead Obstructions.

Two complaints have been made of low bridges. Since the adoption of air-brakes, the different railroad companies have been somewhat negligent in keeping up what is known in railroad parlance as tell-tales. These tell-tales are a necessity where bridges are not high enough to allow a brakeman to stand on top of a freight car without endangering his life by coming in contact with the bridge timber overhead. This danger from a low-truss bridge has not been removed by air brakes and never will be as long as a brakeman is a necessity on a freight train, and the fact that many of the furniture cars are over 15ft.

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from top of rail to top of car, makes it quite important that some steps be taken to designate the minimum height of overhead obstructions, and I would recommend that some legislation be enacted requiring the standard height from the rail of all overhead obstructions of all bridges in the state to be 22 ft. and that tell-tales be maintained on all bridges not of standard height.

During the last inspection of bridges made by this department the engineer employed reported the bridges on the Wisconsin Central crossing Silver Creek and the White River, which were erected in the early 70s, inadequate for the traffic at the present time. These bridges are of iron and at the time of their erection were no doubt sufficiently strong and adequate to the traffic, but with the crystallization caused by time and exposure, and strain from constant use, they are not today equal to the increased traffic which has nearly doubled. While they are operated under the most rigid rules of controlled time, at the rate of less than 6 miles an hour, there probably is no danger, barring accidents, but an accident on either of these bridges would certainly result disastrously and it should be required that the new structure be completed during the coming season. A report to this office dated the 9th of November, 1906, states that the concrete arch of Silver Creek bridge was built in 1905 and the filling is now partly done, and the concrete arch at White River bridge was also built in 1905, but no filling has as yet been done. This structure is some 1500 ft. in length and is probably the longest structure of its kind on the road, and the filling should certainly be done the coming year as a bridge of this height and length, built in 1872, has passed its period of absolute safety.

TWO CENT PASSENGER RATE.

Owing to the fact that the several political parties in this state adopted in their party platform for the year 1904 a de-

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mand for a two-cent passenger rate, this department devoted some time to the study of that question previous to the enactment of chapter 362, Laws of 1905, which practically legislated it out of existence.

In considering the question of a two-cent passenger rate, it becomes apparent at once that it is necessary to divide the roads into two classes, the second class to comprise all new branches, all branches hereafter constructed, and such portions of the old branches as are not self-supporting. Roads of the second class should be transferred to the first class after a certain period, or at the option of the Railroad Commission.

To ascertain the earning capacity of the passenger business on the first or second class branches so established, or to be established, it would be necessary for the commission to demand annual or semi-annual reports from each station agent in the state of the total receipts for passenger tickets, conductors' collections, and mileage books, the latter only to be based on the net receipts to the company, all refunds being deducted; also the receipts from excess baggage and the revenue from carrying express. On divisions where the earnings, coupled with the receipts from the United States Government for carrying mail equal or exceed \$3,000 per mile, there can be no doubt of the reasonableness of a two-cent fare. In fact, such a rate would increase the earnings on some of the lines.

STATE, OR GOVERNMENT SUPERVISION OF BUILDING, OR REPAIRS
OF RAILROADS.

The state should assume some control over the building or repairs to railroads. Glancing back over the railroad problem, its growth is certainly surprising, considering the extent of the make-shifts that have been adopted in the building of some of the lines. In early days when a new road was contemplated, valleys and streams were followed to get away from any expense of grading and in the laying of rails and building of bridges, the future development or increase of traffic on the road

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was never considered. Anything suitable for the present needs was used. Some railway companies were more fortunate than others, because they were more far-seeing and looked to future development, but today, railroading in Wisconsin is still in its infancy, and the field for the professional promoter should be curtailed by requiring to be filed with the commission every detail in contemplation by a road, both steam and electric. There can be no doubt but that the interurban will be much used for short and light traffic, but on the main standard roads of Wisconsin, where the grades are reduced to 1%, the curves are straightened or spiralled, so that the traveller is not in danger of being thrown from his seat, the possibilities of the growth of the traffic are simply wonderful. One often meets railroad officials who say it is impossible to compete with lake navigation. Such men have never considered the question of future possibilities and do not know what the possibilities of railroad transportation are. With a straight track, at a grade not to exceed 1%, and cars of 80,000 lbs. capacity, a locomotive with six drivers with a bearing of 20,000 lbs. to the driver, can move with ease from three to four thousand tons. Today, 900 to 1,300 tons is considered a load on the average line of Wisconsin.

There is another reason why public supervision should assume authority. Many of the roads today have accumulated bonds or other indebtedness that show that the roads cost thousands and thousands of dollars when the actual bona fide cost of the roads is probably one-half.

Some of the roads have received large donations from the public. There is no evidence to show that the money was properly and legitimately used, or to what use it was put. Hereafter, the public donator should at least have the satisfaction of knowing that his money was used for the purpose he contemplated.

One of the lines operating in this state reported to this department the cost of construction and all equipment at something over \$47,000 to the mile. Running back over the ex-

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penses incurred in making up the \$47,000 we find discount on securities sold of an amount equal to over \$25,000 to the mile. Hence, the actual cost of this road was less than \$22,000 to the mile and it was not a makeshift road, the work on it being first class. These conditions, and many others, make it almost a necessity that some effort be made to stop the railroad promoter from squandering money in disposing of securities or building tracks and bridges with inadequate material which the safety of the public, with the ordinary traffic over the road, would require to be replaced in a very short time at five times the original cost.

There are many other reasons why some state supervision should be provided that the brevity of this report does not allow me to consider.

Respectfully submitted,

JOHN W. THOMAS,

Railroad Commissioner.

To the Hon. John J. Kempf, State Treasurer: Herewith find statement showing cost of each railroad, total gross receipts, total net earnings, the total interest bearing indebtedness, total mileage of railroads within the state of Wisconsin, all as reported to this department by the companies named below as of the year ending December 31, 1904 and being according to the provisions of Section 1795 Revised Statutes of Wisconsin 1898.

	Name of Company.	Total cost of railroad in Wisconsin. Dec. 31, 1904.	Total gross receipts of railroad in Wisconsin for year 1904.	Total net earnings of railroad in Wisconsin for year 1904.	Interest bearing indebtedness of railroad in Wisconsin. Dec. 31, 1904.	Interest accrued upon indebtedness of railroad in Wisconsin. Dec. 31, 1904.	Amount of interest paid upon such indebtedness. Wisconsin. Dec. 31, 1904.	Total miles of operated railroad in Wisconsin. Dec. 31, 1904.	Average amount earned per mile year ending Dec 31, 1904.	Rate of taxation for each railroad, year ending Dec. 31, 1904.	Amount of tax or license fee for the year ending Dec. 31, 1904.	No.
1.	Abbotsford & Northeastern	\$232,000 00	\$28,363 55	\$2,874 84	\$120,000 00	\$6,720 00	\$1,800 00	15 16	\$1,871 15	\$5 per mile & 2½ per cent.	\$216 46	1
2.	Ahnapee & Western	516,011 99	63,447 12	11,616 72	612,000 00	25,500 00	15,000 00	34 00	1,866 09	\$5 per mile & 2½ per cent.	481 18	2
3.	Big Falls Railway Co.		8,915 27	51 04	5,000 00	420 00	420 00	21 00	424 54	\$5 per mile.	105 00	3
4.	Bayfield Transfer	3,407,764 66	7,460 42	121 62	1,644,976 64	83,981 04	807 44	9 88	756 64	\$5 per mile.	49 30	4
5.	Chicago, Milwaukee & St. Paul	60,827,020 79	15,004,933 48	5,786,572 90	30,624,796 80	1,500,091 02	1,839,002 88	1,723 87	8,704 21	4 per cent. gross earnings.	600,197 46	5
6.	Chicago & Northwestern*	58,820,672 41	15,449,681 87	6,559,431 84	38,373,440 36	1,901,717 37	1,902,039 90	1,778 65	8,686 18	4 per cent. gross earnings.	617,987 26	6
7.	Chicago, St. Paul, Minneapolis & Omaha*	27,581,069 54	5,216,710 52	1,581,045 02	12,130,956 78	704,000 58	709,678 97	732 86	7,118 29	4 per cent. gross earnings.	208,668 42	7
8.	Chicago, Burlington & Quincy*	12,058,091 34	2,217,249 29	504,838 52	4,515,168 24		189,512 07	222 57	9,962 03	4 per cent. gross earnings.	88,689 97	8
9.	Chicago, Lake Shore & Eastern		74,858 58	195,287 20	130,000 00	7,800 00	7,800 00	18 19	4,115 37	4 per cent. gross earnings.	2,994 34	9
10.	Chicago & Lake Superior	54,000 00	4,555 95			668 57	668 57	3 00	1,518 65	\$5 per mile & 2½ per cent.	16 40	10
11.	Illinois Central	3,218,519 35	105,070 55	142,082 74	1,725,139 00	86,256 95	86,256 95	91 31	1,150 70	\$5 per mile.	456 55	11
12.	Chippewa River & Northern	20,350 00	15,766 76	11,112 76		200 00		24 00	656 95	\$5 per mile.	120 00	12
13.	Chicago, Harvard & Lake Geneva		9,826 67					5 50	1,786 68	\$5 per mile & 2½ per cent.	66 92	13
14.	Chippewa Valley & Northern	85,410 49	11,278 86	3,515 75	29,439 85	1,550 63		10 34	1,030 80	\$5 per mile.	51 70	14
15.	Drummond & Southwestern	199,411 10	16,752 69	12,202 89	50,000 00	3,000 00	3,000 00	21 72	771 30	\$5 per mile.	108 60	15
16.	Duluth, South Shore & Atlantic		289,959 87	13,328 76		157,035 65	157,035 65	112 15	2,585 46	3 per cent. gross earnings.	10,148 57	16
17.	Duluth, Superior & Western Terminal Co.											17
18.	Dunbar & Wausaukee	71,033 02	25,050 36	9,660 31				13 50	1,855 58	\$5 per mile & 2½ per cent.	187 51	18
19.	Fairchild & Northeastern	218,241 56	38,428 66	9,494 35			10,912 08	33 00	1,164 50	\$5 per mile.	165 00	19
20.	Great Northern		975,464 72					37 79	25,812 82	4 per cent. gross earnings.	39,018 59	20
21.	Green Bay & Western	10,100,000 00	589,256 95	78,446 14				225 00	2,618 92	3 per cent. gross earnings.	20,624 00	21
22.	Glenwood & Northern		9,153 70	1,781 29				14 00	526 60	\$5 per mile.	70 00	22
23.	Hawthorne, Nebagamon & Superior	151,804 31	52,614 34	2,343 87				30 50	1,725 06	\$5 per mile & 2½ per cent.	324 11	23
24.	Hazelhurst & Southeastern	108,634 91	19,130 17					11 00	1,739 10	\$5 per mile & 2½ per cent.	120 75	24
25.	Holmes & Son Railway							20 00		\$5 per mile.	100 00	25
26.	Iola & Northern	71,400 00	7,790 24	2,448 00				4 70	1,657 50	\$5 per mile & 2½ per cent.	42 00	26
27.	Kewaunee, Green Bay & Western	1,072,950 00	117,555 01	32,106 51	408,000 00	20,400 00	20,400 00	36 70	3,203 13	4 per cent. gross earnings.	4,702 20	27
28.	John R. Davis Lumber Co., Logging R. R.	30,750 00	1,531 50					20 50	74 70	\$5 per mile.	102 50	28
29.	Lake Superior Terminal & Transfer Ry. Co.	314,053 58	9,954 54	181,672 28	195,000 00	11,700 00	11,700 00	16 33	609 59	\$5 per mile.	81 65	29
30.	Mattoon Railway Co.	85,000 00	29,322 31	16,499 55	85,000 00	5,100 00		29 36	998 71			30
31.	Marquette, Tomahawk & Western	541,402 88	46,401 67		384,525 33	18,700 41	18,739 91	43 77	1,060 12	\$5 per mile.	218 85	31
32.	Minneapolis, St. Paul & Ashland	500,000 00	62,600 04	151,206 32	320,000 00	16,000 00		45 75	1,368 81	\$5 per mile.	228 75	32
33.	Minneapolis, St. Paul & Sault St. Marie	15,113,766 12	1,677,688 05	775,909 10	10,159,749 10	389,912 28	389,912 28	345 02	4,862 59	4 per cent. gross earnings.	67,107 52	33
34.	Northern Pacific		562,360 03	90,157 07				134 56	4,179 25	4 per cent. gross earnings.	22,494 40	34
35.	Northwestern Coal Ry. Co.	237,663 13	17,689 54	327 65	220,000 00	1,833 33	9,166 67	8 00	2,211 19	3 per cent. gross earnings.	530 68	35
36.	Oshkosh Transportation Co., operated by C. & N. W.	70,000 00	10,156 50	6,604 63				4 18	2,429 78	3 per cent. gross earnings.	304 70	36
37.	Robbins Railway Co.	16,017 32	16,867 81	850 49				33 50	503 52	\$5 per mile.	167 50	37
38.	Stanley, Merrill & Phillips	510,104 57	115,290 56	33,195 29	488,000 00	19,865 80	12,615 80	40 05	2,878 66	3½ per cent. gross earnings.	4,035 17	38
39.	West Range, (not operated)							7 00		\$5 per mile.	35 00	39
40.	Winona Bridge Ry. Co.	413,832 43	13,207 98	10,584 05	201,331 20		10,105 88	0 54	24,459 22	4 per cent. gross earnings.	528 32	40
41.	Wisconsin & Michigan	1,603,690 83	133,684 55	15,702 19	545,238 00	24,433 48		67 80	1,971 75	\$5 per mile & 2½ per cent.	1,138 61	41
42.	Whitcomb & Morris	10,834 40	3,325 91	179 09				6 00	554 32	\$5 per mile.	30 00	42
43.	Wisconsin Central	47,450,857 48	5,470,812 55	1,770,561 15	24,294,226 20	1,005,788 03	1,007,213 75	841 29	6,502 89	4 per cent. gross earnings.	218,832 50	43
44.	Wisconsin Western (successor to Kickapoo V. & N.)	521,400 00	67,407 62	28,847 02				51 97	1,297 04	\$5 per mile.	259 85	44
45.	Tony & Northeastern		1,540 50					2 20	700 00	\$5 per mile.	11 00	45
46.	Bayfield, Lake Shore & Western		1,967 14					15 86				46
47.	Mineral Point & Northern		2,006 87					26 40				47
48.	Laona & Northern	100,996 06	14,441 92	2,730 16	46,358 14	2,380 00	2,380 00	13 00	1,110 92	\$5 per mile.	65 00	48
49.	Hillsboro & N. E.	59,437 00	10,202 52	5,000 00	16,000 00	800 00	800 00	4 60	2,217 93	3 per cent. gross earnings.	306 08	49
50.	Marathon Co. Ry.	8,213 45	8,431 50	218 05	4,640 67	182 81	182 81	14 00	543 97	\$5 per mile.	77 50	50
	Totals	\$240,911,558 42	\$48,634,391 92	\$17,025,353 68	\$127,308,986 31	\$5,996,037 95	\$6,407,171 61	7,022 05			\$1,912,267 87	

* Proportional Except for gross earnings.
† Deficits.
‡ Leased.

Investigation Relating to Back Taxes.

PART II.

Report of Investigation of Railroad Commissioner,
J. W. Thomas, Relating to Back Taxes, Under
Section 431, Laws of 1903.

December 1, 1906.

To His Excellency, JAMES O. DAVIDSON,
Governor of Wisconsin.

SIR:—In accordance with section 431, laws of 1903, I submit herewith a report of the results of the investigation made by the department under the provisions of said section. Section 431, laws of 1903, became effective May 29, 1903. After this some time was spent in a careful study of the questions involved, before beginning the actual examination. During this time many shippers were interviewed by representatives of the department to obtain, if possible, information that would aid in the work. Before the investigation was begun, it was found that discriminations, in violation of the provisions of the law, were common and had been for many years. It was further found that favored shippers in various parts of the state had been, and still were, in receipt of rebates. Certain shippers, who had received such rebates, had become dissatisfied, because they feared their competitors were being favored to a greater extent than they were.

After completing the inquiry among the shippers, two expert accountants were employed; and began work at the general offices of the Chicago, Milwaukee & St. Paul Railway Co. on the 29th day of September, 1903, and were instructed to make a full examination of the books and records of the company, with

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a view of ascertaining what rebates or refunds had been made to shippers in violation of any published tariffs, rules, or regulations, and then deducted from its gross earnings before the same were reported for taxes, and also to ascertain if the company had failed to report any portion of its earnings that could be properly considered as gross earnings.

Instructions were issued to the accountants to take into consideration all refunds paid to shippers where such refunds made the rates less than the regular published tariff, rules, or regulations in force at the time of shipment, but to allow refunds as follows:—

On account of charity.

On account of personal courtesies (not affecting the commercial community) extended by railway officials to their relatives and friends.

On account of overcharges, errors, mistakes, accidents, misfortunes, bankruptcies, etc.

On account of "concentration" of products when such concentration rates were sufficiently published by the use of printed tariffs, rules, or circulars.

On account of municipalities, when the transactions were of direct public benefit.

On account of redemption of mileage book "covers" of interchangeable mileage credentials. (This is a considerable item in the consideration of passenger earnings, and the reason for its designation as a proper and legitimate charge to gross earnings is that the public is fully informed and cognizant of the conditions governing the issue of such transportation.)

On account of "milling and manufacturing in transit" when provided for by a regular published tariff, so the general public has full knowledge of the same.

After hurriedly checking over the books, records and vouchers for the year 1902 on the C., M. & St. P. Ry., the C. & N. W., W. C., C. St. P. M. & O, and the M., St. P. & S. S. M., it was found that on all of these roads the state had been deprived

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of a large amount of taxes and that the department had undertaken a work which would require a larger force, if the results desired were secured within a reasonable time. Therefore, two more accountants were employed and commenced work at the offices of the Chicago & North Western Ry. Co.

The several railway companies have treated the accountants with every courtesy, furnishing them with suitable office accommodations and with the books of record required, relating to the investigation of the deductions from gross earnings, and furnished all vouchers for which request was made.

The investigation covered a period of ten years, beginning with the year 1903 and working back to and including 1894, on the Chicago, Milwaukee & St. Paul, the Chicago & North Western, the Chicago, St. Paul, Minneapolis & Omaha, and the Minneapolis, St. Paul & Sault Ste. Marie.

On the Wisconsin Central, the Green Bay & Western, the Kewaunee, Green Bay & Western, the Duluth, South Shore & Atlantic, the Chicago, Burlington & Quincy, the Chicago, Burlington & Northern, the Great Northern, and the Northern Pacific, the examination covered a period of seven years; viz., from 1897 to 1903 inclusive.

The investigation of the books and records of the following roads was made and no illegal deductions from earnings before reported for taxes were found:

Fairchild & North Eastern.

Dunbar & Wausaukee.

Iola & Northern.

Ahnapee & Western.

Northwestern Coal Railway.

Hawthorne, Nebagamon & Superior,

The department was unable to get for examination any vouchers on the Wisconsin & Michigan Ry.

There has been found up to this date \$12,499,028.59 of gross earnings not included in the reports of the railroad companies

to the state treasurer. Properly classified, the several items are as follows:

AMOUNTS WRONGFULLY DEDUCTED FROM
GROSS EARNINGS BEFORE REPORTED
FOR TAXES:

Commissions and repayments to shippers.....	\$6,927,669 15
Commissions and repayments on passenger traffic.....	948,641 24
Expense of operating hotels.....	1,600 96
Expense of operating sleeping cars.....	13,728 91

AMOUNTS NOT REPORTED FOR TAXES THAT
ARE A PART OF GROSS EARNINGS:

Car mileage, credit balance.....	1,070,856 11
Switching charges collected.....	2,465,543 65
Storage, demurrage, and miscellaneous.....	165,304 09
Rental of tracks and terminals.....	905,684 48

Total	\$12,499,028 59
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A set of tables appended to this report will give these figures more in detail.

The Northern Pacific, Great Northern, and Duluth, South Shore and Atlantic have settled the taxes found against them. The Minneapolis, St. Paul and Sault Ste. Marie has paid in part. The sums paid by this road amount to \$6,601.37 itemized as follows:

SEPTEMBER, 1904—RECEIVED OF MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY COMPANY
SUMMARY OF WISCONSIN EARNINGS NOT REPORTED.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Car mileage	\$1,832 57	\$12,113 42	\$11,365 75	\$6,420 46	\$15,972 20	\$10,303 53	\$28,328 97	\$86,346 90
Sleeping car expense.....	1,311 23	1,701 06	1,693 07	1,507 62	1,627 80	2,083 65	.....	9,924 43
Ticket Com.	6,029 11	5,167 48	4,339 76	3,836 89	3,498 18	747 27	.....	23,618 69
Switching charges		3,116 25	3,102 15	2,673 46	3,633 68	1,614 37	556 92	14,696 83
Operating hotels				1,310 39	.....	.....	290 57	1,600 96
Drayage						1,812 56	48 31	1,860 87
Total	\$9,172 91	\$22,098 21	\$20,500 73	\$15,758 82	\$24,731 86	\$16,561 38	\$29,224 77	\$138,048 68
Taxes at 4 per cent.....	\$366 92	\$883 93	\$820 03	\$630 35	\$989 27	\$662 45	\$1,168 99	\$5,521 94
Interest from Feb. 10 to Oct. 3, 1904, at per cent	146 24	299 34	223 51	137,83	156 96	65 35	45 20	1,079 43
	\$513 16	\$1,183 27	\$1,045 54	\$768 18	\$1,146 23	\$727 80	\$1,214 19	\$6,601 37

REPORT OF THE RAILROAD COMMISSIONER.
 Investigation Relating to Back Taxes.

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REFUNDS ON ACCOUNT OF ALLEGED COMPETITION.

At first the department was inclined to allow refunds to meet "lake competition" and refunds at competitive points where one road had the long haul and wished to meet competing lines. After considerable work had been done, it was found beyond a doubt that the refunds made under the claim of "lake competition," and also to meet the lower rate of the short competing road, had not been given to all the shippers from these points and, therefore, the statutes forbidding discrimination had been violated. Competing roads were not agreed upon this question of boat competition. The officials of one of the large roads earnestly insisted that Lake Superior and Lake Michigan boat lines constantly threatened their business at reduced, and frequently changing rates of transportation, and that it is impossible for them to anticipate, by due publication of tariffs, the rates necessary to secure such traffic; while the officials of another equally strong road, which touches practically the same distributing points, maintained strongly that whereas the boats are regarded in every way as competitors, they are not as disturbing as rail lines for the reason that they are operating under tariffs and published schedules which they adhere to and their competition is fully and definitely known, is fully anticipated, and the business is protected by the publication of tariff rates of freight based thereon.

Some very large refunds were no doubt made because of the volume of the business and the favorable location of the shipper for competition between rival lines. This doubtless was the cause of the large refunds made to the Northern Grain Co. which will be taken up hereafter.

COMMISSIONS.

It has been the custom of many railway companies operating in Wisconsin to pay out each year large sums of money on vouchers which are designated as "Commissions." In most in-

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stances, the companies paying out these sums have deducted the amounts so paid from their reported gross earnings to the state treasurer. There can be little question but that these deductions are wrong and that the state is entitled to its percentage on the amounts so deducted. Where this course has been followed by the roads, the amounts so deducted have been included in the tables which form a part of this report. This department regards these payments as unfair discriminations between shippers. The beneficiaries have been lumber and coal merchants, paper and other manufacturers, refrigerator car owners, and owners of the so-called "industrial lines." The meaning of the term "industrial line" is probably known to every one who will read this report. It is generally but a system of side-tracks about the works of a large manufacturing company connecting with one or more main lines of railroad, and is built for the sole convenience of the manufacturing corporation and used exclusively for the freight of that corporation. These roads are not in a broad sense common carriers, and do no commercial business other than indicated. Generally they are organized and known by an independent corporation called a "railway company," but the stock of this corporation is invariably owned or controlled by the parent concern of which it is a component part and the "commission," or "re-division of through rate" paid to this so-called "railway" is only a rebate in disguise.

The Wisconsin proportion of gross earnings has been very materially reduced by commissions paid to the officials of other lines of railway, particularly those located in other states. Parties receiving such payments are designated by their proper official title, occupation and addresses on the voucher, but the receipt for such commission is given in their individual capacity, and not as representatives of the railway companies employing them.

Many of the vouchers for commissions are made to the General Freight Agents, General Traffic Managers, and subordi-

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nate freight officials of lines outside of Wisconsin. In such cases, there has been no difficulty in ascertaining to whom the sums were paid.

Other refunds are paid to large and favored shippers. The course followed has been for the shippers to pay the regular rate of freight, and at intervals, certain proportions of the amounts paid are refunded to them in accordance with a special private understanding.

The amounts are then deducted from the gross earnings and omitted from the total gross earnings reported to the State Treasurer. These refunds amount to illegal preferences to the shippers receiving them, and when they are deducted from the amount of gross earnings, reported to the state treasurer, the amount of taxes the state should receive is reduced. It is difficult to arrive at the exact facts of some of the transactions resulting in freight discriminations in the form of rebates, as the vouchers often give only a vague and meager statement of the facts. Sometimes they are very misleading. The accountants did not obtain absolute proofs of the illegality of many claims of recent date until their investigation led them back to the years 1897 and 1898 where similar payments were found to the same parties which were not so ingeniously worded as the more recent ones.

Refunds on logs and other raw material have been allowed as regular when covered by either general or commodity tariffs. They have been included in the report only when indications have proved beyond question that they were made to cover secret special rates to a shipper not allowed to his competitors. These refunds are no doubt frequently made for the purpose of getting business away from competing lines.

Switching, dockage and drayage are classifications that show preferential refunds to shippers of the charges indicated, mainly in the cities of Chicago and Milwaukee, but which largely affect the gross earnings properly belonging to Wisconsin. It should be clearly understood that switching charges included

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in this special classification, and which have been deducted from gross earnings before being reported to the state, are not covered under switching items elsewhere given in this report

DONATIONS TO NEW INDUSTRIES.

Under this head, nearly all the large roads operating in Wisconsin have made refunds.

Whatever justification there may be for the policy pursued by the companies for encouraging new industries on their lines of road, they certainly have no right to deduct any such donations from the gross earnings, upon which the license fee due the state is computed. The practice has been common with many of the roads.

COAL, LIME, CEMENT AND SALT.

Dealers in coal, lime, cement and salt have frequently enjoyed rates agreed upon much lower than the regular tariff rates. The published tariff rates have been collected from them, but the excess of such rates over those specially agreed upon has been refunded to them by voucher. All such transactions have been included in the aggregate of improper deductions. One large company received in one year upwards of \$32,000 as refunds on the shipment of one of these products.

EXPENSE OF OPERATING HOTELS AND SLEEPING CARS.

When hotels and lunch counters are operated by the railway company, the expense of their operation should not be deducted from gross earnings, but charged to operating expenses. The same is true of the expense of operating sleeping cars.

REBATES, ILLUSTRATIONS OF.

As an illustration adopted to cover discriminations in the nature of rebates, I quote from certain telegrams and letters

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which have come into my possession, during the investigation. These telegrams and letters are taken from the files of one of the leading lines doing business in the state, and they will explain themselves. Names and other identifying remarks are properly omitted, but they are otherwise verbatim. The first letter is addressed by the president of the shipping corporation to the general freight agent of the railway company, and reads as follows:

*“Dear Sir:—*Herewith send you invoice for a few cars of goods, shipped to, and last month. Very nearly all of the shipments were sold previous to receiving your notice that you would not allow any more rebates on these shipments, and there is still eight or nine cars on our books to go which were sold in the month of November. We have also figured our margins, on the mixed cars of stuff sold during last month so close that there is hardly anything left for us, and we thought by explaining the circumstances to you, that you would allow us the rebate, and in view of our talk last Sunday night in train, thought possibly you would be willing to give us the rebate on these several shipments made during the month of January.

Kindly let us hear from you,

Yours truly,

. Co.”

The records show that these rebates were paid. Other communications are as follows:

*“Dear Sir:—*Please relieve Agent to the amount of shipments made by ——— Co., billed prepaid as per expense bills attached. This is in accordance with arrangements made by the general manager and is to cover a subscription of \$500 made by this company toward building a new bridge at The Co. will pay the five hundred dollars and will bill out shipments prepaid until they are reimbursed, the total amount not to exceed \$500 00.

Yours truly,

.

Gen. Frt. Agt.”

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Mr.

Agent

DEAR SIR.—FOR your information I would state that we wish to have the rate on cooperage stock for 15c. There are some reasons why we do not wish to put in this tariff. Please bill all future shipments for via care of R. R., at the through rate of 17½c., showing in the prepaid column an amount equal to 2½c. per cwt. For instance, a car weighing 40,000 lbs, at 17½c. would be \$70 00, and you would show in prepaid column \$10. This would leave \$60 to be collected, which would be 40,000 lbs., at 15c. You will please send me at the close of each month a statement of the amount you are outstanding on account of the 2½c. billed prepaid, and your station will be relieved. In this way shippers will not be required to pay more than 15c. through. Kindly acknowledge receipt of this letter, stating that you understand.

Yours truly,

.....
Gen. Frt. Agt.”

“You will receive five cars of oats from on the Ry., account of the Co. They will instruct the shipment forwarded to points You will bill the shipment forward at regular rate from your station, rating 6½c. per cwt. prepaid on your WBs and make claim for relief of this amount in the usual manner.

(Signed)”

“..... Car 9370, oats from for Bill at regular rate of 16 and hold 12½ to and 4 beyond. Shows 7½c. per cwt. as prepaid, balance collect and make regular station claim for relief which is to be paid entirely by this Co.

(Signed)”

“Agent

W. Bill 58000 oats to, account Co., or Co. at regular tariff rate, showing 3½c. per cwt. prepaid. Make claim for relief on this account.

(Signed)”

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“Agent

Bill oats 17132 from account Co to
 at regular rate of 16½c. showing 6½c. prepaid and
 apply for relief, advising when due.

O. K.”

(Signed)

PASSENGER REFUNDS.

The same conditions that were found in the freight traffic exist in the passenger traffic. Commissions for business have been freely paid to agents and representatives of other lines. Refunds of considerable amounts paid for tickets, cash fares, and mileage books by large corporations and other commercial interests in Wisconsin, are not uncommon. The transportation in these cases was used and the service performed. Most of the vouchers for these refunds clearly indicate that the transportation was used by employes of persons and corporations whose names appear on the detailed report of repayments on account of freight. The refunds are a discriminating preference in favor of the parties to whom paid. The name of the account “tickets redeemed” is misleading and deceptive. It includes refunds and repayments that do not represent unused tickets. It is not descriptive of the account as the tickets were used and the service by the railways actually performed. Nevertheless, the money has been refunded, making the transaction equivalent to free transportation at the outset. During the recent years this account has been used to cover refunds of large sums to shippers, wholesale merchants and manufacturers as restorations to them of amounts paid by themselves and their employes for railway transportation.

TRANSFER OF PASSENGERS.

Tickets from Wisconsin to the East, through Chicago, cover the transfer from one station to another in Chicago without extra charge to the passenger. Nevertheless, the companies

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have been in the habit of deducting from their gross earnings the transfer company's charge for the transfer of the passenger. This department maintains that when a railroad company sells a through ticket, charging only the regular rate, it has no right to deduct from transportation so collected, any part of the operating expenses of carrying the passenger to the destination designated by his ticket.

DEMURRAGE.

Demurrage is a penalty imposed upon the shipper who delays a car in loading or unloading beyond a certain fixed period. Some of the roads have included this item in their reports of gross earnings, while other roads have omitted it. It is clearly a part of the gross earnings of the road.

CAR MILEAGE, CREDIT BALANCE.

Under the rules of the railroad companies when one company delivers a loaded car to another, it is entitled for the use of that car to a certain stipulated price per day, until it is returned. When such company receives a car from another company, it has to pay such company the same stipulated price until the car is returned to the owner. This is "interchange of cars," and the account kept thereof is termed "car mileage."

The supreme court of the state has held that where a company operating a road in this state receives more money from car mileage than it pays out to other roads for car mileage, the balance received should be included in its gross earnings. Several roads have reported no credit balance in car mileage to this department. According to their books they have paid out more than they have received and the balance appears in the form of a debit. Two companies operating in this state, owning their sleeping cars, reported the receipts from them as gross earnings. Believing that an injustice was being done these companies, this department demanded a statement from

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the several railway companies of the total amount paid for car mileage, rental of private cars, gross receipts for car mileage, number of miles operated in Wisconsin, under separate heads. All the roads complied with the request and it was found that the rentals or lease of private cars had been included as car mileage. This item being deducted nearly all the roads had a large credit balance annually on car mileage. The amounts recorded are taken from the figures thus computed, which were received from the auditors of the several roads. As soon as time will permit, they will be reviewed by the accountants.

RENTALS.

Some of the roads operating in Wisconsin have rented to other lines the use of their tracks for terminals and other purposes, and a certain stipulated price has been paid for the use thereof. They have not reported, claiming that the roads renting their tracks pay taxes on their gross earnings and that, therefore, the lessor should not be called upon to pay on the money received as rentals for the use of its line of road. Others have apportioned the rentals received on the mileage basis of the entire system they operate, and have apportioned the money they have paid out for rentals to other lines on the same basis. Under such a division, there is no credit balance, but when the rentals were localized, it was found that in the state of Wisconsin one system had received nearly \$80,000 annually and paid out only about \$900. This department has included all such rentals, and under this head reports the total amount that has not previously been included in reports to the state.

INTEREST ON BONDS AND BANK BALANCES AND DIVIDENDS ON STOCK OWNED.

Two of the large railway companies operating in this state have from time to time purchased stocks and bonds in other

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corporations. The interest and dividends on these securities are the source of a large income. These and other roads operating in the state have considerable sums of money on deposit in different banks which produce certain income in the way of interest. These roads make mention of these items of income in their report to this department, but they have never included such amounts in their report of gross earnings to the state treasurer, and consequently these items have escaped taxation. A tabulated statement of the Wisconsin proportion of these earnings is given among the tables which are appended hereto, marked "Exhibit A."

IMPROPER DEDUCTIONS BASED ON WRONG ACCOUNTING METHODS
OF DISTRIBUTING CHARGES.

It is found in connection with one company that in addition to the deductions from freight earnings as commissions and refunds to shippers, there has been deducted by the auditing department in reporting to Wisconsin, a class of items which results from transactions described as follows: Consignments of coal, hay, grain, feed and other material, upon arrival at Chicago proper, are often transferred to different industries located on the tracks of this line at other points within the city. For this service additional charges are made. The total of such charges as earnings are in the apportionment of earnings divided equally between two divisions of this line entering Chicago and are used equally by these two divisions. With the exception of this arbitrary division of earnings, the entire earnings of the company, both freight and passenger, are apportioned, in the first instance to operating divisions, and secondly, sub-divided to the various states in which the company operates lines of road, in the proportion which the actual miles over which the specific freight or passenger is transported, within the limits of a division of state, bears to the total distance from point of origin to destination. In certain cases

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repayments of part or all of the local charges above referred to are made shippers and in making the vouchers for such refunds the practice prevails to charge the amount of the voucher one half to one of the divisions, and the balance to the other, being the same proportion that is used originally in creating the earnings when the service is performed, *but in deducting the amount of such vouchers from freight earnings, instead of apportioning the deductions according to the actual distance or territory over which the service is rendered; the total amount of such voucher for each operating division has been divided between the states in the proportion that the earnings of each state bears to the total earnings of the division.*

In this way vouchers in favor of agents of the company in relief account and also to various large shippers and receivers of freight to the aggregate of many thousands of dollars, have been charged to gross earnings in Wisconsin, when this state never received any of the original credit connected with such transportation transactions, no part of the original service having been performed over Wisconsin rails.

This method we have been informed, was originally adopted as being a fair one to all concerned and to save the labor and expense of making numerous calculations necessary to charge accurately in the same proportion that the earnings were originally credited. If the cities and towns along the line from Milwaukee to Chicago were approximately of the same size and doing the same character of business, this method of distributing the refunds would not necessarily work injustice to Wisconsin, but refunds in Wisconsin charged to the division and partly sustained by the state of Illinois would be offset in a general way, by refunds in Illinois, partly sustained by Wisconsin. It is possible, therefore, that in the early period when adopted, the method at present used, produced substantially equitable results, but the growth of the traffic in and near Chicago has been such that there is no doubt that the amounts

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charged to Illinois which should be wholly borne by Wisconsin are very much exceeded by the amounts charged to Wisconsin which should be borne by Illinois.

The officials of this company, when their attention was called to this condition, readily admitted that Wisconsin had probably been largely overcharged in the apportionment of vouchers of this nature, and expressed their intention to have the matter gone over thoroughly, for the entire period, and credit given for the amount which may be shown to have been overcharged, (in the repayments of the refunds referred to) to the state of Wisconsin.

SECRET RATES.

The question of private, secret, or special rates, has not been made a subject of special investigation at this time, but the accountants were instructed not to overlook any information that could be found on this subject, and they have furnished this department with samples of special rates, or hectograph special rate sheets, giving lower rates than had been provided for by the current tariffs, regularly issued by the company. These devices or authorizations were generally addressed to either the receiving agent only, or to both the forwarding and receiving agent, and frequently have been made available only to certain persons or certain industries. Possibly these so-called special rate sheets are to be considered duly published tariffs, but as they are not made public at the stations, we believe that their effect has been to violate section 1798 of the Wisconsin Statutes. Their ultimate effect upon the gross freight earnings in dollars and cents cannot be definitely determined without checking the billing of stations affected.

A comparative table showing the rates made by these hectograph rate sheets, and also the regular rates in effect at the time, is herewith appended.

For detailed statement of the amounts found against each

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of the several railway companies investigated, see statistical table attached herewith.

Special Rate Sheets, or "Hectograph Tariffs,"			Special Hectograph.	Regular Printed Tariff Rates.		
Commodity.	From	To	Rates, cents per 100 lbs.	Rates, cents per 100 lbs.	Authc'ty G. F. D. Nos.	Date when effective.
Grain, C. L.	Galesville.....	Green Bay.....	10.	12.5	58206	7-15-01
Brick, C. L.	Ringle.....	Wausau.....	2.5	4.	3914	8-2-04
Lumber, C. L.	Oshkosh.....	Nashkoro.....	6.	8.	66500	9-22-02
Lumber, C. L.	Oshkosh.....	Spring Lake.....	5.	8.	66500	9-22-02
Lumber, C. L.	Oshkosh.....	Red Granite.....	5.	8.	66500	9-22-02
Grain, C. L.	Green Bay.....	Oconto.....	5.	6.	58206	7-15-01
Lima, C. L.	Eden.....	Milwaukee.....	4.	4.5	1756	11-2-03
Lumber, C. L.	Oshkosh.....	Princeton.....	4.	5.	66500	9-22-02
Stone, rough, C. L.	Red Granite.....	Milwaukee.....	4.	5.	66875	9-25-02
Coal, hard & soft, C. L.	{ Milwaukee } { Sheboygan } { Green Bay } { Manitowoc }	{ Oshkosh to } { De Pere. }	3.75	5.	68532	12-9-02
Salt, C. L.	{ Milwaukee } { Manitowoc }	{ Fond du Lac } { Oshkosh..... }	4.	6.66	1082	7-23-03
Salt, C. L.	{ Milwaukee } { Sheboygan } { Manitowoc }	{ Nekoosa..... } { Ft. Edwards } { Grand Rapids }	6.66	8.33	1082	7-23-03
Lime, C. L.	Grimms.....	Manitowoc.....	3.	4.	1756	11-2-03
4th Class Mdse.....	{ Manitowoc } { Two Rivers }	{ Oshkosh to } { De Pere. }	12.	16.	43544	8-2-99
Slabs, fuel.....	Antigo.....	Sheboygan.....	5.	6.	3914	8-2-04
Paper, C. L.	Beloit.....	Janesville.....	4.	4.	66875	9-25-02
Lime, C. L.	Brillion.....	Neenah & Me- nasha.....	3.5	4.5	1756	11-2-03
Coke, C. L.	Milwaukee.....	West Bend.....	3.75	4.	68532	2-9-02
Coal, C. L.	{ Milwaukee } { Sheboygan }	{ Eden..... } { Brillion..... }	3.75	5.	68532	12-9-02
Coal, C. L.	Manitowoc.....	Grimms.....	2.5	5.	68532	12-9-02
Paper stock, C. L.	Green Bay.....	De Pere.....	2.	2.5	66875	9-25-02
Cement, plaster, stuc- co, etc.....	Milwaukee.....	Eden, Brillion, Grimms, Fond du Lac, Osh- kosh.....	4.17	6.	2052	12-19-03
Iron and steel cast- ings, C. L.	Milwaukee.....	Waukesha.....	2.5	3.	1870	11-23-03
Lumber, C. L.	New London.....	Pt. Washington.....	4.	6.	66500	9-23-02
Fuel wood, C. L.	Stratford.....	Marshfield.....	2.	2.75	3914	8-2-04
Lumber, C. L.	Stratford.....	Marshfield.....	3.	5.	66500	9-22-02
Hardwood lumber, C. L.	Tigerton.....	Marshfield.....	5.	6.5	66500	9-22-02
Cull lumber, C. L.	Eland Jct.....	Wausau.....	3.	5.	66500	9-22-02
Cull lumber, C. L.	Marshfield.....	Wausau.....	3.	5.	66500	9-22-02
Cement, plaster and stucco.....	Milwaukee.....	Sheboygan.....	4.17	5.	2052	12-19-03

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COMMISSIONS ON WHICH TAXES HAVE BEEN PAID.

On a preceding page of this report, the subject of commissions deducted from gross earnings, was briefly taken up. It was found that one of the large roads operating in this state had paid commissions and deducted them from its gross earnings when they made their annual report to their board of directors, but before making their report to the state of Wisconsin of gross earnings, on which their taxes were based, these commissions were replaced and reported. From this fact it would appear that these commissions must have been illegal under the laws of Wisconsin and must have been paid in the form of some discrimination between shippers. The extent of such commissions or discrimination have never been inquired into. The department called your attention to this question in a special report, July 6, 1906.

My accountants were instructed to take up the investigation of this question for the years 1901 or 1902, as was most convenient for the company. On September 10, 1906, they went to Chicago, ready to commence work and were notified that the railway company was ready to give them access to all vouchers relating to shipments that were local to the state of Wisconsin, but that they would not give them access to any vouchers or commissions on interstate business. On receiving this information, a letter was addressed to the Attorney General, asking his opinion as to the authority the department had on the question of making an investigation of such commissions when they were paid on interstate earnings. No answer has been received up to date, and consequently we were forced to drop this matter. The department was not working on any theory, but had facts in its possession which gave it some idea of the purport of the commissions that were paid. A copy of one of the vouchers of this kind is hereto annexed.

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“February, 1902.

.....Freight Auditor. In favor of.....Payable through
A.G.F.A, For \$6.50 per car commissions on 530 car-
 loads of freight forwarded from..... over.....Ry. in
 1901, as per statement of billing attached, charging connecting
 lines with their proportion of same.

(Signed).....G.F.A.

(Signed).....Frt. Traffic

Manager.

(Endorsed) Vice President.”

SPECIAL REPORT AT THE REQUEST OF THE
 GOVERNOR.

Madison, Wis. Feb. 10, 1904.

HON. JOHN W. THOMAS,
Railroad Commissioner.

DEAR SIR: In prosecuting the investigation of railroad book accounts, records, and officials, under section 1794 of the Wisconsin Statutes of 1898 and chapter 431 of the laws of 1903, I respectfully request that you ascertain and report as promptly as may be all railroad passes, limited or unlimited, annual or special, and all railway mileage books and transportation issued by any railroad corporation transacting business within the state of Wisconsin, whether issued as a gratuity or paid for otherwise than in money; and that you report the names and residences of all persons residing in the state of Wisconsin to whom such passes, mileage books, or transportation has been issued.

It is quite apparent that such information is pertinent to the inquiry which you are making, for the purpose of determining whether the railroad companies report fully their gross earnings to the state, upon which the state received a four per cent license fee in lieu of all taxes.

Very respectfully yours,

ROBERT M. LAFOLLETTE,

Governor.

Investigation Relating to Back Taxes.

MADISON, WIS., Feb. 14, 1905.

HON. R. M. LAFOLLETTE,

Governor, Madison.

DEAR SIR:—In compliance with your request of February 10th, 1904, to this department, asking for information relating to the issuing of railroad passes, limited or unlimited, annual or special, and all railroad mileage books and transportation issued by any railroad corporation transacting business within the state of Wisconsin, whether issued as a gratuity, or paid for otherwise than in money, and that the names and residences of all persons residing in the state of Wisconsin to whom such passes, mileage books, or transportation had been issued, be reported to you, I would most respectfully report that copies of your communication to this office were furnished to the several large railroad companies operating in this state and a short time thereafter I visited, personally, the office of the C. & N. W. Ry. Co., and President Hughitt informed me that his Company would furnish the information required if the other companies did. I then visited the General Office of the C., M. & St. P. Ry. Co. President Earling was out of the city. I met General Solicitor Peck who informed me that he was not prepared to say what his company would do, but he thought they would furnish the information. At that time, Messrs. Fisher & Cleary were directed to comply with your request by procuring a list of passes for the year 1903, and also for the months of January and February, 1904, so as to ascertain if the continued violation was still in force if any was found, and to get all other free transportation for the year 1903, and as soon as they had completed checking over the years they were then at work on for the C., M. & St. P. Ry., they made the demand for the information. After being kept in suspense several days, they were notified that the Company would not furnish the information demanded and on the 23d of March, I received the following letter from President A. J. Earling.

“HON. JOHN W. THOMAS,
Railroad Commissioner,
Madison, Wis.

DEAR SIR:—I beg to acknowledge receipt of your favor of the 16th of February enclosing copy of Governor La Follette's

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letter to you of February 10th, directing you to ascertain and report all railroad passes and mileage books, whether issued as a gratuity or paid for otherwise than in money, and also the names and residences of all persons residing in the state of Wisconsin to whom such transportation has been issued. The Governor states that this information is pertinent "for the purpose of determining whether the railroad companies report fully their gross earnings to the state, upon which the state receives a four per cent license fee in lieu of all taxes." The Governor does not indicate the period for which the information is desired, but your Mr. Fisher informs me that it is wanted for the year 1903 and for the months of January and February, 1904.

If this information is wanted for the purpose of determining whether this company has fully reported its gross earnings, it is obvious that the request for transportation issued during the months of January and February, 1904, at this time is premature. Under the statutes, railroad companies are required to make and return to the State Treasurer, on or before the 10th day of March, in each year, a statement of the gross earnings of their respective roads, for the preceding calendar year. This company therefore, is not required to report its gross earnings to the state for 1904, until March 1905; and until such earnings have been actually earned and reports made, any investigation into them, or information concerning them for any fraction of a year would serve no good purpose and would be premature.

In respect to the year 1903; if the information sought for would assist the proper state officials in determining whether this company had reported fully its gross earnings for that year, the governor is right in his direction to you; otherwise he is in error. The statutes of Wisconsin require railroad companies to report the "*gross earnings*" of their roads, and to pay an annual license fee, based upon the amount of such earnings. They also require the Railroad Commissioner to ascertain and return to the State Treasurer among other things, "*the total gross receipts resulting from the operation of every such railroad, etc.*" Manifestly passes and mileage books, issued as a gratuity or compliments, are neither "*receipts*" nor "*earnings*" of this company. If issued as retainers to local attorneys, or for advertising, or for other serv-

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ices rendered, still, the consideration for which they were issued, is not and cannot be classed as earnings or receipts within the meaning of the statutes. What sums might possibly have been received in money, if such passes or mileage books had not been issued gratuitously, or for services, or what the transportation may have been worth to the recipients, is wholly immaterial in any investigation of the gross earnings, or total gross earnings, of this company. Whatever may be included within these terms "*gross earnings of their respective roads*" or "*total gross receipts resulting from the operation of every such railroad,*" it is clear that they include only actual earnings or the receipts, and do not include what might have been earned or received if such transportation had not been so issued, or the value which such transportation may have been to the recipient.

Manifestly, any statement which this company might make of the names or residences of the Wisconsin holders of passes or mileage books, issued gratuitously or for services, would not aid in the least in determining whether it has reported fully its gross earnings to the state for the year named. What transportation such persons received, or what service, if any they rendered therefor, and who they are and where they reside are obviously irrelevant to any legitimate inquiry into the amount of the gross earnings or receipts, of the company, which it is required to report to the state.

Whether the Chicago, Milwaukee & St. Paul Railway Company has made a full and correct report of all its gross earnings within this state for 1903 is a question which the railroad commissioner has the right to investigate, and the officers of this company are ready and willing to afford every facility for a lawful investigation into the truth of its reports. But your present request, at the demand of the governor, is so clearly improper, that I must respectfully decline to comply therewith.

Respectfully,
(Signed) A. J. EARLING,
President.

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After the refusal of the C., M. & St. P. Ry. Co., this work was not made special, but was taken up in regular order with the other part of the investigation. No list of passes issued by any railroad company in the state was received, but the Minneapolis, St. Paul & Saulte Ste. Marie, submitted their records of passes issued, for inspection of myself and Messrs. Fisher & Cleary in the presence of the General Manager, but would not allow copies to be made. Their books gave the names and addresses of persons receiving passes and reasons for granting the same. There were seventy five passes given to Wisconsin residents, largely to railroad men. The C. & N. W. and the C., St. P. M. & O. and Wisconsin Central claim they have violated no law of Wisconsin in the granting of any passes and that to guard against the violation of any law relating to the issuing of passes to any state officials, they require every person receiving a pass to sign a statement as follows:

“And as a further condition of my being permitted to use this pass, I hereby declare that I am not a member or employe of any political committee in Wisconsin, nor a candidate for, or an incumbent of, any office or position under the constitution or laws of Wisconsin, or under any ordinance of any town or municipality of that state, and that this pass was not requested by and is not for the advantage of any such person or persons.”

This statement must be signed by the recipient of the pass before it can be used.

A list of advertising contracts given and mileage furnished was received from the C. & N. W. Ry. Co., the C., St. P. M. & O., Green Bay & Western, Wisconsin Central, and M. St. P. and S. S. M.

When Messrs. Gilman & Mason commenced their work in reviewing the first examination made on the C., M. & St. P., President Earling notified them that his Company would furnish a list of contracts for advertising and mileage issued in payment of the same, and on the 18th inst., a copy was received covering the year 1904, but we have no way of ascertaining how such list compares with 1903, but take it for

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granted it is not less. Such list shows that the several roads have given for the respective years for which the lists were furnished the following amount in mileage in payment for such advertising:

1903	C. & N. W.....	\$58,118 93
	C., St. P., M. & O.....	7,092 39
	G. B. & W.....	2,010 00
	M., St. P. & S. Ste. M.....	1,200 00
1904	Wis. Central.....	15,098 85
	C., M. & St. P.....	49,125 75
	Total.....	\$132,645 92

The above transportation is in the form of mileage and other tickets issued to publishers of newspapers, pictorials, pamphlets, and other mediums of advertising in Wisconsin. The record which has been exhibited and which is claimed to be the entire record of this class of transportation which has been issued by the roads to Wisconsin papers and other mediums of advertising, is very meager. The method which has been in use in connection with this class of business is as follows: A contract is made with the parties that do the advertising, either newspaper, agricultural association, or other medium, and this is the basis of the transaction which follows and forms the first of the so-called "papers" which constitute the entire record of this business. The contract is attached to a card-board back upon which is endorsed the name and location of the publication. The application for tickets or mileage, which must pass through the local agent where the publication exists, are attached to the contract in the order of their receipt at the Passenger Traffic Manager's office, and an endorsement is made upon the application showing the value of the ticket issued thereon. It is claimed by the officials of the passenger department that no other record exists of transportation issued in this class, and that even this record exists only during the calendar year for which it is issued, that therefor, the period covered by this examination prior to 1903, all the papers, including the contracts, have been destroyed, and that this destruction annually of such records has been the prevailing custom for many years. Objection was made to an examination of the correspondence included in the papers effecting the business with each publication and the work has been limited strictly to the information called for. Of course, in view of the character of the record, it is impossible to determine

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whether all the requests for tickets under the contract have been attached, or whether the detailed statement attached included the total value of all tickets issued to Wisconsin publishers, but we believe that it is approximately correct for the several years listed except when transportation may have been issued in the form of free passes. If passes were given to publishers, the records which are herein exhibited in connection with the contracts do not show it. The question was raised as to the earnings affected by such transportation issued in Wisconsin. The use of advertising mileage books and tickets is not confined to the state of Wisconsin and it is practically impossible to apportion the earnings therefrom among the states based upon the methods employed in dividing other passenger earnings, but if this were done it would be necessary to ascertain the amount of such advertising tickets issued in all of the states where publications are situated, and base the claim of the state of Wisconsin upon the mileage actually detached within Wisconsin's borders regardless of the location of the publications on account of which the mileage was issued. It being beyond our jurisdiction to demand such record on account of publishers of other states, it is assumed that the tickets issued to Wisconsin publishers and used in other states would be offset by the tickets issued to publishers in other states and used in Wisconsin.

As this investigation is confined to Wisconsin publishers or other mediums of advertising, we are limited to this assumption. In view of the fact that no tickets or mileage issued on account of advertising have been credited to gross passenger earnings, it certainly must be assumed that the state has been deprived of a certain amount of tax by this practice. The value of this transportation should have been included in gross passenger earnings and reported as such to the state of Wisconsin inasmuch as the railway companies have chosen to make contracts for advertising on a money basis and the value of the transportation furnished clearly appears though no money actually passed between the railway companies and the publishers, or other mediums of advertising. Advertising is an expense and instead of being so charged, it is in effect charged to earnings, the value of the transportation being withheld therefrom. Failing to get a complete record of the amount of transportation so withheld, we are constrained to

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make some estimate of what is deemed reasonable. The conditions of railway business in this state for the past five years have have been such that it is safe to assume that the value of this class of advertising done and mileage issued has been about the same, and discounting the above amount fifteen per cent, would certainly be a reasonable estimate of the advertising mileage issued in 1897 and 1898. Based on this estimate, the advertising mileage issued in Wisconsin that was not credited to gross passenger earnings covering a period of seven years would amount to \$986,728.06. Four per cent of this would be a tax of \$39,469.12. This is certainly a very conservative estimate. As already stated we cannot fully vouch that all the facts have been ascertained. Such as have been ascertained, however, we have had copied and hereto attached.

We have nothing further to say in regard to the issuing of passes more than has already been communicated to you in our annual report now in print.

Respectfully submitted,
(Signed) JOHN W. THOMAS,
Railroad Commissioner.

There can be no doubt that advertising is a part of the legitimate operating expenses of any railroad and previous to the enactment of the ad valorem taxation law, where this advertisement was paid in free mileage books, the state was deprived of its legitimate tax on that amount whether it was three or four per cent, and in some instances the difference might have brought the roads into a higher class and increased the taxes several thousand dollars.

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EXHIBIT A.

WISCONSIN PROPORTION OF CHICAGO & NORTHWESTERN RY. CO'S INCOME REPORTED, BUT NOT INCLUDED IN TAXABLE EARNINGS.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Interest on bonds and dividends on stocks owned	\$287,474 77	\$327,511 12	\$397,780 46	\$433,069 76	\$420,281 67	\$508,133 98	\$447,874 58	\$2,817,126 34

WISCONSIN PROPORTION OF CHICAGO, MILWAUKEE & ST. PAUL RY. CO'S INCOME REPORTED, BUT NOT INCLUDED IN TAXABLE EARNINGS.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Gross amount of interest or dividends received on bonds owned	\$3,872 92	\$13,219 93	\$6,738 70	\$7,438 36	\$3,965 21	\$3,504 87	\$1,642 30	\$40,382 29
Gross amount of interest or dividends received on stock owned	1,276 07	1,301 44	984 10	758 33	564 16	8,857 78	14,552 67	28,294 55
Gross amount of interest on deposits	19,313 18	13,542 38	21,082 25	30,801 86	51,177 64	113,602 88	81,014 48	330,534 67
Gross amount of miscellaneous income (other interest)	6,426 50	9,250 97	4,165 72	3,598 70	4,688 06	6,197 51	4,581 09	38,908 55
Totals	\$30,888 67	\$37,314 72	\$32,970 77	\$42,597 25	\$60,395 07	\$132,163 04	\$101,790 54	\$438,120 06

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Before closing this report, we feel it but just to call attention to certain conditions that have existed and no doubt led to some of the large rebates that were paid, especially to the Northern Grain Company. In the early 80s, certain interests in Chicago had secured such a grip over the through traffic from the West that it was utterly impossible for Western flour and grain to pass to the East without paying tribute to Chicago in some form. Chafing under these conditions, the Minneapolis milling industry began to look around for some other outlet. It required but little investigation on their part to see that with the Canadian Pacific already at the "Soo" anxious to tap the great agricultural states of Wisconsin, Minnesota and Dakota, any promoter of a railway leading from Minneapolis to the "Soo," would meet with great encouragement, and capital could be obtained in any amount. The result was that in 1881 companies were organized to build a road from Minneapolis to the "Soo" under charters granted in Minnesota, Wisconsin and Michigan. On the completion of this road, it immediately became one of the great freight lines through the state of Wisconsin. The lines running from St. Paul to Chicago through Wisconsin felt the effect of this outlet immediately and the Wisconsin Central in 1894 conceived the idea of building a branch from Menasha to Manitowoc and establishing a ferry across Lake Michigan connecting with a Michigan line to the East, thus making a second route to the East, independent of Chicago. On the completion of this route, the Northern Grain Company, which was organized in the early 90s, built two large elevators at Manitowoc on the terminals of the Wisconsin Central and the Chicago & North Western, and, had the Wisconsin Central been able to furnish ferrying facilities, no doubt they would have been able to handle all the business that came to them. In one year, on this line, the flour traffic from Minneapolis alone was over 14,000 carloads. However, not being able to handle the shipments promptly and satisfactorily, the Chicago

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& North Western immediately stepped in and bid for the traffic by meeting the rates via the Manitowoc gateway. While most of the vouchers paying rebates have endorsed on them "to protect the Manitowoc gateway," the real fact in the case is that the refunds were paid to equalize the difference in rates between Manitowoc and Chicago. Hence, a great many of the large refunds received by the Northern Grain Company were, no doubt, bids for business via Chicago, which probably no other company would have refused if placed in like circumstances. It would seem that large companies like the Chicago & North Western and the Chicago, Milwaukee & St. Paul, with terminals in Milwaukee, would have availed themselves of car-ferriage across the lake, or seen the necessity of getting a belt line to their Eastern connections, around the suburbs of Chicago, so as to handle the through traffic direct and relieve the congested condition annually occurring in Chicago, and also avoid the burden of having to underbid for the through business to the East.

Respectfully submitted,

JOHN W. THOMAS,

Railroad Commissioner.

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TABULATED STATEMENT SHOWING ILLEGAL DEDUCTIONS AND EARNINGS NOT REPORTED ON THE SEVERAL RAILWAY COMPANIES INVESTIGATED.

December, 1906.

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SUMMARY OF IMPROPER DEDUCTIONS, AND AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS.

C., M. & St. P., C. & N. W., C., St. P., M. & O., M., St. P. & S. S. M., W. C., G. B. & W., K., G. B. & W., C., B. & Q., C., B. & N., D., S. S. & A., G. N., and N. P. Rys.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:									
Commissions and repayments to shippers on account of freight traffic	\$322,256 86	\$369,218 60	\$654,753 80	\$828,334 31	\$882,818 05	\$1,206,183 90	\$1,430,146 75	\$733,951 88	\$6,927,669 15
Commissions and repayments on passenger tickets.....	90,937 86	99,275 98	134,487 07	158,509 69	133,974 95	110,877 09	149,973 03	70,605 27	948,641 24
Expense of operating hotels...					1,310 39			290 57	1,600 96
Expense of operating sleeping cars	3,804 48	1,311 23	1,701 06	1,693 07	1,507 62	1,627 80	2,083 65		13,728 91
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:									
Car mileage, credit balance...	93,555 32	42,697 96	94,224 45	113,368 52	147,183 95	168,593 27	140,137 26	271,095 38	1,070,856 11
Switching charges collected...	327,967 80	250,025 51	253,464 99	344,599 88	319,915 55	307,166 09	321,679 24	344,896 06	2,465,543 65
Storage, demurrage and miscellaneous		1,588 50	5,009 00	4,848 55	3,851 15	18,881 82	55,968 28	75,256 79	165,304 09
Rental of tracks and terminals	259,881 17	89,941 88	91,104 69	101,111 18	97,379 60	92,297 85	91,601 48	82,366 63	905,684 48
Totals	\$1,598,403 49	\$854,009 66	\$1,234,745 05	\$1,552,465 50	\$1,560,456 65	\$1,874,668 72	\$2,191,589 69	\$1,519,600 84	\$12,499,028 59

SUMMARY OF IMPROPER DEDUCTIONS, AND AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS ON THE C. M. & ST. P., C. & N. W., C. ST. P. M. & O.,
M. ST. P. & S. S. M., W. C., G. B. & W., K. G. B. & W., C. B. & Q., C. B. & N., D. S. S. & A., G. N. AND N. P. RYS.
From 1894 to 1903 inclusive.

	C. M. & St. P.	C. & N. W.	C. St. P. M. & O.	M. St. P. & S. S. M.	W. C.	G. B. & W.	K. G. B. & W.	C. B. & Q.	C. B. & N.	D. S. S. & A.	G. N.	N. P.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS REPORTED FOR TAXES:													
Commissions and repayments to shippers on freight traffic	1,822,151 35	3,267,402 95	583,685 78	464,041 75	265,603 66	88,584 35	13,053 84	306,616 49	59,489 34	25,391 28	7,622 71	24,025 65	6,927,669 15
Commissions and repayments on passenger tickets	223,953 71	537,355 49	64,559 64	39,807 63	82,475 35	489 42							948,641 24
Expense of operating hotels				1,600 96									1,600 96
Expense of operating sleeping cars				13,728 91									13,728 91
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:													
Car mileage, credit balance	469,134 88	101,101 98	285,019 00	114,382 49	100,133 69	1,084 07							1,070,856 11
Switching charges collected	1,421,207 74	701,486 74	200,497 75	30,779 00	65,103 35	46,469 07							2,465,543 65
Storage, demurrage and miscellaneous	142,520 03	6,495 56	16,288 50										165,304 09
Rental of track and terminals	807,440 49	36,284 34	61,959 65										905,684 48
Totals	4,886,408 20	4,650,127 06	1,212,010 32	664,340 74	513,316 05	136,626 91	13,053 84	306,616 49	59,489 34	25,391 28	7,622 71	24,025 65	12,499,028 59

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:									
Commissions and repayments to shippers on freight traffic	\$426,345.13	\$137,770 13	\$150,189 30	\$198,609 96	\$185,255.86	\$229,365 22	\$233,869 79	\$230,745 96	\$1,822,151 35
Commissions and repayments on passenger tickets.....	52,985 63	23,380 06	30,372 25	43,344 83	21,542 56	10,864 67	23,336 93	18,126 78	223,953 71
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:									
Car mileage, credit balance..	63,991 36	17,004 12	46,414 09	50,543 92	58,075 33	59,013 37	58,455 81	112,636 88	469,134 88
Switching charges, collected..	281,058 37	144,414 15	141,401 83	184,603 11	159,933 05	163,334 43	164,918 31	181,544 49	1,421,207 74
Storage, demurrage and miscellaneous			1,810 50	2,659 50	1,309 00	13,282 50	52,225 78	71,232 75	142,520 03
Rentals of tracks and terminals	240,956 44	83,267 90	84,110 71	81,755 92	79,003 84	79,681 57	79,297 48	79,366 63	807,440 49
Totals	\$1,038,336 93	\$405,836 36	\$484,298 68	\$561,517 24	\$505,119 64	\$555,541 76	\$612,104 10	\$693,653 49	\$4,886,408 20

Investigation Relating to Back Taxes.

CHICAGO & NORTHWESTERN RAILWAY.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:									
Repayments to shippers on freight traffic	\$243,591 96	\$132,978 96	\$273,210 13	\$338,754 90	\$429,333 26	\$551,591 15	\$887,465 69	\$410,476 90	\$3,267,402 95
Repayments on passenger tickets	22,993 91	55,038 64	77,954 91	74,779 78	85,796 43	79,825 15	102,458 52	38,508 15	537,355 49
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:									
Car mileage, credit balance...	4,423 34	11,082 08	3,192 11	10,991 12	16,086 70	30,135 43	20,465 45	4,725 75	101,101 98
Switching charges, collected..		84,855 66	84,855 66	115,970 21	115,965 48	92,404 29	93,883 43	113,552 01	701,486 74
Storage, demurrage and miscellaneous		179 00	1,116 50	629 05	387 65	3,244 32		939 04	6,495 56
Rental of tracks and terminals				9,056 71	8,307 35	9,616 28	9,304 00		36,284 34
Totals	\$271,009 21	\$284,134 34	\$440,329 31	\$550,181 77	\$655,876 87	\$766,816 62	\$1,113,577 09	\$568,201 85	\$4,650,127 06

Investigation Relating to Base Taxes.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY.

4-R. R.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:									
Commissions and repayments to shippers on account of freight traffic	\$68,362 48	\$23,790 73	\$59,766 53	\$110,757 18	\$87,510 49	\$122,951 23	\$110,547 14	.....	\$583,685 78
Commissions and repayments on passenger tickets.....		10,575 79	16,202 43	13,771 17	8,729 77	7,206 03	8,074 45	.....	64,559 64
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:									
Car mileage, credit balance...	22,140 62	10,519 30	32,529 77	37,141 34	46,238 46	35,984 42	34,725 51	\$65,739 58	285,019 00
Switching charges collected...	46,909 43	14,835 20	17,705 50	23,225 89	17,996 76	21,135 58	30,225 68	29,463 71	200,497 75
Storage, demurrage and miscellaneous		1,359 50	2,032 00	1,560 00	2,154 50	2,305 00	3,742 50	3,085 00	16,288 50
Rentals of tracks and terminals	18,924 73	6,673 93	6,993 98	10,298 55	10,068 41	3,000 00	3,000 00	3,000 00	61,959 65
Totals	\$156,337 26	\$67,754 50	\$135,280 21	\$195,754 13	\$172,698 39	\$192,582 26	\$190,315 23	\$101,288 29	\$1,212,010 32

Investigation Relating to Back Taxes.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:									
Commissions and repayments to shippers on freight traffic	\$83,957 29	\$35,992 92	\$73,261 92	\$57,094 07	\$43,596 28	\$56,502 96	\$54,663 56	\$58,972 75	\$464,041 75
Commissions and repayments on passenger traffic	14,958 32	6,102 22	5,272 46	4,507 62	4,556 89	3,624 56	748 47	37 09	39,807 63
Expense of operating hotels					1,310 38			290 57	1,600 96
Expense of operating sleeping cars	3,804 48	1,311 23	1,701 06	1,693 07	1,507 62	1,627 80	2,083 65		13,728 91
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:									
Car mileage, credit balance		4,092 46	12,088 48	14,692 14	10,683 13	16,933 33	15,553 52	40,339 43	114,382 49
Switching charges collected..		2,780 00	3,976 00	4,432 00	4,775 00	5,996 00	5,050 00	3,770 00	30,779 00
Totals:	\$102,720 09	\$50,278 83	\$96,299 92	\$82,418 90	\$66,429 31	\$84,684 65	\$78,099 20	\$103,409 84	\$664,340 74

Investigation Relating to Back Taxes.

WISCONSIN CENTRAL RAILROAD COMPANY.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:								
Commissions and repayments to shippers on freight traffic	\$15,302 29	\$16,329 77	\$45,049 60	\$47,941 19	\$82,734 71	\$49,592 73	\$8,653 37	\$265,603 66
Commissions and repayments on passenger tickets	4,179 27	4,666 40	21,739 51	13,253 53	9,348 73	15,354 66	13,933 25	82,475 35
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:								
Car mileage, credit balance				16,100 33	26,526 72	10,936 97	46,569 67	100,133 69
Switching charges collected			9,114 85	15,192 00	18,190 00	20,990 00	1,616 50	65,103 35
Totals	\$19,481 56	\$20,996 17	\$75,903 96	\$92,487 05	\$136,800 16	\$96,874 36	\$70,772 79	\$513,316 05

Investigation Relating to Back Taxes.

Investigation Relating to Back Taxes.

GREEN BAY AND WESTERN RAILWAY.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:								
Commissions and repayments to shippers on freight traffic.....	\$6,568 40	\$12,766 38	\$15,205 45	\$19,395 78	\$15,589 75	\$13,894 15	\$6,464 38	\$88,584 35
Commissions and repayments on passenger tickets		15 62	367 08	95 77	7 95			489 42
AMOUNTS NOT REPORTED FOR TAXES THAT ARE A PART OF GROSS EARNINGS:								
Car mileage, credit balance							1,084 07	1,084 07
Switching charges collected	3,140 50	5,526 03	8,253 82	6,053 26	6,105 79	6,611 82	10,777 88	46,469 07
Totals	\$8,408 90	\$18,311 00	\$23,826 38	\$25,544 81	\$21,708 49	\$20,506 00	\$18,326 33	\$136,626 91

KEWANEE, GREEN BAY & WESTERN RAILROAD.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:								
Commissions and repayments to shippers on freight traffic	\$1,143 04	\$1,074 68	\$2,673 03	\$1,123 54	\$4,295 48	\$2,374 53	\$369 54	\$13,053 84
Totals	\$1,143 04	\$1,074 68	\$2,673 03	\$1,123 54	\$4,295 48	\$2,374 53	\$369 54	\$13,053 84

CHICAGO, BURLINGTON & QUINCY RAILROAD.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Total.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:								
Commissions and repayments to shippers on freight traffic			\$34,799 24	\$59,187 86	\$132,300 02	\$65,783 30	\$14,545 07	\$306,616 49

Investigation Relating to Back Taxes.

Investigation Relating to Back Taxes.

CHICAGO, BURLINGTON & NORTHERN RAILROAD.

	1897.	1898.	1899.	1900.	1901.	1902.	1903,	Total.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:								
Commissions and repayments to shippers on freight traffic	\$9,996 25	\$32,340 97	\$17,152 12	.....	.....	.....	.....	\$59,489 34

DULUTH, SOUTH SHORE & ATLANTIC RAILROAD.

	1897.	1898.	1899.	1900.	1901.	1902.	1903,	Total.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:								
Commissions and repayments to shippers on freight traffic	\$6,466 88	\$2,281 72	\$4,579 67	\$4,479 23	\$3,585 79	\$3,290 17	\$707 77	\$25,391 23

GREAT NORTHERN RAILWAY COMPANY.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Total.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:									
Commissions and repayments to shippers on freight traffic		\$378 98	\$333 60	\$1,408 95	\$2,874 28	\$1,957 52	\$146 57	\$22 81	\$7,622 71

NORTHERN PACIFIC RAILROAD.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Total.
AMOUNTS WRONGFULLY DEDUCTED FROM GROSS EARNINGS BEFORE REPORTED FOR TAXES:									
Commissions and repayments to shippers on freight traffic		\$130 02	\$2,608 80	\$2,250 11	\$2,120 23	\$5,315 07	\$8,519 09	\$2,992 33	\$24,025 65

Investigation Relating to Back Taxes.

Investigation Relating to Back Taxes.

SUMMARY GENERAL DEDUCTIONS FROM FREIGHT EARNINGS ON ACCOUNT OF REFUNDS TO SHIPPERS AND COMMISSIONS.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Chicago, Milwaukee & St. Paul	\$426,345 13	\$137,770 13	\$180,189 30	\$198,609 96	\$185,255 86	\$299,365 22	\$233,869 79	\$230,745 96	\$*1,822,151 35
Chicago & Northwestern	243,591 96	132,978 96	273,210 13	338,754 90	429,333 26	551,591 15	887,465 69	410,476 90	3,267,402 95
Chicago, St. Paul, Minneapolis and Omaha	68,362 48	23,790 73	59,766 53	110,757 18	87,510 49	122,951 23	110,547 14	.....	583,685 78
Minneapolis, St. Paul & Sault Ste. Marie	83,957 29	35,992 92	73,261 92	57,094 07	43,596 28	56,502 96	54,663 56	58,972 75	464,041 75
Wisconsin Central .....	.....	15,302 29	16,329 77	45,049 60	47,941 19	82,734 71	49,592 73	8,653 37	265,603 66
Green Bay & Western .....	.....	5,268 40	12,766 38	15,205 48	19,395 78	15,589 75	13,894 18	6,464 38	88,584 35
Kewaunee, Green Bay & Western .....	.....	1,143 04	1,074 68	2,673 03	1,123 54	4,295 48	2,374 53	369 54	13,053 84
Chicago, Burlington & Quincy .....	.....	.....	.....	34,799 24	59,187 86	132,300 02	65,783 30	14,546 07	306,616 49
Chicago, Burlington & North- ern .....	.....	9,996 25	32,340 97	17,152 12	.....	.....	.....	.....	59,489 34
Duluth, South Shore & Atlan- tic .....	.....	6,466 88	2,281 72	4,579 67	4,479 28	3,585 79	3,290 17	707 77	25,391 28
Great Northern .....	.....	378 98	833 60	1,408 95	2,374 28	1,957 52	146 57	22 81	7,622 71
Northern Pacific .....	.....	130 02	2,698 80	2,250 11	2,120 23	5,315 07	8,519 09	2,992 33	24,025 65
Totals	\$822,256 86	\$369,218 60	\$654,753 80	\$828,334 31	\$882,818 05	\$1,206,188 90	\$1,430,146 75	\$733,951 88	\$3,927,669 15

* Including \$47,068.46, items not Wisconsin, but charged to Wisconsin earnings.

Investigation Relating to Back Taxes.

SUMMARY ILLEGAL DEDUCTIONS FROM PASSENGER EARNINGS ON ACCOUNT OF REFUNDS OR COMMISSIONS.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals..
Chicago, Milwaukee & St. Paul	\$52,985 63	\$23,380 06	\$30,372 25	\$43,344 83	\$21,542 56	\$10,864 67	\$23,336 93	\$18,126 78	\$223,953 71
Chicago & Northwestern	22,993 91	55,038 64	77,954 91	74,779 78	85,796 43	79,825 15	102,458 52	38,508 15	537,355 49
Chicago, St. Paul, Minneapolis and Omaha		10,575 79	16,202 43	13,771 17	8,729 77	7,206 03	8,074 45	.....	64,559 64
Minneapolis, St. Paul & Sault Ste Marie	14,958 32	6,102 22	5,272 46	4,507 62	4,556 89	3,624 56	748 47	37 09	39,807 63
Wisconsin Central		4,179 27	4,666 40	21,739 51	13,253 53	9,348 73	15,354 66	13,933 25	82,475 35
Green Bay & Western			18 62	367 08	95 77	7 95	.....	.....	489 42
Totals	\$90,937 86	\$99,275 98	\$134,487 07	\$158,509 99	\$133,974 95	\$110,877 09	\$149,973 03	\$70,605 27	\$948,641 24

Investigation Relating to Back Taxes.

SUMMARY CAR MILEAGE, CREDIT BALANCE NOT REPORTED.

	Before 1897.	Jan. 1st to June 30, 1897	Year end- ing June 30, 1898.	Year end- ing June 30, 1899.	Year end- ing June 30, 1900.	Year ending June 30, 1901.	Year ending June 30, 1902.	Year ending June 30, 1903.	July 1st to Dec 31st, 1903.	Totals.
Chicago, Milwaukee & St. Paul Ry.	\$63,991 36	\$17,004 12	\$46,414 09	\$50,543 92	\$58,075 33	\$59,013 37	\$58,455 81	\$73,555 42	\$39,081 46	\$469,134 83
Chicago & Northwestern...	4,423 34	11,082 08	3,192 11	10,991 12	16,086 70	30,135 43	20,465 45	.....	4,725 75	101,101 98
Chicago, St. Paul, Minnea- polis & Omaha	22,140 62	10,519 30	32,529 77	37,141 34	46,238 46	35,984 42	34,725 51	38,737 58	27,002 00	285,019 00
Minneapolis, St. Paul & Sault Ste. Marie .....	.....	4,092 46	12,088 48	14,692 14	10,683 13	16,933 33	15,553 52	26,085 78	14,253 65	114,382 49
Wisconsin Central .....	.....	.....	.....	.....	16,100 33	26,526 72	10,936 97	45,394 86	1,174 81	100,133 69
Green Bay & Western .....	.....	.....	.....	.....	.....	.....	.....	.....	1,084 07	1,084 07
Totals	\$93,555 32	\$42,697 96	\$94,224 45	\$113,368 52	\$147,183 95	\$168,593 27	\$140,137 26	\$183,773 64	\$87,321 74	\$1,070,856 11

EARNINGS FROM RENTALS OF TRACKS AND TERMINALS NOT REPORTED.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Chicago, Milwaukee & St. Paul	\$240,956 44	\$83,267 90	\$84,110 71	\$81,755 92	\$79,003 84	\$79,681 57	\$79,297 48	\$79,366 63	\$807,440 49
Chicago & Northwestern.....				9,056 71	8,307 35	9,616 28	9,304 00		36,284 34
Chicago, St. Paul, Minneapolis & Omaha	18,924 73	6,673 98	6,998 98	10,298 55	10,068 41	3,000 00	3,000 00	3,000 00	61,959 65
Totals	\$259,881 17	\$89,941 88	\$91,104 69	\$101,111 18	97,379 60	92,297 85	91,601 48	82,366 63	905,684 48

SUMMARY—SWITCHING CHARGES NOT REPORTED.

	Before 1897.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Chicago, Milwaukee & St. Paul	\$281,058 37	\$144,414 15	\$141,401 83	\$184,603 11	\$159,933 05	\$163,334 43	\$164,918 31	\$181,544 49	\$1,421,207 74
Chicago & Northwestern.....		84,855 66	84,855 66	115,970 21	115,965 48	92,404 29	92,883 43	113,552 01	701,486 74
Chicago, St. Paul, Minneapolis & Omaha	46,909 43	14,835 20	17,705 50	22,225 89	17,996 76	21,135 58	30,225 68	29,463 71	200,497 75
Minneapolis, St. Paul & Sault Ste. Marie		2,780 00	3,976 00	4,432 00	4,775 00	5,996 00	5,050 00	3,770 00	30,779 00
Wisconsin Central				9,114 85	15,192 00	18,190 00	20,990 00	1,616 50	65,103 35
Green Bay & Western.....		3,140 50	5,526 00	8,253 82	6,053 26	6,105 79	6,611 82	10,777 88	46,469 07
Totals	\$327,967 80	\$250,025 51	\$253,464 99	\$344,599 88	\$319,915 55	\$307,166 00	\$321,679 24	\$340,724 59	\$2,465,543 65

Investigation Relating to Back Taxes.

Investigation Relating to Back Traces.

STORAGE, DEMURRAGE & MISCELLANEOUS NOT REPORTED.

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Chicago, Milwaukee & St. Paul.....		\$1,810 50	\$2,659 50	\$1,309 00	\$13,282 50	\$52,225 78	\$71,232 75	\$142,520 03
Chicago & North Western.....	\$179 00	1,116 50	629 05	387 65	3,244 32	.....	939 04	6,495 56
Chicago, St. Paul, Minneapolis & Omaha...	1,359 50	2,082 00	1,560 00	2,154 50	2,305 00	3,742 50	3,085 00	16,288 50
Totals	\$1,538 50	\$5,009 00	\$4,848 55	\$3,851 15	\$18,831 82	\$55,968 28	\$75,256 79	\$165,304 09

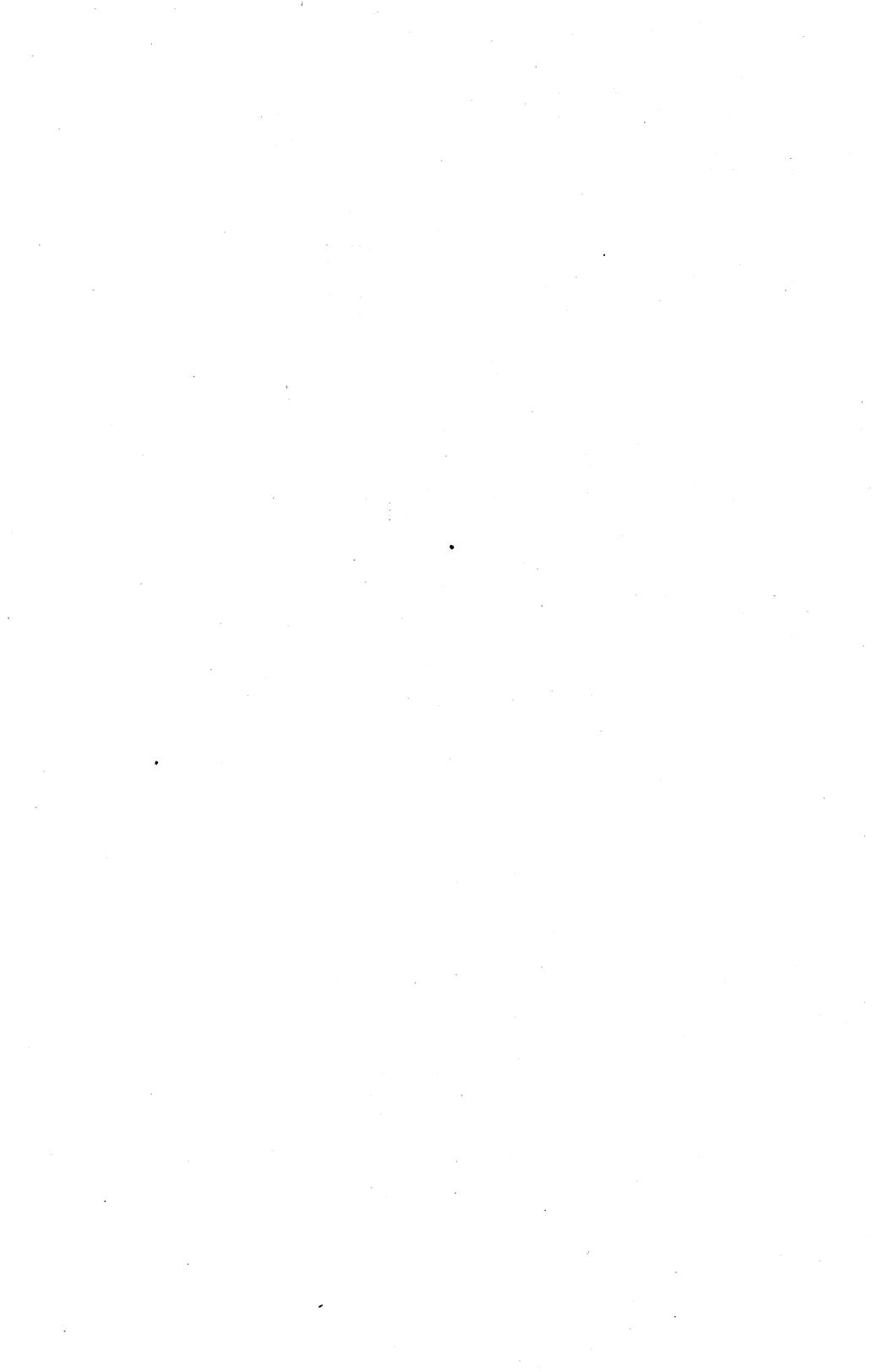
EXPENSE OF OPERATING HOTELS.

	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Minneapolis, St. Paul & Sault Ste. Marie							\$1,310 39				\$1,310 39

Investigation Relating to Back Taxes.

EXPENSE OF OPERATING SLEEPING CARS.

	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Totals.
Minneapolis, St. Paul & Sault Ste. Marie Ry.....	\$1,142 83	\$1,254 30	\$1,407 35	\$1,311 23	\$1,701 06	\$1,693 07	\$1,507 62	\$1,627 80	\$2,083 65	.....	\$13,728 91



EXPENSE OF SPECIAL INVESTIGATION OF RAILROAD
COMPANIES' GROSS EARNINGS, UNDER
CHAPTER 431, LAWS OF 1903.

The salaries of the accountants were all fixed at the suggestion of Governor La Follette.

Mr. E. M. Fisher was paid \$2,500 per annum, with railroad fare; and hotel expenses, not to exceed \$2 per day. Mr. W. H. Cleary was paid \$2,000 per annum, with railroad fare; and hotel expenses, not to exceed \$2 per day. Mr. S. W. Gilman was paid \$2,500 per annum, was allowed Saturdays and railroad fare to and from the city of Madison, each week, and other expenses not to exceed \$2 per day. Mr. E. C. Mason was paid \$1,800 per annum, was allowed Saturdays and railroad fare to and from the city of Madison, each week, and other expenses not to exceed \$2 per day.

In the beginning of the investigation special stenographers were employed to prepare typewritten copies of the original work, but the expenses were found to be so great that a permanent stenographer and temporary clerks were employed for that purpose.

E. M. FISHER:

Salary and expenses for fiscal year, 1904	\$1,945 54
Salary and expenses for fiscal year, 1905	1,722 43
Services and expenses in giving expert testimony, 1905.....	184 49

\$3,852 46

W. H. CLEARY:

Salary and expenses for fiscal year, 1904	1,752 91
Salary and expenses for fiscal year, 1905	2,798 58
Salary and expenses for fiscal year, 1906	2,941 34
Salary and expenses from June 30, 1906, to November 30, 1906	1,234 37

7,154 74

S. W. GILMAN:

Salary and expenses for fiscal year, 1904	1,415 83
Salary and expenses for fiscal year, 1905	3,534 05
Salary and expenses for fiscal year, 1906	970 46

5,920 37

E. C. MASON:

Salary and expenses for fiscal year, 1904	1,215 18
Salary and expenses for fiscal year, 1905	2,703 96
Salary and expenses for fiscal year, 1906	2,636 59
Salary and expenses from June 30, 1906, to December 31, 1906	1,056 30

7,612 03

M. HARRIET WADSWORTH:

Salary as clerk and stenographer for fiscal year, 1904	192 42	
Salary as clerk and stenographer for fiscal year, 1905	802 00	
Salary as clerk and stenographer for fiscal year, 1906	1,004 00	
Salary from June 30, 1906, to December 31, 1906	504 00	2,502 42

CLARA SILBERNAGEL:

Salary as clerk, for fiscal year, 1904	72 96	72 96
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G. H. SNYDER:

Salary as clerk, for fiscal year, 1904	3 88	
Salary as clerk, for fiscal year, 1905	54 00	57 88

L. M. COOK:

Salary as clerk, for fiscal year, 1904	6 00	6 00
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ALFRED EMERSON:

Salary as clerk, for fiscal year, 1905	552 50	
Salary as clerk, for fiscal year, 1906	42 00	594 50

THOMAS PURTELL:

Salary and expenses, as accountant, for the fiscal year, 1905	795 65	795 65
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ALFRED HARRISON

Transcript, 1906	15 00	
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J. W. THOMAS:

Traveling and hotel expenses, during fiscal year, 1904.....	352 82	352 82
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Total expense		\$28,936 78
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FIRST BIENNIAL REPORT

OF THE

RAILROAD COMMISSION

OF WISCONSIN

From the Organization of the Commission to June 30, 1906.

(Opinions to December 1, 1906.)



MADISON, WIS.

DEMOCRAT PRINTING COMPANY, STATE PRINTER

1907

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LETTER OF TRANSMITTAL.

MADISON, WIS., December 1, 1906.

To His Excellency,

HON. JAMES O. DAVIDSON,
Governor.

As required by law, we have the honor to submit our Biennial Report, containing an account of all matters pertaining to this office from the organization of this Commission to December 1, 1906.

RAILROAD COMMISSION OF WISCONSIN,

BY J. M. WINTERBOTHAM,

Secretary.

PART I.

A General Account of the Work of the Commission.

The Railroad Commission of Wisconsin was organized on July 11, 1905, pursuant to the provisions of chapter 362, Laws of Wisconsin for 1905. A number of complaints were waiting for the action of the Commission at the time of organization. From that date to this the Commission has constantly had before it matters of varying degrees of importance affecting the interests of the public and of the railways, in addition to the matters which the Commission has investigated on its own motion.

METHODS OF PROCEDURE.

Two methods of dealing with complaints suggested themselves to the Commission. The one is the method of hearing complaints in formal procedure, as prescribed by law. The other is the method of bringing the interested parties together with a view of reaching a satisfactory solution in informal conference. Both methods with various modifications have been employed.

The Commission assumed at the outset that the people of the State of Wisconsin desired to have legitimate grievances remedied promptly. The mode of procedure adopted, it was assumed, was primarily a matter of judgment on the part of the Commission. Whoever is held responsible for certain results should be left free to a certain extent to choose those methods

by which such results can best be accomplished. In the opinion of the Commission the best results can be obtained by resorting to informal methods of procedure wherever possible and to fall back upon formal proceedings only when other methods have failed. Men sitting around a table in informal conference, discussing the subject in hand with perfect freedom, are much more likely to arrive at some acceptable conclusion than when every word is measured and becomes a part of a record which may figure in the courts. Ten and even twenty different matters have been disposed of in this informal manner at a single sitting, in less time than it sometimes takes to hear the sworn testimony in a single simple case. Many times, at these conferences, one side or the other was made to see certain aspects of the question at issue in such a light as to suggest an immediate and satisfactory solution. The Commission wishes to state unhesitatingly that, aside from its independent investigations, the work of these informal conferences is the most important which it has accomplished. It is almost needless to add that all the parties interested in a case, discussed in conference, including the Commission, generally made the same preparation for the presentation of pertinent facts as is necessary in formal proceedings.

A large number of matters, some of them of much importance, never reached the stage of informal conference even. In these cases the Commission simply acted as intermediary, or go-between, between the complainant and the railway companies, through the interchange of letters and documents, and by supplying the facts from material on file in the office of the Commission. Perhaps this should be characterized as a third method of procedure. Both this function of an intermediary, as well as the informal conference method above referred to, *if unsuccessful*, causes delay in reaching a final decision. The great majority of cases which were conducted informally were disposed of in much less time than formal proceedings would have required. In a few of the instances in which informal methods failed, formal hearings had to be resorted to, resulting in loss of time, which, however, could not possibly have been foreseen by anyone when the cases were first brought to the attention of the Commission. Naturally, when conflicting interests, often of far-reaching importance, are involved, it is not always possible to reach an amicable settlement and formal

proceedings must be resorted to. Generally speaking, it may be stated that where the merits of both sides of the controversy were quite clear, or apparently one sided in favor of the complainant or defendant, informal methods brought the desired results. Where the points at issue were sharply drawn and in the estimation of the parties to the controversy, quite evenly balanced, formal proceedings had to be resorted to. Some questions are in their nature such that both sides seem to feel that nothing but an order of the Commission will settle the differences. Formal proceedings naturally involve much more time than informal methods, although the Commission has always endeavored to issue decisions promptly, consistent with thoroughness and accuracy and hence fairness and justice.

ORIGINAL INVESTIGATIONS.

All the time which remained after correspondence, informal and formal proceedings had been attended to, was devoted to original and independent investigations, some of which related in part or entirely to questions brought before the Commission and the rest related to railway rates and other transportation subjects of interest to the citizens of Wisconsin. Some of the results of these investigations are now before the Commission. Other subjects are still under investigation, while still others await the action of the Commission as soon as the opportunity presents itself. The Commission has endeavored to gain a thorough knowledge and command of all the fundamental facts relating to the railways in Wisconsin, in order that it may be efficiently equipped to deal intelligently and promptly with every question that may come before it. Much of the work has been pioneer work, by which is meant that investigations of the same kind or of the same degree of detail have, so far as is known to the Commission, never been undertaken either by railway companies or by commissions. We refer especially to our analyses of the accounts of the railway companies and the tabulation and charting of rates, the former constituting one of the most indispensable bases for judging the absolute reasonableness of rates and the latter in determining the relation of rates.

COMPLEXITY OF SOME PHASES OF THE WORK.

It may not be apparent, for instance, that a petition for a lower rate on a single commodity between two stations involves an analysis of the entire business of the railway company on whose lines the stations are located. This involves an apportionment of the expenses and earnings of the railway to the State of Wisconsin, and a separation of expenses and earnings between passenger and freight business. There are at least between fifty and sixty general classes of railway expenses, each of which is made up of hundreds and even thousands of separate items. In order that any assignment of expenses may be accurate the smallest item must be placed into its proper column. What is its proper column is, in the case of a good many items, difficult of determination. The same is true with the different possible bases for the apportionment of expenses. While some items classify themselves, others must be classified in some rather arbitrary manner, which generally is open to dispute. Perhaps the amounts of money involved in the disputed items determine the controversy for the solution of which the analysis of the accounts has been undertaken.

Having finally made the necessary separation and apportionment of earnings and expenses, the task of applying the results of such an analysis to a specific rate-question still remains. Several additional extended analyses must be made; such as the determination of terminal expenses, haulage costs, the classification of the article, together with the proper percentage relations between the various classes of freight, the relative treatment of short and longer distances in the making of a specific rate, the relative importance of costs and other elements which enter into rate-making, and so forth. Statistical analyses which enable one to determine whether average costs are covered in the rate are absolutely indispensable as guides in rate-making, even though it is only in relatively rare instances that such costs can directly determine the rate to the exclusion of the factors controlling the manufacture, sale and consumption of the article. It is furthermore of importance to know in what quantities a commodity is customarily shipped, i. e., carload or less than carload shipments, and the average terminal and haulage charges for transporting commodities in quan-

tities varying from a small shipment of, say, one ton up to twenty or more tons in a car.

WORK OF THE TAX COMMISSION.

The work done by the Tax Commission in placing a valuation on the various Wisconsin railway properties has done much to facilitate the work of this Commission

CAUSE OF DELAY IN SOME INSTANCES.

We make this reference to the statistical and other work involved in every question of rate-making in order that it may be understood why certain questions that have come before the Commission have not been disposed of as expeditiously as some others. When all these basal processes have once been completed it will be possible to deal with similar questions in the future with much more facility.

NUMBER OF COMPLAINTS.

The total number of formal complaints filed with the Commission to December 1, 1906, is 92. Of this number 62 were disposed of without a ruling of the Commission, in informal conference, or by means of correspondence.

The chief points involved in all formal cases, together with the manner of their disposition, are given in Part II of this report; while the informal complaints and other matters, 557 in number, are presented in Part III.

The formal complaints, informal complaints, and other informal matters brought officially before the Commission, were distributed by months as follows:

Complaints By Months

	Formal.	Informal.	Total.
1905.			
June and July	1	28	29
August	1	31	32
September		21	21
October	2	30	32
November	2	36	38
December	5	45	50
1903			
January	4	25	29
February	14	35	49
March	1	25	26
April	8	22	30
May	12	28	40
June	7	24	31
July	2	26	28
August	13	32	45
September	6	44	50
October	9	53	62
November	5	52	57
Total	92	557	649

NATURE OF THE REPORTS ON CASES.

In the presentation in this report of the formal and informal complaints it has been our endeavor to set forth in brief terms the salient features of each case. The record in some of the cases which were disposed of in informal conference is quite voluminous and to have presented it in detail would have made this report altogether too bulky. In other instances, the complaints were dropped for one reason or another, or the additional information which the Commission desired to secure from the complainant was not furnished, and for these and similar reasons the account which we are able to present regarding cases of this kind is not always as satisfactory as one might wish it were. This applies, however, only to a relatively small number. In some cases the name of the complainant has been withheld by his special request.

WORK IN PROGRESS.

The Commission has in progress a number of important lines of work, which can be pushed much more rapidly in the future on account of the completion of the work connected with the passenger fare cases. The rates on all the important commodities are being tabulated and charted. Important readjustments in rates have been made on the basis of this work

already and much more will be done in the future. The Commission has gathered considerable information in matters relating to railway sanitation and station facilities and conveniences, with the view of bringing about improvements along these lines. A thorough investigation of Pullman and express rates is also in progress, and some work has been done on the subject of weighing of carload freight. Other matters regarding which the Commission instituted special inquiries will be mentioned in their proper places in connection with the cases to which they relate.

EXAMINATION OF RAILWAY ACCOUNTS.

In order that the Commission might keep itself informed regarding the relation between the carriers and individual shippers it has caused an extended examination of the books of the companies to be made. A large number of items have been compiled and will be subjected to a careful examination by the Commission. At this date we have nothing to report regarding these investigations.

ESTIMATED VALUE OF WORK OF COMMISSION.

The Commission has frequently been asked to express the value of its work in dollars and cents. We have uniformly refused to do so, for the reason that we feel that such calculations, at least when officially made, tend to establish incorrect standards for measuring the value of the work of railway regulation. To be sure, changes in rates affecting a large volume of traffic like grain, cheese, cattle, coal and lumber, have important financial consequences for all the parties in interest—producer, trader, jobber, manufacturer, transporter and consumer; but these financial consequences, important as they may be, should not obscure the other equally important fact in railway regulation, namely, the systematic, thorough and continued study of actual conditions with the view of eliminating misfits of all kinds, preventing injustice in small as well as large matters, and promoting a proper understanding and appreciation of the work of all the agents in the material and social development of the State. This Commission has been given important powers. It has exercised these powers whenever and wherever necessary. But the mere existence of a Commission

with such powers in itself promotes fair dealing on all sides in matters relating to transportation.

POWER OF THE COMMISSION OVER CLAIMS.

During the year a good many letters have come to the Commission regarding claims of all kinds. While the Commission is always glad to do everything within its power to bring about the prompt settlement of just claims, and while the Commission has in many cases succeeded in bringing about such a result, it should be distinctly understood that this Commission is not a court and that the only tribunal which can under the Constitution enforce the payment of money is a court. The jurisdiction of the Commission in matters of this kind is clearly set forth in section 32 of the law, which reads as follows:

“All claims against any railroad for loss of or damage to property from any cause, or for overcharge upon any shipments, or for any other service, if not acted upon within ninety days from the date of the filing of such claim with the railroad, may be investigated by the Commission, in its discretion, and the results of such investigation shall be embodied in a special report which shall be open to public inspection and may be included in the next annual report of the Commission.”

CHANGES IN THE LAW.

One year's operation under the law has demonstrated the excellent work which was done in its preparation and enactment. Not a single serious weakness has been discovered. At the special session of the legislature a number of minor amendments were adopted which are printed in italics in the law as published in Part VII of this report.

These amendments added some power not previously granted and eliminated some uncertainties. Only a few points, relatively insignificant, occur to us which might be worthy of consideration. Some of these do not refer to the Railroad Commission law at all but to other statutes relating to railways.

The Commission would respectfully recommend that the existing laws be amended in the following particulars:

1. The jurisdiction of the Commission over street railways should be either increased or diminished. Under the construc-

tion placed upon the law by the attorney-general and by the Commission, it confers jurisdiction upon the Commission to regulate any street railway company whose lines pass beyond the limits of the city in which it is operating. This right of regulation extends to the urban business of the company as well as to the business of the company outside of the limits of the city. As a result the Commission appears to have a right to regulate the entire business of a street railway company where any of its lines extend beyond the city limits, but it has no right to regulate the business of a street railway company whose lines are entirely within the limits of the city in which it is operating. It would appear to the Commission that it should either have power to regulate the urban business of all street railway companies operating in the State or that such power should not extend to any of them.

2. The existing laws authorize certain parties to build private spur tracks under certain specified restrictions, and when such spur tracks are completed, if they come within the terms of the law, it is made obligatory on the railroads to connect such spur track with the side or main track of the railway company within the limits of the depot grounds. The law is silent as to who should stand the extra expense of making the connection, and we would suggest that it be made explicit upon this point.

3. Assessors now make reports to this Commission regarding the railways within their respective jurisdictions. These reports serve no purpose whatever and should be abolished.

4. The office force of the Commission is at times inadequate, and we recommend that the Commission be empowered to employ additional help whenever necessary for the proper and prompt performance of its duties. During the last year the Commission received and sent out upwards of 20,000 letters. Thousands of pages of testimony had to be taken and transcribed. Extensive statistical compilations were made and must still be made. The filing of tariffs requires time and care. Part of the office force is constantly employed in taking care of the work which each day's mail provides, and consequently there frequently exists a lack of adequate assistance in prosecuting what may be termed the constant and investigative work of the Commission. The salaries paid to the clerical force should be readjusted to some extent.

5. Occasional complaints have been made at various times by different shippers about the manner in which carload freight is weighed. It has been said that the marked weight of the car might very materially differ from the actual weight, owing to weather and other conditions. It has also been said that a great deal of carelessness is exercised in the manner of weighing cars, and that the shipper is ordinarily entirely helpless to protect himself from injustice in the matter of weights, and it has been suggested by some shippers that the entire subject of weighing cars, including the employment of weigh-masters, should be placed under the control of the Commission. The shippers are in a much better position to determine the necessity for such an innovation than this Commission is. We are not prepared at this time to make any recommendation on the subject. If there is any reasonable demand for legislative action along this line, we doubt not that those interested will make their wishes known to the members of the legislature.

6. We would recommend that the law be so amended as to provide that all actions brought against the Commission to set aside its orders should be brought in Dane County. There is some doubt about the provisions of chapter 366, Laws of 1905, extending to suits brought against the Commission.

7. The Commission has had occasion to order railway companies to erect depot buildings, construct side tracks, and do other acts that might necessitate considerable delay on the part of the carrier in complying with the order. Except by implication, the Commission is not authorized to specify the time within which the order must be complied with. We would recommend that the Commission be expressly authorized to prescribe in its order a time within which the order must be complied with where it is not practicable to comply with it within the time that other orders of the Commission become effective by force of the statute.

8. Every corporation doing business in this State should be required to file with the Commission a verified list of its stockholders, upon demand from the Commission.

9. If the opinions and decisions of the Commission made in formal matters are considered of sufficient public interest to warrant the expense of publishing the same in a volume separate and distinct from the Biennial Report of the Commission, legislative sanction for such publication should be given.

10. We would recommend that section 1813, Wisconsin Statutes of 1898 be amended. The statute in its present form is of doubtful validity. If valid, the penalty or liquidated damages for which it provides is excessive.

ADVANCE OPINIONS.

The Commission has frequently been requested to express an opinion in advance on questions which may ultimately be brought before it for adjudication in formal proceedings. Obviously, we have not been able to comply with such requests, for the reason that only one side would be heard and conclusions reached on the basis of *ex parte* testimony. Fairness demands that both sides should always be heard. While we have always been ready and willing to supply information of facts and law to the full extent of our ability, we have not deemed it compatible with our official duties to say in advance whether or not a certain rate, classification, rule or arrangement was just and reasonable or otherwise, except in cases where the questions asked could be answered on the basis of conclusions reached in previous formal hearings and the plain reading of the law. Where the inquiry has been one of fact merely, it has been possible to meet it fully.

EXERCISE OF DISCRETIONARY POWER.

The law vests in the Commission certain discretionary powers which it has frequently been called upon to exercise, especially in the matter of the publication of rates. It has often occurred that public and private interests could be served by permitting a new rate to go into effect in less than ten days. In some of these cases the Commission has authorized the putting into effect of a tariff by telephone and telegraph, where the ordinary mails did not appear to meet the emergency. A full statement of the reasons for shortening the time has been filed in each case.

APPLICATIONS FOR CHANGES IN RATES.

It will be observed that in the docket of formal and informal cases occasionally there will be found an application for a change in a rate or classification. These applications are the

result of that provision of the law which made the rates in effect on April 1, 1905, the legal rates until December 31, 1905. All changes in rates and classifications between April 1 and December 31, 1905, required the express approval of the Commission. Since January 1, 1906, the railway companies have been free to change rates without previous approval of the Commission, subject only to the provisions of the law relating to publication and filing. The only exception to this rule is found in the rates established by the Commission. Such rates cannot be changed without the consent of the Commission.

THE COMMISSION AND THE COURTS.

Under date of September 15, 1906, the Commission made an order requiring the Minneapolis, St. Paul and Sault Ste Marie Railway Company to stop its local east and west bound passenger trains numbered 84 and 85 at Dwight, in Polk County, Wisconsin, for the purpose of receiving and discharging passengers, and also for the purpose of taking on cream for shipment to the "Twin Cities," as well as other express matter.

An action has been commenced by the Railway Company, and is now pending in the Circuit Court of Dane County, to set aside and declare void the order made by the Commission, on the ground that it was unreasonable to require the limited service ordered at the point in question. The action has not yet been tried. The foregoing is the only order made by the Commission that has yet been attacked in the courts.

INFORMAL COMPLAINTS.

Among the informal complaints there will be found an occasional number which has not been closed. This is especially true of the last fifty. Many of these were of such recent date that negotiations were only partially completed when the report was filed.

FREE AND REDUCED RATE TRANSPORTATION ISSUED TO RESIDENTS OF WISCONSIN FROM JUNE 15, 1905 TO JULY 1, 1906.

Section 19, chapter 362, Laws of 1905, provides that every railroad shall, on the first Monday in February in each year, and oftener if required by the Commission, file with the Com-

mission a verified list of all railroad tickets, passes and mileage books issued free or for any other than actual bona fide money consideration at full established rates during the preceding year, together with the names of the recipients thereof, the amounts received therefor, and the reasons for issuing the same.

In compliance with this provision the Commission on January 8, 1906, addressed to each of the railways doing business in this State a circular letter calling their attention to this statute and giving the companies notice that such statements would soon be called for.

The Commission on March 8, 1906, sent a supply of blanks for making such reports, to each of the railways in the State and requested that they make their first report for the period from June 15, 1905, to February 1, 1906, and after that to file monthly reports. The reports filed in response to this request proved to be very voluminous, including as they do the excepted classes provided for in section 8 of the law. These exceptions are, ministers of the gospel, officers or agents of incorporated colleges, inmates of soldiers' homes, regular agents of charitable societies when traveling upon the business of the society, destitute and homeless persons, railroad officers, attorneys, directors, employes, or members of their families, former railroad employes or members of their families, where such employes have become disabled in the railway service or are unable from physical disqualification to continue in the service, members of families of deceased railroad employes, passes issued in exchange to officers, attorneys, or employes of other roads and their families, and passes issued to persons in attendance upon live stock in transit.

Among the reports received was a list of clergymen to whom half fare permits were issued by the Clergyman's Bureau of the Western Passenger Association. This list is very large and probably contains the names of most of the clergymen in the State. As no complete list of the names of the persons to whom half fare tickets were sold has been filed, no attempt has been made to classify such tickets.

The roads in reporting their trip passes have uniformly failed to state the value of such transportation, and the number of these passes is very large, including as it does those issued to employes of the road reporting, whether traveling upon the

business of the company or upon their own business, and passes issued to their families and employes of other roads and their families.

The names of the recipients of the annual and trip passes issued to clergymen, to officers and agents of incorporated colleges, agents of charitable societies, and also the names of attorneys and surgeons occasionally but not continuously employed by the companies, and other persons to whom passes have been issued, have been reported to this Commission by the roads.

The railways in making their reports to this Commission have included mileage books and tickets issued to newspapers and other publications in exchange for advertising. Attached to this report will be found a table giving the names of the newspapers to whom such transportation was issued and the amount issued to each publication by each railway. The amount issued to each publication is expressed in dollars and cents as it was found to be impracticable to make a compilation showing the number of miles represented by such tickets. In some cases the railway company failed to report the title of the publication on account of which the tickets were issued. In these cases the table gives the name of each person who received tickets.

RAILWAY ACCIDENTS.

Soon after the organization of the Railroad Commission a set of blanks, following closely those issued by the Interstate Commerce Commission, was prepared, and a supply was sent to the railway companies doing business in Wisconsin.

Each of the companies reported monthly to the Commission the casualties, if any, occurring upon its line, the summary of which is contained in a table which will be found in another part of this report.

The Commission will continue to require each railway company to make monthly reports of accidents occurring upon its lines, and each succeeding published report of the Commission will contain a summary such as is included in this volume, and from time to time comparative tables will be made.

As shown by the reports, during the period from June 15, 1905, to June 30, 1906, the total number of passengers killed in Wisconsin in train accidents was 5 and the total number

injured was 167; the total number killed on platforms was 1, and the total number injured on platforms was 24; the total number of trainmen killed was 35, and the total number injured was 813; the total number of shopmen killed was 1, and the total number of shopmen injured was 48; the total number of stationmen killed was 1, and the total number of stationmen injured was 45; the total number of other employes killed was 16, and the total number injured was 463; the total number of trespassers killed on trains was 34, and the total number injured was 70; the total number of trespassers killed on right of way was 83, and the total number injured was 46; the total number of persons neither trespassers nor employes who were killed was 8, and the total number injured was 77; the total number killed on crossings was 27, and the total number injured on crossings was 90. The total number of all classes of persons killed was 211, and the total number injured 1783. An inspection of the table will show how these casualties are distributed.

Section 30, chapter 362, Laws of 1905, requires that every railroad shall, whenever an accident attended with loss of human life occurs within this state upon its line of road, or upon its depot grounds or yards, give immediate notice thereof to the Commission. The roads have complied with this provision of the law, so far as we have observed, the Commission receiving notice by telegraph or mail as soon as accidents are reported to the proper railway officials.

A representative of the Commission was sent to the scene of the wreck which occurred on the line of the Wisconsin Central Railway south of Theresa on February 11, 1906. The breaking of a tire on one of the drive wheels of the locomotive threw the train off the track and over an embankment. There were no fatalities and but one person seriously injured among the passengers and crew.

On February 14, 1906, a collision occurred on the Belvidere line of the Chicago & Northwestern Railway south of Janesville, in which one engineer and two firemen were killed and a number of other members of the two train crews seriously injured. The passengers escaped with a few slight injuries. A representative of the Commission visited the wreck soon after it occurred and interviewed as many persons composing the two train crews as he could find. The accident was caused

by the failure of the conductor of a freight train to wait at Janesville for the passenger train from Belvidere, which he had orders to meet at that point. The conductor mistook the arrival of a train from Chicago for the one he was waiting for and proceeded south, colliding with the passenger train about two miles south of Janesville.

INTERLOCKING PLANTS.

Since June 15, 1905, the railway companies have filed plans for twelve new interlocking plants to be constructed at different points on their lines in the State of Wisconsin. Some of these plants are already constructed and in operation, but they have not been personally inspected by this Commission. The plans were approved subject to future inspection by an engineer should the Commission deem it advisable. Due to the resignation of Prof. W. D. Taylor, the Commission was without an engineer until July 1, 1906. The practice followed by the Railroad Commissioners of Wisconsin before the organization of this Commission was to have such plants inspected by a person not an engineer, and on such inspection formal permits were issued for the operation of such plants. This Commission believes the inspection of an intricate and extensive piece of machinery by a non-expert to be of little real value to the public, therefore, it has departed from the custom heretofore followed.

OTHER SAFETY DEVICES.

The Commission has instructed its engineer to enter into correspondence with engineers throughout the country, with a view of ascertaining the best appliances for the protection of railway employes and the public. The result of his investigations will be embodied in a report which will be the basis of future action by the Commission.

PART II.

Formal Complaints.

No. 1.

IN RE APPLICATION OF THE WISCONSIN IMMIGRATION AND DEVELOPMENT ASSOCIATION TO THE RAILROAD COMMISSION OF WISCONSIN TO PLACE A CONSTRUCTION ON CHAPTER 362 OF THE LAWS OF WISCONSIN FOR THE YEAR 1905.

Right of Railway Companies to sell tickets at reduced rates not open to the general public, to homeseekers in Wisconsin, under chapter 362, Laws of 1905.

- Held*, (1) That the legislature of Wisconsin in incorporating in chapter 362, Laws of 1905, certain provisions contained in the Interstate Commerce Act adopted the construction placed upon such provisions by the Federal Supreme Court.
- (2) That the provision of section 3 of the Wisconsin law, providing that the charges made by carriers shall be reasonable and prohibiting unjust and unreasonable charges, is substantially borrowed from section 1 of the Interstate Commerce Act.
- (3) That the provision of subdivision *c* of section 4, Wisconsin law, providing that the rates of charge shown in the printed tariffs or schedules filed under the act shall be the lawful rates of charge, is taken from section 6 of the Interstate Commerce Act.
- (4) That so much of section 22 of the Wisconsin law as prohibits the making of any charge other or different from that contained in the published tariffs, is, in substance, taken from section 2 of the Interstate Commerce Act.
- (5) That so much of section 23 of the Wisconsin law, as prohibits discriminations, is, in substance, taken from section 3 of the Interstate Commerce Act.

- (6) That under that portion of section 22 of the Interstate Commerce Act, which provides that carriers may sell mileage, excursion and commutation tickets, the Federal Supreme Court has held that the language used is illustrative and not exclusive, and that the naming of certain classes of tickets that might be sold at reduced rates, did not prevent the carriers from selling other kinds of tickets, not provided for in the exception, at reduced rates.
- (7) That applying a like construction to section 8 of the Wisconsin law, homeseekers' tickets might be sold at reduced rates, although such tickets were not expressly exempted from the provisions of the law in said section 8.
- (8) That while the carriers might of their own volition give reduced rates to homeseekers, the Railroad Commission has no power or authority under the law to compel the carrier to make a lower rate for some particular class of individuals, than that provided for the general public.

Prior to the organization of the Wisconsin Railroad Commission, the individual members thereof received many communications from land owners and land agents throughout the State, setting forth in substance that such land agents and owners were engaged in the business of colonizing northern Wisconsin lands; that prior to the passage of the law above referred to they received reduced rates of transportation for parties desiring to look over lands in the northern portion of the State, with a view of purchasing homes and taking up their permanent residence therein; that they also received some concessions in the matter of transportation for agents who usually accompanied the land seekers on such trips. The parties so engaged in the colonizing business in Wisconsin expressed a desire to meet and informally discuss the provisions of chapter 362 of Laws of 1905, with the Commission.

Shortly after the Commission was organized the aforesaid land owners and agents were notified that the Commission would meet them at such time as was satisfactory to them, and, accordingly, Tuesday, July 18th, was fixed as the date of meeting.

On that date the land owners and agents aforesaid filed a written communication with the Commission, stating in substance that under the provisions of section 8 of chapter 362, Laws of 1905, the railway companies doing business in Wisconsin were in doubt as to their rights and powers to sell to land owners and agents and to bona-fide home seekers what are known and designated as half-fare home seekers' tickets, with the further right to furnish and provide free trip tickets or mileage to the agents for the home seekers.

Attached to the communication was a letter from H. C. Cheyney, general agent, Chicago & Northwestern Ry. Co., to J. L. Gates, under date June 15, 1905, setting forth in substance that "Under a new Wisconsin law effective immediately the impression prevails that railroads will not be able to make any reduced rates for land seekers or land men that are not open to the general public. Please therefore do not issue any free or reduced rate transportation from receipt until further advice."

Also a circular letter dated June 16, 1905, issued by F. A. Miller, general passenger agent of the Chicago, Milwaukee & St. Paul Ry. Co., setting forth that "Under the recent enactment of the Wisconsin Legislature it is illegal for us to give free or reduced rate transportation to any resident of Wisconsin, unless such rates and reductions are open to the public. Manifestly, we cannot issue L. & I. (land and immigration) transportation to the public, nor can we make the rate heretofore given to land seekers open to the public. I am therefore compelled to ask that you return to me at once all mileage and other transportation you may have which has been issued to you from this office for use in connection with land business. Our conductors have been instructed that such transportation will not hereafter be honored by them in the State of Wisconsin."

There were also filed with the Commission letters from F. A. Miller, general passenger agent, Chicago, Milwaukee & St. Paul Ry., addressed to Oliver-Martin Land Company, under dates of June 24th, June 27th, and July 6th, such letters setting forth in substance that there was nothing the railways could do in the way of issuing free or reduced rate transportation to home-seekers in the State of Wisconsin, without violating the law.

The written communication filed with the Commission prayed that the Commission interpret section 8, chapter 362, of the Laws of 1905, in so far as it related to the sale of tickets to land seekers at less than regular rates.

It was stated orally at the conference that the business of colonizing northern Wisconsin was of vast importance to the State and also to the railways; that the law as now interpreted by the railway companies created a serious discrimination against the interests of the State of Wisconsin; that

a resident of Illinois could secure transportation to points in northern Wisconsin much cheaper than a resident of the southern part of the State of Wisconsin could reach the same territory; that low rates were given by the railway companies to land seekers going from the State of Wisconsin into other states, and that a resident of the State was discriminated against, in that he had to pay more for passage if he desired to purchase a home in the northern portion of the State than a non-resident would be compelled to pay; and that the State was discriminated against, in that its residents could secure cheaper rates of transportation to points outside of the State than they could secure within the State, assuming that in each case the party desiring transportation was a home-seeker.

The letter from Mr. Miller to the Oliver-Martin Land Company, bearing date July 6, 1905, seems to bear out the contention of the land owners and agents that more favorable concessions were given to non-residents of the State who desired to seek homes therein than were being given to residents thereof.

There were a large number of land owners and agents present at the meeting and statements were made and reiterated that the railway companies would be willing and glad to sell tickets at reduced rates to residents of Wisconsin who desired in good faith to purchase them with a view of securing homes, if they could do so without violating the provisions of the law and subjecting themselves to the penalties therein provided.

It may well be conceded that it is a matter of importance to the State at large and its people, that the unsettled portions of its territory should be developed, thus increasing the material wealth of the State, and the amount of taxable property therein.

It was conceded at the hearing that the Commission had no power to order or direct the railway companies to make a lesser rate for land seekers than that obtainable by the people of the State generally. The Commission is not a court but an administrative body, on which are conferred certain powers in regard to rate making that the legislature itself might exercise if in session. The legislature can confer no greater powers in this behalf than it might itself exercise. Any rate established by the legislature or by the Commission must be compensatory in order to be legal, and unless we are prepared

to maintain that the rate formerly given land-seekers is such, our action would not be sustained by the courts. The making of a non-compensatory rate would amount to a deprivation of the railway companies of their property without due process of law.

Chicago, Milwaukee & St. Paul Ry. Co. vs. State of Minnesota, 10 Sup. Ct. Rep., 462.

Interstate Commerce Commission vs. Baltimore & Ohio Ry. Co., 43 Fed. Rep., 42.

Smyth vs. Ames, 169 U. S., 466.

And in no event would the Commission have the power to establish a higher rate for the transportation of one class of individuals than for another.

“The power of the legislature to enact general laws regarding a railway company and its affairs does not include the power to compel it to make an exception in favor of some particular class in the community, and to carry the members of that class at a less sum than it has the right to charge for those who were not fortunate enough to be members thereof.”

Lake Shore & Michigan Southern Ry. Co. vs. Smith, 173 U. S., 684.

But the right of the Railroad Commission to establish such a rate as that sought in this instance is one proposition, while the right of the railway companies to give such rate is an essentially different question. Confessedly, there was no restriction on the railway companies to grant reduced rates to land seekers within this State, and not open to the general public prior to the passage of chapter 362 of the Laws of 1905, commonly known as the Railroad Commission Law.

The hearing, if it might be called such, was *ex parte*, the railway companies not being represented. The parties applying for action on the part of the Commission did not pretend to have given any particular study to the provisions of the law itself; their contention was principally to the effect that heretofore certain privileges in the way of reduced rates were given within the State to land-seekers; that it was important that such privileges be continued, and that the railway companies were willing and anxious to continue them if

they could lawfully do so, but that before they could induce the railway companies to change their present attitude in reference to the law, they must have some expression of opinion on the legality of making reduced rates from the Commission.

In the arguments before the Commission it was assumed that section 8 was the stumbling block, if any there were, in the way of the railway companies giving special rates to land-seekers. There are, however, a number of sections in that law that must be considered in passing upon the questions submitted, to-wit: section 3, subdivision c, section 4, section 8, section 22, section 23, section 28.

Taking up the last section first, it provides as follows:

“The Commission shall have power, when deemed by it necessary to prevent injury to the business or interests of the people or railroads of this State in consequence of interstate rate wars, or in case of any other emergency to be judged of by the Commission, to temporarily alter, amend, or, with the consent of the railroad company concerned, suspend any existing passenger rates, freight rates, schedules and orders on any railroad or part of railroad in this State. Such rates so made by the Commission shall apply on one or more of the railroads in this state or any portion thereof as may be directed by the Commission, and shall take effect at such time and remain in force for such length of time as may be prescribed by the Commission.”

If the condition of affairs described exists it would not be a strained construction of the act to say that such an emergency as is provided for in the above section has arisen, and that with the consent of the railway companies the Commission might make an emergency rate covering the sale of land-seekers' tickets only. While the act provides that, with the consent of the railway companies, the Commission can temporarily suspend in case of an emergency, to be judged of by the Commission, any existing passenger rate, still the section further provides that such an emergency rate as is made shall remain in force for such length of time as may be prescribed by the Commission. The difficulty in applying this section to the facts laid before the Commission in this matter, is that the law seems to contemplate action by the Commission in

cases of emergency, and does not seem to contemplate the making of permanent emergency rates.

There is authority for the position that the case presents such an emergency as would justify action by the Commission. This section of our law is taken from the Texas law. The Commission of that state held that where reduced rates were given to merchants attending jobbers' excursions from points within the State of Texas to points outside, thus diverting trade from the Texas jobbers to those living outside of the State the Railroad Commission might, acting under this clause, put into effect the same rate to jobbing centers in the State of Texas that were given to jobbing centers without the state.

See Appendix N, 12th Annual Report of the Railroad Commission of the State of Texas, page 439; the hearing being held July 24th, 1903.

So far as the questions involved in this application are concerned, the material portion of section 3 of our law provides:

“The charges made for any service rendered or to be rendered in the transportation of passengers or property, or for any service in connection therewith . . . shall be reasonable and just, and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful.”

This provision of our law seems to be taken almost literally from section 1 of the Interstate Commerce Act, the material portion of which reads:

“All charges made for any service rendered or to be rendered in the transportation of passengers or property as aforesaid or in connection there with . . . shall be just and reasonable, and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful.”

Subdivision c of section 4 of our law provides that: “It shall be unlawful for any railroad to charge, demand, collect or receive a greater or less compensation for the transportation of passengers or property or for any service in connection therewith than is specified in such printed schedules, including schedules of joint rates, as may at the time be in force, and the rates, fares and charges named therein shall be the lawful rates, fares and charges until the same are changed as herein provided.”

The Commission has not been advised whether the rates heretofore given land-seekers were published rates, or were contained in the printed schedules of rates, or whether the rates, fares or charges made to land seekers for travel were advertised or published by the railway companies as an open rate for that class of travel. The passenger schedules have not as yet been filed by all of the railways in interest, and we have not been able to ascertain from an examination of such schedules and tariffs as we have, whether or not any regular rate was published or printed by the railway companies for land-seekers' tickets. Certain it is that such schedules of rates as were in force at the time the law was enacted are declared to be lawful rates until such time as the same are changed by the Commission in the manner provided by law. From other provisions of the law it would also appear that if the home-seekers' rates were published rates and the same have not been withdrawn before the law went into effect, such rates could not be legally raised by the railway companies, except on notice and perhaps on application to the Commission.

The provision of our law last quoted seems to be borrowed from the Interstate Commerce Law. Section 6 of that act provides for the printing and posting of schedules of rates for carriage of persons and property, and the act further provides as follows:

“When any such common carrier shall have established its rates, fares and charges, in compliance with the provisions of this section, it shall be unlawful for such common carrier to demand, collect or receive from any person or persons a greater or less compensation for the transportation of persons or property, or for any service in connection therewith, than is specified in such published schedule of rates, fares and charges, as may at the time be in force.”

The difference in verbiage between said subdivision c of our law, and the paragraph from section 6 of the Interstate Commerce Act quoted is not to our minds material on the question presented for discussion.

The material part of section 22 of our law is as follows:

“If any railroad . . . shall . . . charge, demand, collect or receive from any person, firm or corporation a greater or less compensation for any service rendered or to

be rendered by it for the transportation of persons or property or for any service in connection therewith, than that prescribed in the published tariffs then in force, or established as provided herein, or than it charges, demands, collects or receives from any other person, firm or corporation for a like and contemporaneous service, such railroad shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared to be unlawful."

This portion of our act is evidently taken from section 2 of the Interstate Commerce Law, the material portion of which reads: "If any common carrier . . . shall . . . charge, demand, collect or receive from any person or persons a greater or less compensation for any service rendered, or to be rendered, in the transportation of passengers or property, subject to the provisions of this Act, than it charges, demands, collects or receives from any other person or persons for doing for him or them a like and contemporaneous service in the transportation of like kind of traffic under substantially similar circumstances and conditions, such common carrier shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared to be unlawful."

The difference between the two sections quoted, if there is any difference, is the following: Our law provides that the charge must be the same for "a like and contemporaneous service." The Interstate Commerce Law provides that the charge shall be the same for "a like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions."

We have not yet had the time to run down the decisions for the purpose of ascertaining just what force or effect, if any, is given in the words "like kind of traffic under substantially similar circumstances and conditions."

Taking up the proposition as an abstract one it would seem that there is no substantial difference between section 22 of our law and section 2 of the Interstate Commerce Law, in so far as the question at issue is concerned.

Section 23 of the Wisconsin law provides:

"If any railroad shall make or give any undue or unreasonable preference or advantage to any particular person,

firm or corporation, or shall subject any particular person, firm or corporation to any undue or unreasonable prejudice or disadvantage in any respect whatsoever, such railroad shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared unlawful."

Section 3 of the Interstate Commerce Law provides: "That it shall be unlawful for any common carrier subject to the provisions of this act to make or give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation, or locality, or any particular description of traffic in any respect whatsoever, or to subject any particular person, company, firm, corporation, or locality, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever."

This provision of section 3 of the Interstate Commerce Act is broader than section 23 of our act, in that it comprehends more subjects than are covered by the provisions of our act. For instance, the Interstate Commerce Law in terms prevents discrimination between localities, and also prevents discrimination as to particular descriptions of traffic, while section 23 of our law is silent on both of these subjects.

In so far as the carriage of passengers is concerned we do not find any prohibition in section 23 of the Wisconsin law that is not contained in section 3 of the Interstate Commerce Act.

The material part of section 8 of the Wisconsin law reads as follows:

"Nothing herein shall prevent . . . the issuance of mileage, commutation or excursion passengers' tickets, provided the same shall be obtainable by any person applying therefor without discrimination, or of party tickets, provided, that the same shall be obtainable by all persons applying therefor under like circumstances and conditions."

Section 22 of the Interstate Commerce Law provides, "That nothing in this Act shall prevent . . . the issuance of mileage, excursion, or commutation passenger tickets."

Only so much of the two acts are quoted as are deemed material in consideration of the question involved.

The Wisconsin law is precisely the same as the Federal law

in so far as it relates to the issuance of "mileage, excursion or commutation passenger tickets." Our law is broader than the Federal law in that it provides that party tickets may be secured, provided they are "obtainable by all persons applying therefor under like circumstances and conditions."

In other words, the Wisconsin law includes party tickets in section 8, while they are not included, at least in express terms, under section 22 of the Federal law.

As far as we have been able to determine from a hasty consideration of the Wisconsin law, the foregoing quotations comprehend all of the provisions of the law that might be applicable to the principal facts laid before the Commission in this instance. There may be some provisions that we have overlooked that may have a material bearing on the case; at the present time we are not aware of any and none have been called to our attention. In fact we have not had the benefit of any critical discussion of the provisions of the law, either by the parties who appeared before us, or the railway companies, or any one else.

The consideration of section 8 of our law necessitates an inquiry for the purpose of ascertaining whether or not the tickets formerly sold to land seekers at reduced rates come within the designation of excursion tickets, commutation tickets or party tickets. If coming under the designation of excursion or commutation tickets, the law does not in express terms say that they can be sold only to persons applying therefor "under like circumstances and conditions." If they come under the designation of party tickets, then the railway company would undoubtedly have the right to restrict sale to such persons as are bona fide home-seekers.

We have no very definite information as to what a party ticket is; we are advised by some that railway companies have usually restricted the sale of so called party tickets to parties of ten or more; we are advised, on the other hand, that some of the railway companies in this State have been selling at certain seasons of the year party tickets to parties of two or more. The ordinary definition of "party" embodies the idea of two or more people. Whether the term "party tickets" as used in section 8 of the Wisconsin law, should be construed to mean such tickets as had been placed on sale as party tickets by the railway companies prior to the time of the enactment of the

law, or whether the law should be construed to mean that the railway companies would have the right to make party rates for parties of two or more persons, is liable to be a vexatious question. It was stated by several parties that the question of land seekers' rates was considered and discussed by the railroad committee in the senate, that the idea of the law was to permit the railway companies to sell tickets to land-seekers at reduced rates, and that the provision in the law in reference to the sale of party tickets was supposed to be ample to permit the railway companies to give reduced rates to home-seekers, which were then in vogue.

Whether or not the sale of reduced rate tickets to home-seekers, under the designation of party tickets, could be made under the provisions of section 8 of the law, to parties of less than ten, we do not determine. From such little investigation as we have been able to give the matter, the question appears to be a purely academic one, and the answer wholly immaterial.

In adopting certain provisions of the Interstate Commerce law into our own law we have adopted with it the construction placed upon these particular provisions of the Interstate Commerce law by the Federal Courts, and more especially, by the Supreme Court of the United States. This as a legal proposition is elementary and fundamental; if it were not so, and we were at liberty to disregard the construction placed upon the Federal law by the Federal Supreme Court, we would still feel disposed to place the same construction on our act that was placed by the Supreme Court of the United States on the Federal act, where the language of the two acts is similar.

In *Smith vs. Northern Pacific Railroad Co.*, 1 Interstate Commerce Commission Reports, 208, the Interstate Commerce Commission decided that the practice of the Northern Pacific Railroad Company in offering certain inducements to land-seekers who purchased lands from that company, which inducements were not given to other home-seekers purchasing lands along the line of the road, not owned by the Northern Pacific Railroad Company, was an unjust discrimination under the Interstate Commerce Commission act, and the practice was ordered discontinued.

The case there presented differs from the one presently under consideration in that the railway company discriminated in favor of parties who purchased lands from the company, by offering

them rates which were not given to other persons traveling at the same time, and the same distance, but who might wish to purchase other lands.

It will be observed that section 22 of the Interstate Commerce act, after which our section 8 is largely patterned, does not in terms permit the sale of party tickets. After the passage of that act the Baltimore & Ohio Railroad Company placed on sale party tickets, whereby special rates were given to parties of ten or more traveling between certain points on its line. The Pittsburg, Cincinnati & St. Louis Ry. Co., a competing line, asserted that the action of the Baltimore & Ohio Railroad Company in placing on sale party tickets at reduced rates was unlawful, and a violation of the Interstate Commerce act, and that its business and traffic were being diverted by reason of the unlawful rate made by the B. & O. Railroad Co. Complaint was lodged with the Interstate Commerce Commission and that commission decided that the complaint was well founded and ordered the Baltimore & Ohio Railroad Co. to desist from making sales of party tickets between stations on its line, at less than the rates regularly charged to single passengers between the same points, holding that it was a discrimination to carry one of a party of ten for a less rate over the same distance, in the same train, and at the same time, than was charged to a single passenger. The Baltimore & Ohio Railroad Company continued the sale of excursion tickets, and an action was commenced against it in the United States Circuit Court, to restrain it from selling party tickets at reduced rates. The case is reported in the 43rd Federal Reporter, page 37. It was in substance held by the Federal Court, that the term "commutation tickets," as contained in section 22 of the Interstate Commerce law, was broad enough to include and did in this particular instance include a party ticket; that the sale of transportation to a party of ten, at a reduced rate from that given to a single passenger, was not an unfair and unjust discrimination; that Congress did not intend, by making certain exceptions in section 22, to prevent the sales of other classes of tickets that had been sold at less than regular rates before the passage of the act, and that the Baltimore & Ohio Railroad Co. had the right to sell party tickets at less than the regular fare charged, even though such a ticket was not expressly provided for in section 22. The petition of the Interstate Commerce Commission was therefore dismissed.

An appeal was taken from this decision to the Supreme Court of the United States, and the report of the case is found in Vol. 145, U. S. Rep., 263. In this decision the Supreme Court of the United States refused to hold that the term "commutation ticket," as used in section 22 of the Interstate Commerce Act, was broad enough to include a party ticket.

In construing section 22 of that act, which is substantially like section 8 of our act, the court said:

"The unlawfulness defined by sections 2 and 3 consists either in an 'unjust discrimination' or an 'undue or unreasonable preference or advantage,' and the object of section 22 was to settle beyond all doubt that the discrimination in favor of certain persons therein named should not be deemed unjust. It does not follow, however, that there may not be other classes of persons in whose favor a discrimination may be made without such discrimination being unjust. In other words, this section is rather illustrative than exclusive. Indeed, many, if not all, the excepted classes named in section 22 are those which, in the absence of this section, would not necessarily be held the subjects of an unjust discrimination, if more favorable terms were extended to them than to ordinary passengers."

In this decision the Supreme Court of the United States has held that the fact that railway companies were allowed to sell certain reduced rate tickets by section 22 of the act, did not preclude such companies from selling other classes of tickets not mentioned in section 22, at less than the regular rates, unless such sale amounted to an "unjust discrimination," or "an unreasonable preference or advantage."

In the discussion of this subject, the Court holds that the difference between what constitutes discrimination in the carriage of property and persons should be borne in mind. It holds that a railway company may be able, by largely increasing its traffic, to carry parties of ten or more at a less rate of compensation than it charges a single passenger; that there is no unjust discrimination against the single passenger because of the difference in rate, inasmuch as he has the privilege of getting up a party of ten and riding at the reduced rate. The Court said it might well be that a large quantity of freight might be shipped to a single consignee at a less cost than a small amount of freight. The charge of a higher rate to the

smaller shipper, however, might very well result in unjust discrimination; if his competitor was able to secure the transportation of goods at a materially less rate, he would be able to sell them at a lower price, and thus finally drive the small merchant out of business. No such condition is likely to result from the discrimination in the rates charged to travelers at wholesale over lines of road and single travelers over the same line, and between the same points.

The Court held that notwithstanding the fact that railway companies were not expressly permitted by section 22 of the act to sell party tickets, and notwithstanding sections 1, 2 and 3 of the Interstate Commerce Act, the sale of such tickets did not constitute an unlawful discrimination, and the railway companies were not prohibited from selling such tickets, at reduced rates, by the Interstate Commerce law.

As far as we can see, the provisions of the Interstate Commerce law and our own that bear upon the question before us, are substantially alike; the interpretation placed upon that act by the Supreme Court of the United States is for all practical purposes as much a part of the law as the statute itself; applying that interpretation to our law, it would seem to us that where railways had been selling land-seekers' tickets heretofore at reduced rates, they are not in any way prohibited from selling such tickets at reduced rates at the present time, and under the provisions of our law.

You have only to substitute the words "land-seekers' tickets" for the words "party tickets," and you have exactly the same state of facts arising under our law that arose under the Interstate Commerce law; there no special permission was granted to railway companies to sell party tickets; here we may assume that no special permission was granted to the railway companies to sell land-seekers' tickets, for the purpose of argument; but these tickets have been on sale heretofore, as party tickets were on sale before the passage of the Interstate Commerce law; and the tickets were open for sale to all persons applying therefor, under like circumstances and conditions.

While it may be said in a sense that there is a discrimination, still our Federal Supreme Court has said that there was no unjust or unreasonable discrimination as a result of placing such tickets on sale at reduced cost. So far as we are aware, the decision covers every question that is involved in the application before us.

If we correctly understand the provisions of the Interstate Commerce law, in so far as they affect the question before us, they are similar to our own law. If this be true it follows that if it is a violation of our law to carry a home-seeker between points in this state at reduced rates of fare not open to the general public, then it is a violation of the Interstate Commerce law to transport home-seekers at such rates from one state to another.

We have been asked to give a speedy answer to the request filed with us, on the ground that the interests of the State were being jeopardized under existing conditions. Some of the arguments in support of such contention have appealed to us strongly, while others have not. We can give no practical effect to our judgment on the application. A more extensive examination of the law and the decisions of the Interstate Commerce Commission, might result in convincing us that we are in error on some of the propositions herein advanced; if we are we freely reserve the right to reverse ourselves.

It is our opinion that common carriers have the right, if they choose to exercise it, of selling tickets to bona fide land-seekers at less than the regular fare offered the public generally, provided that all who fall within the designation of bona fide land-seekers are treated alike and without discrimination. If on fuller investigation we should change our views we will advise all parties in interest, and also advise the railway companies to withdraw the reduced rates, if they see fit to give them in the meantime.

We have been asked to say whether or not the practice of giving free transportation to land agents must be discontinued. Before giving a definite opinion on this subject we would prefer to consult the attorney general's office; for the present, at least, we express no opinion on the subject, and do not wish to be understood as in any way sanctioning the custom heretofore said to be prevalent, of giving free transportation to land agents.

Respectfully submitted,

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON.

Commissioners.

Madison, Wis., July 20, 1905.

No. 2.

In re APPLICATION CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY COMPANY FOR LEAVE TO DISCONTINUE TARIFF ON WOOD FOR THE ASHLAND IRON & STEEL COMPANY.

William Wilkins, for Ashland Iron & Steel Company.

H. M. Pearce, for C., St. P., M. & O. Ry. Co.

- Held, (1) That under section 6 of chapter 362, Laws of 1905, concentration, commodity, transit and other special contract rates are expressly authorized, provided such rates are open to all shippers of a like kind of traffic under similar circumstances and conditions.
- (2) That a lower rate might be made in this case on raw material, where the same was intended for manufacture and the manufactured product was to be shipped out over the line of road hauling such raw material and the rate on the raw material plus the rate on the manufactured product amounted to a fair compensation for the entire haulage service, than a carrier would be obliged to make where such raw material was consumed at the point of delivery and brought no revenue except that obtained from the original haul.
- (3) That the circumstances and conditions under which the two kinds of shipments are made in this instance are not similar, and that the practice of making a lower rate in the one case than in the other does not unjustly discriminate against the shipper paying the higher rate, and therefore the action of the carrier in exacting a higher rate in the one case than the other was not unlawful.

Application was made to the Commission to discontinue tariff number 15,012 making a rate of 40 cents per cord on wood from certain points on the Omaha line to Ashland, Wis. The reason for the discontinuation, stated in the application, was that the tariff was very low, and was based upon an agreement to ship the by-products over the line of the road, and it was alleged that this latter part of the agreement had not been carried out to the satisfaction of the company. In reply to this application, the Commission notified the Railway Company that the law required notice to be given to the party in interest, so that it might be heard on the application, and notice was accordingly given to the Ashland Iron & Steel Company of the proposed cancellation of the tariff. Objection to the cancellation was made

by the Ashland Iron & Steel Company and accordingly a time was fixed by the Commission to hear the parties in interest.

The date fixed was October 18, 1905, at which time the Railway Company appeared by H. M. Pearce, its general freight agent; the Ashland Iron & Steel Company was represented by William Wilkins, its manager.

On the hearing it appeared that the Ashland Iron & Steel Co. was engaged largely in the manufacture of pig iron and that in its manufacture large quantities of charcoal are used; that the company formerly had its charcoal prepared at various points on the roads leading to Ashland and shipped to Ashland from the coal kilns; that some years back the company realized that if the wood could be shipped to Ashland and reduced to charcoal at that point, certain valuable by-products of the wood could be saved that would otherwise be wasted, particularly wood alcohol and acetate of lime; that the Ashland Iron & Steel Co. before changing the mode of conducting its business, conferred with three of the leading railways entering Ashland for the purpose of ascertaining what rates could be obtained on the shipment of cord wood from various points on their lines, and that the railway companies, in consideration of the amount of freight they would receive from the shipment of the by-products from the wood, and perhaps in part consideration for a promised increase in the output of pig iron, made what was conceded at the hearing to be an extremely low rate for the transportation of the wood to the plant of the company at Ashland. Substantially the same rates were put into effect by the Northern Pacific Railway Co., the Omaha Railway Company, and the Chicago & North-Western Railway Co. The Omaha Railway Company alone made application to discontinue the rate and based its application on the ground that the Ashland Iron & Steel Company did not carry out its part of the agreement in regard to shipping a reasonable amount of the by-products of the wood over the line of that railway. It was asserted on the hearing, however, by Mr. Pearce that the rate was so low that it was not compensatory, and that was given as an additional reason why it should be discontinued. It further appeared at the hearing that the Ashland Iron & Steel Company uses large quantities of wood which cannot be used for commercial purposes in that vicinity, generally speaking; that the rates which

it is paying on its wood at the present time are as high as the rates that are being charged to its competitors in the business; and that its wood, as a matter of fact, is costing it more per cord than its principal business competitors. After Mr. Wilkins' presentation of his side of the controversy, it was admitted by Mr. Pearce that he was mistaken in his assumption that his company did not receive a fair and equitable amount of the by-products from the wood which it hauls for the Ashland Iron & Steel Co. He further stated, that taking all the facts detailed by Mr. Wilkins into account, he thought it would be no more than fair for his company to continue the present rate for the Ashland Iron & Steel Company, provided such action did not constitute a precedent that would bind the company to ship wood for all parties desiring shipment between the same points at like rates, regardless of the purpose for which the wood was used.

It is perhaps unnecessary to go into any discussion of the law on the subject. Section 6 of chapter 362, of the Laws of Wisconsin for the year 1905, being the law creating the Railroad Commission, provides that

“Nothing in this act shall be construed to prevent concentration, commodity, transit, and other special contract rates, but all such rates shall be open to all shippers for a like kind of traffic under similar circumstances and conditions.”

In this case, the earnings of the Railway Company on hauling the wood, and hauling the product of the wood, probably afforded a fair measure of compensation for the two services. If a prohibitory rate were to be made on wood the Railway Company would lose both classes of traffic. It is important to those who are clearing their lands and fitting them for cultivation, that they have some market for this class of material. The rate on the outgoing product is remunerative. It would seem that a lesser rate might well be made on a commodity such as wood or saw logs, where the carrier was to receive a remunerative rate for hauling the manufactured product, than might be made where there was no manufactured product to haul, and that the circumstances and conditions in the one case were materially different from those in the other. For the present the rate in force will be permitted to stand. The decision, however, is not to be construed as establishing a precedent, or

making a ruling to the effect that the rate sought to be discontinued would be a reasonable rate, were it not based on an agreement by the Ashland Iron & Steel Co. to furnish the Railway Company with a reasonable portion of the shipment of the by-products made from the wood.

Respectfully submitted,
RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,
B. H. MEYER,
HALFORD ERICKSON,
Commissioners.

Dated this 20th day of July, A. D., 1905.

No. 3.

VALVOLINE OIL COMPANY

vs.

CHICAGO AND NORTH-WESTERN RAILWAY COMPANY
AND CHICAGO, MILWAUKEE & ST. PAUL RAILWAY
COMPANY.

H. L. Potter, for Petitioner.

This was a complaint against the rates on petroleum and petroleum products from Chicago and Milwaukee to Madison. The rates from Chicago to Madison, being interstate rates, the Railroad Commission of Wisconsin has no power over them, except to investigate and to bring the matter before the Interstate Commerce Commission, should the facts warrant such action. The petitioner in this case alleged that the rates from Chicago to Madison of 12½ cents per 100 lbs., were excessive as compared with the rate of 19½ cents per 100 lbs. from Warren, Pennsylvania, its principal shipping point, to Chicago. The rate of 12½ cents from Chicago to Madison, was farther alleged to be discriminatory as compared with the rate of 7 cents from Chicago to Janesville, Stoughton, Evansville and the places enumerated in the complaint. The rate from Chicago to Oshkosh, a distance of 165 miles, and Chicago to Watertown, a distance of 130 miles, was 10 cents; and from Chicago to Green

Bay, a distance of 213 miles, 12 cents. Madison is only 22 miles north of Evansville and 14 miles beyond Stoughton and yet an extra charge of $5\frac{1}{2}$ cents is levied for these distances. The discrimination in the rate from Milwaukee to Stoughton and Evansville, as compared with Madison, is even greater. The rate from Milwaukee to Stoughton and Evansville is 5 cents per 100 pounds, while the rate from Milwaukee to Madison is $12\frac{1}{2}$ cents. The petitioner alleged that the rates complained of were a discrimination in favor of the Standard Oil Company, which had distributing stations at Stoughton and Evansville and other places named and a discrimination against the Valvoline Oil Company, an independent company, which distributed its products from Madison.

After correspondence and informal conferences, the Railway Companies volunteered to reduce the rate from Milwaukee and Chicago to Madison to 7 cents per 100 pounds, which was satisfactory to the petitioner, whereupon the complaint was withdrawn.

When the new tariff was issued it was observed that the minimum weight had been raised from 24,000 pounds to 30,000 pounds. The Commission took the position that since nothing was said in the previous negotiations about the minimum weight, the same should remain unchanged unless expressly ordered otherwise after the hearing. The Commission took the position that the advance in the minimum weight might tend to nullify the reduction in the rate which the companies had agreed to make. It was shown that shipments of oil in barrels could not possibly reach the 30,000 pound minimum, for a great majority of the freight cars used in this service. Compilations of cars and their dimensions, made by the Commission, showed that only a small percentage of the equipment of the railway cars, were capable of holding a minimum of 30,000 pounds of petroleum in barrels, and that these cars were generally employed in other branches of the service. The Valvoline Oil Company, not having a large enough supply of tank cars of its own, is obliged to ship largely in box cars and a minimum requirement of 30,000 pounds, would be a discrimination against it and in favor of transporters of oil in larger cars. Hereupon, the tariff establishing the minimum of 30,000 pounds, was withdrawn and the minimum weight of 24,000 pounds has been maintained since

that time. The matters related above transpired during August and September, 1905.

During August, 1906, the Chicago & Northwestern and the Chicago, Milwaukee & St. Paul Railway Companies, filed new tariffs on petroleum and petroleum products. The Chicago & Northwestern tariff applied on shipments from Chicago to Freeport, Illinois, Madison and Lake Mills, Wisconsin and the Chicago, Milwaukee & St. Paul tariff from Chicago to Madison. The new rate was first published at 9 cents per 100 pounds, but a few days later it was put down to 8 cents, the explanation being that the 9 cent rate was published by mistake. The rates to Beloit, Janesville, Fort Atkinson, Oconomowoc, Stoughton, Evansville and other places were left unchanged. The Valvoline Oil Company, at once filed a new complaint protesting against the proposed 9 cent rate as being in effect, a discrimination against it and calculated to do great injury to its business. When the Railway Companies corrected the rate to 8 cents the Valvoline Oil Company amended its petition and proceedings were begun to test the reasonableness of the 8 cent rate from Chicago to Madison. After notice had been served by the Commission on the Railway Companies, the 8 cent rate was withdrawn, before the tariff became effective by its terms and the 7 cent rate re-established.

No. 4.

MASON-DONALDSON LUMBER COMPANY

against

CHICAGO & NORTHWESTERN RAILWAY COMPANY

This petition was filed November 10, 1905. It involved rates on lumber from Ashland, Odanah and the Lake Superior territory generally, to Beloit, Janesville, Evansville and other points. The points involved in the petition were discussed several times with traffic officials, a special report on the situation was made by one of the Commissioners, and finally the petitioner requested the Commission to drop proceedings in the case.

No. 5.

E. A. EDMONDS AND A. W. SANBORN
against
THE PULLMAN COMPANY

These petitions related specifically to the charge of \$1.50 and \$2.00, which is charged for a berth by the Pullman Company, between Rhinelander and Ashland and Milwaukee, respectively. The petitioners allege that these charges are unreasonable and excessive for the services performed and that they yield the Pullman Company more than a fair rate of revenue on the investment. The petitioners further complain regarding the practice or custom of the Pullman Company in the operation of its cars, to lower the upper berth whether the same is occupied or not.

The Railroad Commission began an investigation of the Pullman car business in Wisconsin immediately after the petitions had been filed. A considerable amount of information has been collected but not enough to enable the Commission to act intelligently and justly in the matter. Other and more pressing matters have occupied the Commission, but in the near future the Pullman investigation will be resumed and pushed to its completion as rapidly as possible.

No. 6.

ISLAND PAPER COMPANY,
vs.
WISCONSIN CENTRAL RAILWAY COMPANY.

Silas Bullard for Petitioner.
Thomas H. Gill for Respondent.

Complaint against carrier charging unjust discrimination: (1) in the rates on pulp wood as compared with the rates on fuel wood, bolts and logs; (2) in a published proportional rate on pulp wood; (3) in the regular rate on pulp wood to Neenah-Menasha as compared with the rate on pulp wood to competitive points.

Held, That on the facts before the Commission no unjust discrimination has been shown to exist in the rates on pulp wood as compared with the rates on fuel wood, bolts and logs although there are some matters connected with this part of the complaint which require additional investigation;

That the proportional rate complained of is unjustly discriminatory, having caused financial loss to the complainant and should be cancelled;

That the existing rates on pulp wood into Neenah-Menasha are excessive and should be reduced; and by this order they are reduced.

Petitioner, the Island Paper Company, is a corporation engaged in the manufacture of pulp and paper having its principal office in the city of Menasha. The petitioner manufactures what is known as fibre paper which is largely manufactured from hemlock wood. It manufactures its own pulp for the purpose of supplying its mill and is obliged to ship in large quantities of hemlock pulp wood annually. The amount of such shipments of pulp wood is about 18,000 cords per year. Heretofore the petitioner has used almost entirely small hemlock which is usually designated as hemlock pulp wood but in the future it intends to use also hemlock logs which are suitable for saw logs for the purpose of manufacturing its supply of pulp.

The petitioner asserts that there is practically no supply of hemlock wood in the immediate vicinity of its mill and that it is obliged to ship in its supply from considerable distances, chiefly over the line of the Wisconsin Central Railway Company, from points between High Bridge in Ashland County and Abbotsford in Clark County. The rates, which are charged from such points to Neenah-Menasha, are exhibited in schedule "A," accompanying the complaint. Petitioner also submitted exhibits containing the rates from the same points to Neenah-Menasha on cord-wood, bolts and logs, as well as a schedule containing the proportional rates on pulp wood between these same points and Neenah-Menasha, for delivery to various consumers at points beyond the line of the Wisconsin Central.

Petitioner avers on information and belief that a materially higher rate is charged to a pulp or paper mill for hauling hemlock logs and delivering the same to it, over the same line of road, and to the same point, than is charged to saw mills and other wood working plants, and that such excessive charges to the manufacturers of pulp and paper is an unjust and unrea-

sonable discrimination against the petitioner; the petitioner further states that hemlock pulp wood is a commodity of less value and one that brings a lower price in the market than the ordinary wood used for fuel and that no subsequent haul is obtained from fuel wood as in the case of pulp wood, the finished product of which bears a high rate of charge on outgoing shipments. This, is asserted, is a discrimination against shippers of hemlock wood.

The petition also alleges that hemlock pulp wood is shipped into Neenah and Menasha over the lines of the Wisconsin Central Railway for delivery at Appleton and other points beyond the line of the Central, at a lower rate of charge than the petitioner is obliged to pay for shipments into Neenah and Menasha. This is represented as an unjust discrimination against the petitioner.

The answer of the Railway Company admits the correctness of the schedules of rates submitted as exhibits in connection with the complaint. It also admits that a higher rate is charged for hemlock logs when destined for use in paper mills than on logs between the same points when destined for saw mills and other wood working plants. It is denied that this difference in the rate between the two classes of material is an unjust or unreasonable discrimination for the reason that while such schedules of rates are based entirely upon the agreement of the manufacturer to deliver to the railway company which brings in the raw material the manufactured material of whatever kind for out-shipment, it still is a fact that a much larger product of out-shipment at substantially similar rates within the State of Wisconsin is realized by the railway company from saw logs, than from paper, the product of the manufacture of such hemlock pulp wood. For these reasons the respondent Railway Company claims and insists that the relation in the rate between pulp wood and saw logs is a fair and just discrimination, "required by the terms of the law."

Respondent denies any knowledge or information sufficient to form a belief as to whether hemlock pulp wood is of less value in the market than wood transported for fuel purposes although the respondent submits and urges that probably 60 per cent. of the wood transported for fuel purposes over its lines consists of slabs and mill refuse which commands a very much less price

per cord in the market than hemlock pulp wood used for making pulp. That this slab wood and mill refuse would have no market were not an exceptionally low rate provided for the purpose of moving it from the place of production to the place of consumption. That even if it were true that pulp wood were of much less value in the market than the balance of the ordinary wood transported over respondent's line for fuel purposes, to-wit: various hard woods, still respondent urges and submits that the value of such fuel wood varies greatly with the character of the winter and that respondent cannot consistently vary its rates with the weather; also that such low rates seem fully justified in the conduct of the business of common carriers under all the circumstances in the case for the reason that there is no other known use or consumption for such other ordinary hard-woods as are thus transported for fuel purposes. While the highest value of hemlock pulp wood lies in its adaptability to the manufacture of paper and its inadaptability to ordinary fuel purposes. The respondent further urges that a very large proportion of the balance of 40 per cent. of fuel wood shipment consists of hard-woods which are known as kiln refuse, being the tops and smaller branches of trees, the better part of which is cut into cord-wood for the purpose of manufacturing charcoal at kilns and in the manufacture of brick; and that in order not to make a total loss to the farmers and wood producers along the line of the respondent and for the same reasons that exceedingly low rates are made for the transportation of slab wood and mill refuse, similarly low rates have been compelled upon this forest refuse, constituting such a large proportion of the fuel wood transported. Respondent denies that the differences thus shown in the tariffs or rates between cord-wood and pulp-wood are in any sense an unjust or unfair discrimination against the paper manufacturer.

The respondent admits that heretofore there has been, and at present there is charged a lower rate on pulp wood from the same point of shipment to Neenah and Menasha when such pulp wood is destined or delivered to points like Appleton or Kimberly on the line of the Chicago & North Western Railway than is charged upon similar pulp wood from the same points to Neenah and Menasha destined for manufacture into pulp at said last named places, but denies that such rate is in fact

unjust and discriminatory against the paper manufacturers at Neenah and Menasha, for the reason that the paper manufacturers at Neenah and Menasha are unable to take and consume all the wood produced at points along the line of the respondent company for pulp purposes, and that the surplus, therefore, for the relief and benefit of those who produce such hemlock pulp wood, must be marketed at points beyond Neenah and Menasha; and that in order to meet this commercial exigency the respondent has been required to establish a proportional rate which in connection with the local rate over the Chicago & Northwestern Railway from Neenah and Menasha to Appleton and Kimberly will enable the pulp and paper manufacturers at the last named places to procure pulp wood in competition with the manufacturers at Neenah and Menasha at the same prices.

The answer cites the fact that this proportional rate was made on the assumption that the same, added to the local rate between Neenah and Menasha and Appleton and other points on the Chicago and Northwestern Railway, would equal the rate which is charged by the Chicago & Northwestern Railway on similar products produced and consumed locally upon its own line, and also the rate which is charged to manufacturers at Neenah and Menasha drawing their material from points on the Wisconsin Central. However, the respondent having been advised sometime during the month of December, 1905, at a hearing before the Railroad Commission of Wisconsin, that the Chicago & Northwestern Ry. Co. did not in fact charge such local rate but merely a nominal switching charge, the respondent has requested the Commission in writing for authority to withdraw such proportional rate in order to abolish the discrimination which the same has caused without respondent's knowledge or intent.

The attorney for the petitioner also submitted a carefully prepared brief containing many citations from decisions of the Interstate Commerce Commission, of the United States Supreme Court and other federal and state courts, tending to show that when a carrier has had a certain rate in effect for many years the existence of such rate is in itself presumptive evidence in favor of its reasonableness. The brief tends to maintain the proposition that where the evidence shows that the advance has been made after the lower rate had been in ef-

fect for many years and that the traffic affected by such rate is large, important and constantly increasing, such advance should be held unjust and unreasonable unless the same can be satisfactorily explained. By these authorities and arguments, the respondent endeavored to establish the conclusion that the existing proportional rate, which has been the cause of an unjust discrimination, should be made the regular rate rather than permit the existing regular rate to stand as the rate to be charged in the future, and to permit the withdrawal of the proportional rate.

The complaint in this proceeding was submitted November 23, 1905, signed by John Strange, Vice President of the Island Paper Company. An informal conference was held at the office of the Commission between petitioner and the respondent on December 13, 1905. A few days later the Wisconsin Central Ry. Co. requested authority to withdraw the proportional rate on pulp wood to Neenah-Menasha. Correspondence was conducted with manufacturers located in other Fox River points who, it was held, were directly interested in the proportional rate in question; but for reasons shown below the Commission did not authorize the withdrawal of the proportional rate at this time. Meanwhile time passed to January 1, 1906, after which date the railway companies could change rates on ten days notice under the provisions of the Railroad Commission Law, but the Wisconsin Central preferred not to act under these provisions of law and requested the express consent of the Commission instead. The Commission designated February 15, 1906, as the date for the hearing on the application. The signer of the petition requested a postponement because of his contemplated withdrawal from the complainant company and Silas Bullard, attorney for the Island Paper Co., notified the Commission that he could not be ready for hearing by February 15. Consequently the hearing was postponed until March 16, 1906, and at the conclusion of the proceeding on that day an adjournment was taken until June 10, 1906. At both of these hearings Silas Bullard represented the Island Paper Co., and Thomas H. Gill the Wisconsin Central Ry. Co. At the hearing on March 16, 1906 other Fox River pulp and paper manufacturers were officially represented.

The chief points involved in this proceeding are, first, the charge of discrimination in the rates on pulp wood as compared

with the rates on fuel wood, bolts and logs; second, unjust discrimination resulting from the application of a proportional rate on pulp wood from points on the Wisconsin Central Ry. to Neenah-Menasha, one cent lower than the regular rate to Neenah-Menasha from the same Wisconsin Central points, thus placing the petitioner at a disadvantage in comparison with other manufacturers; third, the allegation that the rate of 5 to 6 cents per hundred pounds, respectively, over the Wisconsin Central Ry. to Neenah-Menasha is in itself excessive, unreasonable and discriminatory.

The question involved in the first point, that of discrimination in the rate on pulp wood as compared with the rate on fuel wood, bolts and logs, is one which is inherent in every system of classification and rates. The entire system of the classification of freight is based upon discrimination among commodities. The very essence of classification is discrimination. To be sure, pulp wood, fuel wood, bolts and logs, in common with many other articles, are carried at commodity rates and not under the classification, so that strictly and technically speaking, no question of classification is involved in the point at issue. Yet, the substance of the thing called classification is present which finds objective expression in the different rates. The four commodities named are not placed by the Railway Company in the same class of traffic; if they were the rate would be the same on all of them between the same points. In other cases which have come before this Commission, for instance, the case of the *Ashland Iron and Steel Company against the Chicago, St. Paul Minneapolis & Omaha Ry. Co.*, it was urged that the amount of freight-money received by a railway company on the entire haul of the raw material going in and on the product of this material shipped out, together constitutes the remuneration which the railway company receives for its services. In that case wood was shipped from the same points to Ashland for fuel purposes and for manufacture in a plant which gives the railway company return freight. It was argued, and we thought successfully, that a lower rate was justified on wood destined to the Iron & Steel Company for its exclusive use in manufacture, withdrawn from the ordinary conditions of a competitive market, than on wood shipped from the same stations to Ashland for fuel purposes. In the present case an attempt is made to reverse the arguments. It is main-

tained by the Railway Company that if slab wood is shipped and used for fuel, one rate should apply; if slab wood goes into a mill to be manufactured into pulp, a higher rate is to apply. Slab wood manufactured into pulp yields the railway company additional revenue on the shipments of paper out from the point of manufacture, thus again increasing the company's revenue. It is generally held by railway companies, including the respondent in other connections, that the "products clause" in a tariff, by which the company carrying the raw material in gets the outgoing product, justifies a lower rate on raw material. According to this line of reasoning pulp wood should take a lower rate than fuel wood.

This contention is met by the respondent company, as will be seen by reference to the summary of its answer, in two ways. In the first instance the company maintains that about 60 per cent of these shipments of wood between the points named in the wood schedule submitted with the complaint is slab wood, a cheap waste product which would not move at a higher rate. A large part of the balance of the 40 per cent. is kiln refuse, hard wood, of an inferior quality and incapable of bearing a high rate. The charge of discrimination against pulp wood on these grounds, the respondent holds, is unfounded. If the facts as stated are true, the discrimination in favor of fuel wood does not appear to be unjust.

The argument of the Railway Company with reference to the relation between the rates on logs and on pulp wood is based upon the relative quantity and value, of the outgoing products. It is argued that a given car of logs yields more freight on the outgoing product than the same weight of pulp wood. According to the statistics compiled by one of the paper companies a cord of pulp wood, at an average weight of five thousand pounds for the green wood and four thousand pounds for the dry, yields 801 pounds of paper. One thousand feet of hemlock logs, weighing on the average about 8,000 pounds, will produce about 1,250 feet of lumber which weighs 3,000 pounds. The weight of the lumber produced, therefore, is double the weight of the paper produced, unit for unit of raw material. These figures were presented at the hearing as close estimates rather than exact mathematical quantities, which we have no means of verifying. Since they were accepted by the parties present we may assume them to be approximately correct. On the

facts at present before the Commission no unjust discrimination has been shown to exist between the rates on pulp wood and saw logs. Further inquiries will, however, be made into the general question of the relation among the rates on fuel wood, logs, bolts and pulp wood; and we wish to state expressly that the facts before this Commission are entirely inadequate for an intelligent disposition of this question. Our conclusions in the present proceedings rest upon entirely different grounds, and the question of the relation of the rates on fuel wood, logs, bolts and pulp wood is still an open one, so far as this Commission is concerned.

In so far as the justification of differences in certain rates is found in the differences in the purposes for which shipments are made the point involved has been disposed of *In the Matter of the Wisconsin Central Railway Company, Charge on Construction Material for Manufacturing Plants.*

Coming now to the second point of the complaint, relating to the proportional rate into Neenah-Menasha, the admitted facts are substantially as follows: From all points on the Wisconsin Central Railway between Spencer and Prentice, inclusive, a proportional rate of 4 cents per hundred pounds is in effect to Neenah-Menasha for shipments beyond, while the regular rate from those points to Neenah-Menasha, for consumption at Neenah-Menasha, is 5 cents per hundred pounds. From all points on the Wisconsin Central from Phillips to Marengo, inclusive, the proportional rate to Neenah-Menasha is 5 cents as compared with the regular rate of 6 cents. This proportional rate was put in by the Wisconsin Central on the assumption that the connecting line, the Chicago & North Western, would join in making a combined through rate so that the aggregate rate to Appleton, and other Fox River points, from Wisconsin Central points, would be the same as to Neenah-Menasha, or 5 and 6 cents, respectively. The proportional rate was regarded as a necessity by the Wisconsin Central in order to dispose of the surplus pulp wood on its lines which the mills situated thereon could not consume. Instead of charging what the Wisconsin Central says it was expected would be charged, the Chicago & Northwestern merely imposed a switching charge of \$3. per car as published in C. & N. W. Local Tariff No. 111. At an average assumed weight of 50,000 pounds per car, which is somewhat below the actual

average weight per car, pulp wood would be delivered at Appleton, Kimberly, Little Chute, Kaukauna, from Wisconsin Central points, at a combined rate of 4 3-5 and 5 3-5 cents per hundred pounds, while that same pulp wood would cost the Island Paper Company 5 and 6 cents per hundred pounds, respectively, in freight, or a difference of \$.2. per car, excluding switching considerations, if any enter into this phase of the question. During the year from February 20, 1905, to February 20, 1906, the Island Paper Company shipped over the Wisconsin Central into Neenah-Menasha a total of 1097 cars of pulp wood. At \$.2. per car the total discrimination against the Island Paper Company would be \$2194. The petitioner presented figures which tended to show nearly three times this amount of discrimination. Only a careful, detailed examination of the books of the paper companies could determine the exact sums involved. Before January 1, 1905, the regular rate into Neenah-Menasha was 4 and 5 cents, respectively, or the same as the present proportional rate. About January 1, 1905 the former regular rate was made a proportional rate and the regular rate made one cent higher. At least that was the testimony. The Island Paper Company claims to have purchased the pulp mill from the C. W. Howard Company on the assumption that the rate which the Howard Company had enjoyed, probably as a matter of common understanding rather than a published tariff, would also be the rate of charge for its shipments into Neenah-Menasha from points on the Wisconsin Central. The Island Paper Company bought the mill property in February 1905, at about the time, or soon after, the change in rates was made.

At this point it should be stated that the Wisconsin Central Railway Company claims to have had no knowledge of the failure of the Chicago & Northwestern Railway Company to add a proper rate to the Wisconsin Central proportional rate. At the informal conference of December 13, 1905 the fact of the \$3. switching charge between Neenah-Menasha and Appleton and other points was first brought out. A few days later the Wisconsin Central Railway Company wrote to the Commission stating that it had confirmed the existence of this \$3. switching charge, admitted the discrimination, and applied for leave to cancel the proportional rate. The petitioner in this proceeding

was willing to have such proportional rate cancelled, of course, but it also wanted the regular rate to be made equal to the proportional rate. In short, the question was whether the discrimination arising out of the proportional rate should be abolished by withdrawing the proportional rate or by lowering the regular rate to the level of the proportional. The withdrawal of the proportional rate would affect directly other manufacturers in Fox River points not parties to these proceedings, and the Commission was not disposed to sanction such action without further hearing, although the Wisconsin Central applied for leave to withdraw at several subsequent dates. Regarding these requests for permission to withdraw it may be said that formal consent of the Commission was legally necessary only until January 1, 1906. After that date the Wisconsin Central might have done so at any time, on ten days notice, without action on the part of the Commission, but for reasons of its own it desired to secure the authority of the Commission for withdrawing this proportional rate admitted to be a discrimination. Letters were sent by the Commission to all manufacturers interested in pulp wood at Appleton, Kimberly, Little Chute, Combined Locks and Kaukauna to the effect that a hearing on the application of the Wisconsin Central would be held at a designated time. At this hearing these manufacturers, through their representatives, declared themselves as ready and willing to acquiesce in the withdrawal of the proportional rate and as otherwise satisfied with the existing rates. They desired, however, to be kept on a footing of equality with their competitors. The position of these manufacturers was thus greatly at variance with that of the petitioner which urged with much feeling the injustice of the present rate. It admitted that Neenah and Menasha were common points with Appleton and other Fox River points, having the same rates on outgoing shipments, but it claimed that it was not on the same basis with its competitors regarding shipments of pulp wood in, and that it was being unjustly discriminated against, not only on account of the proportional rate but on account of the higher rate on pulp wood which it was obliged to pay as compared with its competitors.

The Commission has made a compilation of rates on pulp wood, fuel wood, logs and lumber, into the leading points of shipment in this State. The compilations of pulp wood rates

embrace the rates into Eau Claire, Appleton and other towns in the Appleton district, Neenah and Menasha, Port Edwards, Grand Rapids, Centralia and Nekoosa. These compilations show that the rates on pulp wood into Neenah and Menasha over the Wisconsin Central are somewhat higher than the rates on pulp wood into the other towns named over the different lines of railway.

However, the average distance through which pulp wood is hauled into Neenah-Menasha over the Wisconsin Central is greater than the average distances for corresponding shipments over the Chicago, Milwaukee & St. Paul and the Chicago & Northwestern into Neenah-Menasha. It would appear, therefore, that manufacturers at Neenah-Menasha might secure a supply of pulp wood at lower railway rates than those prevailing from pulp wood producing points on the Wisconsin Central, although it is only fair to assume that buyers of pulp wood along the lines of the Wisconsin Central secure their supply at a price sufficiently lower to compensate them for the higher rate and the longer distance over that line. This is a matter, however, which is immaterial to the present issue. If the petitioner is entitled to relief on the facts before the Commission in the present proceedings, such relief must be based upon the third point of the complaint, namely, the question of the absolute reasonableness of the rate.

It is generally understood that the exact cost of transporting a particular shipment is not ascertainable until after the shipment has been made, and even then certain elements of such cost must of necessity be estimates or approximations. The case is somewhat different with average costs. While average cost, too, embraces some elements of approximation, which, it may be added, is true of all cost accounting in all kinds of enterprise, there is sufficient accuracy in figures representing cost of transportation to enable one to determine whether a certain grade of traffic is conducted at a loss or at a profit, as well as the rate of such loss or profit. Pulp wood is one of the lowest grades of commodities carried by the railways in Wisconsin. The carriers receive a good return on shipments of the products manufactured from pulp wood. This gives carriers a greater revenue for the combined service than the rates on pulp wood by themselves would indicate. It appears to us conclusive

that the railways should carry pulp wood at the lowest possible basis of rates consistent with a fair return on their investment. Whatever the rates, they should be reasonable and therefore remunerative. We have made very careful analyses of the accounts of the Wisconsin Central Railway Company. We may add parenthetically that the making of these statistical calculations has been the cause of the delay in disposing of this case. Our statistical analysis shows that the present rates on pulp wood charged by the Wisconsin Central may be reduced slightly and still yield a fair profit to the company. While the amount of this reduction falls far short of what the petitioner claimed it was entitled to, we believe that it will be of substantial advantage to it and at the same time be perfectly just to the Railway Company.

It is our judgment and determination that the present rates charged by the Wisconsin Central Railway Company on pulp wood from stations on its line to Neenah-Menasha are excessive and should be reduced from 5 and 6 cents per hundred pounds, respectively, to $4\frac{1}{2}$ and $5\frac{1}{2}$ cents per hundred pounds, respectively. The present 5 cent zone extends from Spencer to Prentice, inclusive, and the 6 cents zone from Phillips to Marengo, inclusive. The former embraces distances varying between 106 miles and 162 miles and the latter between 174 miles and 239 miles. These are unusually wide zones and there are good reasons for establishing smaller gradations of mileage and correspondingly finer shadings of rates, coming down, perhaps, to differences which can be expressed in mills or fractions thereof. However, the present broad zones constitute a part of the existing adjustment, not only on the Wisconsin Central but also on the other railways in that section of the State, and in the absence of cogent reasons for ordering a change in this respect, we have decided not to interfere in the matter, and permit the two zones to stand as they now are geographically.

We have previously indicated that the Wisconsin Central Railway Company has repeatedly applied for leave to withdraw the discriminatory proportional rate to Neenah-Menasha. We have also shown why we did not approve the earliest of these applications. We have furthermore pointed out that since January 1, 1906, the Wisconsin Central has had the legal right to withdraw this rate on ten days notice. On Sep-

tember 15, 1906, we addressed the following letter to the Railway Company:

“After the complaint of the Island Paper Company was filed with this Commission your company suggested that it would like to issue a new tariff covering the rate on pulp wood shipped over your line to Neenah for manufacture in the Fox River Valley at points beyond Neenah, the Neenah rates being greater than the combined rates charged by your road and the North Western. We suggested that while the complaint was under investigation it might be well to allow the rate to Appleton and other Fox River points to stand.

Without expressing any opinion as to the reasonableness or unreasonableness of the rates in question, or as to whether or not the Appleton rate should be raised, we desire to say that you need not delay any longer about taking such action as you see fit, so far as this Commission is concerned.”

In the light of these facts it is hardly necessary to make an order abrogating the proportional rate. For the sake of definiteness and completeness, however, and as a matter of record, the discontinuance of the proportional rate is made a part of this order. The proposed reduction in the regular rate to Neenah-Menasha will, of course, make the existing proportional rate less discriminatory than it had been in the past. In our judgment it is far better for the connecting carriers to agree upon a joint tariff, which, we are informed, has already been discussed favorably by them, than to continue an arrangement which is uncertain, and if continued in the future, even in a modified form, is likely to cause additional complaints. Not having the matter formally before it, the Commission cannot at present order such a joint rate.

IT IS THEREFORE ORDERED, That the Wisconsin Central Railway Company cancel its proportional rate on pulp wood as published in Wisconsin Central tariff No. D-1292 and we recommend that in substitution therefor the Wisconsin Central Railway Company enter into a joint rate arrangement with its connections at Neenah-Menasha.

IT IS FURTHER ORDERED, That the Wisconsin Central Railway Company hereafter charge four and one-half cents per hundred pounds on shipments of pulp wood to Neenah-Menasha

from stations on its line between Spencer and Prentice, inclusive; and five and one-half cents per hundred pounds on shipments of pulp wood to Neenah-Menasha from Phillips to Maringo, inclusive.

Dated this 14th day of November, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON.

Commissioners.

No. 7.

MASON-DONALDSON LUMBER COMPANY,

vs.

CHICAGO, MILWAUKEE & ST. PAUL
RAILWAY COMPANY AND CHICAGO & NORTH
WESTERN RAILWAY COMPANY.

Petition on account of the refusal of the defendant Railway Companies to make joint rates on lumber and forest products between Rhinelander, Juneau, Mount Horeb, Manitowoc, Sheboygan, Port Washington, Kenosha and Lancaster. Petition withdrawn.

No. 8.

H. N. ROBINSON

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

Dangerous and unprotected crossings on Grand Avenue in the city of Grand Rapids. When this petition was filed, November 27, 1905, the Commission was without power to act in such matters, except to investigate. Soon after, at the special session of the legislature, the law was amended so as to give the Commission power to act in such cases. The Commission corresponded with all the petitioners and respondents in-

volved in the Grand Rapids crossing cases, of which this is one, suggesting that they arrive at a statement of facts and if possible also a satisfactory arrangement. The common council of Grand Rapids took the matter up through the city attorney, J. A. Gaynor (see cases 24 to 26) and accepted the proposition of the railway companies each to place a flagman at the crossing.

No. 9.

FRED STAFF

vs.

CHICAGO, MILWAUKEE AND
ST. PAUL RAILWAY COMPANY.

This is one of the five petitions regarding the Grand Rapids crossings mentioned above.

No. 10.

JOHN B. GRUBER & COMPANY,

vs.

MINNEAPOLIS, ST. PAUL AND
SAULT STE. MARIE RAILWAY COMPANY.

John B. Gruber, in his own behalf.

A. H. Bright, Respondent.

Petition regarding a depot building which is an old boarding car that has been divided into three compartments, the only outside door leads to the waiting-room so that no freight can be stored without being carried through that compartment. In practice, freight, including dressed beeves, calves and hogs is stored in the waiting-room. No facilities for comfort and sanitation have been provided. Complaint also relates to station facilities. Shippers are obliged to pay for the use of docks used in loading forest products.

- Held*, (1) That the Commission can hardly subscribe to the doctrine that a railroad company is entitled as a matter of right to a donation of the land which it is necessary to possess in order to conduct its business properly before it can or should be obliged to furnish reasonable and necessary facilities for shippers.
- (2) That the present depot is unfit for use and should be replaced by a suitable building.
- (3) That at a station where the amount of business transacted is as great as has been in this case shown, shippers should be relieved of the necessity of paying private parties a yearly rental for the use of ground which is necessary in order that they may ship their products.

On October 14, 1905, the Railroad Commission received from John B. Gruber & Company of Catawba, Wisconsin, a communication stating that the firm had been endeavoring for four years to secure adequate station facilities at the village of Catawba, which facilities the Minneapolis, St. Paul & Sault Ste Marie Railway Company (hereinafter called the Railway Company) had agreed to furnish, provided the residents of the village of Catawba would furnish to said Railway Company, free of charge, some additional grounds which it appeared to be necessary for the Railway Company to acquire in order to give the desired facilities at a reasonable expense. Accompanying such communication was a considerable volume of correspondence between the petitioner and the Railway Company, beginning August 7, 1901. Under date of March 1, 1902, the chief engineer of the Railway Company wrote Mr. Gruber as follows:

“Relative to right of way for station purposes at Catawba, I beg to say that if you and others interested at Catawba will secure for the company the necessary ground for station purposes free, as per following description, the company will build the necessary tracks and depots and maintain the same just as long as business warrants the maintenance. The amount necessary will require two strips of land, one strip of land 125 feet wide on the south side adjacent to present right of way, and a strip of land 50 feet wide on the north adjacent to our right of way and extending over and across the N. W. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ of Sec. 8, and the N. E. $\frac{1}{4}$ of the N. E. $\frac{1}{4}$ of Sec. 7, Tp. 131 N., R. 1, W.”

Manifestly the township should be 35 instead of 131. It appears from subsequent correspondence that the land owners in the village of Catawba were willing to donate, free of charge,

the additional land wanted by the Railway Company, with one or two exceptions. These parties insisted on receiving pay for their property. As a result of such refusal the chief engineer of the Railway Company wrote Mr. Gruber under date of May 28, 1902, as follows:

“Your letter of May 28th relative to Catawba station grounds received. In reply I beg to say we will call the deal off. It is no use to try to deal with people that require compensation for ground to be used for station ground purposes, as the benefits derived from locating the station is as much for the people donating the lands as it is for the Railway Company. It is the rule with the railroad companies that where they establish stations the ground for station purposes is granted free of any incumbrance or conditions; and also include, as a rule, half interest of the land available for town site purposes surrounding the station. This latter part of course you know we did not ask of the people at all. I am sorry you have fallen down on the proposition you made in regard to securing additional right of way for station purposes, causing both yourself and the railroad company so much time and trouble for nothing. The company cannot, under any circumstances, establish a station at Catawba, unless it is provided free right of way for station purposes, and if your company cannot see their way clear to do this the company will not put in any further improvements.”

The correspondence continued with more or less regularity until May 13, 1903, on which date the general superintendent of the Railway Company wrote Mr. Gruber as follows:

“As you know, we have only fifty feet right of way on either side of the track through your station and inasmuch as we cannot make satisfactory arrangements for more, have decided to make no improvements whatever and will abandon any further efforts to make it a permanent station. As you are no doubt aware it is only eight miles from Pennington to Kennan, and the distance between the two points does not justify us in keeping Catawba station open. We therefore cannot allow you to build the warehouse along the business track.”

Upon receipt of the communication from Gruber & Company, under date of October 14, certain information was asked for in reference to the population of the village and surrounding country, present facilities afforded, and amount of business transacted at the station. The information asked for was furnished and in addition thereto the Commission sent a representative to look the situation over and make a report thereon.

Under date of December 21, formal petition was filed by Gruber & Company against the Railway Company, alleging in substance that the station building at Catawba was inadequate and unfit for use; that the station grounds at said station were in bad condition, and that a large part of the side track thereat could not be reached on account of its proximity to land owned by private parties and because a large part of the right of way adjacent to such side track was impassible for teams.

The defendant Railway Company filed its answer February 1, 1906, in which is contained the following statements:

“The said company further admits that in some respects its station grounds and facilities at Catawba station are inadequate, but alleges that it has been its intention and purpose without regard to this proceeding to improve the said station privileges in the spring of 1906; that it is wholly impracticable to attempt to make such improvements at this season of the year.

The said company further alleges that if this proceeding is held in abeyance or continued until it can have an opportunity to make the improvement which it has had in contemplation the said petitioners will probably be satisfied to dismiss the same.”

The prayer for relief is as follows:

“Wherefore, said Railway Company prays that said proceeding shall be continued until May 15th, 1906, in order to give said Railway Company an opportunity to carry out the plans which it has with regard to the improvements of said station facilities.”

Prior to the time of the service of this answer notice had been served on the Railway Company, fixing the time and place for hearing of the complaint, for February 13, 1906. The petitioner expressed himself as being satisfied to have the time ex-

tended as prayed for in the answer, provided some person in authority, representing the Railway Company, would file with the Commission a definite statement setting forth what it was willing to do in the way of improving the depot and other station facilities at said point. Under date of February 12, a telegram was sent to the petitioner, stating that the company would begin as soon as spring opened and complete the work in the spring, but the company failed to make any definite statement as to what it proposed to do in the way of making improvements.

Mr. Gruber appeared before the Commission at the time and place fixed in the notice, and presented such facts as he desired to present in the way of sworn testimony. The Railway Company did not appear. The petitioner requested that a decision in the matter be withheld until he had an opportunity to have some further communication with the Railway Company, and a few days thereafter Mr. Gruber represented to the Commission that he would be willing to adjourn the proceedings until May 15, 1906, on the representation of the Railway Company that it would begin work in the spring as soon as it was practicable to do so, and make the desired improvements. The proceeding was accordingly adjourned until May 15, 1906. On that date the petitioner filed an affidavit with the Commission, stating that no action whatever had been taken by the Railway Company in the direction of making any improvements whatever at Catawba. The Railway Company did not appear on May 15 to present any facts or arguments to show why the prayer of the petitioner should not be granted, or why the representations under which the adjournment had been secured had not been complied with.

The petitioner, Mr. Gruber, testified that he shipped from Catawba station from 75 to 100 carloads a year of cord wood, pulp wood, bark, cedar posts and poles, and that his freights on incoming shipments amounted to from \$1,000.00 to \$1,500.00 per year. He estimated the total number of carloads per year shipped out at between 700 and 800 cars. This statement is somewhat lower than the report made by our special representative who visited Catawba. Mr. Gruber further testified that the village contained a population of from 200 to 250 people, and the township 500 people; that the village contains a post office, a school house, churches and stores; that the travel in and out would average ten persons per day, and that there was one

freight or accommodation train going east and one going west each day that stopped to receive and discharge passengers.

The depot building which is complained of is an old boarding car that has been divided into three compartments. The waiting room is about 12x12, and the operator's room and freight room are each about 9x12. The only outside door leads to the waiting room, so that freight would have to be carried through the waiting room and operator's room to reach the freight compartment. As a matter of fact, owing to the dilapidated condition of the freight end of the building and the difficulty of reaching it, practically all of the freight that was stored at all was stored in the waiting room, including dressed beef, calves and hogs. The roof is old and in bad condition, and no closets have been built.

In respect to the facilities for handling freight, it appeared from the testimony that the Railway Company has about 2,700 feet of side track at this point, which is used as a passing track for trains and also as a freight track; that the west two-thirds of this track is not available for loading or unloading freight, because the ground is low and wet and holes have been dug along the side track to either secure material for filling or else to drain the water from the track; that the easterly one-third of such side track is nearly all off the right of way of the defendant Railway Company; that there is a loading dock on the easterly end of the side track which appears to be the only place where it is practicable to load cars, but shippers desiring to use it must pay from \$25.00 to \$50.00 per season for the use of the ground which must necessarily be used in connection with the track, and that even here the work of loading is considerably interfered with owing to the movement of cars while such side track is occupied by trains, to enable them to pass.

The freight shipped from this station consists largely of forest products which are hauled in during the winter season and stored for shipment as the cars are furnished to move it, or the product is being prepared for the market. Such freight is bulky and requires considerable storage room. We gather from the correspondence of the Railway Company and the testimony of Mr. Gruber that both parties consider it desirable to use the present side track for a passing track principally, and that a new side track should be built to accommodate the freight hauled at this

point. The necessity for improvement in the way of side track facilities seems to have been recognized by the Railway Company for about four years, and apparently the only thing that stood in the way of such improvement was the question of who should stand the expense of acquiring part of the additional land that was necessary for the proposed side track and grounds. In view of the admissions contained in the answer we do not deem it necessary to elaborate on the reasons for holding that the present side track facilities are inadequate. It seems to be assumed by both parties that the land now owned by the Railway Company in this village is not sufficient to afford the facilities that should be afforded, and that land in addition to the 100 feet of right of way which the company now owns should be acquired. We can hardly subscribe to the doctrine that a railway company is entitled as a matter of right to a donation of the land that it is necessary for it to have in order to properly conduct its business, before it can or should be obliged to furnish reasonable and necessary facilities for shippers. We are advised that a suitable strip of land on the south side of the right of way, a quarter of a mile in length, and extending from Oak street on the west to Main street on the east, according to the plat of the village of Catawba, can be acquired without condemnation and at a reasonable price. It may be that other and more desirable grounds, all things considered, can be acquired. We have no desire to curtail the right of the Railway Company to select what it may deem the most desirable location that will yield adequate facilities.

We find and determine that the present station facilities at Catawba are inadequate in the following particulars:

(1) The present depot building is unfit for use and should be replaced by a suitable building, such as is now provided at Prentice, Ingram or Kennan, stations on the line of said railway in the immediate vicinity of Catawba.

(2) At a station where there is as much business transacted as there appears to be at Catawba, shippers should be relieved of the necessity of paying private parties a yearly rental for the use of ground that must be had in order to enable them to ship their product, and we think they should be relieved of the annoyance consequent on the use of this particular side track as a passing track.

IT IS THEREFORE ORDERED, That the respondent, the Minne-

apolis, St. Paul & Sault Ste. Marie Railway Company, proceed to erect and construct a suitable depot building at Catawba station, in Price county, Wisconsin. The construction of such a depot building as is now maintained at Prentice, Kennan or Ingram will be considered suitable and a compliance with the terms of this order.

IT IS FURTHER ORDERED, That said respondent Railway Company proceed to erect and construct an additional side track, not less than 1,200 feet in length, at said village of Catawba, for the use of parties desiring to ship freight, and that said track be so constructed, and the grounds adjacent thereto be so fixed, that said side track will be readily accessible to parties desiring to ship freight from the same, and that reasonable and adequate facilities be afforded to shippers to load their freight on cars from said side track.

A period of sixty days from the date of the service of this order will be considered a reasonable time in which to comply with its terms. If said Railway Company finds it necessary to procure additional grounds in order to comply with the terms of this order and is unable to secure the same at a reasonable price without resorting to condemnation proceedings, leave is granted to apply for additional time in which to construct the side track, providing said Railway Company is necessarily so hindered and delayed by such condemnation proceedings that it cannot with the exercise of reasonable diligence complete the same within the time herein provided.

Dated this 17th day of May, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN.

BY JOHN BARNES,
B. H. MEYER,
HALFORD ERICKSON,
Commissioners.

No. 11.

A. C. DOW AND COMPANY,

against

CHICAGO, MILWAUKEE AND ST. PAUL
RAILWAY COMPANY AND CHICAGO & NORTH WEST-
ERN RAILWAY COMPANY.

This petition involved the matter of loading cheese at a certain warehouse on a side track, some distance from the station house and the relation of the shipper and Railway Company to the Western Railway Weighing Association and Inspection Bureau, all of which is set forth in detail in the complaint and accompanying documents. The Commission at once made an inquiry into the methods of weighing cheese by the Weighing Association and after an informal conference, the differences were adjusted and the petition withdrawn.

No. 12.

W. W. SCHULTZ, J. M. SCHULTZ &
A. J. SCHULTZ, DOING BUSINESS AS
SCHULTZ BROS.

against

WISCONSIN NORTHERN RAILWAY
COMPANY.

Eastman & Martineau for petitioners.

This petition sets forth substantially that the respondent is a common carrier having traffic arrangements with the Chicago, Milwaukee & St. Paul Railway Company and the Wisconsin & Michigan Railway Company; that heretofore the respondent has transported logs from points on its line to points on the Chicago, Milwaukee & St. Paul Railway Company's line and the Wisconsin & Michigan Railway Company's line, but that during the fall of 1905, it refused to do so; that the petitioner has entered into contracts which are dependent

upon such shipments; that a spur track has been built and a large quantity of logs piled up near the same, and the refusal of the respondent to carry such logs will involve heavy losses to the petitioners; and that further, the refusal of the respondent is due to its rival interests in a lumber company. After the date for hearing had been fixed, the attorneys for the petitioners forwarded to the Commission a copy of an agreement which was reached between the parties in interest and which provided that the respondent will hereafter carry the forest products and other commodities of the petitioner over its line of road to or from points of its connecting lines, directly or indirectly, and without discrimination, including the placing, switching and handling of cars for the loading and hauling of the commodities offered.

No. 13.

ANTON LOEHR,
 against
CHICAGO, MILWAUKEE & ST. PAUL
RAILWAY COMPANY AND WISCONSIN
CENTRAL RAILWAY COMPANY.

Anton Loehr in his own behalf.
C. H. Van Alstine, for C. M. & St. P. Ry. Co.
T. H. Gill, for W. C. Ry. Co., Respondents.

A small village situated about midway between two stations eight miles apart, in a densely populated farming country, having expressed its willingness to guarantee a reasonable amount of business, and having further volunteered to construct and maintain a station building at its own expense, is fairly entitled to a side-track at the company's expense.

On January 15, 1906, the above named Anton Loehr filed with the Railroad Commission a petition alleging in substance that the respondent Railway Companies were common carriers jointly operating a line of railroad through the village of St. John, Calumet county, Wisconsin; that said Railway Companies for a long time past had stopped their freight and passenger trains at said village to receive and discharge passengers, but

had refused and still refuse to receive or deliver any freight at said point; that there was operated at said village a large cheese factory and there was adjacent thereto a large stone quarry which could not be worked because of the failure of the roads to receive freight thereat; that large quantities of grain were naturally tributary to said point, and would be hauled there if it could be shipped therefrom; that a large amount of incoming freight was shipped for parties who resided at said village, and that the convenience of the inhabitants of the village and of the farmers living adjacent thereto, demanded that a side track be put in at said village so that freight might be received and delivered thereat. The relief asked is that after due hearing and investigation an order be made commanding the Railway Companies to put in a side track at said village, and provide the proper facilities for receiving and delivering freight at said point.

The joint answer of the Railway Companies alleged that the grade of the roadbed for 1,000 feet on either side of St. John is one per cent; that a station at said point would not prove profitable; that there was a station and elevator of suitable capacity at Hilbert Junction, three miles east of St. John, and a station and suitable elevator at Sherwood, two miles west of St. John, and that such stations were sufficient for handling the grain and other farm products raised within a radius of five miles of such stations. The remaining portion of the answer consists of denials of various portions of the petition.

The date fixed for hearing on the issues made was February 20th. The petitioner appeared in person; C. H. Van Alstine appeared as attorney for the Chicago, Milwaukee & St. Paul Railway Company, and T. H. Gill as attorney for the Wisconsin Central Railway Company. Anton Loehr, John Fish and D. R. Curtin testified in support of the allegations of the petition. A petition was also presented and filed signed by seventy-nine persons who were either residents of the village of St. John or farmers living adjacent thereto, mostly the latter. Mr. H. B. Earling, assistant superintendent of the Chicago, Milwaukee & St. Paul Railway, testified in behalf of the Railway Companies.

The evidence offered in support of the petition shows that at the village of St. John there is a store, cheese factory, two saloons, butcher shop, blacksmith and wagon shop, and a stone

quarry, and that the population of the village and of the surrounding territory within a radius of half a mile is 102; that above quarry has been worked for local consumption, but to a limited extent because of lack of shipping facilities, the cost of hauling to the nearest station being \$3.00 per cord, which left no margin of profit for doing the business, and that the quarry was less than a quarter of a mile from the track at the village; that the quality of the stone was good and some lime had been burned there, but the amount that would be shipped in case a side track was put in would be difficult to estimate with any degree of accuracy; that another stone quarry, 15 miles distant, employed 40 men; that it is a trifle over four miles by wagon road to Hilbert on the east, and 3½ miles to Sherwood on the west; that the railway fare to Hilbert was nine cents and to Sherwood eight cents; that Mr. Loehr intended to go into the business of developing the quarry, with its owner, if the side track was put in; that petitioner owned and operated a cheese factory at St. John, and that it took a man and team practically a day to haul two loads of cheese to a place of shipment, and the shipments of cheese for the year ending January 31, 1906, amounted to 125,000 pounds. The petitioner also shipped during the year four carloads of hay and had three more to ship, and he also shipped considerable quantities of eggs, butter, poultry and apples; that there is a considerable quantity of freight shipped for parties living at the village of St. John, consisting of general merchandise principally. Mr. Loehr testified that the freight during the year on his incoming and outgoing shipments amounted to \$600.00, and that the butcher and wagon maker also handled considerable freight.

A petition signed by seventy-nine farmers residing in the vicinity of St. John was filed asking for some station facilities there, in which petitioners represented that they raised in the aggregate to exceed 100,000 bushels of grain a year, nearly all of which would be shipped from St. John if shipping facilities were afforded. It was testified to that all but three of seventy-nine signers resided nearer to St. John than to any other station, and that all or most of them attended church there and desired to do their trading there. Further, that there was a steep hill on the road to Sherwood that was traveled by the farmers living in the vicinity of St. John, which caused

those hauling heavy loads to avoid Sherwood, and that the team tracks on which unloading was done at Hilbert were undesirable because of the liability of horses becoming frightened there. It was further testified to by Mr. Loehr that he would guarantee the erection of an elevator if a side track was put in at a suitable place, and that a couple of other cheese factories would do their shipping from that point, although there was no particular advantage in their doing so on the score of distance. It further appeared that the soil in the vicinity of St. John is very fertile and highly cultivated and that the country is thickly settled; that sugar beets had been raised around the village, but their cultivation had been discontinued because the haul was too great, but that the project of raising them would be revived if a station was established. Finally it appeared that all trains, passenger and freight, stopped at St. John to receive and discharge passengers and that the number of such trains on each of the roads was three each daily.

On the part of the Railway Companies it was contended; that the distance from Sherwood to Hilbert was only 5.6 miles; that the average distance between stations on the Chicago, Milwaukee & St. Paul Railway in Wisconsin in the farming district was 5.44 miles; that the putting in of a station would not add to the revenues of the companies, as the freight that would naturally go to St. John the companies were now getting at other stations; that there was a steep grade where the side track was wanted which made it difficult to start trains going up grade; that the establishment of a side track on a grade was undesirable, owing to liability to accident; that the expense of erecting a depot and platform would be about \$1,200.00, and of a suitable side track from \$750.00 to \$1,000.00; that heat and light for a station would cost from \$100.00 to \$150.00 per year, and the salary of a station agent would amount to from \$500.00 to \$540.00 per year; that a suitable stock yard would cost from \$175.00 to \$300.00; that the amount of freight on goods shipped in or out by inhabitants of the village of St. John for the year 1905 at Sherwood or Hilbert was \$482.94. over the Chicago, Milwaukee & St. Paul Railway and \$135.00 over the Wisconsin Central Railway. It further appeared that a considerable portion of the cheese shipments from St. John were made from Dundas, a station on the Chi-

cago & Northwestern Railway Company's line, about 4½ miles distant.

After the testimony was taken the Commission was requested by the petitioner to send a representative to St. John to look the situation over, and pursuant to such request a commissioner visited St. John. No facts of any importance were disclosed as a result of such visit that were not disclosed in the hearing.

Subsequently a written statement was filed with the Commission signed by the petitioner and a number of other responsible parties residing in the village of St. John or in its vicinity, stating that if a side track was put in at the village and facilities were afforded for receiving freight thereat and shipping freight therefrom the signers would at their own expense erect such a building for the storage of freight and the shelter of passengers as would suit the wants and needs of the patrons of the station, and furthermore that they would care for and look after such station building and see that it was warmed and lighted, the Railway Companies to provide the stove to be used in such station and also to furnish the necessary fuel and oil to heat and light the building.

The petitioner and his associates further stated that in the event of a side track being put in at said point they would guarantee to either build a suitable elevator thereat, or procure some other party to do so, and that they would further guarantee that the stone quarry referred to would be worked, and that some freight would be shipped therefrom, the amount of which they were unable to guarantee, however.

The substance of such written statement was communicated by the Commission to each of the respondent Railway Companies under date of March 14, with a statement that if the offers made were such as to change the attitude of the companies in reference to the side track privilege requested we would like to be advised to that effect. Not having heard from the companies, further than to acknowledge receipt of our communication and say that it would be referred to the proper authorities, we assume that the position taken by the companies has not been changed by the offer referred to. As the petition under consideration has been hanging fire for a long time we do not feel justified in longer withholding a decision.

The following table shows the distances between some of the

stations now maintained by the Wisconsin Central Railway Company in Wisconsin, when such distances are less than four miles:

From Camp Lake to Silver Lake	1.6 miles
From Silver Lake to Trevor	3.3 miles
From Trevor to Camp Lake	1.7 miles
From Lake Beulah to Mukwonago	3.5 miles
From South Oskosh to Oskosh	1.1 miles
From Byron to Hamilton	3.3 miles
From Menasha to Neenah	2.1 miles
From Potter to Hilbert Jct	3.9 miles
From Amherst to Amherst Jct	1.5 miles
From Medina Jct. to Dale	4. miles
From Custer to Stockholm	2.2 miles
From Milladore to Sherry	3.1 miles
From Hewitt to Marshfield	4. miles
From Grand Rapids to South Centralia	2.4 miles
From Colby to Unity	3.9 miles
From South Centralia to Port Edwards	1.9 miles
From Abbotsford to Dorchester	3.8 miles
From Port Edwards to Nekoosa	2.9 miles
From Colby to Abbotsford	2.6 miles
From Chippewa Falls to Irvine	1.3 miles
From Downing to Glenwood	2.6 miles

On the Chicago, Milwaukee & St. Paul Railway between Ranney and Milwaukee, a distance of 33.4 miles, there are eleven stations, the average distance between stations being three miles. Between Racine and Elkhorn, a distance of 40.7 miles, there are nine stations. Of these four are not more than three miles apart. Between Beloit and Brookfield, 117 miles, there are twenty-six stations averaging 4.5 miles between the stations. Six of these are less than three miles apart. Between Milwaukee and Prairie du Chien there are seven stations where the distances run from 1.1 miles to 3.5 miles; the average for the entire twenty-five stations being 7.2 miles. Between Milwaukee and Appleton, a distance of 106.6 miles, there are nineteen stations, the average distance being 5.6 miles. On this division which includes Sherwood and Hilbert, is found Cedarburg and Grafton, 2.2 miles apart, Adel and Waldo 3.9 miles apart, Kiel and New Holstein 3.7 miles apart, Hayton and Chilton 1.9 miles apart, Menasha and Neenah 1.4 miles apart. Between Milwaukee and Fond du Lac, Oshkosh, Portage and branches, covering a distance of 214.7 miles, there are forty-three stations and the average distance between stations is five miles. The distance between Woodland and Iron Ridge Junction is 1.7 miles, Brandon Jct. and Reeds Corners 3.7 miles, Reeds Corners and Ripon four miles, Picketts and

Fisks four miles, Horicon Jet. and Minnesota Jet. 2.9 miles, Minnesota Jet. and Rolling Prairie 1.9 miles. The foregoing list is by no means complete; and in each case, as we understand it, a station agent is regularly employed at the stations named.

The line of the Northwestern road between Milwaukee and Appleton Junction passes through Calumet county and within five miles of St. John. The line from Manitowoc to Appleton Junction is about forty miles and between these points the stations of Cato and Grimms are 1.9 miles apart, Grimms and Reedville 2.4 miles apart, Forest Jet. and Dundas 3.2 miles apart, Kaukauna and Combined Locks 1.6 miles apart, Combined Locks and Kimberly four miles apart, Kimberly and Appleton Jet. 3.5 miles apart, Appleton Jet. and Appleton 1.4 miles apart. As we are advised station agents are regularly employed at all of these seven stations on this forty miles of road traversing the territory in the immediate vicinity of St. John.

The parties signing the statement referred to are Anton Loehr, John Fish, Nic. Schmitt, Leopold Krueger, Fred Timm, Nic. Dohr, Joe Frank and John Schreiner. The last named signer is the owner of the land on which the stone quarry is located.

Considering the fact that the portion of Calumet county involved is densely populated, and other existing conditions, the putting in of an intermediate station between Sherwood and Hilbert would seem to be entirely reasonable.

The evident sincerity and good faith of the people of this vicinity in their desire to secure the accommodation asked for is evidenced by their willingness to contribute a large part of the expense themselves.

It is true that the distance between Hilbert and Sherwood is only 5.6 miles by rail, somewhat more than the average distance between stations on the Chicago, Milwaukee and St. Paul Railway. It is also true that railways should not be required to provide stations at every country cross roads. If the giving of the required facilities involved a considerable outlay of money, in the first instance, or the expenditure of any considerable sum in the future, or seriously delayed or inconvenienced the railways in the transaction of their business, a very different question might be involved than the one we are called upon

to consider. We have here the case of each of the railway companies stopping their trains, freight and passenger, at the place whenever a passenger desires to get on or off a train, and according to the evidence nearly all of the trains, freight and passenger, stop at St. John daily. When freight trains stop to receive and discharge passengers we apprehend no great inconvenience can result from asking one train a day, each way, on each road, to receive and discharge freight. The only additional expense that the railways will be subjected to, over and above what they voluntarily subject themselves to at the present time is the expense of building from five hundred to seven hundred feet of side track and the furnishing of a stove, lamps, fuel and lights for a little depot building. We think the matter of expense may be legitimately considered in determining whether a service complained of is adequate or not. A large part of the first cost is the rails, which can be taken up if time demonstrates that the business of the place is not sufficient to justify the continuance of the station. We cannot look into the future and determine with exactness what the outcome will be of establishing a station at this point. It would certainly appear that there was a large amount of business for the railroads in this vicinity, and that the same will be transacted here if a station is established. It also appears that at least one new industry, that of quarrying stone, will result from its establishment. We have on one side a village of a hundred inhabitants with its store, its blacksmith and wagon shop, its cheese factory, and a populous and fertile country on every side composed of farmers who have their church at this place and congregate here and want to do their business here, and can do it here more conveniently than at any other station on account of distance and other conditions fully as important. When their convenience in the aggregate is fully weighed against the comparatively trifling expense to two railways jointly owning the track running through this village we feel constrained to hold that the slight additional accommodations asked are reasonably demandable and, that considering all the facts and circumstances shown, the service at St. John as it now exists is inadequate.

As long ago as 1874 the legislature passed an act which has remained in the statute books ever since, requiring railways to maintain stations in villages of two hundred or more inhabi-

tants, when such a village was within one-eighth of a mile of the track and a post office was maintained therein. No post office is maintained at St. John because of the advent of free rural delivery, something unknown until long after the passage of the act. We do not decide this controversy on the statute cited, but cite it simply to show the trend of legislative thought in reference to requiring carriers to serve small communities. We hold the service to be inadequate under the provisions of sections 3 and 12 of chapter 362, Laws of 1905.

A side track put in adjacent to the highway running north and south through the village and intersecting the track would best suit the convenience of the shippers and patrons of the road. If there is any serious objection from an engineering standpoint, on account of the grade, to putting in a side track at or near this point, we do not think the Railway Companies should be called upon to put in the track at such point. The only other suitable place is where the highway running east and west through the village crosses the railway track. The railway seems to be level for a considerable distance either side of this crossing. The distance to this point is somewhat greater and there are some other objections to it as a location for the side track, which, however, we do not consider serious. We think the track, to be of any service, should be so located that it can be reached from one highway or the other. We think the choice of the location should be left to the companies involved, and simply express the hope that a further examination of the *locus in quo* will result in showing that it is feasible to locate the side track at the north and south crossing without serious inconvenience or trouble. If it does not, the other location may be selected.

We have felt that passengers taking trains at this point are entitled to some shelter while waiting for trains. It is a matter of common knowledge that trains are often late during the cold inclement winter weather. There is apparently no shelter at the point where trains are stopped, and passengers are subjected to unnecessary hardships for lack of a building of some kind affording protection against cold and storms. If the Railway Companies object to the petitioner erecting a station building on their right of way, then we hold that the companies themselves should provide such a building.

It is therefore determined that the service now furnished by

the Chicago, Milwaukee & St. Paul Railway Company, and the Wisconsin Central Railway Company, at the village of St. John in Calumet county, Wisconsin, is inadequate, and that a suitable side track should be constructed at said point, either near the place where the north and south highway, or the east and west highway, passing through said village crosses the track of said Railway Companies; said companies being required, however, to construct such track where it will be accessible from the highway adjacent to which it is built. It is further determined that each of said companies be, and it is hereby required to receive and discharge freight, either in car-loads or less than car-loads, at such point and to stop one train a day each way to receive and discharge such freight. It is further determined that in the event of said companies refusing to furnish petitioner proper and suitable grounds on which to build a freight and passenger depot that they erect, heat and light such depot themselves, and at their own expense. They are not required to keep an agent at said station, however. In the event that said Railway Companies elect to furnish grounds for a station building, and the petitioner causes such station to be erected said Railway Companies are required to furnish a stove therefor and the necessary fuel and oil to heat and light the same, but are relieved from any other or further expense in connection with the maintenance of said building, and it is further determined that the giving of reasonable and adequate service and facilities on the part of said Railway Companies at said point, within the meaning of section 3 of chapter 362, Laws of 1905, requires that the things herein determined upon should be done.

IT IS THEREFORE ORDERED that the Chicago, Milwaukee & St. Paul and Wisconsin Central Railway Companies proceed to erect and construct a suitable side track at St. John, Wisconsin, said side track to be built at either the point of intersection between the railway and the highway passing north and south through said village, or at the point of intersection between said railway and the highway running east and west through said village; the Railway Companies to have the right to elect which location shall be used and that such side track shall be conveniently built for the transaction of business along the same.

Said Railway Companies are further ordered to file with

this Commission twenty days after the service of this order a notice stating which location said companies have elected to use. In the event of a disagreement between them, or of their failure to make the election provided for, the Commission will by supplemental order fix and determine upon which of said localities shall be used.

IT IS FURTHER ORDERED that said Railway Companies furnish to petitioner the use of sufficient ground at a suitable place upon its right of way for the erection of a freight and passenger depot, and that said Railway Companies furnish a suitable stove therefor, and also fuel and light therefor, or in the alternative that said Railway Companies themselves erect, heat and light such depot building, and that said Railway Companies within twenty days from the service of this order file with the Commission a notice stating that they elect to permit said petitioner to construct such depot building upon their right of way, if they do so elect, and in case of their failure so to do said companies shall be deemed to have elected to construct and equip such depot building at their own expense.

IT IS FURTHER ORDERED that said Railway Companies receive and discharge passengers and freight at said point, and that at least one train a day, each way, on each of said roads, stop for the purpose of receiving and discharging such freight.

The period of sixty days from the date of the service of this order will be considered a reasonable time within which to comply with its terms, except as otherwise provided therein.

Dated this 28th day of March, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 14.

LOFTUS-HUBBARD ELEVATOR COMPANY,
vs.
WISCONSIN CENTRAL RAILWAY COMPANY.

Petitioner did not appear,
Thos. H. Gill, for respondent.

Complaint against Railway Company for its failure to provide cars of sufficient size to enable the loading therein of hay to an amount equal to the prescribed minima.

- Held*, (1) That a scientific arrangement of tiers of bales, based upon abstract mathematical calculation relating to dimensions of bales and cars respectively, is not a fair measure of the loading capacity of a car in actual practice;
- (2) That when a shipper orders a car for a specific purpose the Railway Company should supply a car which will meet that purpose fully, without additional expense;
- (3) That it is unreasonable to fine a shipper, through the instrumentality of an arbitrary rule governing minimum weights, for his failure to designate complicated car dimensions, concerning which he can not be expected to have knowledge, in ordering cars;
- (4) That for cars which are less than 33 feet 6 inches long the minimum for shipments of hay shall be less than 20,000 pounds, as prescribed herein; and for cars 33 feet 6 inches and more in length the Western Trunk Lines Rules shall govern the minimum weights.

The petition of the Loftus-Hubbard Elevator Company sets forth that the petitioner is a corporation organized and existing under the laws of the state of Minnesota and is engaged in the business of buying, selling, shipping and dealing in hay and other farm produce; that in the conduct of its business the petitioner ships hay over the line of the Wisconsin Central Railway Company, between points in Wisconsin, and also over the line of the Wisconsin Central Railway Company in Wisconsin, in connection with other lines of railway; that a joint tariff between the Wisconsin Central Railway Company and the Duluth, South Shore & Atlantic Railway Company, effective March 1, 1902, provides for a minimum weight on hay of 20,000 pounds per carload for all cars less than 36 feet in length, inside measurement, and 22,000 pounds for cars 36 feet in length or longer; that a joint tariff between the Wisconsin Central and the Chicago, Milwaukee

& St. Paul Railway Companies, effective February 16, 1905, provides for a minimum weight, per carload of hay, of 20,000 pounds for cars 36 feet in length or less, inside measurement, and of 22,000 pounds for cars more than 36 feet in length; that the local tariff governing shipments of hay over the Wisconsin Central Railway, effective March 28, 1904, provides for a minimum of 20,000 pounds irrespective of the size or capacity of the car furnished; that the cars furnished by the Wisconsin Central Railway Company to shippers of hay over its lines of road, vary greatly in size; that some of the cars furnished can be loaded with baled hay to their minimum capacity, and slightly in excess thereof, while other cars cannot be loaded to their minimum capacity with hay; that the effect of furnishing to one shipper a car of sufficient capacity to enable the loading of 20,000 pounds, and to another shipper a car of insufficient capacity to load this amount, operates to impose a higher charge for the transportation of hay on the part of the shipper to whom the car of insufficient capacity was furnished, which is a discrimination; that the rules and regulations bringing about such results are unjust and unfair, and that the same should be amended so as to require shippers to pay freight only on the actual amount of hay which a car will hold; and, finally, that the Wisconsin Central Railway Company be required to answer the charges set forth in petition, and that after due hearing and investigation an order be made requiring the Railway Company to cease and desist from the practices complained of and that an order be entered prohibiting the Railway Company from establishing a minimum for the shipment of hay in excess of the capacity of the car furnished, whether such car be a car of its own ownership or a car furnished by another carrier with which it connects.

The answer of the Wisconsin Central Railway Company, denies any information sufficient to form any knowledge as to whether petitioner ships hay over respondent's line between points in Wisconsin, or between points in said state over the respondent's line in connection with other railway lines therein. The above mentioned joint rates between the Wisconsin Central and the Duluth, South Shore & Atlantic and the Chicago, Milwaukee & St. Paul Railway Companies, are admitted to exist, and with respect to the latter it is expressly denied that such joint tariff covers shipments between stations in the State of Wisconsin, but

affirms that the same provides for shipments of inter-state traffic only. It is further denied that the cars furnished by the Wisconsin Central Railway Company to shippers of hay within the State of Wisconsin vary greatly in size, although it is admitted that cars of different dimensions are furnished for such traffic; but that any shipper can, upon reasonable notice, if within the power of the respondent so to do, receive for use for hay shipments, cars of sufficient dimensions to permit such hay shipper to load the same above the minimum weight prescribed by the tariffs mentioned in the petition or any other similar tariff in effect upon the respondent's line. By way of defense and explanation, the respondent urges and insists that the whole difficulty in the hay traffic, complained against by said petitioner, arises entirely from the carelessness and negligence, or want of attention, by said hay shippers, to the proper and sufficient baling and loading of baled hay. The respondent alleges that hay properly baled, of the usual and ordinary sizes of bales, made by the usual and ordinary machinery for that purpose, in use at the various stations on the respondent's line of railway, can be loaded in the cars usually and ordinarily provided for such traffic, in excess of the minimum required by said tariffs, and it is denied that the variation in the size of cars furnished, or which can be furnished, to shippers of hay, is an unjust or unfair discrimination between various shippers of hay, as set out and alleged in the petition. The respondent submits that the rules and regulations governing the shipment of hay are fair and just to all the shippers of hay along its line, and that, on the contrary, to require the respondent to furnish cars without the prescribed minimum, or without requiring shippers of hay to use ordinary and customary care in the baling and stowing of such hay, would be a hardship upon the respondent and every other carrier in the State of Wisconsin engaged in like traffic, and an injustice to other manufacturers and shippers, and that it would deprive the respondent of the fair and reasonable use of its property, and prevent it from collecting a fair and just return for the facilities furnished for the inter-state traffic of such commodity. The complaint of the petitioner was filed with the Commission on January 25, 1906, and soon thereafter February 19 was set for the date of hearing. Shortly before this date the petitioner requested a postponement for thirty days, for the purpose of collecting and formulating additional information for presentation

at the hearing, which was granted. The hearing was held in the offices of the Commission, in the capitol of Madison, March 19, 1906. The petitioner did not appear. The Wisconsin Central Railway Company was represented by Thos. H. Gill, its general attorney.

This complaint originally arose out of an inter-state shipment of hay by the petitioner from Somerset station on the line of the Wisconsin Central Railway in Wisconsin, to St. Paul, Minnesota, in Wisconsin Central car No. 8468. The car contained 16,640 pounds of hay in actual weight, while the Railway Company charged freight on a minimum weight of 20,000 pounds, or an excess of \$1.52 over what the charge on the actual weight would have been at the existing rate between the points named. The dimensions of Wisconsin Central car No. 8468 are 33 ft. 6 in. by 8 ft. 3 in. x 7 ft. 2 in.

Soon after the hearing the Commission addressed a letter to hay dealers throughout the State of Wisconsin for the purpose of obtaining information bearing upon the matter of the complaint, which it had hoped would be provided by the petitioner. This letter read as follows:

“This Commission has before it for consideration a regulation adopted by one of the railroads establishing a minimum weight for a carload of hay. The question has arisen as to whether or not the cars furnished will admit of the amount of hay being placed therein which the minimum calls for, namely, 20,000 pounds. The size of the car in question is 33' 6" x 8' 3" x 7' 2". We are informed that the bales of hay are usually 48" long x 14x17, 15x18, 14x18, 16x20, or 18x22; and that the 14x17 bales weigh about 100 lbs., and that 292 of such bales can be loaded in a car of the dimensions given; bales 14x18 weigh 105 lbs., and that 278 of such bales can be placed in such car; that bales 15x18 weigh 107 lbs., and that 248 of such bales can be placed in such car; that bales 16x20 weigh 110 lbs., and that 210 of such bales can be placed in such car; that bales 18x22 weigh 115 to 120 lbs., and that 170 of such bales can be placed in such car. We would like to get your judgment on the following points: First, as to whether or not the weights as given of the bales of the respective sizes referred to are correct according to your experience; second, whether the number of bales of the different sizes above specified can reasonably be loaded in a car of the

dimensions given. We would be pleased to have you furnish us with the result of your actual experience in regard to loading cars with hay and to receive any additional information that you might think would be of interest to us in addition to that specifically asked for."

The number of replies received was comparatively small, and only a few of them indicated dissatisfaction of any kind with the existing rules and regulations governing the hay traffic in Wisconsin. Several instances were cited in the letters tending to show the impossibility of loading the required minimum into all of the cars, but the general tenor of the replies was that with reasonable care in loading the minimum amount of hay could be put into the cars furnished. But even after these replies had been received the Commission did not feel that it had before it sufficient information for a correct decision. The relative lack of interest, or indifference, manifested in this matter by hay dealers made it extremely difficult for the Commission to secure the desired information. With a view of supplementing what facts we have collected by letter, a representative of the Commission interviewed hay shippers in Milwaukee and other places. These interviews brought to light no grievance of consequence. Information regarding the actual weight of hay shipped in cars of different sizes, which was promised by several shippers, has not been received by the Commission, except in one instance, although definite promises to provide these facts had been made orally and in writing. The investigations of the Commission have thus been greatly handicapped and delayed. One report of this kind, however, was received very promptly, which is of much value in its bearing upon this case. Following is a statement of the cars recently loaded by the shipper making the report.

Car initial.	Car No.	Car dimensions.	Actual wt. of hay in car
C. & N. W.	85988	36 x8.6x8.....	26,688
C. & N. W.	68778	33.6x8.3¼x8.....	21,303
C. & N. W.	64934	33.6x8.3¼x8.....	23,503
C. & N. W.	55180	33.5x8.6x7.6.....	23,390
C. & N. W.	36422	33.6x8.3¼x7.1½.....	21,108
C. & N. W.	38072	33.6x8.3¼x7.1½.....	20,788
C. & N. W.	94622	33.6x8.3¼x6.10¼.....	20,843
C. & N. W.	57461	33.6x8.3¼x7.1½.....	20,815
C. & N. W.	64116	33.6x8.3¼x8.....	20,925
C. St. P. M. & O.	7560	33.5x8.3¼x6.10.....	21,195
C. & N. W.	74022	33.6x8.3¼x8.....	21,790
C. & N. W.	70644	33.6x8.3¼x8.....	23,750
C. & N. W.	60576	33.6x8.3¼x7.1½.....	18,290
C. & N. W.	79308	36 x8.6x8.....	24,470
N. E. W.	60057	33.6x8.3¼x7.1½.....	22,848
C. & N. W.	94938	33.6x8.3¼x6.10¼.....	20,525
C. & N. W.	81966	36 x8.6x8.....	22,719
C. & N. W.	71500	33.6x8.3¼x8.....	22,597
W. C.	11278	34 x8.3x7.2.....	24,360
W. C.	11176	34 x8.3x7.2.....	19,660
C. & N. W.	66406	33.6x8.3¼x8.....	21,100
W. C.	12314	34 x8.1½x7.2.....	21,040
W. C.	16100	34 x8.3x7.2.....	21,830
Ill. Cent.	36412	36 x8.6x8.....	23,600
W. C.	12906	34 x8.1½x7.2.....	20,520
C. & N. W.	94760	33.6x8.3¼x6.10¼.....	19,690
C. & N. W.	47984	33.6x8.2½x6.10¼.....	18,660
C. & N. W.	78442	36 x8.6x8.....	25,071
C. & N. W.	71500	33.6x8.3¼x8.....	22,597

The testimony on the part of the Railway Company, regarding the capacity to hold hay, of cars in different sizes, is based upon mathematical calculations. It takes into consideration the exact dimensions of different sizes of bales of hay and of different sizes of cars. It contemplates a scientific arrangement of tiers of bales in skillful adjustment to the particular dimensions of each car. We are not much impressed by this kind of demonstration, for the reason that we do not believe it to be reasonable and fair to expect an average shipper of hay or his employes to be mindful of abstract cubical and lineal dimensions and complicated adjustments of tiers of bales in the loading of hay into cars. Nevertheless, we believe that the testimony and facts gathered by the Commission, together with the testimony submitted by the company, are conclusive to the effect that a car 33 ft. 6 in. long, 8 ft. 3 in. wide, and 7 ft. 2 in. high, being the size of car which caused this complaint, can readily be loaded with the minimum of 20,000 pounds, without the exercise of more than ordinary care and intelligence. The Railway Company should not be held responsible for the negligence or carelessness of men who load hay. The information at our disposal is also conclusive with respect to the variations in the weight of different kinds of hay, and the great variety in the quality of the work

done by different kinds of hay presses. We do not believe that railway companies should suffer the loss resulting from the use of a poor quality of wire in baling, from inferior kinds of presses, or from incompetent operation of such presses. The testimony of shippers of hay is practically unanimous regarding the variations in the weight of bales, due to the factors just indicated and to other factors which might be discussed, but which are not material in the decision of this case.

On the other hand, we regard it an injustice for a railway company to furnish a car to a shipper, which it knows cannot hold the minimum weight when loaded with reasonable care. It was brought out in the testimony that if a shipper should simply order a car for a shipment of hay, without designating the size of car wanted, the Railway Company might send him a 30 foot car, if it had such, and still collect from him, under the rules, freight charges upon the minimum weight of 20,000 pounds. In this respect the assumption on the part of the Railway Company, according to the testimony, is that it may send a shipper any kind of a car it chooses, unless the shipper expressly directs it to the contrary. The logical conclusion of this assumption is that the Railway Company might furnish a shipper double decked cars for the shipping of horses, palace horse cars for the shipping of wheat, or refrigerator cars for the shipping of live stock, unless the shipper expressly ordered another kind of car. We believe that when a shipper orders a car for a certain purpose, and definitely indicates this purpose to the Railway Company, the company should be compelled to furnish him a car that will serve that purpose fully and completely and not partially, or not at all, or only at an additional expense. We regard it the duty of a railway company to make the car furnished to the shipper fit the exact order of the shipper, unless extraordinary circumstances prevent its doing so, in which case equitable adjustment should be made. We do not regard it an equitable adjustment, to send a man who desires to ship hay, a car which will hold only 16,000 or 18,000 pounds when properly loaded, and then charge him freight on 20,000 pounds. To be sure, it is now a rule of the Railway Company that if the shipper orders a certain size of car, and it cannot furnish the same, it may, at its option, and for its convenience, provide a larger car, charging the shipper only for the minimum weight of the size of car originally ordered by the shipper; but our present remarks have

reference not to the instances of this kind, but to the kind of a car which a railway company should provide when a shipper does not designate the size but does state the purpose for which the car ordered is to be used. The Railway Company, and not the shipper, must be presumed to know the exact kind of car required for different kinds of traffic, and it is unreasonable to fine a shipper, through the instrumentality of an arbitrary rule governing minimum weights, for his failure to designate complicated car dimensions, concerning which he cannot be supposed to have full knowledge; nor should he be held responsible for the acquisition of this knowledge. This is a burden which does not rest upon the shipper of hay, whatever may be true with respect to shippers of certain other commodities.

IT IS OUR DETERMINATION that the requirement of a minimum weight of 20,000 pounds for shipments of hay in cars 33 ft. 6 in. by 8 ft. 3 in. by 7 ft. 2 in. is reasonable and fair. We have no proof that the Wisconsin Central Railway Company uses smaller cars in the hay traffic, to any appreciable extent. But in view of the fact that the company still carries about 750 common box cars, which are less than 33 ft. 6 in. in length, on its equipment register, and in further view of the testimony on the part of the company, with reference to its attitude regarding the furnishing of smaller cars, unless the shipper expressly gives directions to the company to the contrary, we infer that some of the 750 cars may still be occasionally assigned to the hay traffic. Other carriers doing business in Wisconsin have established a lower minimum than 20,000 pounds for cars less than 33 ft. 6 in. long, and the Western Trunk Line Rules, to which the Wisconsin Central Railway Company is subject, also provide lower minimum weights for smaller cars.

WE, THEREFORE, FURTHER DETERMINE AND ORDER that for cars of less dimensions than 33 ft. 6 in. by 8 ft. 3 in. by 7 ft. 2 in., whether such cars are owned by the Wisconsin Central Railway Company or whether they are cars received by it from connecting railways, the Wisconsin Central Railway Company shall be bound by Western Trunk Line Rules, as follows:

Cars 30 feet in length and under	16,000 lbs.
Cars over 30 feet to and including 32 feet	18,000 lbs.
Cars over 32 feet, to but not including 33 feet 6 inches	19,000 lbs.

Except as above provided, it is ordered that the petition be, and hereby is dismissed.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

Dated this 15th day of June, A. D., 1906.

No. 15.

MINER BROS.

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY
AND CHICAGO, MILWAUKEE & ST. PAUL RAILWAY
COMPANY.

Petition on account of the refusal of the Railway Company to make joint rates with the Chicago, Milwaukee & St. Paul Railway Company on lumber between Carter and Virginia. Petitioner is obliged to pay the sum of two local rates, which is 18 cents per 100 pounds and prays for the establishment of a joint rate of not to exceed 11 cents. The Chicago & Northwestern made a joint rate of 11 cents with the La Crosse & South Eastern and the petition was withdrawn.

No. 16.

PLUMB & NELSON, A DOMESTIC CORPORATION,

vs.

WISCONSIN CENTRAL RAILWAY COMPANY AND CHI-
CAGO, MILWAUKEE & ST. PAUL RAILWAY COM-
PANY.

Ralph E. Plumb, for petitioner.

T. H. Gill, for W. C. Ry. Co.

C. E. Vroman, for C. M. & St. P. Ry. Co., respondents.

Argued by the railway companies,

(1) That if two local rates are in themselves reasonable their aggregate is not unreasonable for the entire service performed;

- (2) That whenever a railway is able to supply the wants of the people along the line joint rates should not be established because such rates would decrease the earnings of the road;
- (3) That joint rates are properly made for the purpose of meeting competition with some other railway; or,
- (4) When the railway upon which final delivery of the shipment is made cannot itself supply the article.

Held, (1) That the sum of two reasonable locals does not necessarily make a reasonable joint rate;

- (2) That it should not be left solely to the railway company or companies to prescribe the territory within which certain individuals, firms or localities may or may not do business;
- (3) Railways are public highways over which shippers have a right to transport property for a reasonable compensation;
- (4) To argue that if the Commission were to order a joint rate in the present case, it would be obliged to order one in every other case that may hereafter arise, is also to argue that if the Commission were to deny a joint rate in the present case it would be obliged to do so in every subsequent case. If this is the logical conclusion of this process of reasoning the statute providing for joint rates would be effectually nullified;
- (5) An examination of the tariffs on file does not bear out the theory that joint rates are usually or almost exclusively made to meet competition;
- (6) The rates between the stations specified and Manitowoc should be the same as the rates between these stations and Green Bay, plus two cents per 100 pounds for terminal charges, which under the peculiar conditions disclosed in the present case, we feel disposed to allow for the extra terminal service which must be performed in the case of less than carload shipments between the stations named.

On February 1, 1906, the Plumb & Nelson Company filed with the Railroad Commission a formal complaint alleging in substance that it was engaged in the wholesale grocery business at Manitowoc, Wisconsin, and had a large amount of trade at the villages of Chilton, New Holstein, Kiel and Elkhart, stations located on the Chicago, Milwaukee & St. Paul Railway between Hilbert Junction and Plymouth, and that said intermediate stations had no other line of railway, and that the most feasible route to ship goods thereto from Manitowoc by rail was over the Wisconsin Central Railway to Hilbert Junction and from thence to destination over the Chicago, Milwaukee & St. Paul Railway; that each of the respondents was a common carrier operating lines of road within the State of Wisconsin, the Wisconsin Central Railway extending from Manitowoc to Hilbert Junction, and points beyond, and intersecting the Chicago, Milwaukee & St. Paul Railway at Hilbert Junction; that petitioner had always been compelled to pay two full local rates on shipments made to the points referred to on the Milwaukee road, one to each of the connecting lines; that said railways had refused to make a joint through rate to any of said points, although frequently requested

so to do; that the sum of the two local rates is excessive for the service performed and very much in excess of the rates charged for shipping the same kind of goods to the same points from places on the line of the Chicago, Milwaukee & St. Paul Railway, taking into account the relative distances the freight is carried; that such excessive rates are discriminatory against the petitioner, and that it is in the interest of the petitioner, of the locality served, and of competition, that joint rates be established between said railways on shipments from Manitowoc, Wisconsin, to the points in reference to which complaint is made. Petitioner prayed the Commission to make an order establishing joint rates between said points.

Separate answers were interposed by each of the respondent Railway Companies. The answer of the Wisconsin Central Railway Company set forth that the facts alleged in certain paragraphs of the petition disclose:

“That to accede to the request made by said petitioner so as to equalize them in the matter of freight rates with the wholesale houses located at Green Bay and Milwaukee would show conclusively the injustice and unfairness of such course to all other persons antagonistically interested in ordinary business in the same territory, and demonstrate that a similar complaint by such business houses would again require a reciprocal concession in the territory solely occupied by the petitioners herein.

This respondent respectfully submits that the petitioner in this matter is seeking to obtain an unjust discrimination in its own favor as against other persons in the same business situated nearer to the market sought to be entered and controlled or participated in by said petitioner and that no action which could be justly taken by this respondent's line, or in connection with its co-respondent, can grant relief without working at least as much harm and discrimination against many others competing with petitioners for the business sought herein to be controlled.”

The answer of the Chicago, Milwaukee and St. Paul Railway set forth:

“That the establishment of any joint rate as prayed in said petition which should be less than the combination of the two local rates now existing would be unfair and unjust to said

answering company and would work a discrimination against other shippers over its lines, and a discrimination also against other localities similarly situated in respect to the lines of the aforesaid answering company, and further that the fixing of any joint rate as prayed in said petition would demoralize and destroy the local rates within the State of Wisconsin."

A hearing on the issues thus made up was set for February 28, at which time Ralph E. Plumb, secretary of the petitioning company, appeared in its behalf; E. S. Keeley, general freight agent, and C. E. Vroman, attorney, appeared in behalf of the Chicago, Milwaukee & St. Paul Railway Company; C. E. Wilson, assistant general freight agent, and T. H. Gill, attorney, appeared for the Wisconsin Central Railway Company.

It was urged by the petitioner that it was and is charged the full local rates based on a distance tariff from Manitowoc to Hilbert Junction on the Wisconsin Central Railway, and the full local rate based on the same kind of a tariff from Hilbert Junction to the point of destination on the Chicago, Milwaukee & St. Paul Railway, and that such rates are excessive and discriminatory against petitioner; that joint rates are usually and customarily made between the roads involved on like kinds of shipments to other places; that the making of a joint rate in the present instance is in the interest of competition and that in equity and fairness such rate should be ordered.

The following table showing the rates charged between Manitowoc, Green Bay, and Milwaukee, respectively, to the points to which petitioner asks to have the joint rates applied, together with the respective distances, was submitted by said petitioner:

Table of comparative distances and local rates.

TOWNS.	FROM GREEN BAY TO					FROM MILWAUKEE TO					FROM GREEN BAY TO				
	Miles.	CLASSES.				Miles.	CLASSES.				Miles.	CLASSES.			
		1	2	3	4		1	2	3	4		1	2	3	4
Chilton ...	34	31½	29½	25	20	79	32	27	22	16	34	24½	20½	17	12½
N.Holstein	41	37½	31½	26	21	72	31	25	21	16	41	28	22½	19	13½
Kiel	45	40½	31½	28	22	68	28½	22½	20	16	45	28	22½	19	13½
Elkhart ..	51	43	36½	30	23	62	25	20	17½	14½	51	30	24½	20½	14½

It will be seen that the distances from Green Bay and Manitowoc to the points in question are the same. Most of petitioner's shipments are third and fourth class commodities, and the rates it is compelled to pay for the services it receives are substantially one and one-half times the rates charged from Green Bay, the only difference in the service being the extra terminal charge at Hilbert Junction in unloading freight from one train and loading it on the other. It further appears that Milwaukee is 79 miles distant from Chilton, and Manitowoc is only 34 miles; yet the Manitowoc rate is 9 cents higher on first-class freight, 9 cents higher on second class, 8 cents higher on third class, and $7\frac{1}{2}$ cents higher on fourth class commodities. As illustrative of the further difference between the charge of the sum of the two locals and rate of charge over a single line of road, it appears that the rates from Manitowoc to Plymouth by way of the Wisconsin Central and St. Paul Railways, is, on first class 47 cents, second class 40 cents, third class 33 cents, fourth class $24\frac{1}{2}$ cents, while the rates to the same point on the Chicago & Northwestern Railway is $26\frac{1}{2}$ cents on first class, $21\frac{1}{2}$ cents on second class, 18 cents on third class, and 13 cents on fourth class.

It is urged in substance by the respondents that if the two local rates charged are in themselves reasonable, their aggregate is not unreasonable for the entire service performed. It is also urged that the locality in question is well served at the present time by the Chicago, Milwaukee & St. Paul Railway and that there is abundance of competition to secure reasonable prices. Further, that a railway company situated as the Chicago, Milwaukee & St. Paul Railway Company is in the present instance, having a practical monopoly of the territory in question, and the ability to supply that territory by shipping from Green Bay, Milwaukee and Chicago, over its own line of road, should not be compelled to receive traffic from a connecting line at a rate materially less than it would receive if no joint rate was made.

The arguments advanced against the making of a joint rate in this instance are to the effect that whenever a railway is able to supply the wants of its people along its line joint rates should not be made, because they would have a tendency to lessen the earnings of that particular road; and that joint rates are properly made for the purpose of meeting competition with some other line of railway, or where the road upon which final delivery of the shipment is made cannot itself supply the article shipped

from points upon its line. It was urged that the matter of making joint rates should practically be left to the carriers themselves, and that they should be permitted to say when such rates should be granted or refused.

It has been decided many times by the Interstate Commerce Commission and the courts that the sum of two reasonable locals does not necessarily make a reasonable joint rate. For the purpose of determining the reasonableness of a joint rate recourse is usually had to what the charge would be if the entire service were performed by one line of road. This may not be the correct way to get at it, but it is the usual method adopted by the railways themselves.

While it is true that the merchants in the towns in question would have the benefit of trade competition if Manitowoc were wholly eliminated, it is none the less true that the petitioner under the present disadvantageous freight rates ships large quantities of goods into this territory. We are not in a position to say that this additional competition is not beneficial to the retail merchants and the consumers in the territory involved. Nor are we ready to admit that it should be left solely to a railway company or companies to prescribe the territory within which certain individuals, firms or localities, may or may not do business.

The contention that each railway should have a practical monopoly of the territory in which there is no rail or water competition ignores the consideration that railways are public highways over which shippers for a reasonable compensation have the right to transport property. The original Railroad Commission law, of June 15, 1905, conferred no power on the Commission to make joint rates. At the special session of the legislature held in December last, the law was amended so as to confer such power. The Commission neither suggested the amendment in the first instance, nor asked for its passage when suggested. We must assume that it was the intention of the legislature that the power so conferred should be exercised when the facts in any given case warranted such exercise. We do not see that it will follow, as claimed by the carriers, that if we order a joint rate in this case we must order one in every other case that may hereafter arise. If this be true, it would logically follow that if we deny a joint rate in this case we must do so in every subsequent case, and thus effectually nullify this provision of the law. When the legislature said the Commission may

order a joint rate we do not think it intended that we should do so in all cases, regardless of right or justice; and certainly it would be doing violence to the intention of the legislature to hold that we should not order such a rate in any case. We apprehend that each individual case should be decided on its merits and on the facts before the Commission. When other cases arise involving similar facts we will follow this decision as a precedent, if we still think it is right, and disregard it if we are convinced that it is wrong.

The theory advanced that joint rates are usually, or almost exclusively, made to meet competitive conditions, does not appear to be borne out by an examination of the tariffs on file with the Commission. The result of our examination, so far as we pursued it, would indicate that the refusal to make joint rates, such as are asked for here, between the carriers in question, was the exception rather than the rule. For instance, joint rates are made between the Wisconsin Central Railway Company and the Chicago, Milwaukee and St. Paul Railway Company from Manitowoc on goods shipped on class rates to such points as Omro, Winneconne, Berlin, Brandon, Waukau, Waupun, Horicon Junction, Abram, Lena, Wausaukee, Pembine, Greenleaf, Merrill, Knowlton, Babcock, Meadow Valley, Tomah, Rudolph, Pittsville, and many other points, where there is hardly a suggestion of competition between the Milwaukee company and any other line of road. The city of Merrill, for instance, is substantially twenty miles from any line of road except the Milwaukee. The joint rate on first class goods from Manitowoc to Merrill is $26\frac{1}{2}$ cents, second class $21\frac{1}{2}$ cents, third class 18 cents, fourth class 13 cents. The rate from Manitowoc to Elkhart over the same lines of road is 43 cents on first class, $36\frac{1}{2}$ cents on second class, 30 cents on third class, and 23 cents on fourth class. Most of the petitioner's shipments come under the third and fourth classes. It pays 12 cents per hundred pounds more to ship third class from Manitowoc to Elkhart than from Manitowoc to Merrill, and 10 cents more per hundred pounds on fourth class. The distance from Manitowoc to Elkhart is 51 miles, and the distance from Manitowoc to Merrill is 165.6 miles. It will thus be seen that the rate is more than one and one-half times as high from Manitowoc to Elkhart as it is from Manitowoc to Merrill, while the distance is less than one-third as great.

A joint rate has been in effect from Manitowoc to Greenleaf,

about 13 miles north of Hilbert Junction, for a number of years; and also to other stations on the line of the Chicago, Milwaukee & St. Paul Railway north of Hilbert Junction. We see no good reason why Chilton, a few miles south of Hilbert Junction, should be denied a similar rate.

We think the charges complained of are excessive and that they should be reduced and a joint tariff be put in force between the city of Manitowoc and the stations of Chilton, New Holstein, Kiel and Elkhart. In this case the haul is short and the shipments, as appears from the freight bills filed with us, are in many instances made in small quantities. Under the peculiar condition disclosed here we feel disposed to allow two cents per hundred pounds for the extra terminal charge because of the transfer at Hilbert Junction. This we regard as ample to cover this case. With this addition the Green Bay rate should be put in force from Manitowoc to the points involved, which rate, plus the two cents per hundred pounds above referred to, we find to be a reasonable rate for the service on less than car-load shipments.

It is therefore determined that the rates charged by the Wisconsin Central Railway Company and the Chicago, Milwaukee & St. Paul Railway Company for transporting first, second, third and fourth class freights from Manitowoc to Chilton, New Holstein, Kiel and Elkhart, are and each of said rates is unreasonable and excessive and unjustly discriminatory, and that joint rates should be established by said Railway Companies between the city of Manitowoc and said points; and,

IT IS ORDERED, that for the future the rate to be charged for transporting first, second, third and fourth classes of freight from Manitowoc to Chilton, New Holstein, Kiel and Elkhart, shall not exceed the rate now charged for the transportation of such classes of freight from Green Bay to said points plus two cents per hundred pounds, on less than carload shipments.

Dated this 5th day of March, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 17.

WILLIAM H. PRISK

vs

ILLINOIS CENTRAL RAILROAD COMPANY.

This petition related to a highway crossing near Monticello, Green County. At the crossing in question the Illinois Central and the Chicago, Milwaukee & St. Paul Railway Companies' tracks run parallel with each other about fifty feet apart. The Illinois Central's tracks are some 10 or 12 feet below the level of the Chicago, Milwaukee & St. Paul tracks, and hence the highway runs down quite an abrupt decline at the crossing of the tracks. A cut from 15 to 18 feet deep obstructs the view and the sound of the whistle. For more than 20 years this crossing had been the cause of contentions between the railways and the people. A long list of accidents and narrow escapes is recorded. A member of the Commission visited the locality in question and soon thereafter an informal conference was held in the office of the Commission, with the superintendents of the two railways involved. Subsequent correspondence and interviews led to a satisfactory understanding by which the Railway Companies agreed to improve the crossing and the approaches thereto and to install electric signal bells.

No. 18.

BLUMENFIELD, LOCHER AND BROWN COMPANY

vs.

AMERICAN EXPRESS COMPANY,
NATIONAL EXPRESS COMPANY AND
ADAMS EXPRESS COMPANY.

Petition regarding an advance in the express rates on artificial flowers, feathers and straw goods from merchandise to double merchandise rates. After notice of the petition had been served on the respondent Express Companies, the merchandise rate on the articles named was restored.

No. 19.

A. E. BUELL

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

No appearance on behalf of Petitioner.

S. A. Lynde, for Respondent.

In the above entitled matter the petitioner asks the Commission to make an order establishing a rate of passenger fares over lines of the respondent company in Wisconsin of two cents per mile.

It is still under consideration.

No. 20.

A. E. BUELL,

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY
COMPANY

No appearance on behalf of Petitioner.

Burton Hanson and C. E. Vroman, for Respondent.

In the above entitled matter the petitioner asks the Commission to make an order establishing a rate of passenger fares over the lines of the respondent company in Wisconsin of two cents per mile.

It is still under consideration.

No. 21.

W. L. HOUSER

vs.

CHICAGO, ST. PAUL, MINNEAPOLIS AND
OMAHA RAILWAY COMPANY.

No appearance on behalf of Petitioner.

Jas. B. Sheean, for Respondent.

In the above entitled matter the petitioner asks the Commission to make an order establishing a rate of passenger fares

over the lines of the respondent company in Wisconsin of two cents per mile.

It is still under consideration.

No. 22.

W. L. HOUSER

vs.

CHICAGO, BURLINGTON AND QUINCY RAILWAY COMPANY.

No appearance on behalf of Petitioner.

C. M. Dawes and Woodward & Lees, for Respondent.

In the above entitled matter the petitioner asks the Commission to make an order establishing a rate of passenger fares over the lines of the respondent company in Wisconsin of two cents per mile.

It is still under consideration.

No. 23.

W. L. HOUSER

vs.

WISCONSIN CENTRAL RAILWAY COMPANY.

No appearance on behalf of Petitioner.

Thos. H. Gill, for Respondent.

In the above entitled matter the petitioner asks the Commission to make an order establishing a rate of passenger fares over the lines of the respondent company in Wisconsin of two cents per mile.

It is still under consideration.

No. 24.

SOUTHERN WISCONSIN CHEESEMEN'S PROTECTIVE
ASSOCIATION

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COM-
PANY, CHICAGO AND NORTHWESTERN RAILWAY COM-
PANY AND ILLINOIS CENTRAL RAILROAD COMPANY.

John Luchsinger appearing for the Petitioner.

C. E. Vroman, for Chicago, Milwaukee & St. Paul Ry. Co.

S. A. Lynde for Chicago and Northwestern Ry. Co. and

Burr W. Jones for Illinois Central R. R. Co.

Complaint against carriers charging excessive rates on cheese in southwestern Wisconsin; also excessive and discriminatory rates on lead foil, whey butter, paper and icing.

- Held*, (1) That the existing concentration *system* brings advantages to all the parties in interest, but that the concentration *rates* lack uniformity and system, and that, therefore, a new schedule of concentration rates should be adopted, such a schedule being herein prescribed;
- (2) That the existing rates on cheese from concentration points to Milwaukee are excessive and should be reduced in accordance with the commodity tariff hereby prescribed;
- (3) That carriers shall hereafter bill lead foil as lead foil and not as tin foil, and charge the rates applicable to lead foil;
- (4) That existing rates on whey butter are excessive and that this product shall be lowered from the second class bases of rates and grouped with third class commodities;
- (5) That all matters connected with this complaint, not otherwise disposed of, relate to interstate commerce, and should be brought before the Interstate Commerce Commission.

The petition of the Southern Wisconsin Cheesemen's Protective Association sets forth that the Association is a corporation organized under the laws of Wisconsin and that one of the purposes of its organization is the promotion of the interests of the cheese producers in the counties of Green, Lafayette, Iowa and Dane, as well as other portions of the southwestern part of the State. The petition sets forth: (1) That a large part of the cheese produced in the territory in question is shipped to Milwaukee and Chicago, and that other parts of the product are shipped to distant parts of the United States; and that in putting up such cheese for the market considerable amounts of lead foil are used for wrapping purposes on cer-

tain grades of cheese, some of which is shipped from Milwaukee and some from other points, and that the rate charged on such lead foil is discriminatory, excessive and unreasonable, and that a material reduction should be made in such rate of charge. (2) That considerable quantities of manilla paper are used in wrapping certain kinds of cheese, which paper is shipped chiefly from manufacturing points in the Fox River Valley, and that the rate on this paper is excessive, unreasonable and discriminatory, chiefly because of the violations of the long and short haul principle. (3) That a by-product of cheese known as whey butter is made at factories engaged in the business of making Swiss cheese; that this whey butter is a cheap article commanding about the same price in the markets as lard, whereas the rates of transportation charged therefor are the same as those charged for the transportation of creamery butter, and that consequently the rates charged for the transportation of such by-product are excessive and unreasonable, and that a material reduction should be made in such charges. (4) That the rate of charge for the transportation of cheese itself, both the rate for concentration, and the rate from the point of concentration to points of final destination, is excessive, unreasonable and discriminatory, and that a reduction should be made. (5) That icing charges for shipments of cheese, when it is necessary to ship cheese in refrigerator cars, are excessive, unreasonable and discriminatory and lack uniformity, and that therefore some reasonable regulation should be made in reference thereto and the charge therefor materially reduced.

The answers of the three respondent Railway Companies follow substantially the same lines of denial as follows:

It is admitted that the various carriers are corporations engaged to do business as public carriers in that part of the State of Wisconsin in which the complainant association has its chief membership; that the various carriers involved in the case do as a matter of fact carry large quantities of such cheese, foil, paper, etc., but that the rates charged for any one or all of these articles are reasonable and just and that no reductions in the same should be made. With respect to foil the answers set forth that the weight of the foil enters into the weight of the cheese when it is sold on the market, and that in this manner the manufacturers of cheese do as a matter of fact

gain an excessive profit in their transactions in connection with such lead foil, and that therefore the complaint does not rest upon valid grounds. With respect to whey butter, it is urged that this by-product now takes the same rate as butter and lard, all of them standing in the same class of the Western Classification, and that consequently no discrimination exists. The answers further state that whey butter is used as an imitation of or substitute for lard and butter, and that therefore the rates upon this product should be the same as the rates on lard. With respect to icing, it is denied that these charges are excessive, unreasonable and discriminatory, and that they lack uniformity. With respect to uniformity, it is set forth that the rule of uniformity is violated in only one instance, and that is in the collection of icing charges in transit, which vary with weather conditions and the distance through which the cheese is transported. Where the distance is short, or when the temperature is low, no icing may be required, and that to this extent the lack of uniformity in the collection of icing charges is in the interest of the shippers who would otherwise, under a uniform rule of icing charges, be obliged to pay for ice irrespective of the quantity of ice consumed in making the shipments.

The petition of the Southern Wisconsin Cheesemen's Protective Association was filed with the Commission February 10, 1906. Two informal conferences were held with respect to the matters in dispute, one before and one after the filing of the petition namely, February 7 and 21, 1906, respectively. In addition a member of the Commission visited Monroe for the purpose of conferring with manufacturers and shippers of cheese and gaining more direct personal knowledge of the conditions which prevail in the cheese industry in that section of the State. The formal hearings were held on April 30 and May 24. The Cheesemen's Protective Association was represented by John Luchsinger, and the respondent Railway Companies were represented as follows: Chicago, Milwaukee & St. Paul Ry. Co., by Chas. E. Vroman; Chicago & Northwestern Ry. Co. by S. A. Lynde and Illinois Central R. R. Co. by Burr W. Jones.

The production of cheese is one of the most important industries in the State of Wisconsin; only one state of the Union, New York, exceeds Wisconsin in the amount of cheese pro-

succeed. Compared with its neighboring states, Wisconsin produced annually several times what they produce collectively. The quantities of cheese shipped from single stations in the district from which this petition comes exceed the entire product of many other states in this part of the Union. The rate charged for the transportation of cheese is therefore of importance both absolutely and relatively. The cheese industry in southwestern Wisconsin differs somewhat from the cheese industry in other parts of the State, notably the eastern and northeastern. With minor local exceptions, the counties in southwestern Wisconsin produce various kinds of Swiss cheese, brick and limburger cheese, while those along the shores of Lake Michigan produce American cheese. For the kinds of cheese produced in the southwestern part of the State it is the greatest district in the country. It was represented at the hearings that Swiss cheese required a different kind of treatment and more handling subsequent to manufacture than American cheese, involving three months or more of time for ripening, etc.; and that "concentration" was in reality stoppage in transit for the purpose of curing the cheese and affording storage facilities which the average manufacturer in the territory of the petitioner cannot provide at his factory. If the concentration system, in its conception, involved the idea of shipping into the point of concentration in less than carload lots and out of the point of concentration to the point of final consumption in carload lots, this feature of the system cannot be said to apply to southwestern Wisconsin, for the reason that not to exceed one-fourth or one-fifth of the concentrated cheese is shipped out in carload lots. Generally speaking, therefore, the rate on cheese produced in Wisconsin is the concentration rate plus the less than carload rate from the point of concentration to the point of final destination. This general rule appears to apply not only to the southwestern part but also to the eastern part of the State. The record shows that even in the American cheese producing districts the amount of cheese which is shipped out of concentration points in carload lots is relatively small, being in fact only a fractional part of the total product.

Before proceeding farther with this discussion an explanation should be made of the concentration system.

The concentration system was instituted in Wisconsin about

fifteen years ago. Its general introduction, however, appears to be of much more recent origin. The exact circumstances under which the system arose were not developed during the hearings, nor have we been able to secure definite information from other sources. As the term "concentration" suggests, the system involves the collecting or gathering of cheese at some point or points centrally located with reference to the cheese producing and marketing areas. At such central or concentration points large quantities of cheese are stored in warehouses to be sold and shipped at the proper turn of the market. Ample warehouse and refrigerator facilities have been provided at Plymouth, Sheboygan, Appleton, Green Bay, Kiel and other places. The concentration system has also developed a large number of local markets, each having its "boards," at which cheese is periodically bought and sold. Such boards have been established at Muscoda, Fond du Lac, Sheboygan, Brillion, Hortonville, Marshfield, etc. While cheese is bought and sold on these boards it is not actually brought in at the time of sale or preceding the date of sale, but the men who have cheese for sale appear on the dairy boards on market days with a statement of the number of cheese which they have for sale and then the bidding begins on the part of the competing buyers who are always present on market days. The dairy boards thus afford the seller of cheese strong competition among buyers, many or all of whom are, to some extent at least, also speculators. The dairy boards regarded as institutions for speculation possess all the advantages and disadvantages of the speculative system generally. The merits and demerits of the speculative system as such cannot be discussed in this place. From what we could learn of the system of concentration, we are inclined to look upon it as a system which on the whole brings advantages to the producer, to the dealer, and to the carrier. The producer gains thereby the advantage of a sensitive, competitive market; the dealer is enabled to save some of the expense of storing cheese in large cities as a result of the greater cheapness with which storage and refrigerator facilities can be provided in the smaller towns. The carrier in Wisconsin gains in the greater control which it can exercise over the through and joint rates which govern the shipment of a greater part of Wisconsin cheese to remote points, east, south and west. In a

word, the concentration system brings the advantages of the Chicago market to the smaller Wisconsin towns situated within that part of the state to which the system is made applicable. The territory in which concentration has been established embraces all that part of the State of Wisconsin which lies south of a line connecting Green Bay and La Crosse. Any railway station within this territory can be made a concentration point. The rates of charge for the transportation of cheese to such concentration points are governed in part by special commodity tariffs, and the points not governed by special tariffs are governed by the following general rules:

(1) Chicago & Northwestern Railway G. F. D. 58169, effective July 8, 1901. "The rates on cheese, any quantity, for concentration and re-shipment via the C. & N. W. Ry., between points in Wisconsin (except as provided for above) will be obtained as follows: Add five (5) cents per hundred pounds to the L. C. L. rate from original shipping point to Milwaukee, and deduct therefrom the L. C. L. rate from concentration point to Milwaukee, way-billing at the difference. In no case shall the rate for concentration and re-shipment be less than 5 cents per hundred pounds."

(2) Chicago, Milwaukee & St. Paul Railway G. F. D. 918—A, effective April 25, 1906. "To obtain rates on cheese, any quantity, for concentration and reshipment via the C., M. & St. P. Ry. between points in Wisconsin: Add five (5) cents per hundred pounds to the L. C. L. rate from original shipping point to Milwaukee, Wis., and deduct therefrom the L. C. L. rate from concentration point to Milwaukee, Wis., way-billing at the difference. In no case shall the rate for concentration and reshipment be less than 5 cents per hundred pounds."

(3) Illinois Central Railroad Company Tariff A—7518, effective September 16, 1902. The general import of this tariff was summarized in the testimony by the assistant general freight agent of the Illinois Central Railroad Company as follows:

"These rates are substantially one-half the regular tariff with a minimum of five cents per hundred pounds. From some of our Dodgeville branch points we carry rates that are even less than one-half the tariff to Monticello and Monroe." A notation to item 5 of the tariff reads as follows:

“Cheese, L. C. L. for reshipment. (Applying to 9 stations specified.) In no case must these rates, added to the rates from Blanchardville, Monticello, Dodgeville, or Clarno, to ultimate destination be less than second class rates from original point of shipment to destination.”

It will be observed that the concentration rates to a concentration point, excepting to some extent points on the Illinois Central, are dependent upon the L. C. L. rate to Milwaukee, and that concentration rates can be secured by the shipper only by giving to the railway carrying the cheese into the concentration point at least an equal amount of cheese for shipment out of such concentration point.

Another feature of the concentration system, and one which is of prime importance, is that concentration points take Chicago rates for shipment in all directions, while points in Wisconsin north of the designated Green Bay and La Crosse line, lying outside of the concentration district, take an arbitrary above the Chicago rate of, say, 5 or 7 cents, depending upon the location of the station. It was stated at the hearings, however, by representatives of the Railway Companies, that as soon as the occasion of the establishment of the concentration system in northern Wisconsin might arise as a result of the growth of the dairy industry in northern Wisconsin, the rules and rates which at present apply in southern Wisconsin would also be made applicable to the northern part of the state. It is obvious that under the concentration system Wisconsin points gain an advantage over Chicago equal to the distance from such points to Chicago, in shipment to southern and southwestern points of the United States, while they bear a corresponding disadvantage in shipments northwest and to North Pacific Coast terminals. Regarded from the point of view of the entire cheese industry in Wisconsin, the concentration system decentralizes the business, in that it saves the necessity of storage in, and shipment from Chicago or other large cities in order to enjoy the advantages of through and joint rates to remote points.

The concentration system as described above is developed most completely in the eastern part of Wisconsin, while in the southwestern part of the state, from which the present petition has emanated, the system is only partially developed, in that it lacks the features of capacious local cold storage

houses and dairy boards. In consequence of this, great quantities of cheese manufactured in southwestern Wisconsin must be put in cold storage in Chicago. As already indicated, cold storage houses can be constructed and operated more cheaply in small interior towns than in Chicago, which is an advantage which the cheese makers of southwestern Wisconsin have thus far failed to appropriate for their benefit. Furthermore, the failure to store this article has also deprived the producers and dealers in southwestern Wisconsin of the benefit of the lower Chicago rates on shipments to distant points to which the general concentration rule of extending Chicago rates to points like Monroe and Monticello entitles them. Hence, it follows that a part of the petition of the Southern Wisconsin Cheesemen's Protective Association appears to rest upon the lack of enterprise on the part of the population in this respect, and the complaint regarding the rates on cheese is narrowed down to the local absolute rate between Milwaukee and stations in the territory embraced in the Cheesemen's Protective Association. It will be remembered that all concentration rates on the Chicago, Milwaukee & St. Paul and the Chicago & Northwestern Railway Companies are based upon the less than carload rate to Milwaukee, which will be discussed presently.

In connection with the petition under consideration the Commission made extensive compilations of rates on cheese, embracing about 500 stations on the three respondent Railway Companies' lines. These tables show: (1) The through rates and distances from each station to Milwaukee, Chicago, St. Paul, Minneapolis or St. Louis; (2) The rates and distances to concentration points; (3) The rate from the concentration point to Milwaukee and Chicago; (4) The sum of the concentration rate and the less than carload and carload rates, respectively, from the concentration point to Milwaukee and Chicago; (5) The rate in Iowa for the same distance; (6) The rate in Illinois for the same distance. Similar compilations were made by the Railway Companies. Since both the Commission's and the companies' tables were based upon published tariffs there could be no difference in the results, except such as might arise from differences in the methods pursued. There was found to be only one possible difference in the method and that involved the question whether or not the comparative rates for Iowa and Illinois should regard the two ship-

ments into and out of the concentration point respectively, as a single service or two separate services. For instance, the distance from Ripon, Wis., to Fond du Lac, Wis., is 64 miles; Fond du Lac to Chicago is 161 miles, making the total from Ripon to Chicago via Fond du Lac, 225 miles. In making a comparison of the rates in Iowa and Illinois, should the shipments from Ripon to Fond du Lac and Chicago be regarded as a single service or two services? In other words, is the corresponding Iowa rate the single rate for 225 miles, or the combined rate for 64 miles plus the rate for 161 miles? In favor of the former position it may be argued that the vital question is what it costs to get the cheese to market in the respective state under the conditions existing in those states, irrespective of differences in details of comparative analyses. In favor of the latter it may be urged that a distance tariff for a single rate on, say, a shipment of cheese for a distance of 225 miles contemplates only two terminal services, while the concentration system involves four such terminal services; hence, the Iowa rate corresponding most nearly to the Wisconsin rate used in the present illustration is the rate on 64 miles plus the rate on 161 miles, which together involve four terminal services, analogous to the service performed in Wisconsin under the concentration system.

On the other hand, it is a well recognized principle that where the volume of traffic is large rates can be lower than where the volume of traffic is small. The amount of cheese produced in Iowa is only about five per cent. of that produced in Wisconsin, while the output in Illinois is only about ten per cent. of the output in Wisconsin; hence, from this point of view the rates on cheese in Wisconsin should be lower than the rates on cheese in Iowa, Illinois, or any other state except New York.

The original idea of the concentration system was to cause the cheese to move continually in the direction of its final destination, and it was thought that the concentration rates had been so adjusted that they constituted a trough or depression, the lowest course through which was the most direct route to the final market. In practice, the concentration system did not work out in this manner for it frequently causes cheese to move away from the market; or to move for concentration in the most circuitous manner, causing superfluous transporta-

tion, and a consequent additional burden upon cheese. The testimony in this case brought out the fact that cheese was shipped for concentration from Muscoda, in Richland county, to Plymouth, and from Monroe, Wis., to Watertown, Wis., via Chicago. These are extreme cases, but the Commission's compilations of rates and distances show that the total distance through which cheese is shipped from the point of origin to the concentration point and then to Milwaukee or Chicago is increased on the average from about 25 to 50 per cent., and that the sum of the concentration rate and the rate from the point of concentration to Milwaukee or Chicago is generally in excess of the single rate which the cheese would bear if shipped directly from the point of origin to Milwaukee or Chicago. This would be a fact of much significance, apparently greatly increasing the burden of transportation for cheese, were it not for the further fact that according to the testimony only a proportionately small part of the total output of cheese in Wisconsin is shipped to Milwaukee and Chicago as points of final destination. It will be recalled that Wisconsin concentration points take Chicago rates, and hence, what additional burden the concentration system may involve in the form of greater distances and increased aggregate rates applies only to that part of the cheese which is shipped to Milwaukee and Chicago for storage or local consumption. It is only fair to assume, what the record in the case tends to establish, that this additional burden is offset by the undoubted advantages of the concentration system which accrue to the cheese industry of Wisconsin as a whole.

It follows from what has been stated in the preceding discussion that nothing in the proceedings of this case, or in the independent investigations of the Commission, warrants us in interfering with the principles of the existing concentration *system* as applied to cheese in Wisconsin. Less can be said regarding the rates. While the concentration *rates* are in some instances excessively low they are in other instances unduly high. The concentration rates in petitioner's territory lack system and bring about numerous irregularities, and we believe that they should be reconstructed. No witnesses appeared who could definitely establish the allegation that Wisconsin cheese could not compete successfully with New York, Pennsylvania and Ohio cheese in distant markets on account

of freight rates on cheese from Wisconsin points to such markets; while several statements were presented to the effect that Wisconsin cheese could compete in these markets. Ability to compete, however, is no reliable criterion of the reasonableness of a particular rate, and we express no opinion upon those interstate rates, and especially reserve that part of this investigation for future inquiry.

The case is somewhat different with the rates on cheese from petitioner's territory to Milwaukee and Chicago, only the former of which are, of course, directly within the jurisdiction of this Commission.

The fact was alluded to in the hearings, and documents on file in this office confirm the statement, that the rates on cheese to Milwaukee and Chicago from points in southwestern Wisconsin were materially advanced during the closing years of the last century. In addition, the expense of icing, which had theretofore been borne by the carriers, was made special charge upon the transportation of cheese, causing a still further increase in the rate.

Immediately after the organization of this Commission, statistical investigations relating to the earnings and expenses of railway companies doing business in Wisconsin were begun, which have continued until the present. The recent hearings in the matter of passenger fares have added a great volume of statistical data, which together with what had previously been compiled by this Commission, enables us to form a fairly accurate judgment with respect to the profitableness or lack of profitableness of the rates on cheese to the carriers. We have made careful analyses of the cost of terminal service and of the cost of operation in different branches of the railway service of the respondent Companies. While such statistics of average cost as well as their distribution among different classes of freight and commodities are not a matter of exact mathematical adjustment, nor do we believe that they well can be made such, we are nevertheless convinced that such statistics are the only guide that can be provided with reference to the absolute reasonableness of a particular rate and the profitableness or unprofitableness of the same. To deny this is to admit that no measure of any kind whatsoever can be adopted for the determination of the remunerativeness or lack of remunerativeness of a particular rate and to assign rate

making and every intelligent judgment regarding a rate to the wide and wild domain of conjecture. This may be generally true today; we fear it is more widely true than rate makers would like to admit. On the one hand the income account of the railway companies; on the other hand, considerations of distance, value, space, weight, competition, clamor, importunity, petition, demonstration, threat, reprisal, revenge, good will, favoritism, chance, tradition, speculation, metaphysical generalities and vague notions of all kinds and degrees of consciousness,—these appear to be the only admitted guides and rules for the rate maker. This Commission has been unable to find secure anchorage in any one or more or all of these. We find it absolutely necessary to fall back upon detailed analyses of earnings and expenses and interpret these in the light of as many of the above factors in rate making as we can reduce to a tangible basis. In saying this we by no means wish to be understood as maintaining that the cost of service principle is the only principle of rate making. Every student of transportation, as well as every practical railway man, knows that it is not. However, average costs and average rates must run in lines more or less parallel purely as a sound business policy.

From the point of view of the average cost of the service performed, considering separately the terminal and haulage services, we find that the existing rates on cheese from points in southwestern Wisconsin to Milwaukee and Chicago yield an unduly high profit to the carriers. Cheese is a high grade and relatively valuable commodity, and it should therefore bear a rate somewhat higher than the average rate which would have to be charged on the total traffic in order to cover operating expenses, fixed charges, taxes, dividends, etc. The rule of charging what the traffic will bear has its legitimate field of application, but it is not the only rule to be observed. The question must be asked whether cheese shipped out of the petitioner's territory does not bear a rate from concentration points to Milwaukee and Chicago which is proportionately too high, especially when it is remembered that for objects of transportation which move in large quantities, like cheese in the present instance, the railways customarily make a commodity rate. About thirty million pounds of cheese were produced in petitioner's territory during 1905, and of this fully one-third was produced in Green county alone. We therefore

answer the question regarding the proportionately high rate on cheese in this territory in the affirmative, and our answer is the result of and rests upon a study of the railway statistics applicable to the case.

Before proceeding to discuss the changes in the rates on cheese which we believe our investigations justify, we desire to call attention to the lack of harmony in the existing cheese schedules. We find the widest variations in the rates charged for equal distances and per hundred pounds per mile. Cheese is concentrated at a rate of five cents per hundred pounds for distances varying from 8 to 48 miles; a rate of $7\frac{1}{2}$ cents per hundred pounds covers distances varying from 6 to 73 miles; $5\frac{1}{2}$ cents for 6 miles; 10 cents for 29 miles; and 15 cents for 65 miles. Some of the results are due to the application of the five cent minimum rule to shipments for concentration in a direction away from the market; and others apparently simply "happened" that way as the tariff schedule "grewed." We would not have these illustrations misinterpreted; it is easy to find fault or turn things into ridicule, especially when one is dealing with so complicated an arrangement as the existing rate schedules. However, we believe that a careful examination of the existing cheese schedules in the light of our statistical data, warrants the conclusion that they have not been constructed with such a degree of skill and nicety of adjustment that this Commission cannot suggest some advantageous modification. We realize that the business of the manufacture and sale of cheese has probably accommodated itself to the present relation of rates from the leading shipping points to Milwaukee, and in the relation of these rates we shall make no material changes, unless further investigation should convince us of the desirability and necessity of doing so. It does not appear to us that the same necessity exists for the establishment of group rates to Milwaukee over larger areas as in the case of the shipment of cheese from concentration points to distant parts of the Union which we discussed above in connection with the concentration system as a whole. The cheese producing district of southwestern Wisconsin forms practically a closed area with Green county as its center of production, separated from the eastern and north-eastern Wisconsin cheese producing area by a dairy zone of considerable width, devoted almost exclusively to creameries.

For shipment to Atlantic, Gulf and Pacific points, this southwestern domain of cheese production may well be regarded as a single unit, which, as the testimony shows the railways actually do, or are willing to do, by granting all concentration points located therein the same rates that are charged from Chicago to such distant points. For the purpose of shipments to Milwaukee, smaller groups within this single larger group, each having its own group rates, have in the past been recognized. Believing, as previously stated, that business has probably become adjusted to this grouping, the Commission has recognized the group rating principle practically to the extent to which it is applied by the railways today. Shipments for concentration cover such short distances in so many different directions that no grouping is practicable in making concentration rates.

The reports of the Illinois Central Railroad Company show a deficit from operation in Wisconsin. We have not yet been able to make a detailed analysis of the accounts of the Illinois Central, such as we have made of the accounts of the other large companies doing business in this State. For this reason we are constrained to exempt the Illinois Central Railroad Company from the application of the commodity tariff on cheese herein prescribed for the Chicago, Milwaukee & St. Paul and Chicago & Northwestern Railway Companies, except in so far as the company sees fit to voluntarily comply with the order. Naturally the Illinois Central will adopt the rates of its competitors at competitive points, such as Monroe, which are also heavy cheese shipping points.

In view of the fact that the Commission's concentration schedule is substantially like the concentration rates at present in force on the Illinois Central, and for the sake of uniformity in concentration rates in petitioner's territory, we make the prescribed concentration rates applicable to the Illinois Central Railroad Company.

Coming now to the specific basis of the rates prescribed herein, from points in the petitioner's territory to Milwaukee, we may say that we have regarded chiefly, although not exclusively, the risk assumed by the carrier, the value of the commodity, the volume of the traffic, competitive conditions, and the cost of the service. Our absolute cost of service figures, adopted for the purposes of this cheese schedule, for

terminal as well as for haulage charges, are in excess of the highest figures presented by any one of the large companies in the State. This leaves a safe margin for contingencies of all kinds. The rates prescribed herein are amply sufficient to cover operating expenses, fixed charges and reasonable dividends on the outstanding capital stock of the companies. We believe it only fair to establish a rate on cheese which shall in itself yield a somewhat higher rate of net return to the carrier than the average, for the reason that the value of cheese is somewhat above the average of the value of commodities carried, and that some other commodity less valuable and less able to bear a like rate will gain a corresponding advantage in a lower rate.

It is our determination that the rates given in the following Commodity Tariff on Cheese, from points in southwestern Wisconsin, embracing petitioner's territory, to Milwaukee, are fair and reasonable:

COMMODITY TARIFF ON CHEESE FROM POINTS ON THE CHICAGO, MILWAUKEE & ST. PAUL RAILWAY AND CHICAGO & NORTHWESTERN RAILWAY IN SOUTHWESTERN WISCONSIN TO MILWAUKEE, WISCONSIN.

C. M. & St. P. RY.

Rate in cents per 100 lbs.

	L. C. L.	C. L.
Beloit	25	17½
Janesville	25	17½
Milton Junction	25	17½
Edgerton	26	19
Stoughton	26	19
McFarland	26	19
Madison	26	19
Middleton	28	20
Cross Plains	28	20
Black Earth	29	20
Mazomanie	29	20
Sauk City	30	21
Prairie du Sac	30	21
Arena	31	21
Helena	31	21
Spring Green	31	21
Lone Rock	31	21
Gotham	32	22
Twin Bluffs	32	22
Richland Center	32	22
Avoca	32	22
Muscoda	33	22
Blue River	34	24
Boscobel	34	24
Wauzeka	34	24
Bridgeport	36	26

Prairie du Chien	36	26
Hanover Junction	25	19
Oxford	25	19
Brodhead	25	19
Albany	25	19
Monticello	25	19
New Glarus	27	19
Juda	25	19
Monroe	25	19
Browntown	23	19
Dill	28	19
South Wayne	23	19
Gratiot	28	19
Dunbarton	30	20
Shullsburg	30	20
Darlington	29	19
Calamine	30	20
Mineral Point	30	20
Belmont	32	22
Mineral Point Crossing	32	22
Platteville	32	22

C. & N. W. RY.

	Rate in cents per 100 lbs.	
	L. C. L.	C. L.
Beloit	25	17½
Afton	25	17½
Janesville	25	17½
Hanover Jct	25	19
Footville	26	19
Magnolia	26	19
Leydon	26	19
Fellows	26	19
Evansville	26	19
Brooklyn	26	19
Oregon	26	19
Syene	26	19
Madison	26	19
Summit	28	20
Verona	28	20
Riley's	28	20
Klevenville	29	20
Mount Horeb	29	20
Blue Mounds	29	20
Barneveld	31	21
Ridgeway	31	21
Dodgeville	31	21
Edmond	32	22
Cobb	32	22
Montfort Jct.	32	22
Montfort	32	22
Preston	34	24
Lancaster Jct.	34	24
Stitzer	34	24
Liberty	34	24
Lancaster	34	24
Fennimore	34	24
Werley	34	24
Anderson's Mills	34	24
Woodman	34	24

Livingston	32	22
Rewey	32	22
Leslie	32	22
Mineral Point Crossing	32	22
Ipswich	32	22
Platteville	32	22
Elmo	34	24
Cuba City	34	24
Benton	34	24
Strawbridge	34	24

This Commission, as is well known, has no jurisdiction over interstate rates. The rates on cheese to Chicago are more important to producers in petitioner's territory than the rate to Milwaukee. It is a well established custom on the part of the carriers to charge the same rate from the various points in petitioner's territory to Chicago that are charged to Milwaukee. The foregoing schedule was constructed with this in view, and we recommend that the respondent carriers apply the Milwaukee rates also to Chicago.

From what was said in the earlier part of this discussion, with respect to the practical workings of the present general concentration rules in petitioner's territory, it follows that we are in favor of making some change in the concentration rates. From such facts as we have been able to gather we conclude that cheese is rarely shipped over long distances for concentration in this territory. Every attempt to make the existing general concentration rules work out systematically and equitably in all cases has failed. We have, therefore, concluded to suggest a distance tariff for concentration in this territory. The shipments for concentration at the points in question are purely local, and it is difficult to conceive of a situation which is more appropriate for the application of a distance tariff than this. It seems that if a distance tariff ever has its justification the adoption of a distance tariff to cover shipments for concentration in this territory can be amply justified. We believe that the application of this schedule will not, to any material extent, disturb existing trade relations and that it will work with fairness to both the railways and the shippers. We have concluded to prescribe the following rates for concentration at points in petitioner's territory:

RATES FOR CONCENTRATING CHEESE AT ALL POINTS ENUMERATED
IN THE COMMODITY TARIFF ON CHEESE GIVEN ABOVE, EMBRACING
THE STATIONS ON THE CHICAGO, MILWAUKEE & ST. PAUL

RAILWAY, CHICAGO & NORTHWESTERN RAILWAY AND ILLINOIS
CENTRAL RAILWAY, IN SOUTHWESTERN WISCONSIN, FOR RE-
SHIPMENT OVER THE LINE MAKING THE CONCENTRATION HAUL:

Distance.	Rate in cents per 100 lbs.
Less than 5 miles	5.00
From 5 miles to 9½ miles, inclusive	5.25
From 10 miles to 12½ miles, inclusive	5.55
From 13 miles to 14½ miles, inclusive	5.85
From 15 miles to 17½ miles, inclusive	6.15
From 18 miles to 19½ miles, inclusive	6.45
From 20 miles to 22½ miles, inclusive	6.75
From 23 miles to 24½ miles, inclusive	7.05
From 25 miles to 29 miles, inclusive	7.65
From 30 miles to 34 miles, inclusive	8.25
From 35 miles to 39 miles, inclusive	8.85
From 40 miles to 44 miles, inclusive	9.45
From 45 miles to 49 miles, inclusive	10.05
From 50 miles to 54 miles, inclusive	10.65
From 55 miles to 59 miles, inclusive	11.25
From 60 miles to 64 miles, inclusive	11.85
From 65 miles to 69 miles, inclusive	12.45
From 70 miles to 74 miles, inclusive	13.05
From 75 miles to 79 miles, inclusive	13.65
From 80 miles to 84 miles, inclusive	14.25
From 85 miles to 89 miles, inclusive	14.85
From 90 miles to 94 miles, inclusive	15.45
From 95 miles to 99 miles, inclusive	16.05
From 100 miles to 109 miles, inclusive	17.25
From 110 miles to 119 miles, inclusive	18.45
From 120 miles to 129 miles, inclusive	19.65
From 130 miles to 139 miles, inclusive	20.85
From 140 miles to 149 miles, inclusive	22.05

The rates prescribed in the above concentration schedule are conditioned upon that part of the present general rule for the concentration of cheese which grants concentration rates to cheese which is reshipped over the same line over which the concentration haul is made.

These concentration rates are remunerative in themselves, although they are less so than the rates prescribed from these concentration points to Milwaukee. The schedule has been drawn to include distances up to 150 miles. The average distance for concentrating cheese in this territory is probably less than 30 miles, and, if we are correctly informed, generally does not exceed 50 miles.

The peculiar situation of the Illinois Central Railroad in petitioner's territory may make the rigid application of the concentration schedule of rates to distances over that line of road impracticable in some cases. The tariff, as given, must be interpreted as a schedule of maximum rates for concentration in

southwestern Wisconsin. If, in order to meet short line competition, or for any other reason, the carriers choose to impose a lower rate of charge than that specified in the concentration schedule nothing in this decision prevents their doing so; provided all such rates are published in accordance with law.

The question may be raised as to the expediency of prescribing a new schedule of concentration rates for the southwestern part of the State, without also making it applicable to every other part, especially the eastern or American cheese district. With reference to this question it may be said that the southwestern Wisconsin cheese district is a unit by itself, much more distinctly separated from other cheese territory than one producing territory of any kind is generally separated from other territory producing the same commodity. The present order of this Commission relates only to concentration in the territory under consideration and shipments out of this territory to Milwaukee, and has no application whatever to any other part of the State. Furthermore, before the hearing on this case, the Commission sent letters to cheese men in all parts of Wisconsin, advising them of the questions at issue and inviting them to be present. Several representatives of the American cheese district attended and furnished valuable information, and there was no suggestion from any one in the American cheese district or elsewhere to the effect that producers and dealers in that district desired to be made parties to these proceedings. Consequently, this Commission raises no questions at this time with reference to the situation in the American cheese district. So far as these proceedings are concerned the cheese producing territory in eastern Wisconsin is unaffected thereby.

The rate on foil was the original cause of the complaint which led to the present proceedings. Foil is used in packing certain kinds of cheese produced in southwestern Wisconsin. It appears that the foil thus used was called "tin foil" in an off-hand manner by the cheese makers in this district, the most of whom are Germans. In the German language they characterize this article simply as "lead," while the article the term "lead" designates is lead foil. The Official Classification places both lead foil and tin foil in the same class, namely, 3rd class for less than earload lots, and 4th class for earload lots. In the Western Classification tin foil stands in the 1st class and lead foil in the 2nd class. Lead foil has only recently been introduced as a

separate item into the Western Classification. It was brought out at the hearings that for all these years this lead foil has been shipped as tin foil and at the correspondingly higher rate, due apparently to both the lack of information on the part of the consignees and the arbitrary action of the carriers. The following letter introduced into the record illustrates this:

THE CONLEY FOIL COMPANY,
Manufacturers,
 521 to 541 West 25th Street,
 New York, March 24, 1906.

MR. C. R. SCHEPLEY,
Monroe, Wis.

DEAR SIR: Your letter of the 21st., received, and in reply we write to say that we cannot ship our foil as lead foil. The railroad companies insist that we pay Tin Foil rates on every thing we ship. We have tried it many times shipping the Foil as Lead Foil, but if they pass it at this end they simply come back at the customer at the other end. We will not forget to put our name on the cases as you suggest.

Very truly yours,
 THE CONLEY FOIL COMPANY,
 L. D. CONLEY, *Secretary.*

Lead and tin foil being in the same class in Official Territory, and the rate on both being consequently the same, there appears to be some plausibility of an excuse on the part of the eastern carriers, although the practice appears to us to be indefensible even in Official Territory. We can think of no excuse, however, for the adoption of the arbitrary rule of the eastern carriers by their western connections, in direct violation of the Western Classification to which they are subject. The difference in the rate between 1st and 2nd class between Chicago and certain other points is shown below:

	Per 100 lbs. L. C. L.	
	1st class.	2d. class.
Chicago to Monroe, Wis	38½	33
Chicago to Mineral Point, Wis	46	38
Chicago to Darlington, Wis.	43	34

The difference between 1st and 2nd class rates as shown above is the amount of the excess which consignees have been paying whenever lead foil has been shipped as tin foil. More than this,

it appears that shippers in southwestern Wisconsin have also been paying tin foil, or first class, rates on shipments locally for the distribution of foil from places like Monroe. The following table shows 1st and 2nd class rates between Monroe and other cheese producing points:

Freight rates per 100 lbs. L. C. L. from Monroe, Wis.

To	Miles.	1st class.	2d class.
Juda	8.8	12	10
Brodhead	15.3	18	15
Orfordville	21.6	20½	17
Browntown	8.3	12	10
South Wayne	13.1	15	12
Gratiot	22.6	20½	17
Darlington	32.5	24½	20½
Mineral Point	47.6	29	23½

From the rates which were quoted at the hearings as rates being paid by shippers of lead foil in this territory between Monroe and the points mentioned in the above table, we draw the conclusion that these local shipments have been made at 1st class rates, or the rate on tin foil.

Our attention was also called to the relatively high rates from Chicago to Monroe, Mineral Point, Darlington, and other places, as compared with the rate from Chicago to East St. Louis. The distance from Chicago to East St. Louis via the Chicago & Alton Railway is 280.6 miles; the distance from Chicago to Monroe, Wis., via the C., M. & St. P. Ry., is 132.9 miles, and via Illinois Central Railroad, 139 miles; the distance from Chicago to Mineral Point is 180.5 miles, and Chicago to Darlington, 165.4 miles. The rate on tin foil (not lead foil) from Chicago to East St. Louis is 18 cents per 100 lbs., while the rates to Wisconsin points on lead foil, as shown above, are practically double the East St. Louis rate, while the distance to these points is little more than one-half. We have already brought the matter of the classification of lead foil, and the rate on this commodity from Chicago to Monroe and other points to the attention of the Interstate Commerce Commission.

The petition with reference to the rate on foil was based chiefly on comparison with the rate on nails and analogous articles. It is true, as set forth in the original complaint, that nails and lead foil represent approximately the same amount of risk, which is small in both cases. Both foil and nails are compact and heavy in proportion to the space occupied, and the difference in price

between the two is not remotely equal to the differences in their present classification and rates. However, foil, unlike nails, is sold with a commodity in connection with which it is used; the carrier gets the price of transportation on foil when it is shipped to the cheese factory and also when the cheese is shipped out, the weight of the foil entering into the weight of the cheese upon which the freight is paid. Similarly, the cheese manufacturer gets the price of cheese for the foil in which the cheese is wrapped when he sells it. The price of foil was stated to range from $5\frac{1}{2}$ to 6 cents a pound; sometimes higher. The carload rate on foil from New York to Chicago and Monroe and Darlington is 68 and 69 cents per 100 lbs., respectively. The average price of the cheese sold out of the southwestern Wisconsin district during 1905, according to the state census, is estimated at about 10 cents per pound. Assuming that the average cost of foil to the manufacturer of cheese, including freight charges, is, according to the above, 7 cents per pound, the manufacturer of cheese makes the foil pay for itself, if indeed he does not make a net profit on the original cost of the foil varying from several to many per cent. The cheese manufacturer's transaction in foil is, therefore, not an unprofitable one even at the existing rates. Since no exact mathematical rule exists for the distribution of the aggregate cost of transportation among the different objects of transportation we can discover no adequate ground, all things considered, upon which the existing rate on foil can be declared to be unreasonably high and discriminatory. No doubt the rate on foil regarded by itself as an isolated problem could stand a reduction, but only at the expense of other articles which, in our judgment, are more in need of reduced rates than foil. It is obvious that if carriers make a larger profit on some objects of transportation they can and should accept a smaller profit on others, provided that the profit on their entire business is fair and reasonable. Under all the circumstances in this case, we do not believe that the profit to the carriers on the transportation of foil is excessive.

Whey butter is a by-product of the manufacture of cheese; for every 7 to 10 pounds of cheese one pound of whey butter is produced. One of the respondent railways shipped out of a single station during 1905 more than three million pounds of cheese. This amount of cheese alone would represent, at the above proportions, about 300,000 pounds of whey butter. Since

the estimated amount of cheese produced in southwestern Wisconsin is many millions of pounds, it follows that the amount of whey butter produced reaches considerable proportions and that the same is an important object of transportation. The Western Classification makes no mention of whey butter and at present it is classed and shipped the same as butter. The price of butter is more than double the price of whey butter, and it appears to us that this like treatment in the classification and the rate of whey butter and of creamery butter is a discrimination against whey butter. We, therefore, find that the existing rates on whey butter are excessive, and that the present classification is unjust, and we determine that whey butter should be placed in the 3rd class of the Western Classification.

The petition with reference to the rate on paper from Fox River points to cheese producing points in southwestern Wisconsin, involved the violation of the long and short haul principle. The rate from Fox River points to Monroe, Wis., was 18 cents per 100 lbs., while the rate from the same points to points intermediate between Monroe and the Fox River Valley was 29 cents per 100 lbs. When the attention of the carriers was called to these rates by the Commission they readjusted the same, and this part of the petition was therefore withdrawn at the opening of the hearings.

The petition regarding icing charges has reference exclusively to interstate shipments and is consequently outside of our jurisdiction. We have, however, called the attention of the Interstate Commerce Commission to this part of the petition.

IT IS THEREFORE ORDERED: (1) That the Commodity Tariff on cheese from points in petitioner's territory to Milwaukee, as given above, be hereafter applied by the respondent carriers, except the Illinois Central, on all shipments from said points to Milwaukee.

(2) That the Distance Tariff given above for the concentration of cheese in points in petitioner's territory on the respondent lines be made applicable to all shipments for concentration in such points.

(3) That whey butter be placed in the 3rd class of the Western Classification, and that the respondent carriers cease charging 2nd class rates on whey butter, and that hereafter they charge only 3rd class rates on shipments of this commodity.

(4) That the respondent carriers cease billing lead foil as tin foil at 1st class rates, and that hereafter they bill lead foil as lead foil, charging the rates prescribed in the regularly published tariffs for lead foil in the 2nd class of the Western Classification.

(5) That the petition with reference to lead foil, except as provided in 4 of this order, be dismissed.

Dated this 13th day of August, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners

No. 25.

JOSEPH CURTIS

vs.

CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

Petition because of the failure of the Railway Company to keep open and warm the station at Brooklyn for the train which passes through that village about 7:30 P. M. This train is well patronized at Brooklyn station, many women and children, as well as men taking it to Madison, intermediate points and points beyond, all of whom are compelled to wait for said train on the platform, without shelter from cold and inclement weather. A similar petition was made regarding London station. The railway at once made arrangements to have these stations properly heated and lighted, and to have some one on hand to take care of the baggage. Thereupon the petition was withdrawn.

No. 26.

THE COMMON COUNCIL OF THE CITY OF
GRAND RAPIDS

vs.

CHICAGO, MILWAUKEE & ST. PAUL
RAILWAY COMPANY.

See Case No. 8.

No. 27.

COMMON COUNCIL OF THE CITY OF GRAND RAPIDS
vs.
CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

See Case No. 8.

No. 28

COMMON COUNCIL OF THE CITY OF GRAND RAPIDS
vs.
WISCONSIN CENTRAL RAILWAY COMPANY.

See Case No. 8.

No. 29.

A. J. PULLEN, VILLAGE PRESIDENT, NORTH FOND DU
LAC
vs.
WISCONSIN CENTRAL RAILWAY COMPANY.

Husting & Husting, for Petitioner.
Thomas H. Gill, for Respondent.

Complaint against Railway Company for failure to construct
and maintain a station.

Held, that a village containing a population of about two thousand
people, having a regularly constituted and independent municipal
organization, an independent system of schools, its own
waterworks, sewer system and streets, and doing the volume of
business indicated in the testimony, is entitled to station facilities,
even though it is situated only a few miles from a larger city with
which it is connected by an electric railway.

Ordered that the respondent Railway Company construct, equip and
maintain a suitable station at a convenient point in said village
and stop passenger and freight trains thereat.

Pursuant to a petition signed by about thirty citizens and
business men of the village of North Fond du Lac, addressed

to A. J. Pullen, village president, requesting this official "to make one more attempt and a vigorous effort to bring about the establishment of a passenger and freight station at North Fond du Lac, and to refer the matter to the Railroad Commission of Wisconsin," the petition of A. J. Pullen against the Wisconsin Central Railway Company was filed with the Railroad Commission of Wisconsin on February 28, 1906. The hearing on the case was held in the offices of the Railroad Commission of Wisconsin, March 23, 1906. The petitioner was represented by Husting & Husting, and the respondent by Thomas H. Gill.

The complaint of the petitioner sets forth in substance that the petitioner is president of the village board of the village of North Fond du Lac; that the said village is located on the line of the Wisconsin Central Railway between the cities of Fond du Lac and Oshkosh, and that numerous trains pass over said line of railway and through said village in each direction; that the volume of business to be transacted at said village is sufficient to warrant the expense of stopping trains and maintaining station facilities, and that the convenience of the inhabitants demands such accommodations; that the village has a population of two thousand inhabitants; that it has thirty-eight business houses of various kinds within its borders, and that there is immediately tributary to it a large rural population, which would naturally transact business at the village provided adequate accommodations and facilities were furnished; that the village is four miles from the nearest railway station or depot; that no less than carload freight is received or discharged at the village by the Railway Company, nor are passengers discharged at the said village; that the said Railway Company has been requested to provide depot and station facilities, but that the company, unmindful of its duty and obligations as a common carrier, has unlawfully refused to do so. Therefore, the petitioner prays that the matters and things set forth in his petition be inquired into and that an order be entered requiring the Wisconsin Central Railway Company to provide reasonable and adequate depot and station facilities at the said village, and that it be required to stop a reasonable number of trains thereat, and to receive and discharge passengers and freight at said village, and that such other and further relief may be granted as may be equitable and just.

The answer of the Wisconsin Central Railway Company denies that it is four miles from the village of North Fond du Lac to the nearest station or depot of the said company; that the distance from the south limits of the village to the company's depot in the city of Fond du Lac is 2.1 miles, and that from the same point to the center of the village the distance is two and three-quarters miles, and that to the northern boundary line of the village the distance is approximately three and one-half miles. The answer further states that the village has been built up around the shops of the company as a nucleus and that at these shops a large expenditure of money is incurred, exceeding in amount forty thousand dollars per month; that the amount of the freight traffic to or from the village in less-than-carload lots is very insignificant, being only about 40,000 pounds for the six months ending February, 1906; that car load shipments can now be made to the village and that the amount of such shipments is considerable, aggregating nearly five million pounds during the said six months; that a regular and well established street car service between all points in the city of Fond du Lac and the center of the village, both ways, is in operation for the accommodation of the inhabitants of the village, and that they are substantially as well served as though the Railway Company had established a passenger station at the village and stopped its trains thereat; that there is substantially no freight business outside of the business of the Railway Company originating at or in the vicinity of the village, and that almost the entire traffic for persons living in and adjacent to the village consists of freight received for use or consumption; that the surrounding farming region is naturally tributary to the city of Fond du Lac, and that the establishment and maintenance of a station in the village would not perceptibly increase the volume of freight forwarded or received; that to establish and maintain a freight and passenger station at the village would be a source of large expense entirely beyond the needs, necessities or reasonable comfort and convenience of the inhabitants of the village, and a distinct and unreasonable burden upon the Railway Company.

At the hearing statements were introduced by the petitioner representing that from July 1, 1905, to January 1, 1906, the business men of North Fond du Lac had received, approximately, five million pounds of freight. Of this amount 1,212,-

680 pounds was freight received almost exclusively in less than carload lots by dealers in merchandise of various kinds; 3,478,500 pounds was fuel; 195,800 pounds was freight for hotel purposes; and 113,500 pounds was freight for saloon keepers. The Wisconsin Central Railway Company handled freight at its freight station in the city of Fond du Lac destined to North Fond du Lac for the six months ending February 28, 1906, as follows: Carload shipments, 4,934,400 pounds, from which the company derived a revenue of \$1,897.91; less than carload shipments, 40,460 pounds, from which a revenue of \$113.42 was derived. The petitioner represented that the less than carload freight handled by the Wisconsin Central Railway Company at its station in Fond du Lac was only a small part of the total amount of less than carload freight received by merchants and others in the village of North Fond du Lac, who received shipments also over the Chicago & Northwestern and Chicago, Milwaukee & St. Paul Railways, as well as considerable quantities of freight purchased from commission merchants and others in the city of Fond du Lac. The estimated total of over 1,000,000 pounds of less than carload freight includes all commodities received from these various sources by dealers in merchandise and proprietors of hotels at North Fond du Lac, while the Wisconsin Central Company's figures embrace only that portion of this total which the company handled through its freight house at Fond du Lac in less than carload lots.

The apparent discrepancies in the statements of distance between the freight station of the Wisconsin Central Railway Company at Fond du Lac and the village of North Fond du Lac as given in the petition and answer, respectively, seem to rest upon measurements taken over different routes. The distance between the Wisconsin Central freight house and the southern limits of the village of North Fond du Lac, by way of Seymour street, is 12,560 feet, and between the same points, by way of the Main street route, the distance is 16,640 feet. From the Wisconsin Central freight house by way of the Main street route, to Clinton street in North Fond du Lac, the distance is 24,080 feet, and by way of Seymour street the distance between these two points is 19,000 feet. The distance between the points in the city of Fond du Lac from which freight is usually carried, to points in the village of North

Fond du Lac to which freight is usually carried, seems to vary between three and four miles, depending upon the route and terminal points. The drayman who hauls the most of the freight between the city of Fond du Lac and the village of North Fond du Lac, stated that it takes him about six hours to make the round trip in the usual course of business; that at times the road is quite impassable, and that at other times when the road is in good condition he is able to make two trips in one day. The Wisconsin Central Railway Company has in its permanent employ a drayman who makes two trips per day quite regularly. The cost for handling heavy freight between the city of Fond du Lac and the village of North Fond du Lac is ten cents per hundred pounds; for boxes the charge varies between five and twenty-five cents; for packages and parcels of a miscellaneous character, for different people, the charge varies with the particular service; for trunks a charge of fifty cents is made. This drayage charge is felt as a serious financial burden by the local merchants in North Fond du Lac; besides there is risk and loss attended upon the storage and conveyance of perishable goods, such as vegetables, fish, meat, etc., during the extreme cold of winter and heat of summer. The merchants of North Fond du Lac assert that they are practically prevented from buying in the best markets and having their goods shipped directly to them by rail because of the additional charge and risk involved in the conveyance of goods from the city to the village.

With respect to the probable cost of a railway station suitable for a village like North Fond du Lac, and in accordance with the general plans adopted for works of this nature, the Railway Company maintained that the construction of a suitable station would involve a total outlay of \$4,841.25. It appears that the so-called "standard" plans of the Wisconsin Central Railway Company were adopted about two years ago, and that since their adoption no station has been built on the lines of the Wisconsin Central Railway Company in accordance with these plans. The petitioner had secured estimates of the probable cost of a station regarded as suitable for the village, and found that such a station building would cost from \$1,200 to \$1,500. The actual outlay for the construction and equipment of a suitable station building at North Fond du Lac

is therefore dependant upon the particular kind of structure to be erected.

The petitioner also emphasized the great inconvenience and expense connected with the movement of passengers from and to North Fond du Lac. Passengers desiring to leave the city of Fond du Lac on early trains, it was asserted, are compelled to send their trunks on the preceding day at an expense of fifty cents each; they are obliged to take the five o'clock car rather than the six o'clock car, running between the village and city, because of the possibility of irregularity in the running of the shop cars. Passengers arriving at Fond du Lac on the late evening trains from the south frequently miss the last electric car to North Fond du Lac, because of the very small margin of time which remains even if the steam railway train is on time, which, it is said, is rarely the case. It appears that electric cars run between the village and city once every hour during the early and late hours of the day; at intervals of thirty minutes for certain other hours and at intervals of twenty minutes during the busiest hours of the day. But the electric car service, at best, the petitioners claim, does not afford the population of the village those facilities to which they are by right entitled. It was stated that the Chicago & Northwestern Railway Company stops four trains daily at North Fond du Lac to take on or let off passengers. The Chicago & Northwestern tracks are situated between the tracks of the Wisconsin Central Railway Company and the shore of Lake Winnebago, and are thus less accessible to the inhabitants of North Fond du Lac than the tracks of the Wisconsin Central.

Putting aside all minor considerations, and all statements of fact which may be of doubtful accuracy, the important fact still remains that the village of North Fond du Lac contains a population of about two thousand people, having a regularly constituted and independent municipal organization, an independent system of schools, and its own waterworks, sewer system, and streets. That the village is growing northward and westward, that it is surrounded by a well settled, fertile farming territory, that certain industries may be developed within the borders of the village, that the officers of the town of Friendship have joined the petitioner in praying for the establishment of a station at North Fond du Lac, are all considerations which may well be kept in view when judging of the

merits of the petition under consideration. This immediate population of two thousand people must be fed and clothed, and all things needed for the satisfaction of the wants of the people must at present be brought to them from without, chiefly from localities three or more miles away, over a road which is probably below the average quality of country roads, and at a cost which is felt as a serious burden by the merchants of the village. Within and on the borders of this village there are railway tracks, upon which numerous trains move daily in both directions. Many villages containing only a fractional part of the population of the village of North Fond du Lac and being located not as far or no farther from other stations, have station facilities of which the population of North Fond du Lac is still deprived. Numerous trains stop for the convenience of passengers within and near the boundaries of the city of Milwaukee other than at terminal stations; there are also stations at South Oshkosh near the main station in the city of Oshkosh; at Itasca near the city of Superior, at the ore docks near the city of Ashland; at the railway shops near the city of Chippewa Falls; at South Stevens Point near the station in the city of Stevens Point; and similar illustrations could doubtless be multiplied indefinitely. While illustrations like these, chosen at random, prove nothing, they nevertheless throw some light upon the peculiarity of the situation at North Fond du Lac. We doubt whether it is possible to find anywhere within the State of Wisconsin a population half as large as that of North Fond du Lac which is still lacking the facilities for which the inhabitants of that village have petitioned this Commission. Section 3 of chapter 362, Laws of Wisconsin for 1905, provides that "every railroad is hereby required to furnish reasonably adequate service and facilities." It is our judgment and determination that the Wisconsin Central Railway Company does not provide "reasonably adequate service and facilities" for the inhabitants of the village of North Fond du Lac, by reason of the failure of said Railway Company to provide station facilities and to receive and discharge freight and passengers.

THEFORE, IT IS ORDERED that the Wisconsin Central Railway Company construct, equip and maintain, a suitable passenger and freight depot at a convenient point in the village

of North Fond du Lac, between Harrison street on the south and Clinton street on the north, and maintain an agent thereat; and that said Wisconsin Central Railway Company stop its trains at said place to receive and discharge passengers and freight. If a different location is agreed upon between the Railway Company and the village board such location will be approved by the Commission.

A period of ninety days from the date of the service of this order will be considered a reasonable time within which to comply with its terms.

Dated this 26th day of March, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 30.

A. J. PULLEN

vs.

WISCONSIN CENTRAL RAILWAY COMPANY, On Rehearing.

On the rehearing of this case the arguments of the Railway Company were restricted to a smaller number of points than those embraced in its petition for a rehearing; namely, that the order of the Commission previously issued is indefinite and uncertain regarding the location of the station and the trains to be stopped.

A supplementary order was issued definitely locating the station and designating the trains to be stopped.

A decision was filed in the above entitled proceeding on March 26, 1906. The Wisconsin Central Railway Company on March 31 filed a petition for a modification of the order made by the Commission in the proceeding. The petition so filed recited in substance: (1) That a compliance with the order of the Commission would deprive the respondent of its property without due process of law, and that the decision would be confiscatory if carried into effect. (2) That the order of the Commission was vague, indefinite and uncertain in

that it did not undertake to define and prescribe what would be a suitable passenger and freight depot for the Railway Company to construct at North Fond du Lac. (3) That the order was indefinite and uncertain in that it failed to specify the exact point where the proposed depot should be located. (4) That the order was indefinite and uncertain in that it did not designate what freight trains should stop at North Fond du Lac to receive and discharge freight and what passenger trains should stop thereat to receive and discharge passengers.

The petition further recited that it was the intention of the respondent to endeavor as far as might be reasonable and just to comply with the decision and order of the Commission, but because of the fact that the respondent believed that to do so would create a serious drain upon its revenues over and above the receipts derived from passenger and freight traffic at the station established, it desired a review and modification of the order made so as to require the respondent to maintain and operate the station only for a period of a year so that if at the end of said year the receipts of said station should not reasonably compensate the respondent for the service given it might be at liberty to apply for a modification of the order complained of, so as to permit the respondent to discontinue the operation or maintenance of a station at said village. A rehearing was asked for on the various points raised in the petition as above enumerated.

Pursuant to such petition, a rehearing was ordered, at which the parties in interest were present. At such hearing the point was not urged by the respondent that the order made by the Commission was confiscatory and would result in depriving it of its property without due process of law. The questions argued related to the location of the proposed depot, and the number of passenger trains that should be required to stop at such depot to receive and discharge passengers. Three different locations were discussed as being feasible. The situation at North Fond du Lac as far as the location of a depot is concerned is somewhat peculiar. The main track runs generally in a nearly north and south direction. The line of the Chicago & Northwestern Railway Company lies to the east of that of the Wisconsin Central Railway Company and about fifty feet distant therefrom. To the west of the main line of the Wisconsin Central Railway is lo-

cated the machine shop, paint shop, mill building, car repair shop, round-house, and other structures, built for convenience in the transaction of the business of the company. The main shops of the company are located at this point, and branching out from the main line of the road there is a net work of side tracks and switch tracks, used for storing cars, and reaching the coal sheds, round-house, machine shop, and other buildings. The yard is somewhat elliptical in form, and the village of North Fond du Lac lies to the west of the ground above described. The main highway between Oshkosh and Fond du Lac crosses the tracks of the Wisconsin Central Railway Company at the south end of the village and is known as Lake Shore Drive. From this point the yard extends very nearly a mile in a northerly direction and adjacent to the main track of the respondent Railway Company.

One of the points under consideration for the location of a depot was adjacent to the point of intersection between Lake Shore Drive and the main line of the road. The second point under consideration was a location that would be adjacent to Polk street if the same were extended in an easterly direction so as to intersect the tracks of the respondent road. The third point under consideration was a location adjacent to the point where Clinton street if extended in an easterly direction would intersect the line of the respondent railway.

The Railway Company offered no objection to the establishment of a depot adjacent to Lake Shore Drive. The objections raised to this location by the inhabitants of the village of North Fond du Lac were the following: (1) That the point in question was almost at the extreme southern limit of the village; that there was no opportunity for the village to grow in the direction of the depot on account of the low character of the land in that vicinity, and that the highway by which the same could be reached was somewhat circuitous, and the distance from the depot to the main part of the village was unreasonably great. (2) That in order to reach such depot it would be necessary to pass over at least two switch tracks on which a very large amount of switching was done, and that notwithstanding the fact that a flagman was stationed at such highway crossing it was nevertheless dangerous.

The inhabitants of the village asked that a station be established along the line of the road adjacent to where Polk street

would intersect the same if it were extended across the yard of the respondent company to its tracks. The respondent Railway Company objected to this location on the following grounds: (1) That the extension of such highway would deprive it of yard room which it needed for the transaction of its business; that it was contemplating increasing the size of its machine shop and other buildings so as to take care of the increased work that would become necessary by reason of the extension of its lines, and that it needed all the yard room it had in order to conveniently transact its business. (2) That if the depot were located at such point it could not be placed adjacent to the main track for the reason that there are three other side tracks paralleling the main track at this point, lying to the west thereof, which are located so close together that it would be impracticable to place a depot building between them. (3) That the only location at this point available would necessitate the crossing of one switch track, over which there was a large number of engines and trains passing, in order to get to the depot building, and aside from this that the business could not be conveniently transacted at a depot so located, because passengers would be obliged to cross over three side tracks to get from the depot to the main track, and freight and baggage would likewise have to be carted back and forth over three side tracks in order to reach the depot from the main track or the main track from the depot as so located.

The third location under consideration was that adjacent to Clinton street as extended eastward. This location was satisfactory to the Railway Company but apparently not to the inhabitants of the village. A depot located at this point could be placed on the west side of the track, so that it would not be necessary to cross over any switch track in order to reach the same from the village, excepting a temporary pit track which does not appear to be in use and which the Railway Company said it would remove. The objections raised to this location by the inhabitants of the village were two in number. It was claimed, first, that the distance to the depot so located would be too great from the business portion of the village; and also that the extension of Clinton street to such depot would necessitate the erection of a bridge over a ravine that would be somewhat expensive.

In this connection it might be said that the distance between Clinton street and Polk street is about 1,025 feet. The principal business street seems to be Wisconsin avenue. While a party desiring to reach the depot from the south side of Polk street would have to travel 1,025 feet farther north to reach the depot at the Clinton street location than at the Polk street location, he would have to travel substantially 425 feet farther east to reach the depot at the Polk street location than at the Clinton street location, so that the only difference in distance between the two locations would be about 600 feet. This difference would exist only as to travel coming from the south of Polk street, and this difference we regard as altogether too inconsiderable to merit serious consideration. The matter of the expense of getting a passable highway to the Clinton street location at a reasonable expense raises a different question. We have no definite figures as to what the expense of building the bridge over the ravine would be if Clinton street were extended to the main track of the respondent company. It is certain that quite a little expense would have to be incurred in order to extend Polk street to the location desired by the inhabitants of the village. The expense would probably be not as great, however, as would be attendant upon the extension of Clinton street.

We have not been inclined to look with favor upon the Polk street location for various reasons. In the first place we consider it advisable to avoid crossing over switch tracks in order to reach a depot, where the dangers attendant upon such a crossing can be reasonably avoided. In the next place, we think a depot located in a village of the size of North Fond du Lac that was so located that it would be necessary to pass over three side tracks over which there was a large amount of switching done, to reach a train from the depot or vice versa would not only be a source of danger to persons getting on and off trains, but would be a great inconvenience in the handling of baggage and freight; and, lastly, the location of a depot at this point might very well deprive the Railway Company of the use of grounds that are and will be otherwise needed in the transaction of its business. North Fond du Lac is a division point, containing the shops of the company, where large numbers of its cars are stored, where cars and engines are brought for repairs, and where a great deal of switching is necessarily done. The extension of the lines of the respondent company will undoubt-

edly necessitate the use of additional yard grounds, and we think on the whole it would not be a reasonable requirement to adopt the Polk street location. The impressions we received on the presentation of the case in this regard were strengthened by an examination of the *locus in quo* made by two of the Commissioners after the cause was finally submitted. The considerations set forth here were those which induced the Commission in the first instance to leave considerable latitude in the way of a selection of a site by the Railway Company.

We appreciate the fact that there are some reasonable objections to extending Clinton street, one of which has already been stated, and another of which is the fact that the loop of the street railroad running from Fond du Lac to North Fond du Lac extends midway into Clinton street and practically deprives persons passing along that street from the use of the south half of Clinton street where it intersects Wisconsin avenue. Marcou street parallels Clinton street, and is located to the south of Clinton street and 240 feet distant therefrom. We see no particular objection to the location of a depot at such point that it can be reasonably reached from the street last named. The expense of fixing up this highway, as we recollect the location, will substantially be no greater than if the Polk street location were adopted. Neither the highway nor the depot will interfere seriously with the yard of the respondent company, and the depot can be so located that it will not be necessary to cross any railway tracks in order to reach the same. It is our conclusion on this question, therefore, that the depot should be located on the west side of the railway track and immediately to the south of what would be the south line of Clinton street if the same were so extended as to intersect the railway track. We further conclude in this connection, however, that the defendant Railway Company should furnish over its ground a suitable right of way between such depot and the east end of Marcou street as it now exists.

We have some doubt about the propriety of this Commission establishing definite locations for depot buildings where such stations are ordered to be furnished. In deference to the apparent wishes of both parties to the hearing, we concluded in this instance to fix such location as we thought under all the circumstances would be proper. We are in receipt of petitions from the inhabitants of North Fond du Lac in reference to the

matter of location. As is usual the petitions furnish very little aid in the determination of the question. Those living in the northern part of the village favoring the northern location, generally speaking, and those living in the southern part of the village favoring the southern location. We favor the northern location, because, as it appears to us, it is at least as convenient at the present time as the southern one; its adoption avoids the use of a dangerous grade crossing, and the growth of the village itself is in the direction of the northern location.

In respect to the freight trains that should be stopped for the purpose of receiving and discharging freight at North Fond du Lac, we think one way freight train each way each day, excluding Sundays, will be sufficient to meet the demands of the community.

We have reached the conclusion that the following passenger trains should be stopped at the village of North Fond du Lac to receive and discharge passengers: trains numbered 5, 7 and 11 going north, and trains numbered 12, 8 and 2 going south, as such trains are indicated on the Wisconsin Central time card issued for the "Winter and Spring of 1905." We gave the matter of ordering train number 3 north-bound to be stopped serious consideration. If there is any considerable amount of travel on this train it is certainly inconvenient for the inhabitants of North Fond du Lac to be compelled to leave the train at Fond du Lac, especially in the winter time. On the other hand, the train in question is a fast train running between Chicago and St. Paul and making but a comparatively few stops. It is being operated in competition with the fast trains on the lines of the Chicago & Northwestern and Chicago, Milwaukee & St. Paul Railway Companies. The evening trains on the three roads leave Chicago within fifteen minutes of each other and arrive in St. Paul within fifteen minutes of each other. The Wisconsin Central line is about fifty miles longer than that of either of the other roads. It is in close competition, as before stated, for through business with the other roads, and is laboring under considerable difficulties at the present time in the way of meeting the competition, owing to the length of its line. The same is true of the limited train running between the Twin Cities and Chicago, and we have concluded that for the present at least these trains should not be stopped at North Fond du Lac, and that the three trains each way that are ordered stopped

will furnish reasonably adequate passenger service for the village for the time being. The street car connections with the city of Fond du Lac permits the use of the train in question on the Wisconsin Central Railway, although at some inconvenience, as before stated.

In reference to permitting the respondent to apply for a modification of the order at the expiration of a year if the business of maintaining a station at North Fond du Lac should prove unprofitable, it is our understanding of the law that either party to a proceeding before the Commission has the right to apply for a modification of its orders at any time that conditions would seem to warrant such application. What might be a perfectly reasonable requirement today might be unreasonable two or three years hence, and we do not construe the law to mean that if the Commission orders a station to be put in, or other facilities to be furnished, that the Railway Company must continue to maintain the station and furnish the facilities for all time to come if there is no longer any public necessity for maintaining the station or facilities.

In reference to the character of the station building that should be erected at North Fond du Lac, we think the Company should furnish such a building and such accommodations as are usually and customarily furnished at places within the State of Wisconsin having a substantially like population. The Commission has no objection to the Railway Company building a station in accordance with the plans submitted by it. The parties representing the village submitted a general outline of such a depot as would be satisfactory to them and what satisfies them ought to satisfy us.

It is therefore determined: (1) That the depot building in question be located on the west side of the main line of the respondent Railway Company and adjacent thereto, at a point immediately south of the south line of Clinton street as extended so as to intersect said line of railway, and that said Railway Company furnish the use of a right of way over its yard grounds from the east end of Marcou street as shown in the plat of the village of North Fond du Lac, to said depot, so that the same may be reached from Marcou street both by teams and foot passengers. (2) That north-bound passenger trains numbered 5, 7 and 11, and south-bound passenger trains numbered 12, 8 and 2, as shown on the time card referred to in this decision, be

stopped at said North Fond du Lac station to receive and discharge passengers, baggage and express each day on which said trains run. (3) That one north-bound way freight train and one south-bound way freight train be stopped at said village of North Fond du Lac to receive and discharge freight on less than carload lots each day, excluding Sunday. (4) That a depot building be constructed, such as is now usually and customarily built for the accommodation of villages in the State of Wisconsin having a population substantially the same as the population of North Fond du Lac. (5) That either of the parties to this proceeding may at any time after the expiration of one year from and after the date upon which such depot building is constructed and ready for use apply to this Commission for a modification of the decision of the Commission made herein; and

IT IS THEREFORE ORDERED, That the respondent, the Wisconsin Central Railway Company, locate the depot provided for in the former order of this Commission, at a point on the west side of its main track and adjacent thereto, immediately south of the point where the south line of Clinton street would intersect said line of railway if the same were extended in an easterly direction to such line of road, and that a right of way be furnished over and across the yard of the respondent Railway Company from the east line of Marcou street to said depot, sufficient for the purpose of enabling teams and foot passengers to pass over the same.

IT IS FURTHER ORDERED, That north-bound passenger trains numbered 5, 7 and 11, and south-bound passenger trains numbered 12, 8 and 2, as shown on the time card of the Wisconsin Central Railway Company issued for the "Winter and Spring of 1905," stop daily every day that such trains run at the village of North Fond du Lac, for the purpose of receiving and discharging passengers and for the purpose of receiving and discharging baggage and express.

IT IS FURTHER ORDERED, That one north bound way freight train and one south bound way freight train stop each day, excluding Sundays, at said village of North Fond du Lac, to receive and discharge freight in less than carload lots at said station.

IT IS FURTHER ORDERED, That either of the parties to this proceeding may apply for a modification of the determination and order of the Commission in the manner hereinbefore stated.

A period of ninety (90) days from and after the service of this order will be considered a reasonable time within which to comply with these terms.

Dated this 5th day of June, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 31.

COMMON COUNCIL OF THE CITY OF GRAND RAPIDS,
vs.
THE GREEN BAY & WESTERN RAILROAD COMPANY.

See Number 8.

No. 32.

MILWAUKEE-WAUKESHA BREWING COMPANY
vs.
CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

Charles Manegold, for petitioner.

S. A. Lynde, for respondent.

Complaint of the rate on mineral water from Waukesha to Milwaukee. The rate complained of was a rate of 7 cents per 100 pounds for a distance of 19 miles, which was alleged to be excessive and prohibitory, not only in competition with local rates, but also in competition with shipments of water from other points in Wisconsin enjoying lower freight rates, illustrations of which were given in the complaint. The Railway Company stated openly, that this rate could not be defended and that it was proposed to put in a lower rate. The petitioner was willing to have the minimum weight raised from 30,000 to 35,000 pounds. Hereupon the petition was withdrawn.

No. 33.

MILWAUKEE-WAUKESHA BREWING COMPANY

vs.

CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

Charles Manegold, for petitioner.

S. A. Lynde, for respondent.

This was a complaint against the rate of 10 cents on beer in carload lots from Waukesha to Watertown. This rate was alleged to be excessive and discriminatory as compared with other rates specified in the petition. The matter came up for formal hearing, but after the testimony had been submitted the parties reached an agreement which was mutually satisfactory.

No. 34.

W. L. HOUSER

vs.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY COMPANY AND CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

No appearance on behalf of petitioner.

Thos. Wilson, for C. St. P. M. & O. Ry. Co.

S. A. Lynde, for C. & N. W. Ry. Co.

That part of the present petition which relates to the rates on grain was disposed of in the grain rate cases (see numbers 46 and 47). When the matter was up for formal hearing before the Commission, the Railway Companies submitted extensive testimony with reference to the cost of handling the live stock traffic, which constituted a part of this petition in addition to the rates on butter, cheese and eggs. No testimony was submitted with reference to the latter rates. The Commission has made compilations and charts of the rates on live stock and various other classes of freight, several informal conferences have been held regarding the adjustment of these rates, but the investigations have not yet been sufficiently exhaustive to enable the Commission to proceed farther.

No. 35.

MEDFORD FRUIT PACKAGE COMPANY

vs.

WISCONSIN CENTRAL RAILWAY COMPANY, CHICAGO,
MILWAUKEE & ST. PAUL RAILWAY COMPANY AND
CHICAGO AND NORTHWESTERN RAILWAY CO

J. T. Edwards, Secretary, for Medford Fruit Package Co.
Thos. H. Gill, for Wisconsin Central Ry. Co.
S. A. Lynde, for Chicago & Northwestern Ry. Co.
Chas. E. Vroman, for Chicago, Milwaukee & St. Paul Ry. Co.

- (1) The chief features in determining the proper classification of an article are the space occupied for each one hundred pounds of the article and the value per hundred pounds of the same. Having determined the facts with respect to space and value both expressed decimally the two are added together and constitute a classification unit. It is not an exact but rather an approximate unit. A certain number of classification units are required of all the commodities in a certain class. Articles not included within the classification are generally carried at commodity rates. The Trunk Line Rules take precedence over the Western Classification. All the respondents in this case are members of the Western Trunk Line Committee and as such they abide by the Trunk Line Rules.
- (2) A car of berry boxes shipped between two given points yields \$33.73 more per car in revenue to the railway company than the same weight of fruit baskets shipped between the same points. This is a discrimination against berry boxes for which no adequate defense can be made. The entire matter of classification and rates on different kinds of fruit packages is in need of careful revision.

The petitioner in the above entitled action sets forth in its petition that it is a corporation organized and existing under the laws of the State of Wisconsin, with its principal office in the city of Medford, Wisconsin; that its business consists largely in manufacturing fruit packages, baskets and berry boxes; that its manufacturing plant is located on the line of the Wisconsin Central Railway Company, and that it ships its manufactured product over said Wisconsin Central Railway and connecting lines, and that a portion of its manufactured product is delivered at destination to points in Wisconsin over the lines of the Chicago & Northwestern Railway and Chicago, Milwaukee & St. Paul Railway; that a large portion of the manufactured product of the petitioner consists of berry boxes which are crated and

put up in as compact a form as the nature of the package permits; that these packages are now shipped in carload lots under class rates, and that such rates are excessively high considering the value of the manufactured product and other elements that should be taken into account in fixing a reasonable rate. The petition quotes from certain rules of the Western Trunk Line Committee to be noted below, and complains that the carriers refuse to construe these rules in such a manner as to include the berry boxes under consideration. The petitioner avers that a proper construction of the rules referred to would permit it to ship its berry boxes under the rules which prescribe the commodity rate on lumber with the lumber minimum. The petitioner further represents that the rates that are actually charged for the transportation of berry boxes in carload lots are excessive, and that if the present classification will not admit of these boxes being shipped at the same rate that is charged for the transportation of lumber then the classification of such articles should be changed so as to permit the petitioner to ship goods in the manner indicated.

The answer of the Wisconsin Central Railway Company, which was substantially the answer of all of the companies, sets forth that the petitioner manufactures its berry boxes in the shape in which the same are to be used for the reception of the fruit and crates them in bundles for shipment in such form that thereby the space occupied by the inside of all of such boxes is entirely unoccupied by freight paying material or product, in consequence of which but comparatively small tonnage or weight is contained in any carload of the material so manufactured and shipped by the petitioner. Attention was further called to the fact that in the classification the minimum carload weight is put at 10,000 pounds. That, upon the other hand, lumber shipped by respondent companies occupies almost the entire space in a car and produces several times the weight to each carload that is obtained from the product shipped by the petitioner, and to change the rate so as to apply carload rates to petitioner's shipments would be a gross discrimination against shippers of lumber and lumber products not equal in bulk to petitioner's product but of far greater weight.

The petition was filed April 13, 1906, following a number of fruitless informal conferences, and correspondence extending over several months. The hearings upon the case were held

on May 9 and 10. The Medford Fruit Package Company was represented by its secretary, J. T. Edwards; the Wisconsin Central Railway Company was represented by Thos. H. Gill, the Chicago & Northwestern Railway Company was represented by S. A. Lynde; the Chicago, Milwaukee & St. Paul Railway Company was represented by Chas. E. Vroman.

The vital question at issue in the case is the rate charged for the transportation of a rectangular berry box made out of "scarfed" material, set up, ready for use, in crates of different sizes. The specimen crate produced at the hearing contained sixteen such berry boxes. The berry box in question is the one which is commonly in use in the berry trade in this part of the country. The minor questions relating to the construction of the Western Trunk Line Rules and the Western Classification, which in turn involve the question of the classification of the berry boxes under consideration, ultimately resolve themselves into the question of the rate, because the rate varies with the class to which an article belongs.

The Western Classification, which applies to all the territory west of Chicago and the Mississippi river, has been adopted by some seventy railways doing business in this section of the United States, including all the railways in the State of Wisconsin. On page 14, items 32 and 33 of the Western Classification No. 40, effective April 1, 1906, we find the following applicable to the commodities under consideration in the present case:

BASKETS C. L. (Subject to Rule 6—B.)

Nested or K, D.

Minimum Weight 10,000 lbs2

Rule B is found on page 2 of the Classification and provides in substance that as the size of the car increases the minimum weight shall increase approximately in the same proportion. The basis of this classification is found in a number of principles, none of which are so clearly and well defined that they can be expressed or formulated with mathematical accuracy. However, generally speaking, the chief features which it seems necessary to consider in determining the proper classification of an article are the space occupied for each one hundred pounds of the article, and the value per one hundred pounds of the same. The first is supposed to represent the amount of car space which the carrier must furnish in the transportation of the article, and the second is

supposed to represent in a general way the risk which the carrier assumes, as well as the ability of the commodity to be transported to bear a certain rate. Having determined the number of cubic feet of car space occupied by 100 pounds of an article, and the value of 100 pounds, both expressed decimally, these two items are added together and constitute what has been termed a classification unit. This is not an exact but rather an approximate unit, which serves the purpose of comparison with articles already in the classification, or with other articles still to be added to the classification. A certain number of classification units are theoretically, at least, required of all the commodities in a certain class. For instance, an article which represents between 15 and 20 units falls into the first class; an article which represents between 10 and 15 classified units falls into the second class; between 5 and 10 units third class; 5 or fewer units fourth class. These units may be regarded as index numbers giving the clue to the correct classification of any particular article. Obviously, a large number of different considerations enter into the classification of thousands of articles, and a unit rule of this kind must be regarded as applicable only in a general way. Articles which are not included within the classification, but which are transported in considerable volume, are generally carried at what are known as commodity rates. It is generally understood that commodity rates are lower than class rates. Articles which do not have a commodity rate take the class rate, the same rate applying to each article in a class, while the commodity rate applies only to the particular commodity in question. Applying these general considerations relating to the classification of objects of transportation, it may be pointed out that berry boxes, like those involved in the present case, are carried at class rates, while berry baskets, which are used for the same purpose, and which compete in the market with boxes, are carried at commodity rates. The reason for this will appear in the following paragraph.

The Western Trunk Line Committee is a body representing about thirty railways, all of which are included in the list which has approved the Western Classification, consequently the territory in which these thirty railways operate is a part of the larger territory represented by the Western Classification. The Trunk Line rules take precedence over the Western Classi-

fication and, theoretically at least, it is assumed that the Trunk Line rules are more nearly adapted to the peculiar conditions and movements of traffic prevailing along the lines of the various carriers represented in the committee than the Western Classification. In the case of a conflict between the Trunk Line rules and the Classification the former control. As has been stated, all the respondents in this case are members of the Western Trunk Line Committee, and as such they abide by the rules of that association; although technically and legally, as we understand the situation, the rules and rates published by the Western Trunk Line Committee are supposed to be established by the individual action of the various lines embraced in its membership, and the relation of the committee to the action of the individual lines is that of a publishing agency. The Trunk Line Committee as a publishing agency issues rules and regulations from time to time. Rule 56-B of Rules Circular W. T. L. No. 6, effective April 1, 1905, which is reissued as rule 56-C in amendment No. 5 to the Circular just mentioned, effective April 10, 1906, provides that the lumber rates and minimum weights shall apply to more than fifty different commodities enumerated as a part of the rule and including "berry boxes, scarfed, set up, nested and crated." The rule also includes the following: "Fruit and vegetable packages, made from scarfed box material (minimum weight 30,000 lbs.); described as follows:

Scarfed Berry Box Material, in racks and bundles.

Boxes, K. D., in bundles, N. O. S.

Melon Crate Material, K. D., in bundles.

Four Package Crates.

Six Package Crates.

Grape Packages, nested, handles and covers in bundles."

It will be observed that "berry boxes, scarfed, set up, nested and crated" is given as a separate item, and the petitioner maintained that if this item in Rule 56-B (or 56-C of the amendment) does not apply to the scarfed berry boxes under consideration, he did not think it was possible to designate any article manufactured in this or any other state, in which the carriers are subject to Trunk Line rules, to which this particular item did apply.

The application of both the Classification and of the Trunk Line rules appear to turn upon the definition of the term "nest-

ing." In the general rules which are a part of the Western Classification there is no mention of the term "nesting." On pages 16 and 18 of Western Classification No. 40, we find the only thing which may be construed as a definition of "nesting." The reference on page 16 reads as follows:

"Ratings for nested paper boxes will apply only on packages in which one-third of the space is saved by nesting."

On page 118 we find the following:

"Tinware may be regarded as nested when 20 per cent or one-fifth of space is saved by placing one article within another. Dinner pails, consisting of several parts placed inside the pail proper, are ratable as nested tinware."

On the same page there is also found the following:

"Nested solid, i. e.: The outside and bottom surfaces of the article above must rest against the inside and surface of the bottom of the article below without any intervening space, and is exclusive of articles with projecting ears, handles, spouts, etc., which nest, but not solid as above described."

On page 6 of Southern Classification No. 34, is found the following definition:

"The term 'nested' as used in this Classification covers a series of three or more like articles fitting closely one within another."

In the testimony it was explained by the secretary of the Western Classification Committee that the definition incorporated in the Southern Classification is the one which has been generally applied in construing the Western Classification.

It was suggested at the hearing that in the absence of a general rule as well as of a special rule applicable to nested boxes in the Western Classification, the berry boxes under consideration, placed in crates, should be regarded as being nested, for the reason that the manufacturers of these boxes pay for "nesting" the same when they pay for placing these boxes in crates. It was furthermore urged that boxes, being necessarily rectangular in shape, could not possibly be nested in any manner other than that shown in the specimen crate of boxes produced in evidence. While there is some force in these representations, we cannot acquiesce in the conclusion drawn from them; and we are constrained to hold that no commodity can properly be regarded as nested within the meaning of the Classification or Trunk Line rules, unless certain articles of

of a certain kind fit into one another in such a manner as to effect a substantial saving in space as compared with the amount of space the same number of the same article would occupy when not thus nested, but simply placed in close proximity to one another. The scarfed berry boxes, set up and crated, as shown in the specimen crate, are therefore not to be regarded as nested within the meaning of the Western Classification nor the Western Trunk Line rules. Hence, as the rules now stand, these berry boxes are subject to the rates of class 2 of the Western Classification; whereas, the berry baskets produced at the hearing, and referred to as exhibit 1, take a commodity rate the same as that which applies to lumber with the same minimum weight. Fruit baskets like those of exhibit 1 are conceded to be more valuable than the berry boxes under consideration, and one naturally looks for some explanation of the unlike treatment accorded to these two classes of competing commodities in the Classification and Trunk Line rules. To illustrate the effect of the existing rules upon these commodities, a carload shipment of each from Medford to Milwaukee may be taken. The second class rate between Medford and Milwaukee is $46\frac{1}{2}$ cents per 100 lbs. The lumber rate from Medford to Milwaukee is 10 cents per 100 lbs. Assuming that each of these cars is loaded to the required minimum, namely, 10,000 lbs. in the case of the carload of berry boxes, and 30,000 lbs. in the case of the carload of berry baskets, at the given rate the baskets yield a total revenue of \$30.00, while the boxes yield \$46.50. On the assumption before us there is a difference of \$16.50 which could not be accounted for by any of the facts brought out at the hearing. Not only was it shown that a carload of boxes which must bear between the points mentioned, this rate of \$46.50—assuming the minimum weight—is less valuable than a carload of baskets, but also less valuable than a carload of lumber at the average price prevailing to-day. In addition, the amount of lumber required to make a carload shipment when manufactured into boxes of this kind will produce several carloads of freight, so that in reality in the one instance the railway receives a revenue of only \$30.00, as compared with a revenue several times \$46.50, which it ultimately received, on the boxes manufactured out of this lumber. The exact extent of the disparity in the treatment of berry boxes

and berry baskets is brought out even more forcefully when actual weights are considered. The testimony established the fact that the nested baskets of exhibit 1 rarely, if ever, reached the minimum weight of 30,000 pounds; whereas, the average weight of four cars of berry boxes shipped by the complainant, was 13,705 pounds. Hence, if these cars had been shipped from Medford to Milwaukee at the existing rates, the nested baskets would have yielded the railway company not to exceed \$30.00, and the boxes \$63.73 in revenue per car, or \$33.73 more per car for the boxes than for the baskets. This is a discrimination against berry boxes for which no adequate defense can be made.

It seems clear that the entire matter of the classification and rates on different kinds of fruit packages is in need of careful revision and adjustment. To make such a revision requires time. The season for shipping fruit packages is now at hand. Delay in reaching a decision would mean hardship to the shippers. The granting of immediate relief seems necessary. Therefore, in order to meet the situation which actually exists, and without committing ourselves to specific rules and principles applicable to the future, and which may possibly be deducible from our order, we are inclined to believe, on the basis of the facts before us, the extension of the lumber rate and minimum to the scarfed berry boxes, set up and crated, as shown in the specimen at the hearing, is fair to all the parties in interest. We expressly disclaim approval of the practice of applying apparently low commodity rates to light bulky articles with a high minimum, by means of which the real rate is made several times as high as the nominal commodity rate. We believe it is much more expedient, clearer, and therefore less liable to misconstruction or to cause dissatisfaction, to charge 30 cents per 100 pounds for a carload of 10,000 pounds, than 10 cents per 100 pounds for a carload supposed to weigh 30,000 pounds, but one-half or more of which assumed weight is fictitious weight. We commend the aims of the Western Classification Committee to provide a minimum which can actually be loaded in a car; and we discountenance the method of carriers by which rates are changed through the instrumentality of the classification and minimum weight rather than by directly changing the rate. The method of changing a rate through the classification and minimum

weight is an indirect procedure which veils the real nature of the change which it involves.

We are of the opinion that the existing rules and rates constitute an unjust discrimination against the berry boxes shown at the hearing; and it is further our judgment and determination that the present rates charged for the transportation of lumber, with a minimum weight of 30,000 pounds, as applied to nested berry baskets, are remunerative, and that such rates should also be charged for the transportation of berry boxes.

It is Therefore Ordered, That Rule 46-B of the Rules Circular W. T. L. No. 6, shall apply to the scarfed berry boxes, set up and crated, under consideration in this case, thus giving these boxes the benefit of the rate and minimum weights applicable to lumber, until September 1, 1906, which we regard as a reasonable charge. On or before that date a revised classification and schedule of rates applicable to fruit packages may be submitted to the Commission for its approval. If no such classification and schedule of rates can be agreed upon by the carriers and manufacturers, and others in interest, the Commission will proceed as soon as practicable thereafter upon its own motion to investigate further the existing classification and rates on fruit packages, and to order such changes as may appear just on the basis of the facts then before it.

Dated this 11th day of May, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 36.

L. C. WHITTET

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY AND CHICAGO & NORTH WESTERN RAILWAY COMPANY.

Whitehead & Matheson, for Petitioner.

C. E. Vroman, for Chicago, Milwaukee & St. Paul Ry. Co.

S. A. Lynde, for Chicago & Northwestern Ry. Co.

Refusal of the respondent Railway Companies to make joint rates in lumber. The petitioner had purchased a stock of lumber at Elcho, on the Chicago and Northwestern Railway, which he desired to ship to Edgerton, where his place of business is located, on the Chicago, Milwaukee & St. Paul Railway. He also desired to make additional purchases at Elcho and other points on the Chicago and North Western Railway. The Minneapolis, St. Paul and Sault Ste. Marie Railway has in effect a joint rate on lumber with the Chicago, Milwaukee & St. Paul between Rhinelander and Edgerton of 11 cents per 100 pounds, while shipments from Elcho to Edgerton cost the petitioner the sum of two local rates, namely, $10\frac{1}{2}$ cents to the Chicago & North Western from Elcho to Janesville, and $4\frac{1}{2}$ cents to the Chicago, Milwaukee & St. Paul from Janesville to Edgerton, or a total of 15 cents per 100 pounds for the entire haul. This rate was alleged to be excessive and discriminatory. Full testimony was submitted by both sides at the hearing. The principles involved in the case are generally the same as those involved in the case of the Manitowoc Malting Company, noted below at number 34. Soon after the hearing the parties in interest requested the Commission to have the proceedings rest pending a settlement. Soon after, the Chicago, Milwaukee & St. Paul Railway Company published a joint rate of $12\frac{1}{2}$ cents per hundred pounds between Elcho and Edgerton, which was accepted before its publication as satisfactory to the complainant.

No. 37.

SUPERVISORS OF THE TOWN OF SHEBOYGAN

vs.

CHICAGO & NORTH WESTERN RAILWAY COMPANY.

Petition regarding grade crossing of railway track with Sauk Trail road in the vicinity of the South Freight Yards of the Chicago & Northwestern Railway Company near the city of Sheboygan. The traffic over this road is heavy which makes the crossing especially unsafe and dangerous to the public travel. The petitioners petition to have a flagman placed at the crossing or a signal installed there. The Railway Company agreed to place a flagman there and the petition was withdrawn.

No. 38.

MANITOWOC MALTING COMPANY

vs.

WISCONSIN CENTRAL RAILWAY COMPANY, CHICAGO,
MILWAUKEE AND ST. PAUL RAILWAY COMPANY,
RESPONDENTS, CHILTON MALTING COMPANY IN-
TERVENOR.

Hougen & Brady, for petitioner.

Thos. H. Gill, for Wisconsin Central Ry. Co. and

C. E. Vroman, for Chicago, Milwaukee & St. Paul Ry. Co.,
Respondents.

J. E. McMullen, for Chilton Malting Company, Intervenor.

Application for a joint rate on grain from certain stations on the Chicago, Milwaukee & St. Paul Railway to Manitowoc, over said Chicago, Milwaukee & St. Paul Railway and the Wisconsin Central Railway.

The Manitowoc Malting Company complained that the above named carriers refused to make joint rates on grain from certain stations to Manitowoc, and that the sum of the two local rates was so high as to prevent any grain being shipped to the Manitowoc market, although as near as that of Green Bay, and nearer than that of Milwaukee, and prayed that reasonable joint rates be established.

- Held*, (1) That the sum of two reasonable rates does not necessarily make a reasonable joint rate.
- (2) That the carrier on whose line the grain was produced did not have the right to refuse to make joint rates simply because such action might result in diverting traffic from shippers and manufacturers on its line.
- (3) That it is within the constitutional power of the legislature to either compel carriers to make joint rates by direct act or to confer on the Railroad Commission the power to order joint rates to be made.
- (4) That whether the local rates involved in this proceeding were unreasonable in themselves or not, the sum of the locals would make an excessive joint rate.
- (5) That a joint rate of $7\frac{1}{2}$ cents per 100 pounds from Chilton and Hayton, and 8 cents per 100 pounds from Kiel and New Holstein, to Manitowoc be put in effect in lieu of the local rates now charged aggregating 12 cents per 100 pounds from Chilton and Hayton and $12\frac{1}{2}$ cents from Kiel and New Holstein.

Under date of April 23, 1906, the Manitowoc Malting Company filed with the Railroad Commission a petition reciting in substance that it was a domestic corporation, engaged in the manufacture of malt at Manitowoc, Wisconsin; that each of the above named Railway Companies was a common carrier, engaged in the business of transporting persons and property in Wisconsin; that petitioner was now, and for many years last past had been, engaged in the business of buying barley at various points in the State of Wisconsin and shipping the same to Manitowoc for the purpose of manufacturing malt, and that petitioner was also engaged in the business of selling and dealing in such malt when so manufactured; that large quantities of barley were malted in Milwaukee and Green Bay, and that the malsters of Milwaukee and Green Bay purchase their supply of barley in competition with the petitioner; that large quantities of barley were raised in the vicinity of Chilton, Hayton, New Holstein and Kiel on the line of the Chicago, Milwaukee & St. Paul Railway Company, and that the distance from Chilton to Milwaukee was 78 miles, from New Holstein to Milwaukee 71 miles, from Kiel to Milwaukee 67 miles; that the distance from Chilton to Manitowoc, over the lines of the carriers herein named, was 34 miles, from New Holstein 41 miles, from Kiel 45 miles; that the rate charged for transporting barley in carload lots from New Holstein, Chilton and Hayton to Milwaukee, was $8\frac{1}{2}$ cents per hundred pounds, and from Kiel to Milwaukee 8 cents per hundred pounds, and from Chilton to Milwaukee, when destined to points east of Lake Michigan, $7\frac{1}{2}$ cents per hundred pounds; that the charge for transporting barley from Chilton and Hayton to

Manitowoc is 12 cents per hundred pounds, and from New Holstein and Kiel to Manitowoc, 12½ cents per hundred pounds; that the rate so charged is the sum of the two locals on the lines of the respondent Railway Companies, no joint rate being made between them for the transportation of the commodity in question; that the rate charged over the line of the Wisconsin Central Railway Company, from Hilbert Junction, was 7½ cents per hundred pounds, and the balance of the aggregate charge of the two roads was made by the Chicago, Milwaukee & St. Paul Railway Company; that a joint rate had been established by the Chicago, Milwaukee & St. Paul Railway Company and the Green Bay & Western Railway Company, on malt, from the city of Chilton to the city of Kewaunee, a distance of 75 miles, and that such rate was 7½ cents per hundred pounds; that the rate on from Chilton to Milwaukee was 7½ cents per hundred pounds, and the rate on malt from Chilton to Manitowoc was 12½ cents per hundred pounds; that the rate on barley and malt from Chilton, Hayton and Kiel, over the line of the Chicago, Milwaukee & St. Paul Railway, to Green Bay, was 7½ cents per hundred pounds. The petition further averred that the rates charged from Chilton, Hayton and Kiel to Manitowoc for transporting barley are largely in excess of the rates charged for transporting barley to Milwaukee for a substantially like distance and under substantially like circumstances and conditions, and that it is in the interest of the grain raisers that competition be encouraged and that as many available markets as is reasonably possible should be open to them for the disposition of their produce. Furthermore, that it is usual and customary to make the same rate for transporting commodities like barley to the various lake ports, where the same is transported a like distance under substantially similar conditions. The petition further averred that joint rates were in fact made between the Wisconsin Central Railway Company and the Chicago, Milwaukee & St. Paul Railway Company on very many products, and that such rates should be established for the transportation of barley over their respective lines of road; that in making such joint rates it was usually customary for the roads making them to make the same charge that would be made by a single line of road if the entire haul could be made over it. The petition further averred that the charges made for the transportation of barley from the points in question to Manitowoc are excessive, unreasonable, and

unjustly discriminatory, and that the railway companies in question have refused and neglected to establish a joint rate for the transportation of barley over their respective lines, between the points in question. The petition prays that a reasonable joint rate be established by the Railroad Commission for the transportation of barley between the points hereinbefore enumerated.

The answer of the Wisconsin Central Railway Company consists of various admissions and denials of the matters alleged in the petition. As an affirmative defense to the matters therein set forth, the answer of the said Railway Company sets forth:

“That it cannot in and of itself comply with the requirements of the petitioner as to joint rates as to said Chicago, Milwaukee & St. Paul Railway Company, and that the circumstances and conditions governing and controlling the shipments of barley of said petitioner, in the said city of Manitowoc, are dissimilar to those governing similar shipments to other lake ports, by reason of established trade and competition, and that to comply with the request for such joint rate with the consent of its co-defendant would work a positive and unjust discrimination as against all other shipping points of like traffic to other lake ports and result in a division of the traffic, now solely tributary and controlled by said petitioner, from the points mentioned in said petition and other points, to said city of Manitowoc.”

The answer of the Chicago, Milwaukee & St. Paul Railway Company likewise consists of various admissions and denials, and contains the following affirmative statement:

“Further answering, the respondent alleges that all of the conditions controlling shipments of barley from Manitowoc are unlike those governing like shipments to other lake ports, by reason of established trade and competition, and that to put in a joint rate as prayed for by the bill of complaint would work an unjust discrimination as against other shipping points to other lake ports.”

After the proceeding was instituted the Chilton Malting Company asked leave to intervene and be heard on the issues raised by the petition of the Manitowoc Malting Company and the answers of the defendant Railway Companies. The petition filed by the Chilton Malting Company with the Commission is somewhat lengthy. The salient points covered by the petition are as follows:

Petitioner is engaged in the business of buying barley and manufacturing malt at Chilton, and shipping the same to various points. The petitioner is selling malt in competition with maltsters located at Milwaukee, Green Bay, Manitowoc and other points. Hayton, New Holstein and Kiel are but a short distance from Chilton, the farthest village being but eleven miles distant. Petitioner has an annual capacity of 450,000 bushels of barley, of which amount from 200,000 to 275,000 bushels are annually marketed at Chilton. The petitioner requires the greater portion of the barley marketed at Hayton, New Holstein and Kiel, in addition to that marketed at Chilton, to supply its wants for malting purposes. The Wisconsin Central and Chicago & North Western Railway Companies each reach Manitowoc and run through a territory which produces large quantities of barley. The freight rates from stations on the line of road last named, to Chilton, are greater for like distances than the freight rates to Manitowoc. The petitioner comes in competition with the Manitowoc Malting Company in selling malt, and the rates on malt from Chilton to such markets are as high as the rates from Manitowoc to such markets. Rates on barley are as high to Chilton as they are to Manitowoc, where the commodity is transported over two lines of railway in each instance. The rate on barley from Minneapolis to Chilton is two cents per hundred pounds higher than the rate on the same commodity to Manitowoc. The reduction in rates prayed for in the petition of the Manitowoc Malting Company would be of no benefit to the growers and producers of barley in the vicinity of Hayton, Chilton, New Holstein and Kiel, for the reason that there is already abundant competition among buyers at said points. Manitowoc is not one of the great barley markets of the country, but, on the contrary, at times, the prices of barley are materially higher at Chilton than at Manitowoc. If the joint rate was made it would enable barley buyers at Manitowoc, in case of special exigencies to invade the territory on the line of the Chicago, Milwaukee & St. Paul Railway Company and purchase barley for the time being, but as soon as their immediate requirements were fulfilled they would again drop out of those markets, thereby unsettling the same, to the injury of the local buyers, who have very considerable investments in elevators, warehouses, etc., of a capacity sufficient to handle the crops raised in their immediate vicinities.

The foregoing statement contains a full synopsis of the two

petitions and the two answers filed with the Commission in this proceeding. Leave was granted to the Chilton Malting Company to intervene and be heard in opposition to the granting of the prayer of the petition of the Manitowoc Malting Company.

At the hearing the petitioner was represented by Hougén & Brady, its attorneys; C. E. Vroman appeared for the Chicago, Milwaukee & St. Paul Railway Company, and J. E. McMullen for the Chilton Malting Company. The Wisconsin Central Railway Company did not appear.

The various parties who appeared offered evidence tending to support the allegations of the pleadings referred to. It was testified to, in behalf of the petitioner, and practically conceded by all parties, that the present rates of charge for transporting barley from Chilton, Hayton, Kiel and New Holstein, to Manitowoc, are prohibitory, and that no barley can be moved between those points so long as the present rates remain in force. On behalf of the Chilton Malting Company it was claimed, that it needed for its own use, all the barley marketed at Chilton; that competitive conditions were such, that farmers were assured a fair price for barley in any event, and that prices would not be increased by the advent of the Manitowoc Malting Company on the scene as an active competitor, and that it would suffer loss to the extent of the freights it would be compelled to pay on the barley it shipped in to make good what was lost to the petitioner at Chilton, if the Manitowoc Malting Company was allowed to enter the field, without any benefit accruing to any one, except perhaps the Manitowoc Malting Company. It may, we think, be fairly said that the motives of the two Malting Companies are purely selfish. The petitioner desires to purchase barley in the territory in question for its own pecuniary benefit, while the intervenor desires to keep the petitioner out of this market for its pecuniary interest.

The testimony showed that the territory in question was one of the best barley producing sections of the State and that large quantities of barley were raised in the vicinity of the stations named and marketed thereat.

Vice President Hiland testified in behalf of the Chicago, Milwaukee & St. Paul Railway Company. He did not attempt to justify the reasonableness of the rates from Chilton, Hayton, Kiel, etc., to Manitowoc if a joint rate was to be established. He did claim, however, that the local rate charged by his road to

Hilbert Junction was not excessive and that in justice to itself, the Railway Company he represented could not concede to this Commission, or any other body, the power or authority to force it to make joint rates.

A proceeding was brought by the *Plumb & Nelson Company* a few months ago for the establishment of joint rates on L. C. L. shipments between the city of Manitowoc and stations on the line of the Chicago, Milwaukee & St. Paul Railway, between Hilbert Junction and Plymouth. The prayer of the petition was granted, because, among other reasons for granting the joint rate it appeared that the railway companies involved, had very generally made joint rates on the shipment of the kinds of freight involved, and the stations in question seemed to be an exception to the general rule, for which no satisfactory reason was given or explanation offered. Further, that the sum of the local rates made an excessive charge for the transportation service performed. In the decision in the *Plumb & Nelson Company* case, we stated that a decision in favor of the petitioner would not establish a precedent to be followed under all circumstances in the future, and that each case involving the establishment of a joint rate, should be decided on its individual merits. In other words, the decision in the proceeding referred to, would be valuable as a precedent only, where subsequent cases involved substantially similar facts. It occurred to us that the statute reasonably contemplated that cases might arise where joint rates might be ordered and where they might be refused. If it was the intention of the legislature that they should be granted in all cases our law makers would have undoubtedly enacted a statute compelling the carriers to make such rates without the intervention of this Commission. If it was the intention that such rates should be refused in all cases, then the enactment of the law would be a piece of stupidity, of which no legislative body would be guilty. The legislature had in mind, no doubt, that cases might arise where the sum of the local rates would be a reasonable charge for a service performed jointly by two or more carriers. Furthermore, railways frequently make low commodity rates on raw materials, in consideration of receiving a reasonably long haul on the manufactured product, which agreement would be violated, in spirit, at least, if such carrier were compelled to turn over such freight for its proportion of a joint rate to some nearby connecting line. Other instances, no doubt,

could be given where it would be unfair to compel roads to make joint rates.

The position of the Chicago, Milwaukee & St. Paul Railway Company in the hearing was, that the merits or demerits of the incidental cases submitted to the Commission for decision, should not be considered, and that in every such case there is an important principle at stake which the larger carriers, in justice to their own interests, cannot surrender. That principle is that carriers should be the sole judges of the necessity or advisability of establishing joint rates, and cannot concede anything that would amount to an abdication of such right on their own part or permit the usurpation of such power by a third party. The reasons urged in support of such contention are numerous. The principal ones are: (a) That certain carriers would be deprived of the use of a part of their equipment when the same was needed on their own lines. (b) That expensive and valuable terminals owned by the larger roads would be placed at the disposal of the smaller ones, who had no reciprocal advantages to offer, and the business thus handled would hamper the larger roads in taking care of their own business. (c) That joint rates are established because reciprocal and mutual advantages are received by the contracting carriers, whereas a Commission might establish such rates where the benefits were all received by the one carrier and the losses all sustained by the other. (d) That a producing line should not be compelled to divert the traffic originating on its road to a rival carrier, where its own line furnished good markets for the articles produced. (e) That the making of joint rates, under certain circumstances, permitted competition with buyers established on the line of the producing road, detrimental to such buyers and resulting in no permanent benefit to the producer, and that it is a legitimate proceeding for a carrier to protect industries along its line of road by lessening competition under such circumstances. (f) That if a joint rate is established that is less than the sum of the two locals, those shipping under the local rates will assert that they are being discriminated against and will ask to have a corresponding reduction made in the local rates.

Mr. Hiland for the Milwaukee road stated the position of his company clearly and forcefully. He stated, somewhat apologetically we thought, that in the advent of an adverse decision his company would be compelled, for its own protection, to have

the decision of the Commission reviewed, much as it disliked to do so.

We desire to assure Mr. Hiland, and all other parties who feel that this Commission is in error in its decisions, that we would prefer to have them reviewed in the proper tribunals. We say this in no spirit of braggadocio. We lay no claims to infallibility, and did not graduate in the class that never made mistakes. We desire no one to suffer any wrong or injury through our decisions. If they are wrong we want them corrected, because it is right they should be, and an early discovery of our errors will serve to prevent a recurrence and repetition of such errors.

While this Commission cannot undertake to lay down any general rule as to what it will or will not do, in cases involving the making of joint rates, its views on the general subject are necessarily involved in the decision of this, and another joint rate case heard at the same time. If a railway company is to be regarded as a private enterprise created for private ends, then, the contention of the carriers in this case appears to be unanswerable. The enforced use of the cars or terminals of one railway company by another, or the enforced diversion of traffic from one road to another, is wholly inconsistent with the idea of purely private property rights. If a railway company is not a private corporation, but a quasi-public one, exercising functions that primarily belong to the state, and substantially acting as the agent of the state in furnishing highways for travel and commerce, for which it is entitled to exact a reasonable compensation for the service performed, an essentially different question arises. If we had a system of state owned railways, the patriarchal idea, that the state might say who should do business in a given locality and who should not, and might establish zones where certain interests could monopolize business to the exclusion of others, and divert commerce from its natural channels to artificial ones, is an idea that would, we think, be abhorrent to the American sense of justice and fair play. The relation of the carrier to the public is, therefore, we apprehend, well nigh the crucial test to apply to the logic of the arguments advanced by the carrier in this proceeding.

That a railway is not private property in the sense that the owner may do with it what he lists, we think is as well settled as anything can be by the decisions of the courts. It was settled

in our own court, in *Whiting vs. S. & F. Ry. Co.* 25 Wis., 167, and in *Attorney General vs. Railway Companies*, 35 Wis., 425. In *Munn vs. Illinois*, 94 U. S. 113, 126, the United States Supreme Court held that when private property is affected with a public interest it ceases to be *juris privati* only, and that property becomes clothed with a public interest, when used in such manner as to make it of public consequence and affect the community at large. The decision continues:

“When therefore one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good to the extent of of the interest he has thus created. He may withdraw his grant by discontinuing the use; but so long as he maintains the use he must submit to the control.”

There is still another reason why a railroad company is neither to be regarded or treated as a purely private corporation, and that is because it is in fact a public highway. In *Olcott vs. Supervisors of Fond du Lac*, 16 Wall., 677, the Supreme Court of the United States said:

“That railroads though constructed by private corporations and owned by them are public highways has been the doctrine of nearly all the courts ever since such contrivances for passage and transportation have had any existence. Very early the question arose whether a state’s right of eminent domain could be exercised by a private corporation created for the purpose of constructing a railroad. Clearly it could not, unless taking land for such purpose by such an agency is taking land for public use. The right of eminent domain nowhere justifies taking property for private use. Yet it is a doctrine universally accepted that a state legislature may authorize a private corporation to take land for the construction of such a road, making compensation to the owner. What else does this doctrine mean, if not that building a railroad, though it be built by a private corporation, is an act done for a public use? And the reason why the use has always been held a public one is that such a road is a highway, whether made by the government itself or by the agency of corporate bodies or even by individuals, when they obtain their power to construct it from legislative grant. * * * Whether the use of a railroad is a public or private one de-

pende in no measure upon the question who constructed it or who owns it. It has never been considered a matter of any importance that the road was built by the agency of a private corporation. No matter who is the agent the function performed is that of the state. Though the ownership is private the use is public."

In *Cherokee Nation vs. Kansas Railway Company*, 135 U. S., 461, 657, the court said:

"The question is no longer an open one as to whether a railroad is a public highway established primarily for the convenience of the people and to subserve public ends, and therefore subject to governmental control and regulation. It is because it is a public highway and subject to such control that the corporation by which it is constructed and by which it is to be maintained may be permitted, under legislative sanction, to appropriate private property for the purposes of a right of way upon making just compensation to the owner in the mode prescribed by law."

In *Smyth vs. Ames*, 169 U. S., 466, 544, the court said:

"A railroad is a public highway and none the less so because constructed and maintained through the agency of a corporation deriving its existence and powers from the state. Such a corporation was created for public purposes. It performs a function of the state. Its authority to exercise the right of eminent domain and to charge tolls was given primarily *for the benefit of the public*. It is under governmental control, though such control must be exercised with due regard to the constitutional guarantees for the protection of its property."

In *United States vs. Joint Traffic Ass'n*, 171 U. S., 505, the court said:

"The ordinary highways on land have generally been established and maintained by the public. When the matter of the building of railroads as highways arose a question was presented whether the state should itself build them or permit others to do it. The state did not build them, and as their building required, among other things, the appropriation of land, private individuals could not enforce such appropriation without a grant from the state.

The building and operation of a railroad thus required a public franchise. The state would have had no power to

grant the right of appropriation unless the use to which the land was put was a public one. Taking land for railroad purposes is a taking for a public purpose, and the fact that it is taken for a public purpose is the sole justification for taking it at all. The business of a railroad carrier is of a public nature, and in performing it the carrier is also performing, to a certain extent, a function of government, which, as counsel observed, requires them to perform the services upon equal terms to all."

In *Lake Shore & Michigan Southern Railway Company vs. Ohio*, 173 U. S., 285, 302, the court said:

"In the construction and maintenance of such a highway (a railroad), under public sanction, the corporation really performs a function of the state."

In *Lake Shore and Michigan Southern Railway Company vs. Smith*, 173 U. S., 684, 690, the court said:

"A railroad company although a quasi-public corporation, and although it operates a public highway, has, nevertheless, rights which the legislature cannot take away without a violation of the Federal constitution."

And in the still later case of the *Wisconsin & Michigan Railway Company vs. Jacobson*, 189 U. S. 277, 297, the court held that railway companies:

"Hold a public franchise and government supervision is therefore valid. They are organized for the public interest, and to subserve primarily the public good and convenience."

It is apparently so well established that a railway company is a quasi-public corporation, created and maintained primarily for the benefit of the public, and subject to public regulation and control, that the general doctrine will not at the present time be called in question. The question here involved would seem to be the extent to which the control can and should be exercised. The general character of a railway corporation, and of the rights which the public may exercise in the way of its control, having been discussed, it remains to be considered whether the exchange of traffic between roads and the establishment of a joint rate of charge falls outside the legitimate pale of public regulation. On the obligation of carriers to receive and transport cars of connecting lines, the Illinois Supreme Court has spoken in no uncertain terms. In

Railway Company vs. Railway Company, 109 Ill., 135, 139, where this question was at issue, the court said:

"No proof is needed to show the extent and the importance of the interests involved in the decision. It is a matter of so much public concern that judicial notice may be taken of the fact that cars belonging to different companies are interchangeably used on all the principal railroads in the United States, and that no company could do any considerable freighting business that did not conform to this general usage. Without such usage it would be difficult, if, indeed, it would be possible, to transact the commercial business of the country. Freights for shipment across the continent could not well be stopped at the terminus of each carrier's line, and reshipped in cars of the connecting carrier. That would occasion more delay than the necessities of commerce would tolerate. The extent of the usage in regard to the exchange and transportation of cars among so many different railroads would seem to require such exacting rules and regulations as would insure the strictest accountability on the part of the companies that may transfer or haul cars over their respective roads."

The court thus decides that railway companies are common carriers of cars as well as of freight, and assume the same duties and liabilities in regard to their transportation as they assume toward freight itself. Continuing on page 141 of the opinion the court says:

"The law, as has been seen, makes all railways in this state public highways, open to the use of all persons for the transportation of their persons or property, under such regulations as may be prescribed by law, and it is apprehended it is unlawful to make any discrimination as to the property offered to be carried as to whether it belongs to a private person or to a corporation. If it is such property as is capable of being carried with the means ordinarily employed by such carriers, the obligation is imperative and the carrier must receive the property and carry it with safety, in the way such property is usually carried, and any failure to do so will subject the carrier to damages."

In *Schumacher vs. C. & N. W. Ry. Co.*, 207 Ill., 199, 205, the court said that railroads

“must receive and transport cars, loaded and unloaded, over their lines, and in doing so assume the liability of a common carrier as to both such cars and freight.”

The 22nd General Assembly of the Legislature of Iowa passed an act requiring all railway companies doing business in that state, upon the demand of any person interested, to establish reasonable joint through rates for the transportation of freight between points on their respective lines within the state, and provided that the railway companies in the state should receive and transport freight and cars over such route, or routes, as the shipper should elect. The law also provided that carload lots should be transferred without unloading from the cars in which the shipment was first made, unless such unloading into other cars should be done without charge therefor to the shipper or receiver of such carload lots, and further provided that the transfer should be made without unreasonable delay. The act further provided that in the event of the failure of the railway companies to establish joint through rates, or reasonable rates, for such through shipment, it should be the duty of the Board of Railroad Commissioners, upon the application of any person interested, to establish joint rates for the shipment of freight in cars over two or more connecting lines of railway in the state.

The constitutionality of the law in question was under consideration in the case of the *Burlington, Cedar Rapids and Northern Railway Company vs. Dey*; the case being reported in 48th N. W., 98. The court, 103, opinion, said:

“The arranging of what is called joint through rates is not a thing that is new in the business of railroad transportation. The current history of the country discloses the existence of the practice among railroads to make through shipments of freight without change of cars. Nor is this practice of recent origin. It has existed whenever the business of the roads demanded it. Expedition and economy in transportation induced contracts and arrangements for through shipments between points on connecting roads. It may be that in some cases the managers of the roads refused or failed to enter into such arrangements or contracts, and it may be that in other cases the business of the roads has not been managed wholly in accord with the best interests of the corporations owning them, and with

the requirements of the law. But such failure of duty does not establish the right to be exempt therefrom. Surely the course of business which has been found, by experience of railroad management, to be promotive of economical transportation and increase of business, thereby promoting the interests of the owners of the railroads and the shippers, ought to be pursued; and, if the railroad management fail or refuse to pursue it, the state, as it has done in the statutes under consideration, ought to require it to be pursued. *This the state can do under the authority it possesses to regulate and control carriers and provide maximum freight charges.*"

The railway companies contended that the law in question was void because it compelled railway companies to enter into involuntary contract agreements on the demand of a third party, and required one company to surrender the possession of its cars to another, or else unload the contents without consideration, and because railway companies were required to surrender the possession of their cars to connecting carriers without any provision in the law for their return or for compensation for their use. Replying to such contention, the court said:

"It is not correct that railroad companies are, under the statute, compelled to enter involuntarily into contract relations with each other. It is true that the statute requires them to enter into the contract for joint rates, thus imposing upon them the duty to do so; but the statute does not provide for enforcing the duty by proceedings recognizing a contract between the parties, if that, indeed, could be done; nor does it provide for penalties or forfeitures for failure to discharge the duty; it simply provides that in case of failure to adopt joint rates by the companies, the Railroad Commissioners shall prescribe them, and the companies shall not be permitted to charge more. In that case the charges are not made by the companies under a contract, but pursuant to a duty and obligation imposed by law. It is not necessary, in order to support an action against a railroad company for failure to fix joint rates, to hold that it is bound by an obligation as of a contract. Its liability arises by reason of its failure to perform a duty imposed by law. The statute in its principle and its effect

in this regard is not different from other rules of law applicable to common carriers which hold them liable for failure to receive property for transportation. In both cases the carrier is liable for the nonperformance of duty.

The course of business of railway companies originating in the wants and demands of commerce, requires the cars of one company to be delivered to another for transportation. It is presumed that rules relating to compensation for the cars transported are settled by agreement or under rules recognized and prevailing in the business of transportation by railroads. At all events, the law provides rules under which this matter of compensation may be settled. It is competent for the Railroad Commissioners, if it be necessary, to impose rules touching this matter, in order to aid the railroad companies in performing the duty imposed by the statute to provide for joint rates, or to acquire or enforce the performance of that duty. The fact that the transfer of cars from one company to another, for the transportation of property over more than one railroad without breaking bulk, has been practiced so long as to be recognized as of the course of business, of which we will take judicial notice, is a complete answer to the complaints made in the objections under consideration. Surely a course of business so long pursued, and so extensively prevailing and demanded by the commerce of this country, cannot, when recognized and required by statute, become so objectionable in principle, so oppressive in operation, as to require the statute to be declared unconstitutional. A railroad company as a common carrier is required to receive and transport freight offered to it for transportation. The reasons upon which this rule is founded impose upon it the obligation to haul cars for other companies brought to it for the transportation over its own road."

The court in the case held that it was only the right of the state, through its Railroad Commission, to establish joint rates, but that it was eminently proper for it to do so where the circumstances warranted action by the Commission.

The same question was before the supreme court of the State of Minnesota in the case of *Jacobson vs. Wisconsin, Minnesota & Pacific R. R. Co.*, reported in 74th N. W., 893. In that case

the Railroad Commission of Minnesota required two railway companies operating in that state, and intersecting one another, to make track connections whereby cars could be switched from one road to another, and providing for the interchange of traffic between such roads. One of the railway companies involved contended that the action of the Commission was illegal, and that the statute under which it acted was unconstitutional. The court, on page 895 of the opinion, said:

“As incidental to the operation of its road a railroad company has the power to interchange cars with other connecting companies, and this is the ordinary and usual way of doing business. We are clearly of the opinion that the legislature has the power to compel a common carrier to do business in the ordinary and usual way, and therefore may compel such interchange of cars as incidental to the business for which the company was chartered.”

Continuing, the court said:

“Appellant suggests that cases may arise where it would be compelled to deliver its cars to another carrier who was insolvent, or where the couplings, air brakes or other appliances of the cars of one of the carriers will not match with those of the other, and where it would be unsafe to haul such other cars. It is only necessary to say that such cases can be disposed of when they arise. There is no suggestion that this is any such a case. Appellant seems to contend that this statute attempts to make two or more railway companies partners for the purposes of such through shipment; that it attempts to compel the making of a joint shipping contract, by which each company will be liable for all the defaults of the others in the through shipment; and that, therefore, the statute is unconstitutional and void. The statute merely provides that, in case all the railroad companies concerned in the through shipment fail to fix a reasonable total sum for the total haul, the Commission shall do so for them. There is nothing in this which requires any company to assume any liability beyond its own line for the acts of others in making the haul.”

An appeal was taken from the decision in this case to the Supreme Court of the United States, and the decision of the

Supreme Court of the State of Minnesota was affirmed. The decision is found in volume 179, U. S. 287.

In the *Jacobson* case the United States Supreme Court held that the question of compelling the railway companies to make joint track connections was the only one involved in the judgment, and that under the facts disclosed in the case before the court, it was a legitimate exercise of legislative power to compel the connection even though the carriers might be obliged to condemn additional lands in order to comply with the judgment.

The Minnesota statute referred to in the foregoing case was again under consideration in an action to review a decision by the Minnesota Railroad & Warehouse Commission making a joint rate on coal carried by the St. Paul & Duluth and Minneapolis & St. Louis Railway Companies. The case is reported in volume 80, Minnesota Reports, 193. In this case the Minnesota Court held that the statute authorizing the Commission to establish by order joint through rates for the transportation of freight over two or more connecting lines of railway within the state, did not violate any constitutional provisions, federal or state. In this case there was a joint rate in effect when the proceedings were instituted, but subsequently the carriers attempted to withdraw such joint rate. This case was likewise appealed to the Supreme Court of the United States, and is reported in volume 186, U. S. 257. Here also the Federal Supreme Court sustained the decision of the Supreme Court of Minnesota. The Federal Court held, however, that the right of the State Commission to compel the railway companies to make and enforce the joint rates in the first instance was not necessarily involved in the decision, inasmuch as joint rates were in effect when the proceeding was instituted. The court held that such proceeding could not be evaded or nullified by the subsequent action of the carriers in withdrawing the joint rate. The argument of the court in deciding the case, however, is entirely in favor of the right of the state to provide for such rates. The court in part said:

“We are bound to recognize the fact that modern commerce is largely carried on over railways owned and operated by different companies; that Congress in passing the Interstate Commerce Act assumed the power to determine the reasonableness of joint tariffs as applied to connecting

lines between several states, *Cincinnati etc. R. R. Co. vs. Int. Com. Com.*, 162 U. S., 184, and that, if the power of the state commission were limited to the tariffs of a single road, it would be wholly inefficacious in a large number, if not in a majority, of cases—in fact that the whole purpose of the act might be defeated.”

Referring to the *Jacobson case*, the court said:

“The case did not involve the right of the Commission to prescribe joint through rates for the transportation of freight between points on their respective lines, but if any inferences are to be derived from the opinion, they are in favor of such right.”

The decision heretofore cited might be supplemented by many others holding like doctrines. If there is any question about the right of a state legislature, or of a commission empowered by the legislature, to make joint rates, that question should be settled. The question is extremely important in view of the demands that may be made for such rates in the future. It is important in view of the vast number of joint rates now in force, and the large volume of traffic that moves thereunder, for in the absence of regulative power on the part of the state such rates may be withdrawn at any time. A general withdrawal of such rates would mean a very material raise in rates. The refusal of railways to permit their equipment to leave their own lines and to receive cars from connecting lines would transform many an important highway of commerce into a mere *cul de sac*.

We apprehend that the real question at issue here is not whether the carriers interested will be better off if the joint rate is refused than they will be if it is put into effect. On the contrary, we think, in view of what has been said, the real question is, what is a reasonable compensation for transporting barley from the stations named in the petition, to Manitowoc. It is admitted that the present rate of charge is prohibitory and that no grain can move under it. Leaving out the consideration of the reasonableness of the two local rates now charged, the sum of two reasonable locals does not make a reasonable joint rate. This was the contention in the Minnesota rate case cited before. It was answered by the court as follows:

“There is an underlying fallacy in the argument of the railroad company in this connection that the sum of two reasonable locals cannot be unreasonable; and as it is admitted that \$1.25 per ton is a reasonable local rate for transporting coal from Duluth to Minneapolis over the St. Paul & Duluth Road, and that the local rates for coal from Minneapolis to the designated stations westward and southward are also reasonable, it is impossible that a through rate from Duluth to the same station which does not exceed the aggregate of these two rates, can be unreasonable. We cannot assent to this proposition. The practice of the railways in this country is almost universally to the contrary, and a through tariff is almost always fixed at a less sum than the aggregate of local tariffs between nearby stations on the same road.” 262 op.

As a reason for the differences in charges the court discusses the relative expense of handling business on short and long hauls.

We have carefully considered the plausible argument advanced by the able counsel for the intervenor. It is, in substance, that his client is not rich as compared with some of its present competitors or the Manitowoc Malting Company; that it has considerable money invested in its plants and in elevators at and between Kiel and Chilton; that some of the conditions under which it does business are disadvantageous; that increased competition at the points where it now buys barley will compel it to transport this kind of grain from greater distances and at a higher rate of freight; that it is not improbable that the increased competition will result in raising prices locally for the time being, so as to force it out of business; that such result will be followed by a reduction in prices beyond a reasonable limit, and finally, that a decision adverse to counsel's contention would tend to crush the small operator and discriminate in favor of the large one. Counsel says:

“We do not understand that the law contemplates that it is the duty of the Commission to create points of business or monopolies for individuals or corporations, by fixing railroad rates for the sole benefit of such individual or corporation. If the rates are equal for all who have occasion to use such rates, then the rates cannot be considered unjust or unreasonable.

We do not understand the meaning of the law to be that the Commission is called upon to establish either joint or special rates in the interest of a single individual, corporation or locality, on a special article of commerce for individual benefit.

We understand the intention of the law to be, to protect the smaller investor and his interests and prevent them from being wiped out by the combination of large capital and by the aid of railroads in fixing better rates for the large than the small shipper. This is the crying evil at which the law was aimed.

If a different construction was placed upon the law than that above indicated its usefulness is destroyed, and love's labor lost, and it becomes a machine to punish, instead of benefiting 'God's patient poor.'"

The foregoing contains a queer mixture of truth and sophistry, of good principles and of poor application of them.

As far as we know, the small shipper has never demanded that he be given privileges denied the larger one. In any event he is not entitled to them. What he has demanded, and what he is clearly entitled to, is the same treatment that is accorded his powerful competitor. He should be accorded no less, and cannot, with justice, claim more. He is entitled to use the public and quasi-public highways of the country on not only the same terms that his more powerful neighbor does, but also for a reasonable compensation. Rebates and other favors have in the past done much to eliminate the small operator, but in the process of elimination the establishment of zones, where the trade could be monopolized by a few, has played an important part. The opening up of the highways of commerce to all on equal terms cannot operate injuriously to the small operator. To our minds the establishment of the principle for which the Chilton Malting Company contends might well be a very unfortunate thing for it. It has, in the territory it hopes to partially monopolize, competition strong enough to crush it in those markets any time the competitor sees fit. A barley crop failure in its vicinity, or a desire on the part of its competitor to eliminate it from the field of competition, may force it to seek other markets for the purchase of its product. The establishment of joint rates gives it a larger

field to choose from, and lessens the liability of its being put out of business by some vindictive and unscrupulous neighbor.

We hardly think counsel seriously intends that this case should be decided adversely to the petitioner because it is a large operator while his client is a small one. If this line of argument should be adopted and a decision were made in accordance therewith it would follow, that, if conditions were reversed, a contrary decision should be arrived at. The relative wealth of the parties appearing before a court or a body of this kind would furnish a very poor basis on which to rest a decision.

We think it is a basic principle that all persons desiring to use the quasi-public highways of our country should be accorded the privilege of doing so, on payment of a reasonable compensation for the service performed, and that no greater compensation should be exacted from one than from another for a like service. We believe that the observance of this principle will stimulate competition and redound to the advantage of the small shipper, and that the violation of it rarely, if ever, redounds to his advantage. It seems to us to be alien to the purpose of a public service corporation to refuse to abide by this principle, and to dictate who shall and who shall not do business on its line of road. We believe it is just as important for one malting company as it is for the other that persons desiring the use of highways, upon which toll is charged, should have the untrammelled right to do so on payment of a reasonable price for the service, even though the enforcement of the principle may temporarily work to the disadvantage of the Chilton Malting Company. Monopoly is not built on the observance of any such principle, but by departing from it.

Aside from this, it appears to us that increase in competition between buyers should result beneficially to the producer. There may be isolated cases where this result will not follow, but certainly the tendency of active competition is to produce reasonable prices. The Manitowoc market is now closed to the territory in question. Besides the Manitowoc Malting Company, there are two other large establishments and a number of small ones engaged in buying barley at Manitowoc. If the competition of the Manitowoc Malting Company does not result in increased prices, we are unable to say that other com-

petitors may not appear upon the scene, whose invasion of the field will result in increased prices.

The intervenor asks that if relief is granted on the application before the Commission, that joint rates should also be put in force so as to enable the Chilton Malting Company to ship over the Wisconsin Central and Northwestern Lines. The Chicago & Northwestern Railway Company is not before the Commission in this proceeding. None of the railways involved have been heard on the matter suggested in the brief. The intervenor has a perfect right to bring the matter suggested before the Commission for determination. Its petition will receive careful consideration. In so far as this decision establishes a precedent, it will be followed, unless we conclude the precedent is wrong. If we are convinced of our error we will feel entirely free to correct it.

We have carefully considered the argument of the Chilton Malting Company, to the effect that it did not receive as advantageous rates as were received by the Manitowoc Malting Company, either on barley shipped in for the purpose of manufacture into malt or on malt shipped to the consuming markets after the process of manufacture was completed. An examination of the tariffs discloses the fact that the conditions in each case are substantially alike. The Manitowoc Malting Company is able to procure fuel more cheaply than the Chilton Malting Company, but we do not think this consideration is of sufficient importance to warrant the Manitowoc Malting Company being shut out from the market at Chilton, and the other markets in its immediate vicinity, altogether.

The reasonableness of the existing rates remains to be considered. It is usual where joint rates are made to establish the same rates that would prevail if the entire service were performed by one line of road. It is conceded in the case before us that the existing rates are prohibitory, although the longest distance involved is but forty-five miles. Under certain conditions the Wisconsin Central Line hauls barley from Minneapolis to Manitowoc, a distance of 330 miles, for 71½ cents. It hauls still longer distances to Milwaukee and Chicago at the same rate. It applies its 71½ cent rate on barley locally on its line from Manitowoc to Fremont, a distance of sixty-five miles. It applies a 10 cent rate to stations on its line as far distant

from Manitowoc as Prentice and Eau Claire; the distance to Eau Claire being 226 miles and to Prentice 204 miles.

The Chicago & Northwestern Railway Company, in conjunction with the Omaha Company, makes rates on barley, under certain conditions, from St. Paul and Minneapolis to Manitowoc, Milwaukee and Chicago of $7\frac{1}{2}$ cents per 100 pounds. The Milwaukee road makes the same rate to Milwaukee and Chicago. The latter road carries barley locally to Green Bay, a distance 56.6 miles, for $7\frac{1}{2}$ cents; to Chilton, a distance of 76 miles for $7\frac{1}{2}$ cents, and to Milwaukee, a distance of 63.8 miles, for the same rate. It ships barley or malt from Plymouth and intermediate stations to Kewaunee, in conjunction with the Green Bay road, at a joint rate of $7\frac{1}{2}$ cents, the distance being 90 miles. There is a proportional rate from Green Bay to Milwaukee of $7\frac{1}{2}$ cents on barley, and a local rate of $8\frac{1}{2}$ cents. Comparisons might be multiplied without number, tending to show, as far as they can show, that the rates complained of are excessive, where the entire service performed is taken into account. From the standpoint of absolute reasonableness, and eliminating comparisons, we think the rates involved are excessive, and determine that a rate from Chilton and Hayton to Manitowoc of $7\frac{1}{2}$ cents per hundred pounds on barley in car load lots, and of 8 cents per hundred pounds from Kiel and New Holstein to Manitowoc, is in each case ample to afford a fair meed of compensation to the Railway Companies involved.

IT IS THEREFORE ORDERED, that for the future the rate to be charged by the Chicago, Milwaukee & St. Paul Railway Company and the Wisconsin Central Railway Company, in the aggregate, for transporting barley from Chilton and Hayton to Manitowoc, Wisconsin, in car load lots, shall not exceed seven and one-half cents per hundred pounds, and that the rate to be charged by said Railway Companies, in the aggregate, for transporting barley in car load lots from Kiel and New Holstein to Manitowoc shall not exceed eight cents per hundred pounds.

Dated this 13th day of June, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN.

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 39.

SANDOVAL ZINC COMPANY

vs.

MINERAL POINT & NORTHERN RAILWAY COMPANY.

No appearance on behalf of Petitioner.

McIlhion & Spensley, for Respondent.

Petition alleging excessive and discriminatory rates for the transportation of zinc and lead ore.

Held, that in view of the fact that the respondent Railway Company has been operated at a loss the rates complained of have not been shown to be excessive, nor has discrimination been disclosed.

Complaint was filed by the above named petitioner against the above named Railway Company before the Railroad Commission under date of May 3, 1906, which petition alleged in substance that the petitioner was engaged in the smelting business at Chicago, Ill.; that the Railway Company was carrying zinc and lead ore from places on its line in conjunction with the Chicago, Milwaukee & St. Paul Railway Company and the Chicago & Northwestern Railway Company to Peru and La Salle in the State of Illinois for which service said Railway Company received less than 25 cents per ton for the services performed by it on its line of road and that for like service the respondent charged the petitioner 60 cents per ton for the same capacity cars loaded with the same material, and destined for Sandoval, Ill.

To this petition the Mineral Point & Northern Railway Company filed its answer in which it alleged that its line was entirely within the State of Wisconsin; that the charge made to the petitioner was made on the basis of the regular Wisconsin distance tariff applicable to the material shipped. That it had a joint rate on lead and zinc ore with the Chicago & Northwestern and Chicago, Milwaukee & St. Paul Railway Companies for the transportation of such commodity from points on its line to La Salle and Peru in the State of Illinois such rate being \$1.40 per ton. It denied that it received but 25 cents per ton as its pro-

portion of the joint rate and also denied that the rate in question was either discriminatory or excessive.

The hearing on the issue was set for June 19, but it was adjourned until June 26, 1906. At such hearing the petitioner did not appear; the respondent appeared by its attorneys, Spensley & McIlhion and submitted its testimony relative to the issues joined. It appeared that the petitioner was engaged to some extent in shipping ore from points on the Mineral Point & Northern Railway to Sandoval in the State of Illinois; that ore was likewise shipped from various points on the line of the Mineral Point & Northern Railway to La Salle and Peru in the State of Illinois, and that to the latter points a joint rate was made between the Mineral Point & Northern Railway Company and the Chicago, Milwaukee & St. Paul Railway Company and the Chicago & Northwestern Railway Company, the rate of charge being \$1.40 per ton, of which amount the Mineral Point & Northern Railway Company received 46 2-3 per cent; that Sandoval is situated on the Illinois Central Railroad and is not reached by the Chicago, Milwaukee & St. Paul Railway Company or Chicago & Northwestern Railway Company; that the Mineral Point & Northern Railway Company, does not connect with the Illinois Central Railroad Company, but does connect with the Chicago, Milwaukee & St. Paul and the Chicago & Northwestern Railway Companies, and finally that no joint rate could be made to Sandoval from points on the Mineral Point & Northern Railway that did not involve at least three carriers, the Illinois Central Railroad Company, the Mineral Point & Northern Railway Company and the Chicago, Milwaukee & St. Paul Railway Company or Chicago & Northwestern Railway Company.

The shipment of ore from points on the Mineral Point & Northern Railway to Sandoval, Illinois, considered as an entirety is an inter-state shipment pure and simple. If a joint rate is made covering such shipment it must necessarily involve inter-state transportation. This Commission has no jurisdiction over inter-state shipments and has no power or authority to compel carriers to make joint rates between points in this state and neighboring states. If the petitioner has any redress in this behalf it must be before the Interstate Commerce Commission. The petition in form does not ask for the establishment of a joint rate, but if

the facts warranted the establishment of such rate the petition could be amended and the other carriers and interests brought in as parties defendant. An objection to such proceeding that the Commission had no jurisdiction to act would be fatal and if no such objection were made the Commission would not feel warranted in traveling outside of the law to establish a rate which it had no right to establish.

The only question in connection with the complaint is whether or not the rate charged by the respondent carrier in the present instance of 60 cents per ton for transporting the ore in question a distance of eight miles is excessive. The reasonableness of that rate cannot be determined by the fact that on shipments made by it a like distance over its line of road to points on the lines that it connects with and with which it has joint traffic arrangements are less than the local rate charged in the present instance where no joint rate is made. This is established by the decisions of the courts. It also appears from the testimony that the joint rates now in existence were beneficial to the respondent carrier because of reciprocal advantages which it receives from those carriers on incoming freight.

If the respondent Railway Company were an old well established line of road, doing a large amount of traffic and earning a large income on its investment a materially different question would be raised in reference to the reasonableness of the rate in question from that which now confronts us. The Mineral Point & Northern Railway Company has been in existence but a short time and is only thirty miles long; from the sworn report of the company filed in this office it appears that it began business in the Fall of 1904, and that from the time it began up to the 31st day of December, 1905, a period of a little more than a year, its gross earnings amounted to \$28,978.04; that its operating expenses during the same period amounted to \$33,286.13, and further that the interest on its fixed charges during the same period amounted to \$14,258.34, leaving a deficit of about \$19,000 from the time the company had been in operation up to December 31, 1905. These conditions would not warrant this Commission in holding that the rate in question was excessive. There is nothing before the Commission to show that it is discriminatory.

IT IS THEREFORE ORDERED that the prayer of petitioner be denied and that the complaint be, and it hereby is, dismissed.

Dated this 27th day of June, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,
B. H. MEYER,
HALFORD ERICKSON,
Commissioners.

No. 40.

E. R. WAGNER MANUFACTURING COMPANY

vs.

CHICAGO, MILWAUKEE AND ST. PAUL RY. CO., CHICAGO AND NORTHWESTERN RY. CO. AND CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA RY. CO.

Petition regarding rates on springs and axles for children's vehicles. The Western Classification gives shipments of this kind third class rates, which are alleged to be excessive as compared with numerous other rates enumerated in the petition. After a conference between petitioner and traffic officials, the Commission was requested to discontinue proceedings because the Railway Company agreed to put in rates which the petitioner regarded as equitable.

No. 41.

E. R. WAGNER MANUFACTURING COMPANY

vs.

CHICAGO AND NORTHWESTERN RAILWAY CO.

Petition regarding the rates on iron forgings, less than car lots, packed in boxes, bags and barrels. Specific rates are complained of as being excessive and discriminatory. A satisfactory agreement was arrived at and the petition withdrawn.

No. 42.

DON C. HALL

vs.

CHICAGO, MILWAUKEE & ST. PAUL
RAILWAY COMPANY.

Petitioner, in his own behalf.
C. E. Vroman, for respondent.

Complaint against the C. M. & St. P. Ry. Co. for refusing to carry a private theatrical car.

Held, (1) That the C. M. & St. P. Ry. Co. is not a common carrier of private cars;

(2) That the past practice or custom of the C. M. & St. P. Ry. Co. of carrying private cars does not have the force of law compelling it to do so in the future, which would, in effect, make it a common carrier of private cars.

The petitioner is the manager of a dramatic company with his permanent residence at Stevens Point, Wisconsin. His petition sets forth that the Chicago, Milwaukee & St. Paul Railway Company has refused to transport a car owned by him, giving as the cause of such refusal the explanation that the said Railway Company had since January 1, 1906, "discontinued the handling of private cars belonging to theatrical, carnival or show companies"; that in such refusal the company has shown evidence of discrimination by stating that only certain private cars were no longer being handled by it; that in reply to petitioner's letter of remonstrance the company stated that "they could not consent to haul cars owned by others"; that since January 1, and since the receipt of the above mentioned letters from the company, the cars of other individuals, corporations and companies have been carried by said company, and that this is an unjust discrimination; that such discrimination is contrary to law as recorded in section 1828, chapter 87, Statutes of 1898, and to sections 4, 11 and 23, chapter 362, Laws of 1905; that he has been damaged to the extent of three hundred dollars, and that he asks to have his rights restored and to recover damages according to the provisions of section 25, chapter 362, Laws of 1905; that therefore the said Railway Company be required to answer

the charges set forth in the petition and that after the customary hearing and investigation the Commission make an order commanding the Railway Company to cease and desist from continuing the discriminations complained of and to afford such other and further relief as the Commission may deem just and fair in the premises.

This petition was filed May 15, 1906. Statements bearing upon the petition were submitted to the Commission by representatives of the company June 20, and sworn testimony was submitted July 5, 1906. The petitioner appeared before the Commission and argued his case July 26, 1906.

The respondent Railway Company, through C. E. Vroman, its assistant general solicitor, interposed a demurrer, which was later withdrawn and testimony submitted as noted above.

The abstract question as to whether the Railway Company is liable generally as a common carrier for the transportation of private cars was raised but not argued. The present decision is confined to the specific question involved in the petition, namely, whether or not the Railway Company is a common carrier of private theatrical cars.

The early theory regarding railways was that a *railroad* should be accessible to different shippers or transporters, possibly competing with one another over the same track. The only restriction placed upon the exercise of this right was that the "wagons" and "carriages," or cars of transporters desiring to use the railway company's track should comply with the reasonable regulations of the company. Carriages or cars were invented which were intended to serve both on the railroad and on the highway. This primitive notion regarding railway transportation was transplanted from England to the United States and numerous early charters granted by the legislatures of the various states contained provisions to the effect that transporters other than the incorporators of the railway company concerned should be permitted to use the tracks. Quite a few early Wisconsin railway charters contained this provision although it is doubtful whether any of these have any valid effect in the present franchise of the Chicago, Milwaukee & St. Paul Railway Company, which embraces, roughly, about one hundred original charters. Our attention has not been called to statutory provisions of any kind relating to the transportation of private

passenger cars of the kind in question on the passenger trains of a common carrier.

The Chicago, Milwaukee & St. Paul Railway Company has been transporting private passenger cars for many years. The custom of doing so appears to be well established, although so far as we have been able to determine, no tariffs covering such transportation have ever been issued. The Railway Company claims that it is not now and never has been a common carrier of that class of cars. Since January 1, 1906, the company has refused to carry theatrical and tourist cars of all kinds. The rule has been well settled that a railway company is not a common carrier of circus, express and sleeping cars. So far as we know the courts have not yet ruled upon the point at issue in the present case. The refusal of the Railway Company thus far relates only to theatrical and tourist cars. Under contracts made by the freight department with circus managements, the Railway Company still carries advertising cars of circuses on passenger trains. This is the only exception, the company claims, which has been made since January 1, 1906, and all other so-called private cars which it has carried since are cars that are a part of the equipment of some other railway or sleeping car company. The new interstate commerce law makes sleeping car companies common carriers.

The vital objection of the Railway Company to carrying theatrical and tourist cars is that it cannot adequately inspect such cars at points where they are offered for transportation. They are offered at all hours of day and night, at all kinds of places. At large places like Milwaukee, and at divisional points, a thorough inspection can generally be made, but this is absolutely impossible at small junction points where these cars are most frequently offered. Very often, too, they are offered during the hours nearest to midnight when inspection is most difficult. A company is said to exist in the east which makes it its business to inspect and repair private cars. Inspection by a company of that character, remote from the lines of railway which are asked to carry theatrical and tourist cars, is impracticable. Private cars belonging to other railway companies, can be carried by the Railway Company, it is claimed, for the reason that they are regularly inspected and repaired and are generally subjected to the same rigid rules

with which the Railway Company's regular equipment is made to comply. Furthermore, private theatrical cars are generally cars which are purchased at second-hand from the Pullman or other company at a little more than the scrap value of the car at the time of purchase. By making repairs and refitting such a car it can be made to appear like a substantial car, when in reality its frame work may be utterly untrustworthy. Structural defects are the most difficult to detect, which only adds to the force of what was said regarding the inadequate inspection of private theatrical cars. The decisive factor, then, leading to the refusal of the railway company to continue to carry these cars lay, first, in endangering the safety of all the passengers in the train carrying such a private car, and, secondly, in the safety of the people carried in the private car itself.

Another, but from an operating point of view, much less serious objection, rests upon sanitary and moral grounds. It was urged in the testimony that private theatrical cars usually stand upon side tracks within the yard limits of municipalities for days at a time. Frequently, as many as twenty-five or thirty people of both sexes live in such a car. In order to approach it they must cross numerous tracks, endangering their own lives and prejudicing the safety of railway operation. Supplies must be delivered to the car. People of the town where the car stands often visit it; sometimes entertainments are offered in it. All these considerations add to the danger to which cars of this class give rise. The lack of proper means for the disposal of refuse from the cars gives rise to unsanitary conditions, generally in violation of the ordinances of the municipality in which the car is found for the time being.

The Chicago, Milwaukee & St. Paul Railway Company possesses an equipment of passenger cars amply sufficient to accommodate all the theatrical companies which may desire transportation to and from stations on its line. Special reduced rates, open on equal terms to all applying therefor, are for sale at all stations. We do not believe, therefore, that any serious hardship can result from the discontinuance of the custom of carrying private theatrical cars, provided that the company makes no discrimination in its refusals. To be sure, the traveling expenses of troupes which have hitherto journeyed in private cars will probably be increased, for the rea-

son that they must now patronize hotels, but there can be no question about the desirability of discontinuing the custom, from the point of view of the safety of the traveling public, in which both the public and the Railway Company have a vital interest.

Generally speaking, the Railway Company relies upon the line of reasoning found in 9 Interstate Commerce Commission Reports, 12 to 13, in support of its contention:

“The regulating statute is opposed to every species of favoritism, and seeks to secure like treatment for all persons in like relations to the carrier. The defendant may decline to haul private cars at all, no matter by whom owned or for what purpose used, and a uniform rule to that effect would be entirely consistent with its public obligations. The defendant may also, as we think, haul private cars of a certain class, and refuse at the same time to haul others of a wholly or substantially different class. In either case, however, there should be no avoidable partiality. It is not a question of convenience, much less is it a question for arbitrary decision. A well defined and reasonable policy should be observed to the fullest practicable extent. If the defendant usually or upon occasion transports the private car of sportsmen and theatrical troupes, whether upon published rates or otherwise, it must in like manner and upon like terms transport all private cars occupied for the same or similar purposes. Between those engaged in like callings, or having like objects in view, no distinction can be lawfully made. They are entitled to the same privileges and the same scale of charges.”

The reasoning of the Interstate Commerce Commission in the quotation just given appears to us to be sound. The objections of the Railway Company to carrying private theatrical cars on the ground that it is difficult or almost impossible to inspect the same can have no force whatsoever if the Railway Company is a common carrier of such cars. Much less can decisive consideration be given to the objections resting on sanitary and moral grounds. There are many things connected with railway companies to which sanitary and moral objections can be raised with equal and greater force. Considera-

tions of inspection and safety, morals and sanitation, can not justify a railway company in refusing to carry private cars if it is a common carrier of private cars. The railway company would then be obliged to overcome all these difficulties as best it could and charge a reasonable price for the service. In our opinion, as indicated above, the Chicago, Milwaukee & St. Paul Railway Company is not a common carrier of private theatrical cars.

Considerations of safety, sanitation and morals may well enter into an estimate of the value of the practice of carrying private cars which the respondent Railway Company appears to have followed for many years. Many court decisions have been rendered in which established customs have received the sanction of law. There are scores of such decisions of the highest courts, but we can find nothing in these which would justify us in holding that the custom, if such this practice may be called, of carrying private cars has the force of law, and that long usage has made the respondent Railway Company a common carrier of such cars. There are many grave objections to a custom or law compelling railway companies to carry private cars. These are apparent to every one at all familiar with the railway business and have been pointed out occasionally by the courts. Perhaps the question at issue in this case should be left entirely to the courts. Since, however, it has been raised before this Commission we feel it incumbent upon us to decide it. In our opinion the practice or custom under consideration has not the force of law.

It is to be presumed that theatrical companies owning private cars have invested relatively large sums of money in such equipment, and that their business arrangements rest largely upon the assumption that the railway company would continue the former practice of carrying private theatrical cars. While we do not believe that this practice or custom has the force of law; and, as previously stated, we believe that the Railway Company is correct in its contention that it is not a common carrier of this class of cars and that it has a right to carry or to refuse to carry the cars of one or more of all classes of private cars, provided that no discrimination is made among individuals of the same class, we, nevertheless, cannot refrain from saying that the owners of private theatrical cars are en-

titled to reasonable notice, in order that they may readjust their affairs in accordance with the new state of things. A sense of common fairness would seem to suggest this.

IT IS THEREFORE ORDERED that the complaint be and it hereby is dismissed.

Dated this 2nd day of August, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 43.

EDWARD W. GUILDNER

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Petitioner, in his own behalf.

C. E. Vroman, for respondent.

Petition for the establishment of a station and the building of a side-track where a station had been maintained up to 1894 within about two miles from another station established since that date.

Held, that in view of the operating and traffic conditions at present prevailing on the section of the railway in question, and in the territory immediately adjacent thereto, the stoppage of one freight and passenger train, in each direction daily, except Sunday, is an equitable disposal of the complaint.

The petitioner sets forth that he is a farmer residing in the town of Lewiston, Columbia county, Wisconsin; that the village known as Lewiston is on the line of the Chicago, Milwaukee & St. Paul Railway Company, being situated about half way between Kilbourn and Portage in a populous farming country; that the nearest point to Lewiston at which passenger trains stop are Portage to the east and Kilbourn to the west; that only one way freight train each way stops daily at Lewiston and then only on signal; that owing to the irregularity in the time of said way freight trains the passenger service afforded by these

trains is of little value to the inhabitants of the village and the surrounding country; that the production of milk and cream in the country tributary to Lewiston is large; and, since these commodities are necessarily shipped only by passenger trains, the petitioner and others so situated are compelled to haul their milk and cream to Kilbourn a distance of over nine miles in order to ship it; that during the hot months of the year it cannot be hauled for such a distance without danger of spoiling and becoming unfit for the market; that much of the arable land in the country tributary to Lewiston is given up to the cultivation of potatoes; that between Kilbourn and Portage, a distance of about eighteen miles, the only side track or other shipping facility maintained by the Railway Company is at Cheney, a telegraph station on the line of said railway, about two miles west of Lewiston; that Cheney is located three-quarters of a mile from any public highway and that the only means of access to it and to the side tracks at the station is through the fields of one Charles Stomer; that Cheney lies on a knoll of earth which is isolated from any other high land and is entirely surrounded by swamps, and that the only highway running in its vicinity runs about three-quarters of a mile from it; that the said highway runs through a swamp or marsh and is overflowed and made impassable at certain seasons of the year by high water of the Wisconsin River; that all seasons of the year the said road is in such condition that it is impossible to haul any but small loads over it; all the roads leading to Lewiston are passable at all seasons of the year and are generally in good condition; that they have been so laid out as to make Lewiston the center of a large and populous country lying north, east and northeast of it; that if shipping facilities were to be established at Lewiston a potato warehouse would immediately be erected and a large amount of timber would be cut and sawed at Lewiston; that about six miles north of Lewiston is Briggsville, a village of about 500 inhabitants containing a large general store and a large grist mill; that all the products of this village would in all probability be shipped out and received by way of Lewiston instead of going to Packwaukee a greater distance as it now goes.

For the above reasons the petitioner prays that the Railroad Commission of Wisconsin make an order requiring the

said Railway Company, first, to put in a station with side track and other facilities at Lewiston; second, to stop one passenger train each day each way at Lewiston to receive and discharge passengers and express matter; third, to stop one freight train each way each day at said station, and for such other and further order as the Commission may deem necessary and just in the premises.

For reasons stated at the hearing, the Railway Company did not file a written answer previous to the hearing. The petition was filed May 17, 1906, and the hearing was held in the office of the Commission June 19, 1906. The Chicago, Milwaukee & St. Paul Railway Company was represented by C. E. Vroman and the petitioner was represented by himself and Frank J. Freemore.

Portage and Kilbourn are two stations on the Chicago, Milwaukee & St. Paul Railway about 18 miles apart. Lewiston is situated about midway between these two, and Cheney is a station a little more than $1\frac{1}{2}$ miles west of Lewiston. An operator, but not a regular agent, has been maintained for some years at Cheney. The freight offered for transportation at Cheney and Lewiston is billed at Kilbourn and Portage. No billing is done at either Lewiston or Cheney. At present one freight train each way stops daily at Cheney and Lewiston. There being no side-track at Lewiston, only less than carload freight can be shipped from or to this station while both less than car load and car load shipments can be made from Cheney. No passenger trains stop between Portage and Kilbourn except occasionally by special request. Practically the entire region adjacent to the Chicago, Milwaukee & St. Paul Railway between Portage and Kilbourn is without passenger service. This is an unusual situation and one which fully justifies complaint.

Up to about 1894 a station was maintained at Lewiston. The old station building is still standing there and is at present in use for storing incoming and outgoing freight. About the year 1894 a station was erected at the present site of Cheney and the former stations at Old Cheney to the west and Lewiston to the east were discontinued. The reasons for this change of stations was the unfavorable situation of Lewiston from a railway operating point of view. It appears that Lewiston is "a very obscure point." Sharp curves, embankments and trees ob-

scured the view in each direction and grades added difficulty to cautious train movements. Enginemen in charge of trains approaching Lewiston could not see whether the semaphores were in danger or not. "Endless accidents" occurred there, causing interruption of traffic and loss. The station at Old Cheney, about 4 miles east of Kilbourn, was similar to that at Lewiston. When the new block signal system was adopted by the Chicago, Milwaukee & St. Paul Railway Company the consolidation of the two stations of Old Cheney and Lewiston into the present Cheney was decided upon.

At Cheney, the Chicago, Milwaukee & St. Paul Railway Company has expended some eight or nine thousand dollars for passing tracks, signals, etc., exclusive of the company's buildings. The company's buildings embrace two section dwelling houses, an agent's house, telegraph and block house, hand-car house and a small coal shed and oil house. The dwellings are described as fairly good houses and altogether the buildings and tracks represent investments of some importance. The station at Cheney is built on what may be termed an island,—a knoll or elevated area surrounded by swamps. It is approached by a short road running off from the Kilbourn-Portage highway, which runs generally parallel to the Wisconsin river, about three-quarters of a mile in length. This short road runs over private land. A public highway has never been laid out on the section line running toward Cheney. The owners of the land over which the present road runs have never objected to its use as a public highway and free access is maintained to the station without discrimination. The main highway referred to as the Kilbourn road in the testimony is said to be in bad condition frequently an account of the overflow of the Wisconsin river whenever high water prevails and it is said to be impassible for days and even weeks at a time. The direction in which the branch road to Cheney runs in its relation to the Kilbourn road, makes the distance only about one-half mile greater to Lewiston than to Cheney. for persons traveling on the Kilbourn road towards Cheney and Lewiston from the west. Figures presented by the Railway Company tend to show that the greater part of the freight shipped out of Cheney comes from the west rather than from Lewiston. Petitioners appear to have the opposite impression al-

though they naturally did not have traffic statistics to support their views.

The territory surrounding Lewiston while lying in an old settled section of the state is relatively new country which is developing rapidly. Dairy interests especially are fast growing in importance. Milk and cream are produced for the market in considerable quantities. These must be shipped regularly and promptly and it is generally desirable that they should not be hauled by wagon over great distances. When the Kilbourn road is under water or otherwise impassable farmers living to the west of the obstructed portion of the Kilbourn road cannot reach Lewiston and those living around Lewiston cannot reach Cheney. Relatively much money and labor have been expended in improving this part of the Kilbourn road, but to make it passable at all seasons of the year for fairly good sized loads appears to be beyond the means of the community at present. The only arrangements therefore which will fully meet the needs of all the farmers around Cheney and Lewiston all the time is the ability to ship milk and cream from both Cheney and Lewiston.

At the present time less than car load freight can be shipped from and received at Lewiston, one local freight stopping daily in each direction. Car load freight can be shipped at Cheney, potatoes being the chief product, and hay, swamp grass and poles following next in importance. The products mentioned together represent all but a small percentage of the total car load business out of Cheney.

Now, commodities like potatoes, hay, swamp grass and poles are shipped at seasons of the year when Cheney can be approached with loaded wagons from all directions. We see no urgent necessity therefore, for shipping car load freight from Lewiston rather than Cheney. Furthermore, the Railway Company has expended a large sum of money at Cheney and nothing but the most extreme circumstances should lead to action involving an abandonment of the facilities and structures provided there. Viewing the situation as a whole the maintenance of agents and the construction of side tracks, etc., at both Cheney and Lewiston appears to be an unnecessary burden upon the Railway Company.

The petitioner and other persons residing in Lewiston territory have expressed their willingness to assist in loading

and unloading milk and cream at Lewiston in case train stops at that station. We believe that all the legitimate demands of the patrons at Lewiston can be met without constructing a side track there and without making Lewiston a regular railway station at which an agent is maintained. On the other hand, we are much impressed by the advantages which will follow the stopping of one local passenger train in each direction at Lewiston for the purpose of taking on and discharging passengers and of receiving milk and cream for transportation and returning empties to that station. Such a service does not require much special effort on the part of the Railway Company but will be of signal importance to the community about Lewiston. The stopping of one local freight daily in each direction as at present is scarcely adequate railway service for the community from which the petition emanates. The Railway Company will naturally keep a record of the amount of business done at Lewiston, and if after a lapse of some time it should appear that the services which this Commission may order to be performed by the Railway Company at Lewiston station are in excess of what the traffic warrants, the Commission will entertain an application for the suspension of such order on the facts which may be brought before it. It is our determination that reasonably adequate service at the stations of Lewiston and Cheney requires the stopping of one local passenger train in each direction daily, except Sunday, at each of these stations; and that, in addition, the service of stopping one local freight train in each direction daily, except Sunday, at each of these stations be continued. For the present, local passenger trains Numbers 2 and 5 may be stopped.

IT IS THEREFORE ORDERED, that the Chicago, Milwaukee & St. Paul Railway Company stop trains numbers 2 and 5 daily, except Sunday, at Lewiston and Cheney for the transaction of such business as is customarily done in connection with such trains, including the transportation of milk and cream and the return of the empties,—it being understood that shippers will assist in loading the milk and cream into the cars; and if it can be mutually arranged between the Railway Company and its patrons to return empty milk and cream cans on freight trains, this Commission has no objection whatever to their doing so. The Railway Company is further to continue the stopping of one

local freight train in each direction daily, except Sunday, at Cheney and Lewiston and to permit the use of the old station building at Lewiston for storing less than car load freight. That part of the petition relating to the construction of a side track and other station facilities at Lewiston is dismissed.

Dated this 27th day of June, A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 44.

WELLS & CHASE

vs.

WISCONSIN CENTRAL RAILWAY COMPANY.

Lack of station facilities at Dorchester. Petitioners own and operate a mill and warehouse adjacent to the right of way of the railway, but do not have side track connections. The company agreed to provide facilities satisfactory to the petitioner and the petition was withdrawn.

No. 45:

A. H. KROUSKOP

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY AND CHICAGO & NORTHWESTERN RAILWAY COMPANY.

C. Barnes, for Petitioner.

C. E. Vroman, for Chicago, Milwaukee & St. Paul Ry. Co.

S. A. Lynde, for Chicago & Northwestern Ry Co.

Petition regarding rates on lumber in car lots from Richland Center to specified points on the Chicago, Milwaukee & St. Paul Railway, and the Chicago & Northwestern Railway.

This involved both the question of the absolute reasonableness of rates and of joint rates. The petitioner enumerates various rates in comparison with which the rates complained of are excessive and discriminatory.

The case came to a formal hearing; but some time after the testimony had been submitted, the petitioner wrote the Commission that the Railway Company had made certain rates satisfactory to himself which met the objections raised in his petition and testimony and that, therefore, no further action was required on the part of the Commission.

No. 46.

WOLF RIVER PAPER & FIBER COMPANY

vs.

CHICAGO & NORTH WESTERN RAILWAY COMPANY.

M. A. Hogan, for Petitioner.

S. A. Lynde, for Respondent.

Petition regarding rate on coal. The petitioner uses about 10,000 tons of coal per year, on which a rate of \$1.00 per ton is charged from lake ports, which is alleged to be discriminatory as compared with a rate of 75 cents per ton to Fox River points which are competitors of the petitioner enjoying the same freight rates on shipments of their respective products to the chief markets. A time was set for the hearing and the parties appeared, but before the case was reached on the calendar, a satisfactory settlement was announced by the companies agreeing to make a rate of 70 cents per ton on soft coal as soon as the new line from Green Bay to Shawano is completed.

No. 47.

JOSEPH LIBERTY

vs.

WISCONSIN CENTRAL RAILWAY COMPANY.

Petitioner, in his own behalf.

Thos. H. Gill, for respondent.

Request to order night passenger trains to stop at Stetsonville, Wis.

The speed of the trains in question considered; the connections which they made; the size of the village of Stetsonville; the other accommodations furnished; the fact that both trains passed the station between midnight and four o'clock A. M. as well as other facts and circumstances, and it is

Held, that a compulsory order should not be entered requiring the stoppage of the trains in question at Stetsonville.

A complaint was filed with the Railroad Commission by the above named Joseph Liberty in his own behalf and in behalf of the inhabitants of the village of Stetsonville in Taylor county and vicinity, alleging that the service furnished for the transportation of passengers to and from said village was inadequate, and praying that an order be made by said commission requiring said Railway Company to stop an additional north and south bound passenger train for the purpose of receiving and discharging passengers. The answer denied the inadequacy of the service furnished, and set forth some reasons why the trains in question should not be ordered stopped.

The hearing was set for July 10, 1906, on which date Mr. Liberty appeared in person in support of the allegations contained in his petition. The Wisconsin Central Railway Company was represented by its attorney, Thos. H. Gill.

From the facts submitted it appears that Stetsonville is located 5 miles north of Dorchester and 4.6 miles south of Medford. All passenger trains stop at Dorchester and Medford. All three of the stations named are intermediate between Abbotsford and Ashland. Between the two latter points two passenger trains are run daily in each direction, and one freight train that carries passengers. The day train in each direction between Abbotsford and Ashland stops at all stations. The night train does not stop at Stetsonville and some of the other smaller stations. The north bound night train connects with the Chicago-St. Paul limited train leaving Abbotsford at 3:20 A. M., passing Stetsonville at about 3:35 A. M., and arriving at Ash-

land at 7:45 A. M., the distance from Abbotsford to Ashland being 132 miles. The corresponding south bound train leaves Ashland at 7:25 P. M., passing Stetsonville about 12:10 A. M. and arriving at Abbotsford at 12:30 A. M.

A sleeping car is run by said Wisconsin Central Railway Company between Chicago and Duluth, such car being transferred to the north bound night train referred to at Abbotsford and transferred to the Northern Pacific Railway Company at Ashland, with which close connections are made. Returning the sleeping car is transferred from the Northern Pacific Railway to the Wisconsin Central line at Ashland and carried on the south bound night train to Abbotsford, where it is attached to the limited train between Chicago and the Twin Cities. The night trains in question are also mail trains. Considering the condition of the road between Abbotsford and Ashland, and the fact that the trains between Abbotsford and Ashland are night trains, their running time might be considered reasonably fast.

The Chicago - St. Paul train is a fast train run in competition with several other lines of road between Chicago and the Twin Cities, the line of the Wisconsin Central between these points being at least considerably longer than that of two of its principal competitors. The service between Chicago, Milwaukee and Ashland is in competition with a limited train, making stops, generally speaking, only at larger places on the line of the Chicago & North Western Railway. The day passenger north bound arrives and stops at Stetsonville at 11:57 A. M. and the south bound day train arrives at and stops at said point at 1:04 P. M. The accommodation train north bound reaches Stetsonville at 9:25 A. M. and the south bound similar train arrives at the same point at 2:20 P. M.

The village of Stetsonville has a population of about 200 and the country around it is settled up. Considerable freight is shipped from the station in question and an agent is maintained thereat. There is no gainsaying the fact that for travelers destined to or from St. Paul and Minneapolis and points beyond Eau Claire and Chippewa Falls, and for those desiring to go to or return from Chicago and Milwaukee and other distant points, and who desire to travel by night, it would be a great convenience to have the night trains referred to stop at Stetsonville. By doing so they could make their

journey more easily and more quickly. As it now is they must forego the use of this train or travel to or from either Medford or Dorchester, depending on whether they are going or returning.

The general policy of the railway companies heretofore has been opposed to stopping their heavy fast night train at small stations. This has been due to a desire to accommodate through or long distance travel in the matter of time, and to the fact that travel after midnight from the smaller places would be very light. There is no doubt a demand from the general public for fast service. Frequent stops tend to lengthen the time in which a train can make its journey. If fast night trains are stopped at small stations the convenience of the occasional passenger therefrom will be promoted. On the other hand, the greater number of through passengers will be inconvenienced. Frequent stops and fast time do not make a harmonious combination. The mere matter of stopping the two trains in question at Stetsonville might not and probably would not result in any increase in the time between Abbotsford and Ashland. Considering the entire journey of this train or of the portion of it at least from Chicago to Ashland, if it were required to stop at all stations between Chicago and Ashland, such requirement might make a very material increase in time. We refused for what we considered good reasons to stop this train at North Fond du Lac, a village of two thousand inhabitants. In that case, however, the proximity of the village to the city of Fond du Lac, and the street car facilities between the two places, were important factors in reaching a conclusion. If we order the trains in question stopped at Stetsonville it would establish a precedent by which we might be asked to stop like trains at other stations throughout the state under similar circumstances. Otherwise we might be justly accused of discrimination. We have examined the time cards of various railways in relation to other fast night trains and find it is neither usual nor customary to stop such trains between midnight and four o'clock in the morning at places as small as Stetsonville, except where there is reason for so doing from an operating point of view. The night trains on the Ashland Division of the Chicago & Northwestern Railway, which run in competition with the trains which petitioner desires to have

stopped, make no stop between Port Washington and Manitowoc, a distance of fifty-two miles, except at Sheboygan. They do not stop at stations like Reedsville, Brillion, Marion, Tigerton, Wittenberg, etc. In fact, they do not stop at 44 of the 66 stations between Milwaukee and Woodruff, to and from which point to Ashland they are day trains. It is true, however, that the passenger service on a portion of the northern end of the Ashland division of the C. & N. W. Ry. is better than that on the Wisconsin Central between Abbotsford and Ashland. The question involved here has been perplexing. Treated as an independent question pure and simple, and divorcing it from the probable effect of the precedent it would establish, we would feel strongly inclined to order the trains stopped, because such action would result in some convenience to the inhabitants of the village, and we think this particular stop might be made without any increase in time. Taking the broader view of the question, however, we do not feel that we would be justified in holding that fast night trains passing a small station like Stetsonville between the hours of midnight and four o'clock in the morning should ordinarily be stopped, where such trains stop at stations on either side a few miles distant, in view of the fact that there is a day passenger train on this portion of the road, and an accommodation train that carries passengers. Such a ruling would go far toward revolutionizing the present policy of railway companies respecting such trains, and might place Wisconsin roads at a decided disadvantage in competing for through business with lines of road reaching the same terminals but not passing through the state.

Our conclusion, therefore, is that the complaint should be dismissed, and

IT IS SO ORDERED.

Dated this 10th day of August, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

The decision of the Commission was accompanied by a recommendation to the Railway Company, that it stop the limited trains in question for the purpose of taking on or letting off passengers going to or coming from points south of Fond du Lac and west of Eau Claire. The Company accepted the suggestion and the trains are being stopped as indicated.

No. 48.

IN RE REGULATIONS GOVERNING COAL SHIPMENTS
ON CHICAGO, MILWAUKEE & ST. PAUL RAILWAY.

C. E. Vroman, for C. M. & St. P. Ry. Co.

This action was an investigation of the Commission on its own motion to determine the reasonableness of a rule or regulation governing the shipment of different kinds of coal between points in Wisconsin. According to this rule the rate charged for a mixed car load of coal is the rate on the minimum weight, regularly prescribed for each kind of coal when shipped separate in car lots, thus causing the shipper to pay freight charges on a double minimum. The Railway Company at once wrote the Commission that the rule was indefensible and that the same would be abrogated from that time forward, whereupon the Commission dropped the proceedings.

No. 49.

O. G. KINNEY

vs.

WISCONSIN CENTRAL RAILWAY COMPANY.

WALTER L. HOUSER

vs.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY
COMPANY AND CHICAGO & NORTHWESTERN RAIL-
WAY COMPANY

IN THE MATTER OF GRAIN RATES.

Being an investigation of grain rates between stations in Wisconsin and Milwaukee, Wisconsin, on the Chicago, Milwaukee & St. Paul Railway, the Chicago & Northwestern Railway, the Chicago, St. Paul, Minneapolis & Omaha Railway and the Wisconsin Central Railway, by the Railroad Commission of Wisconsin, acting on its own motion.

O. G. Kinney, in his own behalf.

S. A. Lynde, for Chicago & Northwestern Railway Co.

C. E. Vroman, for Chicago, Milwaukee and St. Paul Railway Company.

Thos. H. Gill, for Wisconsin Central Railway Co.

Thos. Wilson, for Chicago, St. Paul, Minneapolis & Omaha Railway Co.

The petition of O. G. Kinney was filed with the Railroad Commission of Wisconsin, June 11, 1906. Correspondence with Mr. Kinney in regard to grain rates dates back nearly a year. The petition of Mr. Kinney sets forth that he is engaged in a general merchandise business, conducting a department store, and buying grain, potatoes, hay and other farm products; that he ships grain over the line of the Wisconsin Central Railway Company from the village of Colfax to Milwaukee, Wisconsin; that the Railway Company charges a rate on grain between Colfax and Milwaukee of twelve and a half cents per hundred pounds and that the amount so charged is excessive, affording the Railway Company a greater compensation than is usually and customarily charged for a like service between other points in the State of Wisconsin and that a material reduction should be made in this rate.

The petition of Walter L. Houser was filed April 12, 1906. It sets forth that the petitioner is a citizen, resident and freeholder of the State of Wisconsin and is at the present time, and for many years last past, has been engaged, among other things, in the business of farming, horse-breeding, stock raising and dairying in the city of Mondovi, Buffalo county, Wisconsin; that the respondent Railway Companies do business as common carriers in the State of Wisconsin along the various lines of road which are described in the petition; that Milwaukee, which is a city of about 350,000 inhabitants, is the chief market within the State of Wisconsin for the sale of the products produced and dealt in by the petitioner; that the rates from Mondovi to Milwaukee, Wisconsin, on horses and mules, cattle, hogs, sheep, hay, wheat, grain, butter, cheese and eggs are excessively high and very much greater than the rates charged for like distances for the same commodities in the State of Illinois; that the country surrounding the city of Mondovi is a farming and dairying country, thickly populated, and that large quantities of the commodities above enumerated are produced and shipped out of this territory whereby all such producers, including the petitioner, are injuriously affected and suffer great loss by reason of the excessive rates which the respondent Railway Companies are charging from the city of Mondovi to Milwaukee, and that all citizens and producers of the territory specified will be greatly benefited by the making and enforcing of a just and reasonable rate.

The two petitions filed involved rates on grain from Mondovi and Colfax to Milwaukee. The rates complained of were not discriminatory when compared with the rates charged on the same commodity from points in the immediate vicinity of Mondovi and Colfax. In each of the petitions the rates charged were alleged to be excessive. The consideration of such alleged excessive charge necessarily involved other rates than those complained of. If the allegations of the petitioners in regard to excessiveness were found to be true, then in justice and fairness, and to avoid the creation of discriminations by act of the Commission, it became necessary that the proceeding in regard to grain rates should have a much larger scope than that presented by the petitions on file. Accordingly the Commission deemed it advisable to investigate on its own motion the whole subject of grain rates in Wisconsin.

During the latter part of June, 1906, the Railroad Commission of Wisconsin gave notice to the Wisconsin Central, Chicago, St. Paul, Minneapolis & Omaha, Chicago & Northwestern and the Chicago, Milwaukee & St. Paul Railway Companies that it had undertaken an investigation of the rates on grain between stations on these respective lines of railway in the State of Wisconsin and Milwaukee, Wisconsin, pursuant to the provisions of sub-division "B," section 12, chapter 362 of the Laws of Wisconsin for the year 1905 as amended by section 3 of chapter 13 of the Laws of said State enacted at the special session of the legislature convened on December 4, 1905; and that as a result of such investigation the Commission was satisfied that sufficient grounds existed to warrant a hearing being ordered to determine whether or not the rate of charge between each of the stations enumerated was unreasonable or excessive; and ordering a formal hearing at the office of the Commission July 10, 1906.

The hearing of July 10, 1906, was the only formal hearing which was held in this matter. At this hearing Mr. O. G. Kinney appeared and gave testimony. No other sworn testimony was submitted. The Wisconsin Central Railway Company was represented by Thomas H. Gill, general attorney, and C. E. Wilson, assistant general freight agent. The Chicago, St. Paul, Minneapolis & Omaha Railway Company was represented by Thomas Wilson, general counsel, and H. M. Pearce, general freight agent. The Chicago & Northwestern Railway Company was represented by S. A. Lynde, general attorney, and F. P. Eyman, assistant general freight agent. The Chicago, Milwaukee & St. Paul Railway Company was represented by C. E. Vroman, assistant general solicitor, and E. S. Keeley, general freight agent.

Mr. Kinney's testimony, like Mr. Houser's petition, emphasizes the importance of Milwaukee as the chief grain market for Wisconsin buyers, and the necessity for having this market accessible to "independent" buyers. Acceptable rates on grain to other lake ports than Milwaukee have little value to such buyers unless they are also consumers, for the reason that these ports generally lack adequate facilities for handling the grain of independent buyers. It was shown that the greater part of the grain-producing territory in northwestern Wisconsin was subject to the competitive influences of the

ports of Lake Superior and of Lake Michigan; and that all the railways are compelled to meet whatever rates are in effect to these respective ports. From certain competitive areas, the rates to Green Bay, Kewaunee, Manitowoc, Sheboygan and Milwaukee must generally be the same as the rates to Duluth, Superior and Ashland, making due allowance for differences in the lake rates to eastern terminals. A parity of rates to the different Lake Michigan ports has existed for a long time in the past. The new schedule of grain rates contemplates the preservation of the existing relation of rates between the several Lake Michigan gateways. In case these relations should not be observed in all instances in the future this Commission will investigate and make such further order as may be just. This relation in the rates to lake ports creates a situation in which a carrier having a long haul under a joint rate arrangement may receive a very spare division of the through rate for its part of the haul. Traffic considerations of this kind enter into the adjustment of rates at all competitive points and have to be carefully weighed in the preparation of rate schedules. While the general rule that a short haul included in a longer haul in the same direction shall not bear a greater rate than the long haul is unquestionably just and fair in the great majority of instances, it was found necessary to violate this so-called long-and-short-haul principle in several instances in order to make the application of a lower rate possible at common points.

Existing proportional rates were also drawn into consideration. As is well known, proportional rates are rates applicable to traffic destined to points beyond the line of the carrier making the same. Proportional rates on grain are in effect through all the lake ports both north and south. The Supreme Court of the United States as well as the Interstate Commerce Commission has repeatedly held that a proportional rate is not a just measure of the reasonableness of a rate applied to local or inter-line traffic terminating at the points to which such proportional rates apply. It follows that local rates on grain in Wisconsin cannot be measured by the proportional rates which carriers have published, effective on traffic to Michigan and Superior ports but destined to points beyond these ports.

The present order relates only to rates between stations on the lines of the Wisconsin Central; Chicago, St. Paul, Min-

neapolis & Omaha; Chicago & Northwestern, and Chicago, Milwaukee & St. Paul Railways and Milwaukee. These rates directly and indirectly control nearly all others in this state for the reason that rates to lake ports generally apply as maxima to intermediate points. Nor does the present order apply directly to all the railways in Wisconsin. However, the four railways included in the order together practically control grain rates in the state; and whatever else there may be to adjust in the matter of grain rates in Wisconsin will be taken up by the Commission as the occasion may arise. It is not improbable that future experience and investigation may suggest further re-adjustments.

The independent investigations of this Commission with reference to rates date back almost to the time of its organization. Elaborate statistical compilations and analyses had been prepared before notice of the official investigation of grain rates had been issued. The hearings in the matter of passenger rates have contributed much to an exact solution of the question of grain rates in so far as this solution depends upon a division of operating expenses between freight and passenger traffic and in so far as any solution in matters of rates may be characterized as "exact." The final adjustment of figures has not yet been made in the matter of passenger rates; and to the extent to which certain items may still be transferred from one account to another, the statistics which formed the basis of the present grain rate investigation are subject to correction. It is possible, therefore, that further postponement of a decision in the matter of grain rates might have led to a more accurate adjustment of rates to statistical data. We do not regard it probable, however, that whatever changes may still have to be made in the division of operating expenses between freight and passenger traffic will appreciably affect the present conclusions regarding grain rates in important particulars. Furthermore, the season for moving this year's crop is at hand. According to the census of the State of Wisconsin for 1905, nearly 175 million bushels of grain were produced within the state during that year; and it is a matter of some consequence to the producers of this grain whether the new rates are to go into effect at once or at a later time, perhaps after the greater part of the crop has been moved. In our opinion the most advantageous course of procedure, and

the one which was pursued, was to revise the grain rates on the basis of the best available data at hand, publish the new schedules at once, and leave whatever additional changes in rates might later appear to be necessary and just for future consideration.

The details of the statistical process by which our conclusions were arrived at need not be presented here. It would require many pages of tables and explanations to make the same intelligible and inasmuch as the rates to be promulgated are practically the accepted results of the various conferences with traffic officials it is unnecessary to do so. Generally speaking we divided the operating expenses between passenger and freight traffic in the most careful manner and on this basis we arrived at certain conclusions with reference to the cost of doing freight business both with respect to terminal and to haulage charges. The rates for the shorter distances were loaded much more heavily with operating expense than the rates for the long distances for the reason that unless this is done the long distance grain traffic will move only with difficulty or not at all.

It is our judgment and determination that the following rates on grain between stations named herein on the Wisconsin Central; Chicago, St. Paul, Minneapolis & Omaha; Chicago & Northwestern; Chicago, Milwaukee & St. Paul Railways and Milwaukee, Wisconsin, are reasonable and just; and *it is ordered* that these rates shall be the lawful rates between such points.

Rates on grain in carloads in cents per hundred pounds between stations on the Chicago, Milwaukee & St. Paul Railway and Milwaukee, Wisconsin.

Zenda	7.5	Gotham	9.5
Walworth	7.5	Twin Bluffs	9.5
Avalon	8	Richland Center	9.5
*Ranney	3	Avoca	9.5
*Truesdale	3	Muscoda	9.5
*Somers	3	Blue River	10
*Corliss	3	Boscobel	10
*Frankville	3	Woodman	10
*Caledonia	3	Wauzeka	10
*Oakwood	3	Steuben	10
*Lake	3	Barnum	10
Sylvania	5	Petersburg	10
Union Grove	5	Belle Center	10
Kansasville	6	Gays Mills	10
Dover	6	Soldiers Grove	10
Burlington	6	Readstown	10
Lyons	6	Viola	10
Springfield	6.5	La Farge	10
Elkhorn	7	Bridgeport	10
Peck's Station	6.5	Prairie du Chien	10
Mayhew's	6.5	Janesville	8
Troy Center	6.5	Hanover	8
Delavan	7.5	Orfordville	8
Darien	7.5	Brodhead	9
Allens Grove	7.5	Albany	9.5
Clinton Junction	8	Monticello	9.5
Porters	8	New Glarus	9.5
Beloit	8	Juda	9.5
Elm Grove	4	Monroe	9.5
Waukesha	4	Browntown	9.5
Genesee	5	Dill	9.5
North Prairie	5	South Wayne	9.5
Eagle	6	Gratiot	9.5
Palmyra	6.5	Dumbarton	10
Whitewater	7	Shullsburg	10
Lima	7.5	Darlington	9.5
Milton	8	Calamine	9.5
Milton Junction	8	Mineral Point	9.5
Edgerton	8	Belmont	10
Stoughton	8	Platteville	10
McFarland	8	Brookfield Junction	3
Madison	8	Pewaukee	3.5
Middleton	8.5	Hartland	4
Cross Plains	8.5	Nashotah	4.5
Black Earth	8.5	Oconomowoc	5
Mazomanie	9	Ixonia	6
Sauk City	9	Watertown	6.5
Prairie du Sac	9	Richwood	6.5
Arena	9	Reeseville	7
Spring Green	9.5	Elba	7.5
Lone Rock	9.5	Columbus	7.5

* Corrections and readjustments.

*Fall River	7.5	Romadka	10
*Doylestown	8	Pittsville	10
Rio	8.5	Hansen	10
Wyocena	9	Vesper	10
Portage City	9	Arpin	10
Lewiston	9	Craamoor	10
Kilbourn City	9.5	Nekoosa	10
Lyndon	9.5	Port Edwards	10
Mauston	9.5	Grand Rapids	10
New Lisbon	9.5	Rudolph	10
Orange	9.5	Junction City	10
Camp Douglas	10	Dancy	10
Oakdale	10	Knowlton	10
Tomah	10	Mosinee	10
Tunnel City	10	Flanners	10
Lafayette	10	Schofield	10
Sparta	10	Wausau	10
Rockland	10	Brokaw	10
Bangor	10	Heights	10
West Salem	10	Trap City	10
Medary	10	Pine River	10
North La Crosse	10	Merrill	10
La Crosse	10	Welling	10
Onalaska	10	Otis	10
Hubbellton	6.5	Foss Siding	10
Waterloo	7	Combs	10
Marshall	7.5	Alder Lake	10
Deanville	7.5	Heineman	10.5
Sun Prairie	8	Gleason	11
Burke	8	Doering	11
Leon	10	Irma	11
Melvina	10	Gilbert	11.5
Cashton	10	Tomahawk	11.5
Westby	10	Heafford Junction	11.5
Viroqua	10	Bearskin	11.5
Darwin	8	Harshaw	11.5
Windsor	8.5	Goodnow	11.5
De Forest	8.5	Garth	11.5
Morrisonville	8.5	Hazelhurst	11.5
Arlington	9	Hixon	11.5
Poynette	9	Minocqua	11.5
Hartman	9	Arbor Vitae	11.5
Valley Junction	10	Sayner	11.5
Norway	10	Star Lake	11.5
Mather	10	Granville	3
Meadow Valley	10	Menomonee	3.5
Daly	10	Lannon	3.5
Babcock	10	Templeton	3.5
Necedah	10	Sussex	3.5
Dexterville	10	Merton	4
Veedum	10	North Lake	4.5
Cary	10	Germantown	3.5
Newtown	10	Richfield	4
Hogan's Spur	10	Schleisingsville	5
Lindsey	10	Hartford	5.5
Boynton	10	Rubicon	5.5
Lynn	10	Minnesota Junction	7

* Corrections and readjustments.

Rolling Prairie	7.5	Lena	10.5
Beaver Dam	7.5	Coleman	11
*Fox Lake	7.5	Pound	11
*Randolph	7.5	Beaver	11
*Cambria	8	Ellis Junction	11
Pardeeville	8	Porterfield	11
Thiensville	3	Bagley Junction	11
Cedarburg	4	Marinette	11
Grafton	4.5	Woodland	6.5
Saukville	5	Iron Ridge Junction	6.5
Fredonia	5.5	Horicon Junction	7
Random Lake	6	Burnett Junction	7
Middle Inlet	11.5	Atwater	7
Wausaukee	11.5	Waupun	7.5
Athelstane	11.5	Brandon Junction	7.5
Girard Junction	11.5	Fairwater	7.5
Amberg	11.5	Utley	7.5
Adell	6.5	Markesan	7.5
*Waldo	6.5	Reed's Corners	7.5
*Plymouth	6.5	Ripon	7.5
*Elkhart Lake	6.5	Picketts	7.5
*Kiel	6.5	Fisk	7.5
*New Holstein	6	Oshkosh	7.5
*Hayton	5.5	Rush Lake Junction	7.5
*Chilton	5	Berlin	7.5
*Hilbert Junction	6	Waukau	7.5
*Sherwood	6.5	Omro	7.5
Lake Park	7.5	Winneconne	7.5
Menasha	7.5	Mayville	6.5
Neenah	7.5	Knowles	7
Appleton	7.5	Thetis	7.5
*Forest Junction	6.5	South Byron	7.5
*Askaton	7	Fond du Lac	7.5
Greenleaf	8.5	Trevino	12.5
Midway	9.5	Durand	12.5
De Pere	9.5	Red Cedar	11
Green Bay	9.5	Meridian	11
Cormier	10	Caryville	11
Tremble	10	Porter's Mills	11
Sobieski	10	Eau Claire	11
Abrams	10	Badger Mills	11
Pembine	11.5	Chippewa Falls	11
Oconto Junction	10	Dunnville	11
Oconto	10	Downsville	11
Stiles	10	Menomonie	11
Stiles Junction	10	Cedar Falls	11

*Corrections and readjustments.

Rates on grain in carloads in cents per hundred pounds between stations on the Chicago & Northwestern Railway and Milwaukee, Wisconsin.

Sharon	7.5	*Cato	6.5
Clinton Junction	8	*Grimms	6.5
Shopiere	8	*Reedville	6.5
Janesville	8	*Brillion	6.5
Milton Junction	8	*Forest Junction	6.5
Koshkonong	7.5	*Dundas	7
Ft. Atkinson	7	Combined Locks	7.5
Jefferson	6.5	Kimberly	7.5
Jefferson Junction	6.5	Burnside	7.5
Johnson's Creek	6.5	Greenville	8
Watertown	6.5	West Greenville	8
Clyman	6.5	*Horton Junction	8
Juneau	7	Medina	8
Minnesota Junction	7	Medina Junction	8
Burnett Junction	7	Larson	8
Chester	7.5	Allenville	8
Oak Center	7.5	New London	9
Oakfield	7.5	Beloit	8
Fond du Lac	7.5	Afton	8
Van Dyne	7.5	Hanover	8
South Oshkosh	7.5	Footville	8
Oshkosh	7.5	Magnolia	8
State Hospital	7.5	Evansville	8
Snells	7.5	Leydon	8
Neeah-Menasha	7.5	Fellows	8
Appleton Junction	7.5	Brooklyn	8
Appleton	7.5	Oregon	8
Little Chute	7.5	Syene	8
Kaukauna	7.5	South Madison	8
Wrightstown	8.5	Madison	8
Little Rapids	9.5	Mendota	8
De Pere	9.5	Waunakee	8.5
Green Bay Junction	9.5	Dane	8.5
Green Bay	9.5	Lodi	9
Whitefish Bay	3	Okee	9
Mequon	3	Merrimac	9.5
Ulao	3	Devil's Lake	9.5
Port Washington	4.5	Baraboo	9.5
Lime Kilns	5	Kirkwood	9.5
Belgium	5.5	North Freedom	9.5
Cedar Grove	6	Ableman's	9.5
Ootsburg	6.5	Reedsburg	9.5
Weedens	6.5	La Valle	9.5
*Sheboygan	6.5	Crossman	9.5
*Seven Mile Creek	6.5	Wonewoc	9.5
*Cleveland	6.5	Union Center	9.5
*Newton	6.5	Elroy	9.5
*Manitowoc	6.5	Glendale	10
*Two rivers	6.5	Kendalls	10
*Montrose Siding	6.5	Wilton	10
*Branch	6.5	Norwalk	10

* Corrections and readjustments.

Summit	10	Platteville	10
Siding No. 4	10	Elmo	10
Sparta	10	Cuba City	10
Rockland	10	Benton	10
Bangor	10	Strawbridge	10
West Salem	10	Buncombe	10
Medary (Winona Jct.)	10	Pleasant Prairie	4
Grand Crossing	10	Woodworth	5
La Crosse	10	Bristol	6
Onalaska	10	Salem	6
Midway	11	Fox River	6.5
Lytles	11	Bassett's	6.5
Trempealeau	11	*Twin Lakes	7
Galesville	11	*Lake Elizabeth	7
Pine Creek	12	*Genoa Junction .....	.7
Marshland	12.5	*Lake Geneva	7
Bluff Siding	12.5	Williams Bay	7 5
Necedah	10	*Kenosha	3
*Cloverdale	10	*Berryville	3
Cranberry Center	10	*Racine Junction	3
Necedah Junction	10	*Racine	3
Beecher St. (Milwaukee)	3	*Ives	3
Layton Park	3	*County Line	3
North Greenfield	3	*Carrollville	3
Calhoun	3.5	*South Milwaukee	3
Waukesha	4	*Cudahy	3
Wales	4.5	*St. Francis	3
Dousman	5	*Bay View	3
Sullivan	6	Siloam Siding	2
Helenville	6	L. S. Junction	2
Lake Mills	6.5	Lindwurm	3
Loudon	7	Silver Springs	3
Deerfield	7.5	Granville	3
Cottage Grove	8	Rockfield	4
Echo	8	Jackson	4.5
Verona	8.5	West Bend	5.5
Riley's	8.5	Barton	5.5
Klevenville	8.5	Kewaskum	6.5
Mount Moreb	8.5	Campbellsport	7
Blue Mounds	9	Eden	7.5
Barneveld	9	*Sheboygan Falls	6.5
Ridgeway	9.5	*Plymouth	6.5
Dodgeville	9.5	*Glenbeulah	6.5
Edmund	9.5	*Hull's Crossing	7
Cobb	9.5	*St. Cloud	7
Moutfort	10	Calvary	7.5
Preston	10	Malone	7.5
Stitzer	10	Peebles	7.5
Lancaster	10	Eldorado	7.5
Fennimore	10	Rosendale	7.5
Werley	10	West Rosendale	7.5
Woodman	10	Ripon	7.5
Livingston	10	Arcade Siding	7.5
Rewey	10	Green Lake	7.5
Leslie	10	Princeton	8
Mineral Point Crossing	10	Neshkora	8.5
Ipswich	10	Watoma	9
		Wild Rose	9.5

* Corrections and readjustments.

Almond	10	McMillan	10
Baneroft	10	Marshfield	10
Kellner	10	Birnamwood	10
Grand Rapids	10	Aniwa	10
Vesper	10	Elmhurst	10
Arpin	10	Antigo	10
Spring Lake	8.5	Webster's (Sylvan Lake).....	11
Red Granite	8.5	Bryant	11
South Centralia	10	Malcolm	11
Port Edwards	10	Elton	11
Nekoosa	10	Junction Sherry Spur.....	11
New London Junction.....	9	Drexel	11
Sugarbush	9.5	Deerbrook	11
Bear Creek	10	Kempster	11
Clintonville	10	Koepnick	11
Embarrass	10	Summit Lake	11.5
Belle Plaine	10	Elcho	11.5
Shawano	10	Pratt Junction	11.5
Cecil	10	Lennox	11.5
Underhill	10	Nashville	11.5
Mosling	10	Crandon	11.5
Northern Junction	10	Parrish Junction	11.5
Claywood	11	Parrish	11.5
Suring	11	Jeffris Junction	11.5
Breed	11	Jeffris	11.5
Kingston	11	Harrison	11.5
Mountain	11	Pelican	11.5
Lakewood	11.5	Monico Junction	11.5
Wabeno	11.5	Malvern	11.5
Blackwell Junction.....	11.5	Satuit	11.5
Laona	11.5	Rhineland	11.5
Gillette	10	Newbold	11.5
North Branch	10	McNaughton	11.5
Oconto Falls	10	Tomahawk Lake	11.5
Stiles Junction	10.5	Woodruff (Arbor Vitae).....	11.5
Oconto	10	Bolton	12
Buckbee	10	Lac du Flambeau.....	12.5
Marion	10	Powell	12.5
Hunting	10	Manitowish	12.5
Split Rock	10	Mercer	12.5
Tigerton	10	Carson	12.5
Whitcomb	10	Sand Rock	12.5
Wittenberg	10	Van Buskirk	12.5
Eland Junction	10	Hurley	12.5
Elderon	10	Gile	12.5
Galloway	10	Pence	12.5
Rosholt	10	Kimball	12.5
Norrie	10	Saxon	12.5
Hatley	10	Cedar	12.5
Ringle	10	Alder	12.5
Callon	10	Odanah	12.5
Kelly	10	Bear Trap	12.5
Wausau	10	Ashland	12.5
Marathon City	10	Gagen	11.5
Edgar	10	Stella Junction	12
Fenwood	10	Three Lake	12
Stratford	10	Eagle River	12

Conover	12	Brule	12.5
Hackley	12	Duck Creek	10
Rummeles	12	Saranac	10
State Line	12	Big Suamico	10
Pulp	12.5	Brookside	10
Spread Eagle	12.5	Pensaukee	10
Hills'de	12.5	Oconto	10
Hematite	12.5	Elba	10.5
Commonwealth	12.5	Wilcox	10.5
Florence	12.5	Peshigo	11
Ridgetop	12.5	Marinette	11

Rates on grain in carloads in cents per hundred pounds between stations on the lines of the Wisconsin Central Railway Company and Milwaukee, Wisconsin.

Trevor	6	Weyauwega	9.5
Camp Lake	6	Waupaca	9.5
Silver Lake	6	Sheridan	9.5
Wheatland	6	Amherst	9.5
Burlington	6	Amherst Junction	9.5
Honey Creek	6	Custer	9.5
Lake Beulah	6	Stockton	9.5
Mukwonago	5	Stevens Point	9.5
Vernon	5	Plover	9.5
Waukesha	4	Bancroft	9.5
DuPlainville	3.5	Plainfield	9.5
Templeton	3.5	Hancock	9.5
Colgate	4	Coloma	9.5
Rugby Junction	4.5	Westfield	9.5
Schleisingerville	5	Packwaukee	9.5
Cedar Lake	5.5	Montello	9.5
Allenton	5.5	Endeavor	9.5
Theresa	6.5	Portage	9
Lomira	7	Junction City	10
Byron	7.5	Milladore	10
Hamilton	7.5	Sherry	10
Fond du Lac	7.5	Auburndale	10
Van Dyne	7.5	Hewitt	10
Oshkosh	7.5	Marshfield	10
State Hospital	7.5	Ruplinger's Spur	10
Neenah	7.5	Arpin	10
Menasha	7.5	Vesper	10
*Sherwood	6.5	Sigel	10
*Hilbert Junction	6	Grand Rapids	10
*Potter	6.5	South Centralia	10
*Collins	6.5	Port Edwards	10
*Valders	6.5	Nekoosa	10
*Madsen	6.5	Mohle	10
*Alverno	6.5	Veeckind	10
*Manitowoc	6.5	Spokeville	10
Medina Junction	8	Loyal	10
Dale	8	Greenwood	10
Fremont	8.5	Mann	10
Gill's Landing	9	Spencer	10

* Corrections and readjustments.

Unity	10	Marengo	12.5
Colby	10	Ashland	12.5
Abbotsford	10	Curtiss	10.5
Dorchester	10	White River.....	12.5
Stetsonville	10	Thorpe	10
Medford	10	Stanley	10.5
*Chelsea	10.5	Boyd	10.5
Rib Lake (\$2.50 per car above Chelsea).....		Cadott	10.5
Westboro	11	Bateman	11
Ogema	11.5	Chippewa Falls	11
Prentice Jct.....	11.5	Badger Mills	11
Prentice	11.5	Eau Claire	11
Phillips	12	Howard	11
Fifield	12.5	Albertville	11
Park Falls	12.5	Colfax	11
Butternut	12.5	Wheeler	11
Glidden	12.5	Boyceville	11.5
Morse	12.5	Downing	11.5
Mellen	12.5	Glenwood	11.5
Upton	12.5	Emerald	11.5
Iron Belt	12.5	Cylon	12
Hoyt	12.5	Jewett Mills	12
Hurley	12.5	New Richmond	12.5
High Bridge	12.5	Somerset	12.5

Rates on grain in carloads in cents per hundred pounds between stations on the lines of the Chicago, St. Paul, Minneapolis & Omaha Railway Company and Milwaukee, Wisconsin.

Elroy	9.5	Humbird	10
Tunnel	10	Fairchild	10
Hustler	10	Price	10.5
Camp Douglas	10	Osseo	11
Necedah Junction	10	Linderman	11
Valley Junction	10	Strum	11
Warren	10	Eleva	11.5
Millston	10	Mondovi	11.5
Sheppard	10	Kempton	10
Black River Falls.....	10	Augusta	10
Merrillan	10	Rosedale	10
Trow	10	Fall Creek	10.5
Columbia	10	Altoona	11
Wedges Creek	10	Eau Claire	11
Sydney	10	Truax	11
Neillsville	10	Elk Mound	11
Kurth	10	Rusk	11
Granton	10	Menomonie Jct.	11
Yolo	10	Menomonie	11
Chili	10	Tramway	11
Cedarhurst	10	Teegarden	11
Ebbe	10	Knapp	11.5
Marshfield	10	Wilson	11.5

* Corrections and readjustments.

Hersey	11.5	Wines	12.5
Woodville	11.5	Rockmont	12.5
Emerald	11.5	South Range	12.5
Spring Valley	11.5	Itasca	12.5
Elmwood	11.5	Nettleton Ave.	12.5
Comfort	11.5	Superior	12.5
Weston	11.5	Spring Brook	12.5
Baldwin	11.5	Stinnett	12.5
Hammond	12	Hayward	12.5
Roberts	12	Phipps	12.5
Chapman	12	Leonard	12.5
N. Wisconsin Jct.	12	Cable	12.5
Hudson	12.5	Drummond	12.5
Prescott Road	12.5	Sweden	12.5
Glover	12.5	Grandview	12.5
River Falls	12.5	Bibon	12.5
Severance	12.5	Mason	12.5
Beldenville	12.5	Benoit	12.5
Ellsworth	12.5	Dauby	12.5
Burkhardt	12.5	Koll	11
Boardman	12.5	Chippewa Falls	11
New Richmond	12.5	Anson	12.5
Stanton	12.5	Jim Falls	12.5
Deer Park	12.5	Cobban	12.5
Clear Lake	12.5	Hatch	12.5
Richardson	12.5	Brunet	12.5
Clayton	12.5	Holcombe	12.5
Turtle Lake	12.5	Sillhawn	12.5
Perley	12.5	Hannibal	12.5
Comstock	12.5	Eagle Point	11
Cumberland	12.5	Bloomer	11
Granite Lake	12.5	*New Auburn	11
Barronett	12.5	Chetek	12.5
Shell Lake	12.5	Cameron	12.5
Spooner	12.5	Rice Lake	12.5
Superior Jct.	12.5	Tuscobia	12.5
Lampson	12.5	Brill	12.5
Lakeside	12.5	Birchwood	12.5
Minong	12.5	Yarnell	12.5
Huser	12.5	Couderay	12.5
Wascott	12.5	Radisson	12.5
Gordon	12.5	Crooked Rapids	12.5
Solon Springs	12.5	Winter	12.5
Sauntry	12.5	Draper	12.5
Bennett	12.5	Haugen	12.5
Hawthorne	12.5	Sarona	12.5

* Corrections and readjustments.

Other matters complained of by Walter L. Houser will be disposed of in a separate order.

Dated this 8th day of August, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 50.

IN RE GRAIN RATES CHARGED BY CHICAGO, MILWAU-
KEE & ST. PAUL RAILWAY COMPANY.

C. E. Vroman appearing.
See Number 48.

No. 51.

IN THE MATTER OF THE MENASHA WOODENWARE
COMPANY AND WISCONSIN CENTRAL RAILWAY
COMPANY.

Silas Bullard, for Menasha Woodenware Company.
Thos. H. Gill, for Wisconsin Central Railway Company.

This proceeding involves the legal rate under which certain forest products move.

The Wisconsin Central Railway Co. had in effect a tariff under which forest products were shipped from certain stations to Menasha. A new and a higher tariff was promulgated by the Railway Company about June 15, 1905. Such tariff was dated as of April 1, 1905. The Menasha Wooden Ware Co. claimed the right to ship on the lower and older tariff during the year 1905.

- Held*, (1) That sec. 4 of ch. 362, Laws of 1905, made all published rates in force on April 1, 1905, a maximum tariff up to December 31, 1905, which maximum tariff could be changed only by the Commission for cause shown and on notice to the parties in interest.
- (2) That the ante-dating of the new tariff did not affect the rights of the parties, and it had the same force and effect as if dated upon the day of its issue.
- (3) That the shipments in question should be made on the tariff actually in force on April 1, 1905.

The Menasha Wooden Ware Company is engaged in the manufacture of staves at Menasha, Wisconsin, and has been in the habit of purchasing bolts to manufacture into staves at certain stations along the line of the Wisconsin Central Railway. Several years ago a rate was put in effect from Abbotsford, Wisconsin, to Menasha, covering the shipment of such product. Later on the rate was extended so as to apply to Curtiss station. The rates to Abbotsford and Curtiss were continued until

1901, as we are advised, when a certain advance was made and shipments continued to be made from time to time at the advanced rate up to July 1, 1905. During the winter of 1904 and 1905 a large quantity of material was banked at Curtiss station which the Menasha Wooden Ware Company desired to ship to Menasha for the purpose of manufacturing. The shipments commenced sometime during the spring of 1905 and continued up to December of that year. Chapter 362 of the Laws of 1905 was published on June 16, 1905. Section 35 of that act provided or required that schedules of rates in force on April 1, 1905, should be filed with the Railroad Commission within thirty days after the passage and publication of the act. The Wisconsin Central Railway Company filed with the Railroad Commission a tariff covering shipments of various kinds of raw material from points on its line to Menasha substantially within the time provided for in section 35, which tariff bore date April 1, 1905. The tariff so filed made a rate on the material piled for shipment by the Menasha Wooden Ware Company very much higher than the rate originally in force. In June, 1905, the Wisconsin Central Railway Company notified the Menasha Wooden Ware Company that it must complete its shipment from Curtiss station during the months of July and August as the old tariff under which it was operating would not be allowed to remain in force any longer. For some reason shipments were not all concluded within the time fixed. The Menasha Wooden Ware Company being indebted to the Wisconsin Central Railway Company on account of freight shipped refused to pay on this shipment of bolts any other or greater rate than that prescribed in the tariff that had been in force for several years prior to the enactment of the Railroad Commission Law. The new tariff that was filed with the Railroad Commission, and which it may be claimed superseded the old tariff, was not in fact compiled until about June 15, 1905. The Wisconsin Central Railroad Company expressed a willingness to allow the shipment of the Menasha Wooden Ware Company to be made on the basis of the tariff in force prior to April 1, 1905, provided it could do so without violating the Railroad Commission Law. Mr. T. H. Gill, attorney for the Wisconsin Central Railway Company, and Mr. Silas Bullard, attorney for the Menasha Wooden Ware Com-

pany appeared before the Commission, and agreed on the foregoing statements of facts, which were taken down by the Commission's stenographer, and requested the Commission to render an opinion as to whether or not the payment in question could legally be made.

The question in dispute between the parties here as we understand it involves several thousand dollars. It is peculiarly a question for the courts and not for the Commission. Any conclusion we might reach is binding on no one and settles nothing. The courts may follow it if they concur in it and may reject it if they do not. The law under which we are operating makes no provision for the submission of such a question to us. There is but one consideration that we think of that would justify any action on our part in the matter. If we reach a conclusion that the Menasha Wooden Ware Co. is right in the controversy and payment is made by the Railway Company in good faith relying on such conclusion both parties would probably be relieved of the penalty provided by statute if it should be ultimately decided that our construction of the law was wrong. Such we take to be the logic of the decision recently announced by the Supreme Court of Wisconsin in the case of the *State of Wisconsin vs. The Chicago & Northwestern Railway Company* involving the collection of a penalty for failure to report gross earnings as a basis for taxation. At the urgent solicitation of the parties in interest we have reluctantly concluded to travel outside of what we conceive to be our legitimate domain in the present instance. If we hereafter conclude that the practice is bad it will be discontinued.

The provisions of the Wisconsin law that have a more or less direct bearing on the question before us are sections 4, 22, 24 and 35 of chapter 362, Laws of 1905.

Section 4 provides: "Every railroad shall print in plain type and file with the commission, within a time to be fixed by the commission schedules which shall be open to public inspection, showing all rates, fares and charges for the transportation of passengers and property, and any service in connection therewith, which it has established and which are in force at the time between all points in this state upon its line, or any line controlled or operated by it, and the rates, fares and charges shown in such schedules which are to take effect prior to January 1st, 1906, shall not ex-

ceed the rates, fares and charges shown on the schedules filed under the provisions of section 35 of this act."

Sec. 4a. "No change shall thereafter be made in any schedule * * * except upon ten days' notice to the commission * * * provided the commission upon application of any railroad may prescribe a less time within which a reduction may be made."

Sec. 4c. "It shall be unlawful for any railroad to charge, demand, collect or receive a greater or less compensation for the transportation of passengers or property or for any service in connection therewith than is specified in such printed schedules * * * as may at the time be in force, and the rates, fares and charges named therein shall be the lawful rates, fares and charges until the same are changed as herein provided."

Sec. 22. "If any railroad * * * shall * * * demand, collect or receive from any person, firm or corporation a greater or less compensation for any service rendered or to be rendered by it for the transportation of persons or property * * * than that prescribed in the published tariffs then in force, or established as herein provided or than it charges, demands, collects or receives from any other person, firm or corporation for a like and contemporaneous service such railroad shall be deemed guilty of unjust discrimination which is hereby prohibited and declared to be unlawful and upon conviction thereof shall forfeit and pay into the state treasury not less than one hundred dollars nor more than ten thousand dollars for each offense."

Section 24 makes it unlawful for any shipper to accept any rebate or concession whereby his property is "transported at a less rate than that named in the published tariffs in force as provided therein," and provides a penalty for such a violation of the law.

Section 35 provides: "Until December 31, 1905, unless the commission shall otherwise order, after application and hearing as hereinafter provided, it shall be unlawful for any railroad within this state to demand, collect, or receive a greater compensation for the transportation of property between points in this state than the charge fixed in the lowest published schedule of rates for the same service

between the same points, in force on the 1st day of April, 1905. Every railroad in this state shall, within thirty days after the passage and publication of this act, file in the office of the commission copies of all schedules of rates, including joint rates in force on its line or lines between points within this state, on the 1st day of April, 1905, and all rates in force between such points at any time subsequent to said date. Any railroad desiring to advance or discontinue any such rate or rates may make application to the commission in writing, stating the advance in or discontinuation of the rate or rates desired, giving the reasons for such advance or discontinuation. Upon receiving such application, the commission shall fix a time and place for hearing, and give such notice to interested parties as it shall deem proper and reasonable. If, after such hearing and investigation, the commission shall find that the change or discontinuation applied for is reasonable, fair and just, it shall grant the application either in whole or in part. Any railroad being dissatisfied with any order of the commission made under the provisions of this section may commence an action against it in the circuit court in the manner provided in section 16 of this act which action shall be tried and determined in the same manner as is provided in said section."

It is apparent from the foregoing statutes that the only question involved is, what was the legal rate in force at the time the shipments in question were made. If the tariff now on file with the Commission was in force any refund such as is sought to be received by the Menasha Wooden Ware Company would amount to a rebate unlawful alike for the carrier to give and for the shipper to accept. If the rate admittedly in effect on and after April 1st, is the lawful rate then the Menasha Wood-ware Company has the right to insist that no greater charge be exacted of it. In fact the statute attaches a penalty for an unauthorized exaction of this kind.

The tariff on file with the Commission bears date April 1st but it is admitted that such tariff was ante-dated and that it was not made up earlier than June 15. This *ex post facto* proceeding cannot, we apprehend, vary the rights of the parties. If the tariff in question would not be applicable if

it were dated as of the time it was born into the world, placing a stamp of antiquity on it, which it did not deserve, would not enhance its virtues or add to its comprehensiveness when the real facts were made known.

We do not think that there is any incongruity between sections 4 and 35 of the law. Logically section 35 should precede section 4, but the arrangement is not important. Logically, perhaps the second sentence of section 35 should precede the first one. The second sentence requires a railway company within thirty days after the passage of the act to file "*copies of all schedules of rates * * * in force on its line or lines between points within this state on the 1st day of April, 1905, and all rates in force between such points at any time subsequent to such date.*"

There is no ambiguity in this requirement whatever. All rates in force on April 1, 1905, should be filed with the Commission regardless of whether they had been raised, lowered or discontinued subsequent to that time, and under this provision it was the duty of the Wisconsin Central Railway Company to file the rates then in force affecting Menasha Wooden Ware Company shipments. If any new rates or any changes in the rates in force on April 1, were made between that time and the date of the passage and publication of the law such new rates or charges should also be filed with the Commission. The statutory requirement is too plain to admit of doubt on the proposition stated. The first sentence of section 35 provides that until December 31, 1905, unless otherwise ordered by the Commission after hearing, it shall be unlawful for any railway within the state to charge more for any service "between points in this state than the charge fixed in the lowest published schedule of rates for the same service between the same points in force on the 1st day of April, 1905." With one exception, which will be hereafter discussed, there is neither ambiguity nor room for divergent constructions of this sentence. The ambiguity relates to the meaning of the word "published" as used in the sentence. The purpose of the statute we think is apparent. The proposed law had been pending before the legislature for some time. Some strife has been engendered. A commission appointed under it would have much to learn before it could deal intelligently with rates. It was perhaps feared that some rates had been raised in anticipa-

tion of the passage of the act, and that others might be raised after its passage and before the Commission was so organized as to intelligently protect the shippers. It was, therefore, we apprehend, the purpose and intent of the law to make the rates in force on April 1, a period ante-dating the passage of the act, about six weeks, the maximum rates that could be changed during the remainder of the year 1905. Discriminating and unreasonable rates might be in effect at that time that were contrary to the spirit and purpose of the law but such rates could be adjusted by the Commission on the application of the carriers or of the shippers or by the Commission on its own motion. The carriers were, however, forbidden to raise the rates of April 1, except on application to the Commission, and before the Commission could act it must order a hearing and give the parties affected an opportunity to be heard. We think the provision for a maximum tariff for a few months until the Commission could get in working order was a reasonable one whether necessary or not.

Section 4 requires the railway companies to "print in plain type and file with the commission within a time to be fixed by the commission schedules * * * showing all rates, fares and charges for the transportation of persons and property which it has established and which are in force at the time between all points in this state upon its line * * * and the rates, fares and charges shown in such schedules which are to take effect prior to January 1st, 1906, shall not exceed the rates, fares and charges shown on the schedules filed under section 35 of this act."

Under section 35 copies of the tariffs should be filed within thirty days. The "printed" schedules provided for by section 4 should be filed at such time as the Commission should direct. It was a matter of common knowledge that very many of the thousands of tariffs in force were not printed. For the convenience of the Commission it was thought necessary that they should be. To do so would necessarily consume much time. It was essential that tariffs should be promptly filed with the Commission even if they were not in the most convenient form. Hence the provision contained in section 35 in regard to the time of filing copies of tariffs was intended to cover the interim between the thirty day limit and the time fixed by the

Commission under section 4. Section 4 carefully preserves the provision of section 35 providing for a maximum legislative tariff until December 31, 1905.

The solution of the question here involved, as we view it, hinges on the meaning of the word "published" as used in section 35. If the rate which the Menasha Wooden Ware Company was shipping its logs under was a published rate within the intent and meaning of that statute then it is the lawful rate to-day because it has not been lawfully superseded. If the rate was not published a different question is presented.

Before the passage of the Wisconsin law, tariffs applicable in the state might be divided into three general but not very well defined groups. (1) Those relating to inter-state shipments which the Interstate Commerce Act required should be filed in a public place in each railway station as well as filed with the Interstate Commerce Commission. (2) Those dealing with class rates which generally covered numerous commodities and a large number of stations and which were kept in the office of the railway company and in the depots in stations affected by such rates. (3) Those dealing with commodities that were not shipped on a class rate frequently relating to a single commodity and to shipments between two stations only. Such rates were sometimes promulgated in the form of a letter, sometimes they were sent out in a printed tariff, sometimes they were typewritten or hektographed. Of such tariffs a copy was kept in the railway office, one was sent to the agent at the receiving station, one to the agent at the point of delivery and one usually if not always sent to the shipper. The tariff in question came within the last class. Is such a promulgation of a tariff a publication of it within the meaning of the law?

It was suggested rather than urged by the counsel for the Railway Company that the word published as used in section 35 related to the first class of tariffs only. The language of the act expressly excludes this interpretation of legislative intent. The law required the filing of schedules showing all rates between points within the state. The railways were forbidden to exact more than the published schedules showed the rates of charge to be between points within the state. Only inter-state rates were required to be posted up by the Interstate Commerce Law. While it is no doubt true that there were some

purely intra-state rates in the schedules posted of inter-state rates, still their inclusion in such schedules which was not required by law could hardly be construed to be a publication of such rates if by publication is meant the giving of publicity in some manner provided by law. And it would hardly be doing justice to the intelligence of the legislature to say that it intended that only such intra-state rates should prevail until December 31, as were included in inter-state schedules. We reject this idea as being illogical.

It was further suggested by counsel for the Railway Company that in any event the publication referred to in section 35 should not be construed to apply beyond those classified schedules of rates that were usually printed and applied to numerous points and generally to numerous articles, which schedules were on file with the agents of the railway companies at the various stations to which such schedules applied. The difference between the publicity given to the second and third general class of rates is a difference in degree only. Such publicity was given in either case as would enable the station agent at a given station to quote rates to the point to which the shipper desired to ship. When the tariffs related to intra-state rates pure and simple the general public had no more right to insist on an inspection of them than it would have in case of a purely local tariff.

We think it was the intent of the legislature to include all rates and tariffs that were given out in the usual and customary manner by railroads when they undertook to establish rates. Simply because one tariff was of more general application than another and was therefore to be found in more stations does not prove that the tariff of the more limited circulation was not published. It was made public to the extent it was deemed necessary in order to move traffic under it. The classified rates were not amalgamated for the purpose of advertisement or publicity, but for convenience. There was apparently no reason or motive for making the one class of rates public and the other secret.

The word "publish" itself has no technical legal significance. To arrive at its meaning in a statute we must have recourse to lexicography. The meaning of the word is perhaps as well understood as is any definition of it.

The Century Dictionary gives the meaning of the word, "To make known to people in general: promulgate or proclaim as a law or edict. To exhibit: to display, disclose or reveal. To introduce to public notice." Webster, "To make public or known either by words, writing or printing as what before was private or unknown known: to notify publicly: to divulge, as a private transaction: to promulgate or proclaim as a law." Worcester, "The act of making public."

"Publish means to issue, to make known what before was private: to put into circulation: the idea of publicity, of circulation, of intended distribution." *United States vs. Williams*, 3 Fed. 484, 6. "Publish primarily means to make known." *State vs. City of Orange*, 54 N. J. L. 111.

An award is published when its contents are made known to the parties in interest. *Brooke vs. Mitchell*, 6 Mees. & W. 473, 478.

A libel is published when it is communicated to some person other than the plaintiff who understands it.

Prescott vs. Tousey, 50 N. Y. Sup. Ct. 12, 14.

Staub vs. Van Benthuyzen, 36 La. Ann. 467, 8.

And the dictation of a letter containing libelous or slanderous matter to a private stenographer constitutes a publication of the slander or libel even though neither the stenographer nor the party to whom the letter is addressed communicates its contents to any person.

Bambrill vs. Schooley, 93 Md. 48.

A will is published by a simple declaration of the testator to the witnesses that the instrument is his will.

Compton vs. Mitton, 12 N. J. Law, 70, 71.

A publication is the act of publishing or making known; notifying or printing; proclamation; divulcation, or promulgation.

United States vs. Comerford, 25 Fed. 902, 3.

State vs. Grey, 21 Nev. 378, (19 L. R. A. 134).

Sprone vs. Pillsbury, 72 Me. 20, 21.

As soon as the tariff in question was issued by the Wisconsin Central Railway Company and copies of it were sent to the stations at which commodities moving under it were re-

ceived and delivered and a copy was sent to the party moving freight thereunder we think such tariff was made known or divulged or proclaimed or promulgated and that it was therefore published within the meaning of the law. We think it was the manifest purpose and intention of section 35 of the act to make a maximum tariff for the unexpired portion of the year 1905, and that such rates as were in force as shown by the schedules in effect April 1, 1905, should constitute such maximum tariff and that such rates could only be changed on application to and leave by the Commission in the manner provided in section 35. We do not think the failure of the Railway Company to file this tariff can affect the question at issue.

We think what the legislature had in mind when it used the word "published" was giving out of rates to shippers in the usual and customary manner in which rates were promulgated. It could hardly have intended that some of the rates in force April 1, should be continued while others should not be, and it certainly did not intend that none of the rates of April 1, should be continued.

It is our conclusion, therefore, that the tariffs in effect on April 1, 1905, relating to the shipment in question continued to be the legal tariff until December 1, 1905, when such shipment was finished and that the Wisconsin Central Railway Company has no right to exact any greater charge from the Menasha Wooden Ware Company than that prescribed in such tariff.

Dated this 3rd day of July, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 52.

P. SMITH *ET AL.*

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Petition for the construction of a station at Gleason, Lincoln county. The petition which is signed by a large number of names sets forth the amount of freight and passenger business done at Gleason and alleges that the present meager facilities are entirely inadequate. At an informal conference the Railway Company gave assurance that a station would be built at Gleason with as much promptness as possible, which closed the case.

 No. 53.

O. G. KINNEY

vs.

WISCONSIN CENTRAL RAILWAY COMPANY.

Thos. H. Gill, for Respondent.

See number 49.

 No. 54.

MERRIMAC BRICK COMPANY

vs.

CHICAGO & NORTH WESTERN RAILWAY COMPANY.

W. G. Bissell, for Petitioner.

S. A. Lynde, for Respondent.

Petition alleging that the rates on common brick between Lodi and more than seventy-five stations named in the petition are unduly high and unreasonably excessive and a discrimination against the petitioner. The case was set for hearing, and the parties appeared, but before the testimony was taken

the "spirit of compromise" caused both parties to state before the Commission that a satisfactory schedule of rates had been agreed upon and that proceedings should be dropped. These rates are, of course, on file in the office of the Commission.

No. 55.

IN RE CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, CHICAGO & NORTHWESTERN RAILWAY COMPANY, WISCONSIN CENTRAL RAILWAY COMPANY, MINNEAPOLIS, ST. PAUL & SAULT STE MARIE RAILWAY COMPANY, CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY COMPANY, GREEN BAY & WESTERN RAILROAD COMPANY AND ILLINOIS CENTRAL RAILROAD COMPANY, THE INTERPRETATION OF SUBDIVISION "B" OF RULE 17, WESTERN CLASSIFICATION NO. 40.

This investigation was the outcome of the rates charged for shipments of boats by which a single row-boat, because of its dimensions, took a higher rate than a number of other boats of slightly different dimensions taken altogether. The rule to be investigated had only recently been adopted as the result of abstract mathematical calculations made by persons who were not familiar with traffic matters. The purposes of the investigation are set forth in the following notice issued by the Commission.

"Sub-division "B" of Rule 17, Western Classification No. 40 taking effect April 1st, 1906, Page 4 contains the following provisions.

'A minimum charge of 5,000 lbs at 1st class rate will apply on articles loaded in box or stock cars when such articles exceed 7½ feet in height or 6 feet in width or 22 feet in length. Also on articles more than 16½ feet in length when exceeding 2 feet in width, or 10 feet in length when exceeding 4 feet in width, or more than 8½ feet in length when exceeding 5 feet in width, except that actual weight and class rate may be applied whenever the small end door is utilized for loading articles in which the

only dimension that prevents loading through side doors, is length. In loading such articles the small end doors may be used without subjecting shipment to minimum charges of 5,000 lbs., at first class rate.' ”

An amendment changing the marginal notation opposite said rule was filed in this office on June 8, 1906, which amendment reads as follows: “Minimum charge for articles loaded on open cars and for large articles loaded in box cars.” “In applying the rule the greatest dimension of a package will be considered its length; the second greatest dimension its height; and the remaining dimension, its width.”

The foregoing rule as amended appears to this Commission to be ambiguous, indefinite and uncertain. It also appears to us that it has, in some instances raised the rate many fold that was heretofore charged for the transportation of certain bulky articles.

We have pursuant to the provisions of subdivision b of section 12, chapter 362 of Laws of Wisconsin for the year 1905, as amended by section 3 of chapter 13 of the Laws of said State, enacted at the special session of the legislature convened on December 4, 1905, investigated the reasonableness of rate of charge as now made by the above named Railway Companies on light weight articles on which the minimum of 5,000 pounds is charged for, but which articles can be loaded into the side doors of a 36 foot car. As the result of such investigation, the undersigned Commission, is satisfied that sufficient grounds exist to warrant a hearing being ordered to determine whether or not the rate of charge in each instance specified and referred to hereinbefore is unreasonable or excessive. The Commission also desires to consider and discuss the adoption of some rule in lieu of the one herein set forth that will be definite and certain as to its intent and meaning.

After notice of the hearing had been served the Railway Companies requested the Commission to stay proceedings until after the meeting of the Western Classification Committee, soon to be held, in the hope that this committee might make or suggest changes in the rule which should meet the objections of the Commission. The delay was granted. The Western Classification Committee, upon which all the respondent Railway Companies are represented, abrogated the objectionable rule and

re-established an earlier rule with some modifications. The new rule was accepted by this Commission and the proceedings were discontinued.

No. 56.

F. L. COREY

vs.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE
RAILWAY COMPANY.

Petitioner, in his own behalf.

A. H. Bright, for Respondent.

Application for the establishment of a side track, and the stoppage of freight and passenger trains to receive and discharge freight and passengers at Dwight, in Polk county, Wisconsin.

- Held,* (1.) That the amount of freight business that would be transacted at said station if it were established would not warrant the Commission in ordering a spur track and warehouse to be built, and ordering freight trains to stop and receive and discharge freight.
- (2.) That the local east and west bound passenger trains numbered 84 and 85 should stop at Dwight to receive and discharge passengers, and also cream and other express, and that a suitable loading platform for the handling of cream should be erected, and also a suitable platform for the convenience and safety of passengers should be built.
- (3.) Except during the season when cream is being furnished for transportation by express, the trains in question need only stop on signal.

Under date of June 16, 1906, a petition was filed with the Railroad Commission signed by a large number of persons living in the vicinity of Dwight, in the town of Garfield, in Polk county, Wisconsin, setting forth that Dwight is situated four miles east of Nye, and four miles west of Deronda, on the line of the Minneapolis, St. Paul & Sault Ste. Marie Railway Company; that up to the year 1901, a spur track was maintained at said point and local trains stopped there, but that during said year the service at said point was discontinued, the spur track being taken up and the trains ceasing to stop there; that there is now maintained there a creamery and general store, and that the country adjacent to Dwight is fertile

and thickly populated, and that the railway facilities afforded to persons living in the vicinity of Dwight are inadequate.

Under date of June 26, 1906, a formal petition was made by F. L. Corey, the chairman of the town of Garfield, which set forth the facts alleged in the prior petition, as well as some additional facts. It was alleged in the petition that the volume of business that would be transacted at Dwight, if a station were established there, would be sufficient to warrant the expense of stopping trains and maintaining a switch track at said point, and that the refusal of the Railway Company to stop its trains at said village and to restore the spur track had already resulted in a large loss to the inhabitants of said village and the surrounding country, and particularly to those engaged in business thereat, compelling them to travel four miles to transact business with said Railway Company, and to haul all the freight received for said village and the surrounding country from a station four miles distant, and to haul all the commodities produced immediately around Dwight to either the station maintained east or the one maintained west of said point. The petition prayed that the Commission make an order commanding said Railway Company to stop its local trains at said village for the purpose of receiving and discharging passengers with their baggage, and of receiving and discharging freight, and that such other and further order be made in the premises as the Commission might deem just and reasonable.

The answer of the Railway Company alleged that there was no village at Dwight, and that the only people in the immediate vicinity of Dwight were the keeper of the store located at said point, and a man in charge of the skimming station or creamery maintained there; also that the spur track referred to was taken up and removed before the creamery was erected and before the store in question was built at Dwight.

The answer further admitted that the country between Nye and Deronda, which stations are eight miles apart, is a fairly good agricultural country, but denies that the same is thickly settled, and denies that the conditions existing in said locality demand the establishment of a station at Dwight. The answer further sets forth that any business that was built up at Dwight for the Railway Company would be built at the expense of

the stations on either side of Dwight, and would not result in any increased revenue for the Railway Company. Objection was also made to putting in a switch because of the danger attendant upon placing switches on a main line or road, and it was further alleged that the amount of business transacted at Dwight was very limited, and that the conditions were such that no substantial increase in new traffic would be built up by establishing a station at Dwight.

A hearing upon the issues made up by the petition and answer was ordered to take place at the office of the Railroad Commission at the Capitol in the city of Madison on July 26, 1906.

The petitioner, F. L. Corey, appeared in person. The respondent Railway Company was represented by its attorney, Alfred H. Bright.

At the close of the petitioner's testimony on the first hearing a suggestion was made by the Commission of what might be a reasonable and satisfactory settlement of the controversy, which was acquiesced in by the petitioner and in reference to which the representative of the Railway Company desired time in which to consult with the management of the road, and the proceedings were accordingly adjourned. The Railway Company declined to adopt the suggestion offered, and appeared on September 12 and offered testimony in opposition to the granting of the prayer of the petition.

The evidence in behalf of the petitioner tended to show that there was a store, a skimming station, and a few farm houses at or in the immediate vicinity of Dwight; that Deronda, the nearest stopping place to the east, was four miles, and that Nye, the nearest stopping place to the west, was a like distance; that if a spur track was put in at Dwight considerable farm produce and milk would be shipped from there; that there is a farmer for every eighty acres in the vicinity of the proposed station, and considerable hay, grain and stock is raised around there; that the road to Nye is bad but the road to Deronda is better; that the cream taken from the milk at the skimming station is now manufactured into butter, but the farmers after November 1, when their present contract with the party operating the skimming station expires, desire to ship their cream to St. Paul and Minneapolis, provided they can do so without

being obliged to haul it to Nye or Deronda; that considerable quantities of eggs would also be shipped by express from Dwight if trains stopped at this point; that about fifty gallons of cream a day would be shipped during the summer months from Dwight by express; that there would be the usual amount of passenger traffic from Dwight if trains were stopped there considering the population of the surrounding country and the proximity of other stations.

On behalf of the Railway Company it appeared that the grade was level at Dwight, but that there was a curve from 250 to 300 feet west of the proposed stopping place, and another about 500 feet east of it; that the distance from St. Paul to Weyerhauser was 110 miles, the running time four hours, the number of stops twenty-two; the time lost on account of stops one hour and forty minutes, and that the average time lost in slowing down a train for a stop, doing the work at the station and getting up speed after starting, was four minutes, and that the actual running time of the train in question was about 47 miles per hour, and that the average train consisted of three coaches. It further appeared that there were a dozen flag stations between Rhinelander and Minneapolis at which these trains stopped, and at which no station was maintained, and that it was the policy of the road to make frequent stops to accommodate patrons, even where the revenues hardly warranted the making of the stops.

When the probable amount of freight business which the Railway Company would transact at this point if a siding were put in, and the present facilities afforded to patrons of the road for shipping freight are considered, we do not think that we would be justified in ordering a side track to be built, and in directing that freight trains should be stopped to receive and discharge freight. The petitioner practically conceded as much on the hearing.

In determining whether the local passenger trains, one east bound and one west bound, should be stopped to receive and discharge passengers and express, we believe we should consider the convenience such stoppage would afford to those living in the immediate vicinity of Dwight, the inconvenience that would result to them if the trains are not stopped, the expense of such stoppage to the Railway Company, the danger, if

any, occasioned thereby, the revenue that would be received at said point, and the seriousness of the loss of time that would result from such stoppage.

According to the testimony of some competent experts given on the hearings in the passenger rate cases, the cost of stopping light passenger trains such as those involved is twenty-five cents. If this be true, the actual cost of stoppage is not a very serious matter. We do not consider that there would be any danger attendant upon stopping trains at Dwight, because of the curves testified to or for any other reason that has been called to our attention.

The trains in question are local trains running between St. Paul and Minneapolis and Rhinelander. They are ordinarily passenger trains from Weyerhauser west, and accommodation trains from Weyerhauser east. The time from St. Paul to Weyerhauser, 110 miles, is four hours, and in the opposite direction four and one-half hours, as shown on the time card. The distance from Weyerhauser to Rhinelander is 102 miles, and the time is five hours and thirty-five minutes. In the opposite direction the time lacks five minutes of being five hours. The total time between Rhinelander and St. Paul, a distance of 212 miles, is nine hours and thirty-five minutes. It does not appear that this train makes important connections at any point, or that if it were necessary it could not just as well make its leaving time four minutes earlier or its arriving time four minutes later, if its present schedule is such that it could not conveniently make time and still make one more stop. We do not think that the speed of the train is such that it would be seriously handicapped if it made the additional stop.

The country between Nye and Deronda seems to be a well-settled farming community. The average distance between stations between St. Paul and Weyerhauser is five miles, and also between St. Paul and Rhinelander. The distance between Nye and Deronda is eight miles. There appears to be but two other instances of stations in Wisconsin west of Rhinelander being so far apart, and as to at least one of those there are no settlers between these stations. It seems to be the general policy of the respondent Railway Company, as well as other railway companies, to stop local trains at convenient points where the business would not warrant the maintenance of a regular

station. If the stoppage of the trains in question entailed any particular hardship on the Railway Company in this instance, we would hesitate to order them stopped. It is manifest that it would be a great convenience for the farmers living in this vicinity to be able to ship their cream and to take the trains in question to and from this point. In determining whether a given service is adequate or not, the convenience of the party on the one side should be measured with the inconvenience of the party on the other. In a case of this kind where the expense and inconvenience to the Railway Company will be very slight, and the convenience to those living in the vicinity of Dwight will be very considerable, by reason of the stoppage of the trains in question, we feel constrained to hold and do hold that the present service is inadequate, and that an order should be entered requiring the stoppage of the trains in question. The amount of revenue which a railway company will derive in a case like this is always problematical. If after a fair trial under the new order of things the revenue is so inconsiderable as not to warrant the considerable stoppage of the trains in question at this point the Commission will consider an application to discontinue the practice.

IT IS THEREFORE ORDERED, that the Minneapolis, St. Paul & Sault Ste. Marie Railway Company erect and construct at a point on its line, between Nye and Deronda, which was formerly known as Dwight Siding or Spur, a platform suitable for the loading and unloading of cream and other articles shipped by express, and in a place that is reasonably accessible to teams, and also that said Railway Company erect a platform, such kind and dimensions as is usually and customarily furnished at small stations where no depot is maintained, and sufficient to enable passengers to get on and off trains with safety.

IT IS FURTHER ORDERED, that said Railway Company stop its local passenger trains numbered 84 and 85, as shown on its time card of August 10, 1906, at the point above designated, for the purpose of receiving and discharging passengers and express. Except during the season when cream is being shipped, such trains need stop only on signal in the case of a passenger desiring to take the same, or on request to the con-

ductor in the case of a passenger desiring to leave the same at such point.

Dated this 15th day of September, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 57.

IN RE THE GRAIN RATES FROM CERTAIN STATIONS
ON LINE OF WISCONSIN CENTRAL RAILWAY TO
MANITOWOC AND MILWAUKEE.

Thos. H. Gill appearing for the Wisconsin Central Railway
Company.

See Number 48.

No. 58.

IN RE JOINT GRAIN RATES FROM CERTAIN STATIONS
ON THE LINE OF CHICAGO, ST. PAUL, MINNEAPOLIS
AND OMAHA, OVER THE LINES OF THAT RAILWAY
AND THOSE OF THE CHICAGO & NORTHWESTERN
RAILWAY TO MANITOWOC AND MILWAUKEE.

Thomas Wilson, general counsel and H. M. Pearce, general
freight agent, for the Chicago, St. Paul, Minneapolis and Omaha
Railway, and

S. A. Lynde, general attorney and F. P. Eyman, assistant gen-
eral freight agent, for the Chicago & Northwestern Railway.

See Number 48.

No. 59.

CHARLES O. CRON

vs.

CHICAGO, MILWAUKEE AND ST. PAUL RAILWAY COMPANY.

Complaint on account of the Railway Company not stopping train No. 58 at Camp Douglas, Wisconsin. It is alleged in the petition that the failure of the Company to do so causes the service which it performs at that station to be inadequate and discriminatory. The train stops at numerous other stations between La Crosse and Milwaukee, and its failure to do so at Camp Douglas is the cause of great inconvenience to the citizens and traveling public at that place. The Railway Company agreed to stop the train and the proceedings were dropped.

 No. 60.

THE OSCEOLA MILL & ELEVATOR COMPANY, A CORPORATION,

vs.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY COMPANY.

J. A. Frear, for Petitioner.

A. H. Bright, for Respondent.

Complaint against Minneapolis, St. Paul and Sault Ste Marie Railway Company for refusal to make connections with the side track which the shipper desires to build at his own expense.

The point at issue involves a consideration of section 1802, Wisconsin Statutes of 1898, as amended by chapter 386, Laws of 1905, making it obligatory for railway companies to make connections within terminal or yard limits.

Held, (1) That the point at which the present connection is desired is outside of the yard limits, and that therefore the statute has made no provision for the conditions which exist in this case; (2) That an unfortunate condition exists at the station complained of and the Commission will investigate the adequacy of the facilities and service provided thereat.

A petition was filed with the Railroad Commission setting forth that the above named Osceola Mill and Elevator Company, hereinafter called petitioner, owned and operated two mills at the village of Osceola, in Polk county, and desired to erect a spur track so as to connect said mills with the Minneapolis, St. Paul & Sault Ste. Marie Railway Company (hereinafter called Railway Company), and that said Railway Company refused to permit any connection to be made between its railway and such spur track and prayed the Commission that an order be made requiring such connection to be made. Other matters are set up in the petition as amended which will be alluded to hereafter.

The answer set up some physical difficulties in the way of grade and curves near the desired point of connection that rendered it inexpedient to permit the connection to be made, and that such point was not within the yard limits of said Railway Company at Osceola.

The petitioner appeared by his attorney, Jas. A. Frear, and offered testimony in support of the allegations contained in the petition. The Railway Company appeared by its attorney, Alfred H. Bright, and offered testimony tending to support the averments of the answer.

On the hearing the petition was amended so as to set forth certain alleged discriminations, and likewise so as to set forth that the station facilities afforded by the Railway Company at Osceola were inadequate and did not afford the patrons of the road the service to which they were justly entitled. The attorney for the Railway Company stated that he was not prepared to meet the new issue raised by the petitioner, and it was conceded that he was entitled to the statutory notice before being forced to trial on such issue. Both parties desired a decision on the question presented by the original petition.

The law under which petitioner claims the right to ask this Commission to make a compulsory order is section 1802, Wisconsin Statutes of 1898, as amended by chapter 386, Laws of 1905. The material portion of the law as amended is as follows:

“The owner of any elevator, warehouse, manufacturing plant or mill, or of any lumber, coal or wood yard located within one-half mile of any railroad, or any sidetrack thereof, may at his own expense construct a spur track

from any such elevator, warehouse, manufacturing plant, mill or yard to a point in the right of way *within the terminal or yard limits* of any such railroad *and the railroad shall connect the same with its tracks within such terminal or yard limits.*"

It was conceded at the hearing, and we think correctly, that whatever rights a private party may have to connect a private track, built at his own expense and for his own convenience, he gets under this statute. It was likewise conceded that the mills of the petitioner were less than one-half a mile from the road. As we view it, there is but one question for decision, and that is whether or not the point at which the petitioner desires to make the connection is within the yard limits of the Railway Company at Osceola. The statute is mandatory in its terms, and if the point in question is within yard limits, it is the absolute duty of the Railway Company to grant the petitioner's request regardless of the physical conditions. If it is not, then the Railway Company may refuse to make the connection whether hardship ensues or not, and whether its motives are good or bad. It can stand on its legal rights without apology and without explanation.

The siding that is used to load and unload freight at Osceola is on the south side of the track. Owing to warehouses, elevators, the depot and other buildings, and the nature of the ground, but three or four hundred feet of the side track seems to be available for loading or unloading carload freight. Owing to the contour of the country all of this unloading must be done between the side and main track. It is said that the work of loading and unloading cars is interrupted from one to two hours a day by switching. There is no other side track that is used or is available for yard purposes as far as the public is concerned. There are two sidings on the north side of the main track that are used for passing tracks, and that cannot be used for other purposes owing to the elevation of the tracks above the level of the ground on which the roadbed or trestle rests. The length of the siding used by the public is something over 1,200 feet from switch to switch. The length of the longest of the passing tracks on the north side of the main line is about 1,800 feet from switch to switch. About 400 feet from the east switch there is a highway which passes under the tracks.

About 1,412 feet farther east or 1,812 feet from the east switch the petitioner desires to connect with the main track, and it seems to be the only feasible point at which a connection can be made at any reasonable expense. From this point petitioner proposes to build about 900 feet of somewhat expensive spur track to its plants which it was testified would enable it to save \$3,500.00 a year in handling freight on the business it now does, and also enable it to greatly increase its business. To connect with the passing tracks referred to would necessitate the building of a high trestle work. The right of way appears to be partially fenced between the bridge referred to and the proposed point of connection. The elevation of the track for a portion of the distance renders a fence unnecessary.

One way freight train a day each way stops at Osceola and receives and delivers freight. It is claimed on the part of the petitioner that the west bound freight, when it does switching at Osceola, leaves the caboose and some cars coupled thereto on the main track while switching, and that in the case of a long train such caboose and cars would stand as far east on the main track as the proposed point of connection. The evidence on the subject is as follows:

Mr. Bernier testified that when he was surveying the proposed spur the west bound way freight stood on the track about 300 feet west of the proposed connection. Mr. Ladd testified that

“a freight train coming from the east usually stop their train east of the east switch and take their engine off and run down the switch in from the west end of the track. Now if they had forty-five cars they would average 34 feet inside, with bumpers I should say 37 feet, a train of forty-five cars, not including the engine and caboose, would be 1675 feet. So the rear of the train would be beyond the proposed switch.”

As a matter of fact the distance from the switch to the proposed point of connection is over 1800 feet. There is no evidence showing the number of cars ordinarily carried in a way freight train. The question whether the use to which the track between the east cattle guard and the proposed point of connection makes the main track and that portion of the right of way adjacent to its yard limits is the vital question in the case.

The evidence of the continued use of the part of the track as far east as the proposed point of connection is not very satisfactory. It would take a train of nearly fifty cars to reach from the switch to the point in question. Naturally trains going west would use the west switch for transferring cars, and would utilize at least a portion of the main track between the two switches for that part of the train not necessarily moved while the switching is being done. There was no claim that east bound trains used the main track for switching purposes as far east as petitioner desires to tap the main line. There is nothing east of the bridge to indicate an intention on the part of the company to use the ground on either side of the track, or the track itself, for station grounds except as occasional switching may be done there. The ground itself is unapproachable and fences appear to be maintained where the contour of the ground renders them necessary.

The question to be decided is whether or not the use of the main track to a point over 1,800 feet east of the east switch for switching purposes, in the manner testified, makes the right of way adjacent to the track to such point yard limits.

It was conceded on the argument that "station grounds" and "yard limits" were synonymous terms. This concession seems reasonable and appears to be in harmony with the decision in *McGrath v. Detroit, M. & M. R. Co.*, 24 N. W. 854 (Mich.).

The Wisconsin cases which attempt any definition of depot grounds have arisen mostly in reference to killing stock. In one case the injury complained of was by a passenger. In all such cases the railways have claimed more extensive depot grounds than the other party to the suit was willing to admit. Here conditions are reversed. Generally speaking the railways have placed their cattle guards some distance from the switches and have attempted to extend the station grounds to such cattle guards. Owing to the elevation of the track and the fact that the highway passes under the track, there are no cattle guards to aid us in the present case.

The decisions bearing on the legal phase of the case are not entirely satisfactory. In two cases our court seems to have decided that station grounds could not extend beyond the switches. In two other cases the court seems inclined to the opinion that the portion of the main line ordinarily used in switching might properly be considered as marking the bound-

ary line of depot grounds. In still other cases it has been held that the part of the right of way included between switches is not necessarily depot grounds. What is, and what is not depot grounds is ordinarily a question of fact for the jury, although we apprehend that where there is no dispute in the facts the question becomes one of law for a court to decide.

In *Blair v. Milwaukee and Prairie du Chien Railroad Co.*, 20 Wis. 254, 261, the cattle guard was placed 478 feet beyond the switch, and the ground between the switch and the cattle guard was used by trains in switching. On the question as to whether or not the distance between the switch and the cattle guard constituted station grounds the court said:

“As to the place of the accident being within the depot grounds of the company at Stoughton it seems to us, after careful consideration of the testimony, that there is no ground for saying that it was. It was out on the main line of the road where there is but a single track several hundred feet beyond the switch and beyond where the cattle guard now is. It is an admitted fact that the same was fenced by the company as part of its main line shortly after the accident in question and that it has remained so ever since. And although trains in switching sometimes run down to the place of the accident, still it is clearly shown that there is and was no practical objection to its being fenced. We do not think under the circumstances that it can be considered as part of the depot grounds.”

The cattle guard referred to in the opinion was erected in close proximity to the switch after the accident.

In *Fowler v. Farmer's Loan & Trust Company*, 21 Wis. 78, the distance from the switch to the cattle guard was but 238 feet, which distance was used by trains in switching. The jury decided that this piece of track was not within the yard limits and the court sustained the decision. It said, however:

“We are rather inclined to the opinion that the weight of evidence is in favor of that part of the railroad between the switch and the bridge being a part of the depot grounds.”

The court further said that all grounds necessary or convenient and actually used for station purposes are included in depot grounds. The piece of road in question here was ordinarily used by the train crews in switching.

In *Dunwoodie v. Chicago, Milwaukee & St. Paul Ry. Co.*, 70 Wis. 160, 163, the court defined the depot as a place where passengers got on and off cars, where goods are loaded and unloaded, and said that all grounds necessary or convenient and actually used for these purposes are depot grounds. In this case an animal was killed 60 rods north of the station, but adjacent to a spur track maintained by the company, and the question was whether or not the alleged yard limits were unreasonably large. The court said that it could not be said as a matter of law that the depot grounds included a spur track 60 rods north of the station, or that the right of way along there was properly embraced in depot grounds. The right of way was in fact fenced on one side.

In *Plunkett v. Soo Railway Co.*, 79 Wis. 222, 3, 5, the cattle that were killed came upon the track at a point 600 feet east of the east switch. The railway company claimed the place in question was depot grounds and the plaintiff asserted the contrary. In this case the court said:

“The grounds necessary or useful and used for the purpose of the freight and passenger business of the road, which includes all the business in which the public are interested, may properly be called depot grounds. This would include the switching, making up of trains and the use of side tracks for the storing of cars and the place where the public require open and free access to the road for the purposes of business. There is really no disagreement of the courts with respect to these essentials of depot grounds.

Within the widest definition found in any case the highway mentioned is far outside of the depot grounds and warehouses. The eastern end of the siding or switching tracks is as far as they could extend for any possible public purpose.”

In *Grosse v. C. & N. W. Ry. Co.*, 91 Wis. 482, the court said:

“Three conditions must concur to constitute the particular grounds, depot grounds, within the contemplation of law. They must be *necessary, convenient and actually used* for the purposes of depot grounds. They must be *necessary*. This, no doubt, is to be interpreted as meaning reasonably necessary. It is *not enough* that they are *convenient and actually used*; they *must be* reasonably neces-

sary as well. No doubt the question of what or how much ground at any particular station will be necessary for the convenience of business at that station must in the first instance be determined by the company itself. But that determination cannot, considering the nature of the interests involved, in all cases be conclusive. * * * In the instant case a portion of the appellant's right of way which was left unfenced for depot purposes was one-half mile in length. For that distance its tracks were exposed to the incursions of wandering animals, thus increasing the hazard to passengers upon its trains and exposing the animals themselves to the perils of passing trains and their owners to loss. The fact that the company left all this portion of its tracks unfenced is not conclusive that it was all necessary for depot grounds. It was properly a question for the jury."

In *Mills & Le Claire Lumber Co. v. Chicago, St. Paul, Minneapolis & Omaha Railway Company*, 94 Wis. 336, the depot grounds were left unfenced for a distance of 1,000 feet and the animals that were killed entered upon the track from such unfenced grounds. The court said:

"Prima facie, no doubt, the depot grounds include all that part of the right of way which is left unfenced between the switches and cattle guards on either side of the platform including the switches and side tracks and in the absence of evidence showing that they are unreasonable in extent will be deemed the true limits. It has even been held by this court in fact that the depot grounds may be deemed in some cases to extend even beyond a switch to that point which an ordinary freight train must run in order to switch and run back upon its side track."

In *Cole v. D. S. S. & A. Ry.*, 104 Wis. 460, the unfenced station grounds were 2,800 feet long and commenced 580 feet south of the south switch and ended 670 feet north of the north switch. The platform was opposite the south end of the switch track, and immediately south thereof, was a traveled highway. The track from the highway to the cattle guard at the commencement of the fence south of it for about 500 feet was not accessible or used for purposes of loading or unloading cars or of handling passengers. There were ditches on both

sides of the track of considerable depth, generally containing water. Trains were accustomed to run down to this locality in order to back on to the switch track, and also to stand there at times when delivering freight upon the platform. The plaintiff's horses entered upon the track from the highway and were killed. The jury found that the space between the switch and cattle guard was not depot ground and the verdict of the jury was sustained. The court said, however:

“Where, as here, the grounds left unfenced and treated by the railway company as depot grounds are unusually extensive and the *locus in quo* is outside of and beyond the switches and side tracks and is not used as a place of access by the public or patrons either for freight or passengers and only for the passing or standing of trains, the question whether it is necessary for and used as depot grounds is properly for the jury.”

As far as we have been able to find, the foregoing are all of the decisions of the Wisconsin court that bear directly on the question in issue. Primarily the right to fix the limits of depot grounds rests with the railway companies. If they seek to extend such grounds beyond reasonable limits, they cannot escape liability because they have called something a station ground that either was not used or was not reasonably necessary for that purpose. The cases in which the court expressed a view that the portion of the main track beyond a switch that was used for switching purposes might be considered depot grounds, were cases when the railways had themselves in a practical way, by the use of fences and cattle guards or substitutes therefor, attempted to define the limits of their grounds. Giving the evidence the most favorable construction for the petitioner, we do not think that under the decisions cited, the point where the petitioner desires to connect a spur track with the main line of the road is within the yard limits of Osceola station. We think the evidence is against the proposition that this particular portion of the main track is used for switching purposes at all. If the station grounds extend over 1,800 feet east of the east switch because of switching done on the main track, it is reasonable to suppose for the same reason that they extend a like distance west of the west switch. And if this were true and the spur track in question was put in, the yard

limits would necessarily be extended 1,800 feet still further east, because that additional space would be used in switching to and from the spur track. This would be stretching station grounds away beyond the limits outlined in any court decision we know of, and away beyond where we think they should be extended.

The only possible ground upon which it could be held, under the decisions cited, that the grounds in question were within yard limits, would be that the main track was ordinarily and usually used as far east as the proposed connection for switching purposes. There is no evidence before the Commission that would justify such a conclusion.

An unfortunate condition exists at Osceola, but it seems to us to be a condition for which the statute has made no provision. Under the facts and the law in the case we feel it incumbent on us to refuse to issue an order requiring the desired connection to be made. The issues raised by the amended petition will stand for hearing.

Dated this 23rd day of August, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

Ho. 61.

W. H. McGRATH

vs.

ILLINOIS CENTRAL RAILROAD COMPANY AND CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

W. H. McGrath, in his own behalf.

Complaint because of the failure of the Illinois Central Railroad and the Chicago, Milwaukee & St. Paul Railway to make the proper train connections at Dill, causing great inconvenience to people who live on either line desiring to go to and return from Monroe, the county seat, and also to and from Dodgeville and other points. People must either submit to

long waiting at Dill or drive a distance of ten miles. The secretary of the Commission made a special report on the situation and representatives of the companies visited the locality, as a result of which, it was agreed between the two respondent companies by which the Illinois Central Railroad will let its train No. 231, wait at Dill for train No. 7 of the Chicago, Milwaukee & St. Paul, not to exceed 20 minutes. The petitioner accepted this change in time as satisfactory to all concerned and the proceedings were dropped.

No. 62.

SAMUEL PERRY,

against

THE AHNAPEE & WESTERN RAILWAY COMPANY.

F. W. Hall, for petitioner.

David Decker, Jr., for respondent.

Complaint charging lack of reasonable station facilities at Forestville, Door County, Wisconsin.

Forestville is an unincorporated village containing more than 200 inhabitants. All trains stop there to receive and discharge passengers and freight. In a proceeding brought to compel the Railway Company to erect a station building at said place to accommodate freight and passengers, and to put an agent in charge of such building;

Held, (1) That section 1861, Wisconsin Statutes, 1898, in conjunction with section 9, chapter 362, Laws of 1905, makes it obligatory on the carrier to maintain a passenger depot warmed and lighted, as well as a place for the storage of freight, and also requires the carrier to maintain an employe to look after freight, sell tickets, etc.

(2) That the station facilities now furnished at Forestville are inadequate within the meaning of section 3 of chapter 362 of the Laws of 1905.

(3) That the statutes in question do not violate the Fourteenth Amendment to the Federal Constitution, when applied to the Ahnapee & Western Railway Company although such railway company has not been able to earn at all times its operating expenses and fixed charges.

The petition in this proceeding alleged that the service furnished by the Ahnapee & Western Railway Company at Forestville, in Door County, Wisconsin, was inadequate to meet the needs of the inhabitants of said village and of the surrounding country tributary thereto, in that no depot was provided except a platform and an open shed and no station agent was employed at said point, and that all freight received at said village had to be prepaid and that all freight shipped therefrom

had to be billed from stations many miles distant. The petition prayed that an order be made by the Railroad Commission requiring the Railway Company to provide reasonable and convenient depot and station facilities and also requiring said company to maintain an agent at said place.

On the hearing the petitioner appeared in person with F. W. Hall as his attorney. David Decker, Jr., appeared in behalf of the Ahnapee & Western Railway Company. The hearing was held on October 9, 1906.

The petitioner introduced evidence tending to show that the population of the unincorporated village of Forestville was 214; that there are seventeen business places of various kinds in the village, among them two general stores, a hardware store, a grist mill, an elevator, two grain warehouses, a brick yard, a meat market, a shoe shop, two creameries, a cheese factory and two saloons; that the farming country in the vicinity of Forestville was thickly settled and the area that was naturally tributary to this station exceeded one hundred square miles, and that the principal farm products raised and shipped consisted of hay, oats, peas and beets; also that there was a considerable quantity of live stock and dairy products shipped from this point.

The petitioner attempted to make an estimate of the amount of freight shipped to and from said point, as well as an estimate of the passenger revenue that should naturally be credited to this station. Such estimate was based largely on written statements made to the petitioner by the various parties who had occasion to ship to or from such station and consisted largely of hearsay evidence. Some of the statements the petitioner himself was able to verify to some extent. The estimate so made showed 567 carloads of freight shipped out from Forestville during the past year and 1,645,750 pounds of less than carload freight shipped out, and 1,578,520 pounds of less than carload freight shipped in. In endeavoring to arrive at the earnings of the station in dollars and cents the petitioner estimated the average freight received on each car to be \$20.00, and the average rate of freight paid on merchandise in less than carload lots to be \$.13 per hundred pounds. An actual count was kept of the passengers getting on and off trains at Forestville for a period of eleven days, and taking the figures shown for this period as a fair average for a year, and estimating the revenue derived from each passenger at \$.50, an estimate was made of

the amount received from the passenger service. The aggregate of these estimates amounted to between \$18,000.00 and \$20,000.00. The estimates at best are rough and are apt to be wide of the mark, if not wild in some cases, and are widely variant from the statement furnished by the Railway Company. pany.

The evidence of the petitioner further tended to show that the railroad in question was built through Forestville about twelve years ago; that the nearest station at which an agent is maintained, south of Forestville, is Algoma, seven miles distant, and the nearest station to the north, at which an agent is maintained, is Sawyer, fourteen miles distant; that there is a platform at this place, but nothing in the way of a building to provide shelter for passengers or freight that could, by courtesy even, be termed a station or warehouse. A little shed was built at this point when the railroad was first constructed, which has never been heated or lighted, except as it was lighted by a half window in one of its ends. It has become old and dilapidated, and a photograph produced shows a large hole in the shed roof.

The testimony of the witness was further to the effect that the patrons of the railroad were subjected to great inconvenience and loss by reason of the failure of the Railway Company to maintain an agent at that point. No L. C. L. freight could be billed to Forestville without being prepaid and when delivered there it was liable to be damaged by the elements, or stolen, if the owner was not on hand promptly to take charge of it. Freight could not be billed out from this station but had to be billed from either Sawyer or Algoma, and this necessitated delay, expense and trouble, as well as some risk from damage by the elements, or else by theft, if the freight was delivered on the platform any considerable length of time before it was loaded into cars.

Numerously signed petitions were filed with the Commission, setting forth the inadequacy of the present facilities and requesting that they be improved by the addition of a station building and the maintenance of a station agent at this point. Communications were also received from shippers who could more conveniently transact their business with the Railway Company at Forestville than at any other point, but had refrained from doing so because of the absence of a station agent

to take charge of the goods consigned to them or shipped out by them.

It further appeared that there had been some correspondence and negotiation between the Railway Company and the inhabitants of Forestville in reference to the establishment of a station at this point, and that in the fall of 1904 one of the officers of the Railway Company agreed that in the near future a station would be regularly established.

Mr. Decker in behalf of the Railway Company testified to the receipts from this point for the year ending July 1, 1906, as compiled by one of the clerks in the office of the railway company. The compilation, if correct, showed that there were shipped out from this station 199 carloads of hay, 42 of grain, 39 of peas, 27 of sugar beets, 27 of brick, 25 of stock, 2 of posts, 2 of wood, 1 of junk and 1 of household goods, making in all 365 carloads, on which the Ahnapée and Western Railway Company received \$3,072.83; that the merchandise shipped out in less than carload lots was 389,171 pounds, on which the railway company received freight amounting to \$295.59; that the amount of freight received at said station during this period of time was 390,000 pounds, on which the freight amounted to \$221.16; that the total number of passengers was 1,620, and the fares collected therefrom amounted to \$744.00, making the total receipts for the station—if it may be called such—\$4,333.58. The railway company, of course, has the reports from which an accurate statement can be made up. The clerk who made the compilation was not sworn, so the testimony in behalf of the Railway Company is of a hearsay character as well as that offered in behalf of the petitioner. There should not be any such discrepancy between the figures given by the Railway Company and the estimates made by the shippers, particularly as to carload lot business. One probable cause of the discrepancy is, no doubt, due to the fact that while the estimates of each party covered the period of a year they did not in fact cover the same time.

Mr. Decker in his testimony admitted that some other and better accommodations should be furnished for the care of passengers and freight, and that a regular station should eventually be established either at Forestville or Maplewood, a flag station some four miles north of Forestville; but that it was not practicable to determine at the present time which point

should have the preference in the matter of a station agent. He also testified that the road was but thirty-four miles in length; that the water competition was strong and that the road was built by local capitalists, and that only in three of the twelve years of its existence had it been able to earn its actual operating expenses and enough in addition thereto to pay interest on its fixed charges.

The foregoing are the essential facts presented to the Commission for consideration. As a matter of temporary relief Mr. Decker offered to place a box car at this point and partition the same off into waiting rooms and employ some person at Forestville to heat and light the same before the arrival and departure of trains, and to see that freight was sheltered. Such service could be obtained at a cost of about \$15.00 per month, whereas if an agent were placed in charge, who attended to the billing of freight and the other duties usually performed by a station agent, the expense would be \$30.00 per month additional.

The village of Forestville has a post office, and as an indication of the populousness of the surrounding country, it might be mentioned that the census shows the town of Forestville, in which the village is situated, to have a population of 1407.

The statutes bearing upon the obligation of carriers to furnish suitable station facilities and empowering this Commission to compel such facilities to be provided, where the railway companies refuse to provide them of their own volition, are the following:

Section 1801, Wisconsin Statutes of 1898, provides, that:

“Every corporation operating a railroad shall maintain a station at every village, whether incorporated or not, having a post office and containing two hundred inhabitants or more, through or within one-eighth of a mile of which its line of road runs, and shall provide the necessary arrangements, receive and discharge freight and passengers, and shall stop at least one train each day each way at such station, if trains are run on such road to that extent.”

Section 3, chapter 362, Laws of Wisconsin for 1905, provides:

“Every railroad is hereby required to furnish reasonably adequate service and facilities.”

Section 9 of the same act provides:

“It shall be the duty of every railroad to provide and maintain adequate depots and depot buildings at its regular

stations for the accommodation of passengers, and said depot buildings shall be kept clean, well lighted and warmed, for the comfort and accomodation of the traveling public. All railroads shall keep and maintain adequate and suitable freight depots, buildings, switches and side tracks for the receiving, handling and delivering of freight transported or to be transported by such railroads."

Section 12 of said Act provides:

"Upon the complaint of any person . . . that any regulation or practice whatsoever affecting the transportation of persons or property, or any service in connection therewith, are in any respect unreasonable or unjustly discriminatory, or that any service is inadequate, the Commission may notify the railroad complained of that complaint has been made, and ten days after such notice has been given may proceed to investigate the same as hereinafter provided. . . . If upon such investigation . . . any regulation, practice or service complained of shall be found to be unreasonable or unjustly discriminatory, . . . the Commission . . . shall have power to make such orders respecting such regulation, practice or service as it shall have determined to be reasonable and which shall be observed and followed in the future."

Section 14 of the act referred to relates to the order that shall be made by the Commission when it determines that a service is unreasonable.

Three questions arise under these statutes: (1) Is it the absolute legal duty of the carrier, on the undisputed facts in this proceeding, under any of the statutes cited, to furnish any or all of the facilities asked for thereat?

(2) Do the facts show that the service is inadequate at the place in question?

(3) If the facilities are found to be inadequate should an order be entered requiring the carrier to erect a depot and maintain an agent thereat in view of the financial condition of the carrier?

Our first inquiry naturally would be, what is a "station" within the meaning of section 1801? May it consist merely of a stopping place at which freight and passengers are received and discharged, or does it embrace the idea of a building with an agent in charge to transact the usual routine of business that

is transacted where agents are employed? We approached the question with the impression that a recourse to the books would furnish a ready and satisfactory answer to the problem. There seems to be a dearth of judicial decisions on the point. Occasional decisions are to be found holding that under certain statutes, specified places were or were not stations, but little is attempted in the way of a general definition.

Webster defines a railroad "station" as "a place where railroad trains come to a stand for the convenience of passengers, taking in fuel, discharging freight or the like." This definition is adopted in Bouvier's Law Dict. Vol. 2, p. 1031, Rawle's Ed.

The American & English Encyclopedia of Law, Vol. 26, p. 495, 2nd Ed., says: "A railroad station may be defined as a place where railroad trains come to a stop for the convenience of passengers, receiving and discharging freight and the like." The authorities cited furnish an indifferent support for the definition.

English's Law Dictionary, 744, defines a station as: "A building on a railroad for the accommodation of passengers, and the receipt, delivery and safe keeping of baggage and freight."

Anderson's Law Dictionary, p. 968, defines a station as: "A stopping place at which passenger tickets are ordinarily sold; as within the meaning of a statute forbidding a railway company to eject a person from its cars for nonpayment of fare except at some passenger station. In another statute or connection a different sense may be intended."

It has been held that where the place claimed to be a station had only a platform at which certain trains stopped to take and leave passengers, but tickets were not sold to or from such point, and it had not been designated as a station on the time cards, it was not a "station" within the meaning of a statute forbidding railroad companies to abandon established stations without the consent of the railroad commissioners. *State vs. Railway Company*, 41 Conn. 134.

There are other cases holding that the furnishing of limited facilities for receiving and discharging freight and passengers does not make the place at which such facilities are furnished a station. *Kansas City M. & B. Railway Company vs. Lilly*, 8 So. 644. *Beauchamp vs. I. & G. N. Railway Company*, 56 Tex. 239, 243.

If a place at which passengers and freight are received and discharged by a railway company is a station, regardless of whether a depot building is erected or not, it does not follow that the mere receiving and discharging of freight and passengers satisfies the requirements of section 1801. That section requires not only the maintenance of a "station" under certain conditions but also requires the carrier to "provide the necessary arrangements, receive and discharge freight and passengers," etc. The necessary arrangements to receive and discharge freight we assume would include the furnishing of a suitable warehouse where the same could be temporarily kept so as to preserve it from the elements and from theft. This would necessarily mean that some one should be placed in charge of such warehouse to receive and deliver freight. It might be said that it is not necessary in order to receive and discharge passengers that shelter should be provided for them while they are waiting for trains. Yet it has been held under a statute providing that, "Railroads having for their principal object the public accommodation, the proprietors thereof shall be bound to provide crossings, *stations*, and other facilities for the public," a railway company was liable in damages to a passenger for a disease contracted while waiting for a train at a station during inclement weather, because the depot building was not heated. *Boothby vs. Grand Trunk Railway*, 34 At. 157 (N. H.).

In providing that stations should be established in certain villages and that the carriers should provide the necessary arrangements to receive and discharge passengers, it does not seem unreasonable to suppose that the legislature had in mind not only the matter of taking on and discharging freight and passengers but also the matter of warehousing the freight and protecting the passengers from the inclemencies of the weather.

Section 9, chapter 362, Laws of 1905, makes it the duty of every railroad to provide and "*maintain adequate depots and depot buildings at its regular stations for the accommodation of passengers,*" etc. It also requires the maintenance of "*adequate and suitable freight depots.*" It seems to us that a place like Forestville, where all the trains on the road of the respondent are scheduled to, and do stop for the transaction of business, is a regular station within the meaning of this statute. If the stopping of trains to receive and discharge passengers and freight does not make Forestville a station in the absence

of an agent or station buildings, then it is the duty of the company under section 1801 to establish a station at such place. If Forestville is a station now, it is the duty of the Railway Company to furnish a freight and passenger depot under section 9.

Construing the two statutes together we think they require the Railway Company to establish a station at Forestville, to provide a freight warehouse, to provide a passenger depot, to keep the same heated and lighted, to keep a man in charge of its station to sell tickets, and also to receive freight intended for shipment so as to render the company liable for its safe keeping as soon as delivered, and to take charge of incoming freight until the same is removed by the consignee. Such being the legal duty imposed by statute on the carrier, there is little left for the judgment or discretion of the Commission, if it has any, to act on.

We entertain no doubt that the facilities for transacting business and the facilities furnished at Forestville are inadequate within the meaning of section 3 of the act cited, and in the case of the ordinary railway would not hesitate to make the order asked for. We confess, however, that the position of the Railway Company appealed to us very strongly. The road is but thirty-four miles long. Its terminals are lake ports. It runs through no village of any considerable size between terminals. It runs through a narrow peninsula where water competition is strong. Even the terminal towns are small. There are no large manufacturing industries on the line. The business furnished is that produced by a rural population. Although the territory had been settled for a long time it failed to attract any existing railway. The road is the result of local enterprise, and, as we are informed, of local capital very largely. Its building was an exhibition of commendable pluck. To those unfamiliar with the resources and possibilities of the country the project probably seemed to be of the quixotic order. Time will, no doubt, demonstrate that the enterprise was a sound business venture, and one in which the enthusiasm of the builders of the railway did not run away with their judgment. If we had any discretion to exercise we would have great hesitancy in placing any onerous burden on a weak road laboring under many difficulties and disadvantages that today owns no rolling stock of its own unless it be a few locomotives,

and that has paid its operating expenses and interest on its bonds in but three of twelve years of its existence, and this in the face of the fact that the last ten years have, on the whole, perhaps, been the most prosperous decade the railways of the country have ever experienced.

The building of a depot is in the nature of a permanent improvement to the property. The expense of keeping a man in charge of the station is a permanent addition to operating expense, which is a loss to the company, except insofar as the increase in business that may result therefrom offsets such loss. Considering the question in the abstract, we think that the furnishing of fewer facilities or poorer service than section 1801, Revised Statutes and section 9, chapter 362, Laws of Wisconsin for 1905, as construed and interpreted by us, call for, would not be furnishing adequate service and facilities within the meaning of section 3 of chapter 362, Laws of 1905.

A question worthy of consideration is whether or not the legislation referred to, when applied to the Ahnapee & Western Railway Company, is in conflict with the fourteenth amendment to the Constitution of the United States.

Neither a legislature or a commission may make a rate so low as to deprive the carrier of its ability to earn its operating expenses and some income on its investment, because such action has been held to amount to the deprivation of the carrier of its property "without due process of law," and also of the "equal protection of the laws." This principle was firmly established in *C. M. & St. P. Ry. Co. vs. Minnesota*, 134 U. S. 418; *Reagan vs. Farmers' L. & T. Co.*, 154 U. S. 362; *Smyth vs. Ames*, 169 U. S. 466; *C. M. & St. P. Ry. Co. vs. Thompkins*, 176 U. S. 167, and other cases.

It is a question that is not altogether clear how far a legislature may go in the way of imposing financial burdens on non-remunerative railroad properties. The burden that would be imposed here is not a large one, but it is in all probability a burden. The cases above cited all referred to alleged inadequate rates that were established by legislature or commission. The case here is one of "service," but there would not seem to be any difference in principle. We are not at all sure that the courts have intended to draw a distinction between the rights of the carrier when a rate is involved and when a service is involved. Speaking of the obligation of a carrier in regard to

depot and station facilities the Supreme Court of Minnesota said:

“It would seem to be now well settled, upon principles of public policy, that the decisive question in such a case should not be the convenience and benefit of railway companies alone. They undoubtedly have a right to consider their own profit and convenience largely, but also owe duties to the public, for which reasons they have been permitted to establish their roads, and enjoy many substantial privileges depending upon benefits which will accrue to patrons adjacent to their lines, and incidental to the obligations thus imposed it must be their duty to treat the public fairly, and furnish them with reasonable facilities to enjoy the benefits they confer; hence the discontinuance of an established railway station which their patrons have been permitted to use for years, upon the faith of whose location the people of a village and the surrounding country have depended, cannot be determined solely by the consideration whether a railway station is profitable to the road, nor upon its convenience and the adaptation of its affairs to the increased advantages and methods of transacting its business, nor by the test whether the continuance of a station will require it to incur increased expense.”

State ex rel. R. & W. Com. vs. Northern Pac. Ry. Co.,
96 N. W. 81, 82.

In *Covington and Lexington Turnpike Road Co. vs. Sandford*. 164 U. S. 578, 596, the court said:

“It cannot be said that a corporation is entitled, as of right, and without reference to the interests of the public, to realize a given per cent upon its capital stock. When the question arises whether the legislature has exceeded its constitutional power in prescribing rates to be charged by a corporation controlling a public highway, stockholders are not the only persons whose rights or interests are to be considered. The rights of the public are not to be ignored. It is alleged here that the rates prescribed are unreasonable and unjust to the company and its stockholders. But that involves an inquiry as to what is reasonable and just for the public.”

The foregoing language is cited and approved in *Smyth vs. Ames*, 169 U. S. 545, 466.

Our conclusion from a review of the foregoing authorities is that the legislation in question, when applied to the defendant in this proceeding, is not subject to any valid constitutional objection.

We therefore find that the station facilities heretofore and now furnished at Forestville are inadequate, and that the statutes cited impose an obligation on the carrier which the Commission could not modify or suspend if it were of the opinion that the equities of the case would justify such modification or suspension. The law is, of course, as binding on the Commission as it is on the carrier and where no discretion is vested in the Commission none can be exercised.

IT IS THEREFORE ORDERED, That said Ahnapee & Western Railway Company proceed to erect and construct a station at a suitable and convenient place on its right of way at the village of Forestville, in Door county, Wisconsin. That such station contain at least one waiting room, not less than 12x15 feet, or the equivalent thereof, in size; that the same be kept open and comfortably heated and lighted for at least one-half an hour prior to the time scheduled for the departure of each train carrying passengers; that tickets be kept on sale and sold at such station; that a suitable and convenient storage room for freight be provided and maintained; that some person be placed in-charge thereof to receive and receipt for parcel freight tendered for shipment, and to either bill the same out from said station or see that it is billed out from some other station, and that such person likewise take charge of incoming parcel freight and store the same in the usual and customary way, until called for by the owner or his agent.

A period of ninety days will be deemed reasonable in which to comply with the terms of this order.

Dated this 5th day of November A. D. 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 63.

PICK BROS. & CO.

vs.

CHICAGO AND NORTHWESTERN RAILWAY COMPANY.

Complaint alleging that the rate of 12 cents per 100 lbs. for the transportation of sugar from Milwaukee to West Bend, a distance of 34 miles, is excessive and that the same yields the Railway Company more than a fair rate of profit. This rate is compared with other rates. The case was set for hearing but before that time the petitioner wrote to the Commission, stating that they were not prepared to proceed and desired to withdraw the petition and at a future time probably enter several others.

No. 64.

W. J. CAMPBELL

vs.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY CO.

Thompson, Thompson & Pinkerton, for Petitioner:
E. B. Ober, for Respondent.

Complaint of shipper that the classification and rate on pine trimmings, or material of an analogous character, is unjust and unreasonable.

- Held*, (1) That the application of the lumber rate to the material in question is unreasonable and that the carrier desist in the future from charging such a rate;
- (2) That the railway companies carrying products of this kind in the State of Wisconsin enter into conference for the purpose of adopting a uniform classification and rate for the products mentioned, and that in the event of their failure to arrive at an agreement satisfactory to the Commission, this Commission, after due hearing, will promulgate such uniform rate and classification on such products.

The petitioner is a broker and wholesale dealer in lumber and forest products having his office and place of business in Oshkosh, Wis. In paragraph 4 of the petition the chief com-

mercial considerations entering into this controversy are clearly set forth as follows:

“That in the sawing and manufacturing of lumber there always has been more or less of waste, owing to defects in the timber, taper of the log, mistakes, accidents in manufacture or other causes. Oftentimes from these causes there are short pieces, which are reasonably sound and would be serviceable as lumber, except that they are too short to be used, sold or classified as lumber in the market. For example, it may be possible to produce and manufacture a piece of merchantable quality of low grade which, if it could be gotten out eight feet long or longer could be used as lumber but the fact that it can only be gotten out from one and one-half to three and one-half feet in length, renders it unfit for general or ordinary use and it is not suitable in building for use in place of what is known and called lumber and classified as such. That in the earlier days no notice was ordinarily taken of such pieces, but they were piled out and disposed of as and for fuel, or thrown into the burner as refuse and of no value. That the growing scarcity of timber and the increased value of forest products has in later years caused a more economical system of manufacturing and greater desire and effort to save everything that has any value for any purpose whatever, and many of the mills in Wisconsin have put in machinery especially fitted to cut out and produce from slabs, defective boards, and what would otherwise be fuel or waste, short pieces, generally narrow, of an inferior quality, but yet useful in manufacturing establishments where boxes are made, or other work is done where a short piece can be worked in, handled, of course, by the manufacturer with more difficulty, labor and expense than lumber, but yet when procured at a correspondingly low price, sufficiently available to encourage their use; all of which results in a direct saving and an increase in the value of the raw product, increase in the amount paid out for labor in manufacturing, and a small saving to the people of the State generally for the reason that what would be otherwise wasted or burned is put to some valuable and commercial use.

“That these pieces hereinbefore described, at some places and by some railways are classified as “fuel” or “wood”

and by some railways and in some places as "pine clippings." That they are not lumber as such word or classification is known and understood in Wisconsin or in the general market; and by some railways in the shipment of such pieces in carload lots they are classified, billed and shipped as wood or fuel and the freight rate adopted and charged is the rate for wood or fuel, and by other railways, when shipped in carload lots, they are classified, billed and shipped for "pine clippings" and at the rate adopted and charged for "pine clippings," either of which rates is considerably less than the freight rate on the same road for the same distance for lumber. That the adoption of these rates has encouraged the use of this otherwise waste product and has established an extensive but a reasonable market therefor, and their use has been beneficial to all concerned, and their classification as lumber, with the consequent increased freight rate thereon, will necessarily limit their use, if not entirely prevent it, and to a large extent relegate them to the wood pile or burner."

Succeeding paragraphs of the petition relate what the petitioner believes to be the true relation existing between the Chicago & Northwestern Railway Company and the Chicago, St. Paul, Minneapolis & Omaha Railway Company, and the relations between the various railways entering the city of Oshkosh and the Western Railway Weighing Association and Inspection Bureau.

Paragraph 9 of the petition states that by reason of the acts by said Railway Company done and threatened, there is now in the State of Wisconsin more than one classification of freight, and the classification of freight in this State is not uniform on all railroads, and that the said Omaha Company by reason of the premises is violating section 7 of chapter 362 of the Law of 1905.

In conclusion the petition sets forth that the rate charged by the Omaha and Northwestern Railways on such freight in the manner hereinbefore stated is unreasonable, and that inasmuch as shippers who ship over the Northwestern road a like product get a freight rate upon a classification of pine clippings and this petitioner who ships from points on the Omaha road over both roads to Oshkosh does not get such rate and is and will be compelled to pay the lumber rate which is higher. The rates of freight and the classification are both unjustly

discriminatory and the practice or regulations hereinbefore set forth and the service in connection therewith are unreasonable and unjustly discriminatory and the petitioner is compelled and will be compelled to pay a greater freight rate than would be charged on the Northwestern road independently for the transportation to Oshkosh, as well as other points, upon such property; and that the acts and doings of the said Railway Company, as well as the acts and doings of the inspector of the Western Railway Weighing Association and Inspection Bureau are unjust and discriminatory and without warrant or authority of law.

The answer of the Chicago, St. Paul, Minneapolis & Omaha Railway Company admits the allegations of the earlier paragraphs of the petition, including the statement that in the manufacture of lumber there are more or less short pieces of lumber nor fit for general use, but fit for use and used for different purposes in manufacturing plants, and that the petitioner ships such short lumber over the respondent's lines of road; and that the inspector of the Western Railway Weighing Association and Inspection Bureau named in the petition is employed by the respondent and that it is a part of his duty as such employee to see to it that freight shipped over the respondent's line is properly billed.

But the respondent denies that the relations alleged to exist between the Chicago & Northwestern and the Chicago, St. Paul, Minneapolis & Omaha Railway Companies and the Western Railway Weighing Association and Inspection Bureau, as described in the petition do exist, and that the rate of freight or the classification in force upon the respondent's lines or charged the petitioner for the transportation of such short lumber is unjust, unreasonable, or discriminatory.

The petitioner was represented by Thompson, Thompson & Pinkerton.

The respondent was represented by E. B. Ober.

As is seen by the petition the object of this controversy is the classification and rate on a shipment of some kind of forest product from Rice Lake, Wisconsin, to Oshkosh, Wisconsin. The material in question appears to consist mostly, if not entirely, of pieces of wood from 14 to 47 inches in length,—possibly some of it is longer and some shorter, it being impossible to state the exact facts in this respect at this time.

The most of it is one inch in thickness, although thicknesses up to two inches occur.

The fact appears to have been clearly established at the hearing that the Chicago, St. Paul, Minneapolis & Omaha Railway Company, which will hereafter be referred to as the Omaha Company, had not issued a tariff covering "pine cuttings" similar to C. & N. W., G. F. D. 48218, issued February 21, 1900, and which the petitioner suggests should have been applied to the shipments of the material in controversy from Rice Lake to Oshkosh. No one at the hearing was able to inform the Commission as to the specific character of the commodity which has actually been shipped under C. & N. W., G. F. D. 48218. Nor has the Commission been able to secure information covering this point since the hearing, although the assertion was repeatedly made that material like that shipped by the petitioner from Rice Lake to Oshkosh had been shipped between various points at the "pine cuttings" rate. It was argued that the C. & N. W. and the Omaha, being in reality one system or "line," the pine cuttings tariff should apply also on the Omaha, and if so that the material in controversy should get the benefit of the lower pine cuttings rate for the entire haul.

The inspector for the Western Railway Weighing Association and Inspection Bureau at Oshkosh had raised petitioner's shipment from "wood" to "lumber," causing a large increase in the freight charges. This inspector is employed jointly by a large number of railways constituting the membership of the Western Railway Weighing Association and Inspection Bureau, and it is his duty to see to it that the correct classification and rates are applied to every shipment within his jurisdiction. This inspector raised the classification of the shipment in question on the ground that the contents of the car, which was billed as wood, were not used for fuel, but instead they were taken to a box factory and used in the manufacture of boxes, just as lumber is used. On this account the inspector held that the shipment should be raised to the lumber basis.

The testimony further shows that the shortest length of boards included under the head of "lumber" had gradually decreased from about ten feet a decade or two ago to six feet at the present time. A price list of lumber effective today was introduced to show that such price list included no lengths

of less than six feet. A consignee would have the right to reject shorter lengths, unless such lengths were expressly included by the terms of the contract. In the ordinary acceptance of market terminology it would seem, therefore, that the material in question was not "lumber."

On the other hand, it was argued that this material was not "wood," for the reason that it was not used for fuel and hence the wood rate should not be made to apply. It was also testified to that the material in question was invoiced per thousand feet. Such a quantitative measurement in thousand feet it was admitted was a characteristic of lumber, but it was further explained that such measurement per thousand feet rested upon weight, a certain number of pounds being considered the equivalent of one thousand feet. The number of pounds which is regarded as the equivalent of one thousand feet appears to vary from about 2,400 to 2,800 pounds. Again, it was pointed out that "wood" was never weighed and that hence this material could not possibly be wood; and the fact that the petitioner had made an alternate offer for the purchase of the material at Rice Lake of \$8.00 per thousand feet f. o. b. Rice Lake and \$10.50 f. o. b. at Oshkosh was suggestive of the further fact, the respondent claimed, that the petitioner himself had rated this material before he had purchased it as lumber, the difference between \$8.00 and \$10.50 being approximately the lumber rate between Rice Lake and Oshkosh. The petitioner explained these two prices which he offered at Rice Lake upon different grounds, namely, the peculiar conditions under which the bargain was made, which he described.

The Omaha Company has on file with the Commission a considerable number of tariffs covering shipments of "slabs," "edgings" and "trimmings," between designated points, numbered as follows: G. F. D. Nos. 18358, 15025, 15073, 8296, 14083, 8195, 8185, 8167, 8132, 19052, 18570, 8058. It would seem, therefore, that the material in question would fall within the designation of one or more of these three terms, or it would have to be classed as wood or lumber, so far as the Omaha Company is concerned. As stated before, the Omaha has no rating on "pine cuttings." The C. & N. W. tariff on pine cuttings contains, among others, the following notation:

"The rates named in this tariff will apply only on Bolts and Pine Cuttings, in straight carloads. If cars contain

any other forest products the entire shipment will be subject to tariff on commodity taking the highest rate."

This notation would seem to support the contention of the Railway Company that "pine cuttings" are a "forest product," such as branches of trees, stumps, etc., not more than three and one-half feet in length. Yet no one at the hearing knew of a product of this description having ever been shipped, nor have we been able to learn since the hearing of a single shipment of that class of forest products. We have inquired of experienced lumbermen and not one of them knows such "pine cuttings." The Commission will continue its investigation of this matter in the hope of finding out what the real facts are. If "trimmings," "clippings" and "edgings" have been shipped under the "pine cuttings" tariff for some persons while others have been charged the lumber rate, or even the wood rate, a discrimination has clearly been practiced. The above mentioned Omaha tariffs on trimmings, clippings and edgings are uniformly lower than the rate on wood between the same points.

Considering all the facts in this case we are convinced that it is unjust to charge the lumber rate on the class of material shipped by the petitioner between Rice Lake and Oshkosh, which, up to a few years ago, was fuel or waste product. The facts before us, however, are not sufficient to enable us to determine the classification and rate which under all the circumstances in this case may be just and reasonable. We therefore deem it proper to invite the Omaha Company to enter into conference with the other railway companies carrying this class of material in the State of Wisconsin, with a view of adopting a uniform terminology and classification for products of the kind in controversy, subject to the approval of the Commission. The Commission is ready to assist in bringing about an early settlement of this question; and should the various railway companies be unable to come to a satisfactory agreement, we shall, after due hearing promulgate such uniform classification and rate as may be just and reasonable.

IT IS THEREFORE ORDERED, that the Chicago, St. Paul, Minneapolis & Omaha Railway Company cease classifying material like that shipped by the petitioner from Rice Lake to Oshkosh as lumber and charging the lumber rate; and that on all ship-

ments made between the date of the effectiveness of this order and the issuance of whatever uniform classification and rate on products of this kind may be made in the future, the Railway Company shall charge a less rate than it charges for the transportation of lumber.

Dated this 4th day of October, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,
B. H. MEYER,
HALFORD ERICKSON,
Commissioners.

Twenty-five days after the decision was rendered, namely, October 30th, the Commission held a hearing in a proceeding on its own motion for the purpose of ascertaining the facts on the basis of which the classification and rate to be applied to pine clippings, trimmings and edgings might be determined. For this see case Number 320.

No. 65.

MELCHOIR SCHMIDT, PRESIDENT, VILLAGE OF NEW
GLARUS,

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COM-
PANY AND THE ILLINOIS CENTRAL RAILROAD
COMPANY.

John Luchsinger, for Petitioner.

William Ellis, for Chicago, Milwaukee & St. Paul Ry. Co.,

Jones & Schubring, for Illinois Central R. R. Co.

Complaint because of the failure of the Illinois Central and the Chicago, Milwaukee & St. Paul Railway trains to connect at Monticello. The petitioner who is president of the village board of New Glarus, represented that citizens of his town are now

obliged to travel over a circuitous route of 37 miles, accompanied by great inconvenience and loss of time and expense in going from New Glarus to Monroe, whereas, if proper train connections were established it would be necessary to travel only 17 miles and save much time, inconvenience and expense. Monroe is the county seat and naturally there is considerable travel to that city. Under present arrangements, after suffering all this inconvenience, people have only the brief noon hour at Monroe, when public offices are closed, for the transaction of business, if they desire to return home the same day. After the testimony had been taken an informal conference was held at which the Railway Companies agreed to make the necessary changes in their train schedules and establish the desired connections, whereupon formal action on the part of the Commission became unnecessary.

No. 66.

FOUNTAIN CITY SUPPLY COMPANY, P. F. BOULAY &
BRO. COMPANY AND HELMER MILLING COMPANY,
vs.
WISCONSIN CENTRAL RAILWAY COMPANY.

Petition alleging unjust discrimination in rates on crushed stone from Hamilton to Fond du Lac, Oshkosh and other places as compared with the rate from Waukesha to Fond du Lac. The rate from Waukesha to Fond du Lac is $1\frac{1}{2}$ cents per hundred pounds for a distance of 58 miles, while the rate from Hamilton to North Fond du Lac, a distance of 10 miles, is 2 cents; Hamilton to Oshkosh, a distance of 25 miles, 2 cents; and Hamilton to Fond du Lac, a distance of 6 miles, 1 cent. Before this case came to a hearing, the three petitioners and the Railway Company signed a stipulation requesting the Commission take no further action in the matter.

No. 67.

BLOOMER PRODUCE COMPANY

vs.

CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA RAILWAY COMPANY.

J. Maloney, for Petitioner.

E. B. Ober, for Respondent.

Petition on account of the refusal of the Railway Company to accept potatoes as a part of a mixed carload shipment with hay, oats and grain, at the carload rate. The petitioner avers that he frequently has opportunity to fill orders calling for smaller quantities of potatoes and grain to the same consignee and that the arbitrary ruling of the Railway Company prevents his making up such mixed car lots and shipping them at carload rates. This is equally unjust in view of the fact that the carload rate on potatoes, grain and hay, is the same for each of these commodities, to the places to which petitioner desires to ship. The answer of the Railway Company, denied the allegations of injustice in the existing rules and regulations and protested against any change.

The history and development of mixed carload ratings were presented at the hearing in this case and it became clear to all that the Commission could not dispose of this petition without passing upon the existing rules governing mixed carloads in general. A letter was therefore addressed to the petitioner, setting forth this view of the matter and notice was sent to the Railway Company to the effect that the Commission would investigate the entire question of mixed carload shipments. For an account of these proceedings, see case number 75.

No. 68.

IN RE NORTH WISCONSIN FARMERS ASSOCIATION.

The North Wisconsin Farmers Association is a voluntary organization formed for the purpose of advertising northern Wisconsin lands and of inducing settlers to locate thereon. It is supported by voluntary subscriptions made by certain counties and by residents of the northern portion of the State generally.

No particular lands are advertised and many if not most of the subscribers have no lands of their own for sale. One of the means of advertising employed was to equip a car with samples of the farm products raised in the different portions of the territory included in the organization, and to exhibit such products in Minnesota, Iowa, southern Wisconsin and Illinois, for the purpose of attracting settlers to northern Wisconsin. The railway companies penetrating the northern part of the State, being interested in the settlement and development of the territory in question, have heretofore transported the car free of charge, together with the occupants of such car. On an application by the Wisconsin Central Railway Company and the above named association for a ruling from the Railroad Commission as to whether or not the railway companies could legally continue to render the services heretofore rendered free of charge.

- Held*, (1) That the railway companies might, if they saw fit, contribute to the association in question a sum equal to the usual charge for the haulage of such a car, and this being so, there is nothing in the law to prevent the railway companies from making a contribution by way of service to the objects and purposes of the association, they being directly interested in and benefited by the colonization of northern Wisconsin, and having the right to contribute money or its equivalent for advertising purposes.
- (2) That under the provisions of section 1, of chapter 13, of Laws passed at the 1905 special session of the legislature, the occupants of such a car would be obliged to pay the regular rate of fare when traveling between points within Wisconsin.

The North Wisconsin Farmers Association is a voluntary organization composed of inhabitants of a number of counties in the extreme northern portion of the State of Wisconsin. Its members are farmers, merchants and citizens of the territory mentioned generally. Its purpose is to induce settlers to locate upon the vacant lands in the northern portion of the state. The association is not engaged in the business of selling lands, or in the business of dealing in them, and does not advertise any particular lands for sale. It employs a secretary, who is paid a salary. No other member of the association draws any salary or receives any direct benefit from the Association. The contributors undoubtedly expect to receive some indirect benefit, which would probably consist largely in the increase in property values that naturally follows the settlement and cultivation of a new country. The effect of colonization, no doubt, will be to increase the value of the taxable property of the region in question as it is settled up and property owners will no doubt be benefited by such settlement.

For the purpose of promoting the advertising of northern Wisconsin lands, the association procured from the Wisconsin Central Railway Company a passenger car, which has been fitted up by the association. This car is moved about from

place to place in southern Wisconsin and in portions of Minnesota, Iowa and Illinois at certain seasons of the year, in charge of the secretary of the association. In the car are carried specimens of the various kinds of grain that are raised in the northern portion of the State, and the car is fitted up in such a manner as to attract attention as an advertisement. The railways penetrating northern Wisconsin, have, generally speaking, heretofore carried this car over their lines of road free of charge. The Wisconsin Central Railway Company has contributed the use of the car free of charge and also has carried the same over its line of road without charge. Substantially all of the railways of any importance in the state penetrate the territory covered by the association. As the timber is being depleted in this section of the State it is important to the railways as a business proposition to encourage settlement along their respective lines so as to make business for themselves. In fact, they are very much interested in the settlement and development of the northern portion of the State, which has been a very profitable field for the railways in the past, but which is becoming less so every year.

Recently Mr. Fairall, the secretary of the association, has been advised by certain railways that in their opinion they could no longer continue to haul the car in question free of charge, owing to the operation of chapter 362, Laws of 1905, generally known as the Railroad Commission Law. Mr. Fairall called upon the Commission and stated that neither he nor his association desired to violate the law, and asked that the Commission advise him whether or not in its judgment the railways could legally continue to move the car free of charge if they desired to do so.

In regard to the legality of carrying occupants of this car from place to place free of charge we entertain no doubt. We think it is forbidden by section 1, chapter 13, of Laws passed at the special session of the legislature held in December, 1905. The secretary and such help as he employs when going about, are employed and paid by the association and not by any railway company, and we do not think they are entitled to travel between points within the State of Wisconsin without paying the usual and regular rates of fare.

In regard to the right of the railway companies to carry the car referred to a different question arises. The railways are much more interested in colonizing northern Wisconsin than

any individual is. To encourage colonization they sell reduced rate tickets into this region. Some of them spend considerable money in advertising lands in the northern portion of the State so as to induce settlers to locate on them. It is, of course, a perfectly legitimate thing for a railway company to advertise for the purpose of increasing its business and revenue. Excursions are advertised and agencies are maintained in different places for the purpose of advertising. In fact, the item of advertising expense on the larger roads in the State of Wisconsin each year is a large one. We take it that the railways might contribute to the funds of the Association sufficient sums of money to cover the cost of carrying the car in question, and also to cover the reasonable value of its use, and that such action would not be illegal. Instead of making a cash contribution to cover the expense of carrying the car, they elect to transport the car as their contribution to an enterprise in which they are co-workers with the residents of the northern counties who have membership in the Association. We do not think that this is forbidden by any provision contained in chapter 362 of the Laws of 1905, as amended at the special session of the legislature held in December of that year. Each of the railway companies could undoubtedly fit out such a car if it saw fit for advertising purposes. The mere fact that there is co-operation between the railway companies and the inhabitants of the territory advertised, and that the inhabitants contribute the larger proportion of the expense, can hardly make it unlawful for the railway companies to do their share towards furthering the enterprise. If the cars were carried for the purpose of advertising the lands of certain land companies who were advertising their own lands as a business proposition and for their own benefit, a different question might arise, but we do not think the law of Wisconsin was intended to prohibit, or that in fact it does prohibit the railway companies from carrying the car in question free of charge under the circumstances detailed herein.

Dated this 25th day of August, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 69.

FRANK C. SMITH

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

L. H. Bancroft, for Petitioner.

C. E. Vroman, for Respondent.

This proceeding involved the general question of the adequacy of the facilities and service on the Prairie du Chien Division of the Chicago, Milwaukee & St. Paul Railway, from Madison to Prairie du Chien. The first official communication which the Commission received regarding this matter came from Senator Robert M. La Follette, who complained of the lack of train facilities and the crowding of passengers, frequently compelling them to stand for long distances. In addition three formal complaints were lodged and the Commission also issued notice of investigation on its own motion in order that every phase of the questions presented might be covered. Petitions relating to train service, signed by numerous citizens, were submitted from Mazomanie and Madison. Before the date set for the formal hearing, an informal conference was held in the office of the Commission, at which there were present attorneys and other representatives of Richland Center, Muscoda, Boscobel, Prairie du Chien, Soldiers Grove, Wauzeka and Milwaukee, besides representatives of the Railway Company, about twenty altogether. At this conference the situation was thoroughly discussed and, as will be noted below, an acceptable solution found.

A brief reference to the complaints will be sufficient to explain the situation to which people living along the line of the Prairie du Chien Division objected. The petition of L. H. Bancroft went into the details of the existing service on the branch line from Lone Rock to Richland Center. It referred to the 3,000 population of the city of Richland Center, with a tributary population of upwards of 20,000 people and the large volume of traffic which this population supported. It pointed out the dilapidated and unsanitary condition of the "so-called depot" and the lack of attendance at the same; it objected strongly to the quality of the service provided by the trains

which the company "pretended to operate" between Richland Center and Lone Rock, the inferior and defective equipment, the poor condition of the track, the powerlessness of the small train crew to cope with the traffic, the unsightly surroundings of the company's property, and the failure of the company to maintain a night telegraph operator.

The petition of F. C. Smith alleged that no improvements had been made in the service for 25 years, that passengers frequently were unable to find seats, that women were obliged to ride in the smoking car, that the company did not operate a Pullman or parlor car, and, in short, that the whole service was "miserably inadequate."

The petition of John J. Blaine, specified not only the entire line from Madison to Prairie du Chien, but also the two branches running from the main line to Richland Center and La Farge, respectively, alleging that both freight and passenger service were inadequate, and that the company failed to furnish proper connections with the Chicago & Northwestern Road at Wauzeka and Lone Rock.

Soon after notice of the hearing in these cases was served on the Railway Company, a representative of the company stated to the Commission that the company should make no attempt to justify the present service, that the same had been the object of much attention and solicitude on the part of the officials of the company but that they had never quite been able to see their way clear toward finding a satisfactory solution on a business basis, nor did they now; and that the company desired to have the Commission undertake a thorough investigation and make such recommendations or order as they deemed just. The Commission immediately made preparations to take testimony and make thorough investigations at all important places along the Prairie du Chien division. Meanwhile, the wishes and desires of people were being formulated and discussed, mass meetings were held, and as a result a conference was arranged for in the office of the Commission, for the purpose of considering a proposition which the Railway Company desired to submit. The conference lasted all day and was characterized by much earnestness and good feeling. At the close of the conference, the following proposition was agreed to and recommended by some and acquiesced in by all:

"The Chicago, Milwaukee & St. Paul Railway Company

proposes to run a passenger train daily, except Sunday, from Madison to Richland Center, carrying a coach from Madison to be put on to a through freight at Lone Rock running through to North McGregor, the return trip of a through coach from North McGregor to Madison being made from North McGregor to Lone Rock on Stock Freight No. 166. The service between Lone Rock and North McGregor to include a combination passenger and baggage car in addition to the coach above referred to. The schedule upon which this service will be operated to be finally determined by General Superintendent Bush, to the satisfaction of the Wisconsin Railroad Commission."

When this proposition reached the operating department of the Railway Company, the responsible officials appear to have felt that after all the proposed freight service between Lone Rock and Prairie du Chien might prove more difficult and expensive than they had at first supposed and that possibly it might be very difficult to live up to such a schedule, in which case the complaints from west of Lone Rock would again come before the Commission, for the representative from Boscobel had expressly reserved the right to call for action on his complaint in case the proposed service should not meet the requirements. Besides, the officials of the company, we are informed, felt that there was much force in the arguments presented at the conference to the effect that a great railway company like the Chicago, Milwaukee & St. Paul, should not ask its patrons in an old and settled part of the State to ride in a freight train. Consequently it was decided to run the new passenger train through from Janesville to North McGregor, giving the Richland Center branch passenger connections at Lone Rock. It was furthermore agreed to run the train which has for years left Milwaukee shortly before noon out of there at 1:45 P. M., and going west from Madison at about 4:40 P. M. This schedule is now being observed and the new train is running in both directions at the hours agreed upon. The company has also undertaken to make necessary improvements in station and other facilities.

No. 70.

C. R. GOLDSWORTHY

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY
AND WISCONSIN CENTRAL RAILWAY COMPANY.

Goggins & Brazeau, for Petitioner.

S. A. Lynde, for C. & N. W. Ry. Co.,

Thos. H. Gill, for W. C. Ry. Co.

On the 28th day of August, 1906, the petitioner in the above entitled proceeding filed a complaint against the Chicago & Northwestern Railway Company, alleging that the village of Vesper, Wood county, Wisconsin, contained a population of more than two hundred inhabitants, and that the respondent company maintained there no agent and no station buildings, except a small shed, unwarmed and unfit for use; that outgoing and incoming freight was uncared for by respondent company. The petitioner prayed that after due hearing and investigation the Commission enter an order requiring the respondent company to maintain an agent, and erect suitable station buildings at the said village, and for such other and further order as to the Commission might seem just and reasonable. The matter came on for hearing on the 18th day of September, and it appeared that the Wisconsin Central Railway Company had a line of road running through Vesper, parallel to the tracks of the Chicago & Northwestern Railway Company, and one hundred feet distant therefrom, and that the said Wisconsin Central Railway Company maintained neither an agent nor suitable station facilities at said village; wherefore petitioner asked leave to amend his petition so as to include the said Wisconsin Central Railway Company therein and by stipulation between the parties the hearing was adjourned to the second Tuesday in November, and leave was granted petitioner to file his amended complaint. Subsequently, by agreement between the parties, petitioner withdrew his complaint on agreement between himself and the respondent Railway Companies that the said companies were to erect suitable joint station buildings at Vesper, and maintain a joint agent at that point.

No. 71.

JOHN TORRFNCE

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Ray S. Reid, for Petitioner.

C. E. Vroman, for Respondent.

Petition alleging that the rate on structural iron between La Crosse and Viroqua is excessive and discriminatory. Before the matter came to a hearing the attorney for the petitioner wrote to the Commission that his client desired to withdraw the complaint for the present because the Railway Company had promised to put in a satisfactory rate.

No. 72.

CHIPPEWA SUGAR COMPANY

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY COMPANY AND WISCONSIN CENTRAL RAILWAY COMPANY.

R. G. Wagner, for Petitioner.

Wm. Ellis, for C. M. & St. Ry. Co.

H. M. Pearce, for C. St. P. M. & O. Ry. Co.

See Number 72

No. 73.

WISCONSIN SUGAR COMPANY

vs

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

R. G. Wagner, for Petitioner.

M. G. Jefferson, for Rock Co. Sugar Co.

Wm. Ellis, for C. M. & St. P. Ry. Co.

H. M. Pearce, for C. St. P. M. & O. Ry. Co.

S. A. Lynde, for C. & N. W. Ry. Co.

Jones & Schubring, for I. C. Ry. Co.

Complaints alleging that the rates now charged for the transportation of sugar beets and sugar beet pulp within the State of Wisconsin are in excess of what the service is reasonably worth, and that the rules enforced in regard to the minimum load required on every carload of sugar beets or sugar beet pulp are unjust and illegal.

- Held*, 1. That the rates charged for the transportation of sugar beets and sugar beet pulp in Wisconsin are unreasonable and discriminatory.
2. That the rules complained of with regard to the minimum load required on every carload of sugar beets or sugar beet pulp are unreasonable and unjust.
3. That the rates and rules complained of shall be substituted by rates and rules that are reasonable and just.

It appears from their complaints that each of the above petitioners is a corporation, engaged in manufacturing sugar from beets; that the plant of the Chippewa Sugar Company is located at Chippewa Falls, Wisconsin; that the plant of the Wisconsin Sugar Company is located at Menomonee Falls, Wisconsin; and that the plant of the Rock County Sugar Company is located at Janesville, Wisconsin. It further appears that each of the petitioners is shipping beets and sugar beet pulp over the lines within this state of the several Railway Companies which are named above.

Each petition sets forth in substance, that each of the above named Railway Companies is a common carrier engaged in the transportation of persons and property between points in the State of Wisconsin; that it is the duty of the said Railway Companies to transport property between various points on their lines of road in the State, when requested to do so, and to charge a reasonable compensation therefor; that the rates on sugar beets

and sugar beet pulp charged by the said Railway Companies are in excess of what the service is reasonably worth, affording to said Railway Companies greater compensation, considering the service performed, than is usually and customarily charged for like services in other states, and that for this reason the rates thus charged should be substituted by reasonable rates; that the rules enforced by each of said Railway Companies in regard to the minimum load required on every carload of sugar beets or sugar beet pulp has the effect of increasing the rate of freight charged by each company, such increase being excessive, unjust and illegal. The petitioners also ask that after due hearing and investigation, orders be made fixing a reasonable rate, and a reasonable minimum weight per car, for the transportation of sugar beets and sugar beet pulp.

The respondent Railway Companies in their answers admit that they are common carriers and subject to the laws of Wisconsin, but they deny, in substance, that the rates charged for the transportation of sugar beets and sugar beet pulp in this State are in excess of what the service is reasonably worth, or that they are in excess of the rates for a like or similar service in transporting these commodities elsewhere; that they are in excess of the rates charged for a like or similar service in the transportation of other commodities of like character; that the rules either as made or enforced in regard to the minimum load on every car of sugar beets and sugar beet pulp are unreasonable and have the effect of unjustly increasing the rate of freight charged.

The complaints were filed in this office about September 10 last. The hearings were held October 2, 9, 10 and 17, respectively. The Wisconsin Sugar Company and the Chippewa Sugar Company were represented at the hearings by R. G. Wagner, who is president of both companies. The Rock County Sugar Company was represented by its vice president, M. R. Osburn and by its attorney, M. G. Jeffris. Of the respondent Railway Companies, the Chicago & Northwestern appeared by its attorney, S. A. Lynde; the Chicago, Milwaukee & St. Paul appeared by its special representative, William Ellis; the Chicago, St. Paul, Minneapolis & Omaha appeared by its traffic manager, H. M. Pearce; the Illinois Central by its attorney, E. J. B. Schubring; the Wisconsin Central was not represented at any of the hearings.

The plant of the Chippewa Sugar Company at Chippewa

Falls is located on the tracks of the Wisconsin Central Railway Company, and receives its beets partly over the lines of that company and partly over the lines of the Chicago, St. Paul, Minneapolis & Omaha Railway Company and the Chicago, Milwaukee & St. Paul Railway Company. Last year it appears to have so received about 20,000 tons of beets over said lines. The Wisconsin Sugar Company's plant at Menomonee Falls is located on the tracks of the Chicago, Milwaukee & St. Paul Railway Company, and last year received by rail about 30,000 tons of beets, grown partly along the lines of that company and partly along the lines of the Wisconsin Central and the Chicago & North Western Railway Companies. The plant of the Rock County Sugar Company at Janesville is located on the tracks of both the Chicago, Milwaukee & St. Paul and the Chicago & North Western Railway Companies and received last year over these roads about 30,000 tons of beets. The average distance which the beets are hauled seems to be about thirty-five miles for the Janesville plant and about seventy miles for the other plants; though in the case of the Menomonee Falls plant the greater proportion appeared to be obtained within fifty miles of said plant. The amount of beets in each carload averaged twenty-two tons last year.

Sugar beets are valued at about \$5.00 per ton and are manufactured into sugar, each ton yielding about 200 pounds, besides about eighty pounds of molasses and about fourteen hundred pounds of sugar beet pulp. The greater proportion of the sugar and molasses of the Menomonee Falls and Janesville plants is sold through brokers in Milwaukee and Chicago; sugar selling in the market at about four and one-half cents per pound, or ten per cent less than the market price of cane sugar, while the molasses seems to bring about \$7.00 per ton. The Chipewa Falls plant disposes of the greater part of its products in St. Paul, Minneapolis, Duluth, and Superior, at about the same prices. The pulp seems to have some value as feed for live stock and part of it is shipped to various places for that purpose, but, being comparatively unknown, commands little or nothing in the markets. Sugar beets not only are of comparatively low value, but they are of such character that they cannot very well be destroyed by either the elements or by ordinary accidents. The risks involved in handling and transporting them are, therefore, small.

Large quantities of coal and limestone are also required in

connection with the manufacturing of beet sugar. Coal is used for power and in drying. Lime stone is used for some other purpose in the process of manufacture. The exact amount of each of these commodities that was so used last year was not directly stated, but the facts brought out in the testimony indicate that not far from seventeen tons of coal and four tons of lime stone are required for one hundred tons of beets. The coal is shipped into the factories from the various lake ports and from the Spring Valley district in Illinois; while the lime stone is largely shipped in from Moline and St. Louis in that state.

From the tariffs on file with this Commission, it appears that each one of the above mentioned Railway Companies in this State has adopted the same rates for the transportation of sugar beets and sugar beet pulp, as well as the same rules for the regulation of the minimum weight of each carload of the commodities in question. As these commodities are transported under commodity rates, the question of their classification is not a part of the issue in this case.

The testimony and facts presented by the petitioners in this case purported to show that the rates charged in this State for the transportation of sugar beets and sugar beet pulp are relatively higher than the rates charged for substantially like services in the transportation of the same commodities in other states; that the rates so charged on these commodities in this state are higher than the rates charged for like services in transporting other commodities of like character in this State; and that the rates per ton per mile on these commodities in this State are higher than the average rate per ton per mile of all the freight transported on the entire system.

The respondents also presented many comparisons and facts which tended to disprove some of these contentions and to show the immateriality of others. They also endeavored to establish the fact that owing to the conditions surrounding the traffic in question the cost to carriers of handling the same was considerably above the average cost.

The testimony in support of the allegation that the rates in Wisconsin on the commodities in question are higher than in other states, consisted largely of quotations from the tariffs in effect in these states and of comparisons of the rates given therein. These comparisons may be summarized as follows:

COMPARATIVE RATES ON SUGAR BEETS.

Miles.	Wisconsin. Per ton.	Michigan. Per ton.	Nebraska. Per ton.	Colorado. Per ton.
Up to 5 inclusive.....	\$ 50	\$ 40	\$ 40	\$ 30
" 10 do	50	40	40	30
" 15 do	50	40	40	30
" 20 do	50	40	40	30
" 25 do	50	40	40	30
" 30 do	50	40	40	30
" 35 do	60	50	50	30
" 40 do	60	50	50	30
" 45 do	60	50	50	30
" 50 do	60	50	50	40
" 55 do	60	60	50	40
" 60 do	70	60	80	40
" 65 do	70	60	80	40
" 70 do	70	70	80	50
" 75 do	70	70	80	50
" 80 do	70	70	80	50
" 85 do	85	70	80	50
" 90 do	85	80	80	50
" 95 do	85	80	80	50
" 100 do	85	80	80	50
" 105 do	85	80	80	50
" 110 do	1 00	90	90	60
" 115 do	1 00	90	90	60
" 120 do	1 00	90	90	60
" 125 do	1 00	90	90	60
" 130 do	1 00	1 00	90	60
" 135 do	1 15	1 00	90	60
" 140 do	1 15	1 00	90	60
" 145 do	1 15	1 00	90	60
" 150 do	1 15	1 10	90	60
" 155 do	1 15	1 10	90	60
" 160 do	1 30	1 10	1 00	80
" 165 do	1 30	1 10	1 00	50
" 170 do	1 30	1 20	1 00	80
" 175 do	1 30	1 20	1 00	80
" 180 do	1 30	1 20	1 00	80
" 185 do	1 45	1 20	1 00	80
" 190 do	1 45	1 30	1 00	80
" 195 do	1 45	1 30	1 00	80
" 200 do	1 45	1 30	1 00	80
	1 45	1 30	1 00	80

As the rates in the Wisconsin tariff are grouped by distances of twenty-five miles each, it may be well to reduce all the rates in the preceding table to the same basis. When this is done the table will appear as follows:

RATES PER TON.

Distances.	Wisconsin.	Michigan.	Nebraska.	Colorado.
25 miles and under.....	\$ 50	\$ 40	\$ 40	\$ 30
50 miles and over 25.....	60	52	50	34
75 miles and over 50.....	70	66	80	46
100 miles and over 75.....	85	78	80	50
125 miles and over 100.....	1 00	92	90	60
150 miles and over 125.....	1 15	1 04	90	60
175 miles and over 150.....	1 30	1 16	1 00	80
200 miles and over 175.....	1 45	1 28	1 00	80
Average in cents.....	94.32	84.75	78.25	55.00

The rates given for Michigan were compiled from the tariffs of the Grand Trunk Railway in that state. Those given for Nebraska were compiled from the tariffs of the Chicago, Burlington & Quincy Railway. Those given for Colorado were compiled from the tariffs of the Atchison, Topeka & Santa Fe Railway. These rates also seem to be in effect on other railways operating in the same states or localities.

Upon comparison of the rates in the foregoing table it appears that those for Wisconsin are somewhat higher than the rates in the other states named. The differences in this respect are particularly marked for the shorter distances, or up to about sixty miles, and for distances above eighty and one hundred miles. For distances of from sixty-five to about seventy-five miles the rates in Wisconsin and Michigan are about the same, while the rates in Nebraska for distances from about fifty-five miles to about eighty miles are somewhat higher than in Wisconsin. The rates in Colorado for all distances are much lower, not only than the rates in Wisconsin, but also than the rates in the other states named. The most significant differences as between Wisconsin and the other states are those which appear in the rates for distances up to sixty or sixty-five miles, for it appeared from the testimony that in this State the greater proportion of the beets were obtained within fifty miles of the factories.

The correctness of the foregoing rates was not questioned by the respondents, but they gave it as their opinion that the rates for other states than Wisconsin were not fairly remunerative to the carriers and that they had been put into effect for special reasons. The Michigan rates, for instance, were said to have been fixed by the Pere Marquette, a bankrupt road, in its desperate efforts to obtain or develop traffic. The rates in Colorado were said to have been fixed by the Santa Fe, partly for the purpose of assisting in developing a barren country, and partly because of the distances the cost of marketing the sugar was so great that the manufacturers could not stand any higher rates on beets. After looking into the situation somewhat, we do not feel that the greatest weight should be attached to these opinions. The Michigan rates were adopted by non-competitive as well as by competitive lines. They are even in effect in Indiana and Ohio. From such facts as are disclosed by the reports of at least some of the railways by which they have been adopted, it would hardly seem that they are not paying rates. It does not

seem probable that local rates of this character would be so generally maintained if they did not yield a fair amount of profit.

The respondent also presented many comparisons and facts bearing upon the rates in the various states. These comparisons cover a wider field than those presented by the petitioners, but do not seem to lead to materially different results. They may be summarized as follows:

COMPARATIVE RATES ON SUGAR BEETS.

(The rates shown are the rates per ton.)

Distances.	C & N.W. in Wisconsin & Michigan.	C. & N.W. in Minnesota.	C. & N.W. in Nebraska.	Lines in Northern Colorado.	Lines in Southern Colorado & Northern Kansas.	Lines in California.	Lines in Utah.	Lines in C. F. A. Territory.
5	\$.50	\$.50	\$.40	\$.30	\$.30	\$.30	\$.09	\$.40
10	.50	.50	.50	.30	.30	.40	.18	.40
15	.50	.50	.50	.30	.30	.45	.29	.40
20	.50	.50	.50	.30	.30	.50	.43	.40
25	.50	.50	.50	.30	.30	.50	.57	.40
30	.60	.60	.50	.35	.30	.55	.66	.50
35	.60	.60	.50	.35	.30	.55	.73	.50
40	.60	.60	.50	.37	.30	.60	.82	.50
45	.60	.60	.50	.45	.40	.60	.92	.50
50	.60	.60	.80	.50	.40	.60	.98	.60
55	.70	.70	.80	.55	.40	.65	1.13	.60
60	.70	.70	.80	.60	.40	.65	1.30	.60
65	.70	.70	.80	.65	.50	.65	1.37	.70
70	.70	.70	.80	.70	.50	.70	1.44	.70
75	.70	.70	.80	.75	.50	.70	1.55	.70
80	.85	.85	.80	.80	.50	.80	1.63	.70
85	.85	.85	.80	.....	.50	.80	1.73	.80
90	.85	.85	.80	.....	.50	.80	.....	.80
95	.85	.85	.80	.....	.50	.80	.....	.80
100	.85	.85	.80	.....	.50	.90	.....	.80
105	1.00	1.00	1.00	.....	.60	.90	.....	.90
110	1.00	1.00	1.00	.....	.60	.90	.....	.90
115	1.00	1.00	1.00	.....	.60	.90	.....	.90
120	1.00	1.00	.....	.....	.60	1.00	.....	.90
125	1.00	1.00	.....	.....	.60	.....	.....	1.00
130	1.15	1.15	.....	.....	.60	.....	.....	1.00
135	1.15	1.15	.....	.....	.60	.....	.....	1.00
140	1.15	1.15	.....	.....	.60	.....	.....	1.00
145	1.15	1.15	.....	.....	.60	.....	.....	1.10
150	1.15	1.15	.....	.....	.60	.....	.....	1.10
155	1.30	1.30	.....	.....	.80	.....	.....	1.10
160	1.30	1.30	.....	.....	.80	.....	.....	1.10
165	1.30	1.30	.....	.....	.80	.....	.....	1.20
170	1.30	1.30	.....	.....	.80	.....	.....	1.20
175	1.30	1.30	.....	.....	.80	.....	.....	1.20
180	1.45	1.45	.....	.....	.80	.....	.....	1.20
185	1.45	1.45	.....	.....	.80	.....	.....	1.30
190	1.45	1.45	.....	.....	.80	.....	.....	1.30
195	1.45	1.45	.....	.....	.80	.....	.....	1.30
200	1.45	1.45	.....	.....	.80	.....	.....	1.30

The rates under "C. & N. W. in Wisconsin and Michigan" apply locally on the lines of the respondents in this State and on the Chicago & North Western Railway in the Upper Peninsula of Michigan,—that is to the beet sugar factory which is located at Menominee, Michigan. The rates shown under "C. & N. W. in Minnesota" are precisely the same as those in effect in Wisconsin. The rates headed "C. & N. W. in Nebraska" when taken as a whole are slightly lower than the rates in Wisconsin and considerably higher than the rates in effect on the Chicago, Burlington & Quincy Railway in Nebraska. The rates shown for "Northern Colorado" are somewhat higher than the rates shown for "Southern Colorado and Kansas," and all of those rates are a great deal lower than the rates in Wisconsin. The rates in California are also lower than those in Wisconsin, the differences being particularly marked for the shorter distances. Utah presents a rather peculiar situation. Up to about twenty miles the rates in that state appear to be almost excessively low. From this point up they increase very rapidly, so rapidly in fact that for the distances from about thirty-five to about eighty-five miles they are out of proportion to the rates in any of the states included. If the sugar beets in Utah are raised within twenty or even thirty-five miles of the sugar factories, then these factories have lower rates than those of any of the other states. If not, then the reverse might be true. The rates in the C. F. A. territory, which in this case means Indiana, Ohio and possibly part of southern Michigan, seem to be identical with the rates on the Grand Trunk and other railroads in Michigan, which, as shown above, were introduced in the evidence by the petitioners in this case. They are also considerably lower than the rates for like distances in Wisconsin.

From these comparisons of the rates on sugar beets, the conclusion must be drawn that the rates in Wisconsin are about the same as those on the Chicago & North Western Railway in Minnesota and northern Michigan; that the rates in Wisconsin are, on the whole, higher than the rates for like distances in Michigan, Indiana, Ohio, Nebraska, Kansas, Colorado and California. If the average distance of haul in Utah does not exceed twenty-five miles, then it would also seem that the Wisconsin rates are higher, or at least fully as high as the rates in that state. The petitioners in this case also submitted tariffs showing the rates on sugar beets in Oregon and Washington, and the rates in

these states also appear to be somewhat lower than those in Wisconsin. The excesses for Wisconsin can, of course, be shown in percentages, but it is not likely that this method of presentation would make the situation any clearer. A few illustrations, however, may be in place. Going back to the tables, it is found that the average rate for the first twenty-five miles is fifty cents in Wisconsin and forty cents in C. F. A. territory, and in Michigan outside of the Northern Peninsula. In this case, then, the excess for Wisconsin amounts to about twenty-five per cent. At thirty-five miles, which corresponds very closely to the average haul at Janesville in this State, the rate is about sixty cents per ton in Wisconsin and fifty cents in Michigan, an excess of twenty per cent for the former. Taking all the comparisons into consideration, it is found that Minnesota is about the only state where the rates are as high as in Wisconsin. This is certainly the case if Utah is classed as doubtful.

Whether comparisons of this character are material to the question at issue depends largely upon the density of the traffic and the cost of operation. The greater the output of the factories and the farm the greater is also the traffic density, and the lower is the cost per unit of transportation. The cost per unit is also vitally affected by the cost of operation and by the cost of the railways. These are the general rules. With respect to these conditions, Wisconsin and Michigan are about on a parity.

According to the last United States Census the value of farm property was: Wisconsin, \$811,712,000, Michigan, \$690,356,000, and the products of the farms were valued at \$157,446,000 and \$146,548,000, respectively; while the output of the factories was valued at \$360,819,000 in Wisconsin, and \$356,944,000 in Michigan. These facts alone make it quite clear that Michigan is not furnishing any more in the way of traffic than Wisconsin. This conclusion is further supported by the fact that, with the exception of perhaps one or two trunk lines, the traffic density on the roads in the two states is also about the same. Nor have we been able to discover any cogent reasons for believing that there are any important differences as between the two states, either in the cost of constructing the roads or in the expenses of operating them. The topography of the country is about the same. There can be no marked differences in the wages of trainmen and other employes. The cost of fuel and materials is certainly no greater in Michigan. On the whole, it would probably

be no easy task to pick out two states in which the conditions in question are more nearly alike than in the two states named.

The traffic conditions in Indiana and northern Ohio, particularly with respect to the local business, appear to be about the same as in Michigan. When it comes to the states west of the Missouri River, however, the situation must be somewhat different. These states are more sparsely settled. Their industries are in a less advanced stage of development and their output is smaller. It is also possible that there are places where the cost of operation is relatively heavy. On the other hand, the traffic in these states is shared by fewer roads and less mileage. The traffic density of some of the roads which are operating in these states is not far behind that of many of the roads in the north central states. Nor does there appear to be any marked differences in the relations between the operating expenses and the earnings in the two cases.

After a careful consideration of these facts it rather appears to us that the foregoing comparisons of the rates in the various states on the commodities in question are material to the points at issue in this case. This is particularly true of the comparisons which are made between Wisconsin and Michigan.

The respondents also held that under the present adjustment of the rates the manufacturers of beet sugar in Wisconsin are at least as favorably situated as the manufacturers of beet sugar in the other state. Considerable testimony was introduced to show that when the present rates on beets, coal and lime stone in, and on the sugar out were so adjusted that, so far as freight rates were concerned, the sugar from Wisconsin would be placed upon the market at as low a cost as the sugar manufactured elsewhere. A large proportion of this testimony consisted of tariffs and statements showing rates on coal, lime stone and sugar, together with the distances transported, for the various states, and a brief review of these facts also will be necessary.

For Wisconsin, Janesville was used as the basis. To this point the rates on coal varied from 80 cents to \$1.00 per ton, the greater proportion going under the latter rate, and the distance of haul varies from 78 to 130 miles. On limestone the rate was \$1.00 for a distance 163 miles and \$2.20 per ton for a distance of 212 miles. Most of the shipments were made under the lower rate. On coke the rate was \$3.60 per ton. About 70 per cent

of the sugar out was shipped to Chicago on a rate of 8 cents per cwt., and the larger part of the balance was shipped under rates that varied from about 12½ to about 21 cents per cwt.

To the different factories in Michigan the lowest rates on coal varied from 50 to 90 cents per ton for distances ranging from 33 to 145 miles. Higher rates for longer distances are also quoted, but as few of the factories are located any considerable distance from either the local coal mines or the lake ports the above figures would seem to fairly represent the situation. The rate on lime stone for distances ranging from 175 to 370 miles was about 90 cents per ton. The rates on sugar varied from 4 to 22 cents per cwt. The greater proportion is probably shipped on an 8 and 8½ cent rate.

For Colorado the rates on coal for distances ranging up to 585 miles were given at \$1.75 to \$4.45 per ton. These rates were obtained from the tariffs of the Santa Fe Railway and looked rather high. An examination of the coal producing points with reference to the location of the sugar factories in that state disclosed the fact that coal can be had within much shorter distances than those given in the testimony. In fact the average distance between the coal mines and the factories seems to be less than 100 miles. In view of these facts it is not likely that the rates on coal into the sugar factories are any greater in that state than in Wisconsin. The rates on coke are even less than in Wisconsin. The rates on limestone for distances of from 68 to 159 miles seem to vary from 50 to 70 cents per ton. The local rates on sugar were given at from 10 to 15 cents per cwt., and the rates to Mississippi River and common points at about 30 cents per cwt. From some factories more than one-half and from others less than one-half of the output went out under the local rates. The rates to Missouri River and other points from most of the factories seem to stand at about 25 cents, while they were 35 cents per cwt. to Chicago.

On the C. & N. W. Ry. in Nebraska the rate on coal to the sugar factory seems to vary from \$1.16 to \$1.21, \$1.45, \$2.25, and upward per ton, while the rate on limestone is about 50 cents per ton. The rate on sugar to the Missouri River points is 10 cents, while to Chicago it is 27, and to Minneapolis 20 cents per cwt.

From these facts it would seem that the average rate on coal is about 90 cents per ton in Wisconsin, 70 cents per ton in

Michigan, and perhaps \$1.00 per ton in Colorado; that the rate per ton for limestone is about \$1.20 in Wisconsin; 90 cents in Michigan; and 50 cents in Colorado; that the rate on sugar is about \$2.00 per ton in Wisconsin, \$2.00 in Michigan and about \$2.40 for one half of the output and \$6.00 for the remaining half, or an average of about \$4.20 per ton in Colorado. It is not claimed that these averages can be absolutely correct, but it would seem from the above facts that they can be safely used for comparative purposes. Their full meaning can be better shown if they are applied to the coal and lime stone in, and the sugar out, for a hypothetical factory in each of the three states which consumes 50,000 tons of beets annually. With 17 tons of coal, 4 tons of limestone, and 10 tons of sugar to each 100 tons of beets the freight of these commodities outside of the beets would amount to \$20,050 in Wisconsin, \$17,750 in Michigan, and \$30,500 in Colorado. If these amounts are added to the cost of transportation of the 50,000 tons of beets under the present rates a fairly good idea of the rate situation in the three states may be obtained. Perhaps a few illustrations based upon the above figures and the cost of transportation of the beets for distances of 25, 40, 60, 80, 120, 160, and 200 miles, respectively, may be in point.

Miles of haul for beets.	Wisconsin.	Michigan.	Colorado.
25 miles for beets	\$45,050	\$37,750	\$45,500
40 do	50,050	42,750	45,500
60 do	55,050	47,750	50,500
80 do	62,050	52,750	55,500
120 do	70,050	62,750	60,500
160 do	85,050	72,750	70,500
200 do	93,050	82,750	70,500

These figures then include the cost of transportation of beets, coal and limestone in to the factory and of the sugar out. The cost for Wisconsin seems to be the highest in every instance. Even if these figures were only approximately correct they would apparently fail to sustain the respondents in their contention that the manufacturers in these states had been placed on about the same basis with respect to their freight rates, when the cost of transporting all of the above named commodities is taken into consideration. Without passing upon the question as to what extent natural and commercial inequalities should be adjusted through the charges for transportation, we feel that

there are certain features in these comparisons that should not be disregarded in deciding this case.

Both sides made extensive comparisons between the rates on sugar beets and the rates on other commodities. These comparisons together with many other rates were examined but have led to no important conclusions. Sugar beets are a low grade of cheap raw material that is converted into other products and thus furnishes traffic both into and out of the factories. It should therefore be compared with other low grade commodities which was also done. On many such commodities the rates were about the same as those on beets. On others again they were higher, while several commodities were found on which the rates were lower than the rates on beets. The most prominent commodity in the latter class is perhaps logs when moved to the mills to be converted into lumber; but bolts, pulp wood, wood pulp, pig iron, fuel wood, and several other kinds of raw material are sometimes also found in this class. While the present rates on sugar beets are among the lower rates in effect, and rightly so, they cannot be said to be the lowest rates in effect.

The average rate per ton per mile for the entire system can hardly be a fair basis for the rates on sugar beets. This rate is simply the average receipt per mile for each ton of freight transported. It includes all kinds of freight and all sorts of loading for all distances. On one of the railways involved in this case the average rate for the fiscal year of 1905, was 8.8 mills per ton per mile. The average carload in this case was less than 14 tons, and the average distance of haul about 175 miles. For beets the average load is about 22 tons and the average length of haul less than 60 miles. The conditions in the two cases are obviously not comparable.

A rate is made up of two classes of expenses; the cost of handling the freight at the stations or terminals, and the cost of moving the same from one station, or terminal, to another. The terminal expenses are not affected by the length of the haul. They amount to as much for a ton going ten miles as for one going a hundred miles. A terminal cost of 25 cents per ton amounts to 2.5 cents per ton per mile for a haul of ten miles, and to only 2.5 mills per ton per mile when the haul is one hundred miles in length. The cost of hauling the freight between the stations on the other hand varies with the length of the haul. Comparisons of the rates per ton per mile are therefore not

likely to mean a great deal unless the kind of traffic and the length of the haul are the same.

If the average rate for the average load for the average distance of haul for the entire system was applied to sugar beets the long haul would have to bear the greater proportion of the terminal expense as well as of the increased cost for the short or the so-called way freight haul. This may be further illustrated. As above stated, the average rate for one of the roads was 8.8 mills per ton per mile. For ten miles this would amount to 8.8 cents per ton; for twenty miles 17.6 cents per ton; for fifty miles 44 cents; for one hundred miles 88 cents; for one hundred fifty miles \$1.48; for one hundred seventy-five miles \$1.54, or 8.8 mills per ton per mile; and for two hundred miles about \$1.62.

The average rate of 8.8 mills per ton mile for the system when properly adjusted will be found to be higher than the present rates on sugar beets. With the operating expenses roughly apportioned between passenger and freight traffic and between terminal and movement expenses; with the same terminal cost per ton of freight regardless of the distances it is hauled; with the movement expenses per mile about three times as great for the way freight as for the through haul, the approximate average rates per ton for the system were: 54.6 per ton for a distance of ten miles; 64 cents per ton for 20 miles; 82.7 cents per ton for 40 miles; 110.6 cents per ton for 70 miles; 132.4 cents for 100 miles; 148.0 cents for 150 miles; 154.0 cents per ton, or 8.8 mills per ton per mile, for 175 miles; and 162.5 cents per ton for 200 miles. The present rates on sugar beets are: 50 cents per ton for distances up to and including 25 miles; 70 cents for 70 miles; 85 cents for 100 miles; \$1.15 for 150 miles; \$1.30 per ton, or 7.43 mills per ton per mile for 175 miles; and \$1.45 for 200 miles.

These adjustments of the average rate for the system are not absolutely correct, but it is believed that they are close enough to actual averages to show that the average rates cannot be fairly applied to sugar beets.

There are many reasons why sugar beets should be transported at lower than the average rates. Their value is relatively much lower than the average value of freight carried and the risks involved are much less. Sugar beets also move in heavier carloads, the average being 22 tons to each car as against 13.74 tons

for the average. In addition to this the beets are a raw material for other products, which in turn, also furnish traffic for the railroads, and facts of this character are, as a rule, taken into consideration in fixing rates.

The testimony and facts presented by the respondents in reference to the cost of transporting sugar beets related mostly to the detention and earnings per car; the cost of the station service; the cost per unit of transportation where the traffic is light as compared with the cost where it is heavier; and the cost of the local as compared with the through traffic. The greater proportion of this testimony was presented by the representative of the Chicago, Milwaukee & St. Paul Railway Company.

The average detention of the cars in the sugar beet service was estimated at 7 to 8 days at Chippewa Falls, 8 days at Janesville, and 10 days at Menomonee Falls. These estimates, however, do not agree with the reports of the manager of the Car Service Association. From these reports, which show the date of billing and the date the cars were released at the factories, it appeared that the average time between these dates for 763 cars at Chippewa Falls was 4.3 days; that the average time for 1395 cars at Menomonee Falls was 4.7 days and that the average time at Janesville for 573 cars was 4.3 days, or an average of 4.5 days for a total of 2731 cars. If to this average of 4.5 days is added about 2 days for loading we have an average detention of 6.5 days for the cars in the sugar beet service.

These figures do not seem to be out of proportion when compared with the performance of the cars on the roads as a whole. The reports which the railway companies make to the State do not show how many loads were carried by each car during any given period, but from the traffic data presented in them it is possible to obtain some idea upon the situation in this respect. For the fiscal year 1905 it appears that each car in the freight service carried about 41.5 loads on the C. M. & St. P. Ry., and about 40 loads on the C. & N. W. Ry. This is equal to an average detention of about 8.8 days for the former road and to about 9 days for the latter. In comparing these figures with those obtained from the Car Service Association it appears that the average detention in the sugar beet traffic in this State is less than the average detention for the entire traffic on the two systems.

Under the Car Service rules two days of 24 hours each are al-

lowed free of any extra charge for loading a car, and the same length of time is allowed for unloading it. For any detention beyond these two days in either case an extra charge of \$1.00 per day is imposed for the use or for the delay of the car. About three fourths of the cars of beets appear to have been unloaded at the factories either on the same day on which they were placed or before the expiration of the two day limit. The remaining fourth were detained more than two days, but the average detention of all cars seems to have been less than two full days. The real cause of the extra detention was not fully determined. In some cases it was probably due to the crowded condition at the factories while in other cases the switching service may have had something to do with it. The beet shipping period during each year is short, covering substantially only the months of October, November and December. During this period the condition about the factories is necessarily quite crowded, and there are no doubt times when more cars are received than can be conveniently handled.

The respondent showed that the average gross revenue per car of beets was \$17.29 at Menomonee Falls and from \$12.73 to \$14.47 at Janesville, or an average of about \$16.10 for both places. With an average detention of ten days, as estimated by the respondent, the average earnings per day would amount to about \$1.61. But as shown, their estimates of this detention exceeds the time which was disclosed by the actual records by about three and one half days. When the average detention of the cars is thus reduced to six and one half days, it is found that the daily earnings averaged about \$2.66 at Menomonee Falls, and that they varied from \$1.96 to \$2.23 at Janesville, with an average of \$2.48 when both places are included. These earnings compare quite favorably with the average daily earnings per car for the systems as a whole. For the fiscal year of 1905, for instance, these earnings amounted to about \$2.38 on the Chicago, Milwaukee & St. Paul Railway, and to about \$2.10 on the Chicago & Northwestern Railway. While the beets are transported at lower than average rates, the loading per car is over eight tons greater than the average, while the detention of the cars is somewhat less than the average for the roads. The lower rates on the one hand are thus offset by heavier loading and quicker service on the other. In view of these facts, it would hardly seem that the position of respondents, with respect to the earnings per car, was well taken.

Beets are moving during the season when the traffic as a whole is the heaviest, and when the demand for cars is the greatest and when, perhaps, their earning capacity also is the greatest. It also appears that some of the Railway Companies in this case are now put to some extra expense in furnishing flat cars with racks for the purpose of being placed in the sugar beet service. Just what importance should be attached to these facts in this case is not clear. We have been unable to discover any physical factors by which they can be adequately measured. The extra cost of the racks, however, may perhaps be more or less fully offset by the fact that the cars to which they are applied are less costly to construct and maintain than the average freight or box car.

With respect to the station service, the facts presented purporting to show that the cost of the same for each ton of beets shipped into Menomonee Falls amounted to about 9.32 cents, while the average cost of this service for the entire system amounted to only 7.92 cents per ton of freight. The cost for beets was thus 1.40 cents per ton above the average. While the basis upon which the station service was apportioned between the different classes of traffic does not seem to be sound, it is possible that the results obtained fairly measure the difference in the amount per ton, when, in each case, the cost is divided by the tonnage. Sugar beets are mostly shipped from the smaller stations where the traffic is extremely light. It is quite possible that when the agent's salary is pro-rated upon the tonnage that the amount per ton will be relatively high. These facts, however, do not seem to be the best index to the cost of handling this traffic, so far as the station service is concerned. The beets are not handled by the agent at either end of the haul. They are both loaded and unloaded by the shippers. All the agents have to do in the matter is to bill the cars at the shipping station and receive the way bill and take into account at the receiving station. The actual cost of handling an entire carload of beets is, therefore, less than the cost of handling a hundred pound package. For, to bill this package, and to take the way bill for it into the accounts, costs just as much as for a carload of beets. Besides this, the package must be checked in and out and handled through the warehouse or station at both ends of the haul; and this extra labor is entirely saved in the case of beets. The above comparisons are based upon the expenses for the entire

year. It was argued at the hearings that this was not fair in the case of the beet traffic, for the reason that since they were all moved during a specific period of the year, which was well known and understood by carriers, and did not as a rule cause any increase in the station expenses, beets should be charged with station service for only that period during which they were moving, instead of for the entire year. Without passing upon this, it can be safely said that there is, perhaps, no class of freight which can be handled at the station with any less actual work on the part of the station employes than that of sugar beets. In view of these facts it is very doubtful whether any importance should be attached to the small difference in the cost of station service which was pointed out above, and which was obtained by a method of pro-rating that would not, perhaps, bear a closer examination.

In connection with this question a statement was also presented in evidence which purports to show the total cost of the terminal service at Menomonee Falls. The terminal service in this case includes the cost of maintenance of the switch tracks and interest on the cost of the same, the entire cost for the switch engine including maintenance and interest on its value for ninety-one days, the total cost of the station service, the repairs and interest upon the cars used, based upon an average detention of ten days and on a value of \$400 per car.

Some of the items in this statement would seem to be open to some readjustment. The entire cost of operating the switch engine, for instance, seems to have been charged to the terminal expenses, while it appeared from the testimony that a part of its time was occupied with other work than switching at the station. Then, again, the cost for the cars is based upon an average detention of ten days, when, at most, it should not have been placed above seven days. It also appears that the entire cost of the station service was included without any allowance for that part of the same which should be charged to the passenger traffic. If two of these items, only, namely, the cost for the cars and the cost for the station service, are adjusted to the basis suggested, the average terminal cost per car at this station will be reduced from \$2.28, as given in statement, to about \$1.95.

With respect to the cost of hauling freight on the various divisions of the road, the testimony showed in substance, that the cost of repairs, fuel and other supplies for locomotives, and of

the locomotive, round house and train service for hauling one hundred tons one mile was considerably greater on Divisions where the traffic is comparatively light than on divisions where it is heavy. On the La Crosse and the Chicago and Milwaukee Divisions, where the gross weight of the train loads average, for instance, about thirteen hundred tons, the cost stood at about 3.4 cents to about 3.7 cents. On the Northern Division, where the train loads average about six hundred and twenty tons, the cost was about 6.7 cents. For the entire system the average was about 5.1 cents. That the cost per unit of transportation varies inversely to variations in the density of the traffic is too well settled for discussion. But while this is true of the units of transportation, the reverse seems to be true of the unit of service. When the above expenses were converted into the cost per train mile, it was found that this cost amounted to not far from forty-eight cents on the Chicago and Milwaukee division; to over forty-three cents on the La Crosse Division, while on the Northern Division it was about forty-one cents. Fuel and locomotive supplies seem to be elements of expense that are mostly affected by the weight of the trains.

But all of the beets are not moved over divisions where the traffic density is lighter and the cost per unit of transportation consequently greater. An analysis of the traffic, with this end in view, for the road in question, revealed that over seventy per cent of the beets originated on the La Crosse, the Chicago and Milwaukee, and the Prairie du Chien, the three divisions on which the through traffic was said to be the greatest. This fact alone would seem to eliminate this part of the contention from further consideration. But even if all the beets were moving, say, on the Northern Division, it is a question whether this fact would have been of such great importance as the representatives of the road would try to make it appear. Tariffs are not made by divisions. If they were, and the rates in them were based upon the cost, it would inevitably follow that the higher rates on divisions where the traffic is light would be offset by lower rates on divisions where the traffic is heavy, and in the final outcome the roads would be in precisely the same position as if the rates had been based upon the average cost and traffic for all the divisions. By this is not meant that there are no local conditions to be taken into account in fixing rates, but simply this,—that the one under discussion does not seem to apply with a great deal of force to points at issue in this case.

Excets are no doubt moving largely on local trains which have to stop and handle freight at most of the stations on the run. These stops require time, and time is money. A run of, say, one hundred miles, is undoubtedly more costly for a train which has to stop at all the stations than for one that can run through without stops. The witnesses who testified upon this point gave it as their opinion that it costs about sixty cents to start and stop an ordinary freight train, and from twenty to twenty-five cents to stop and start a locomotive without load. These opinions were not supported by any facts showing that they were based upon actual tests. They also vary considerably from the opinions in such matter, which at other hearings before this commission have been expressed by other operating officials. If the cost of starting and stopping a train is as great as stated above, then it would certainly seem that the average cost per train mile would be considerably greater on divisions where little but local or way freight business is done than on divisions where the through haul greatly predominates. But this does not seem to be the case. As shown already, the average cost per train mile was only about forty-one cents on the Northern Division, with its local traffic, while it was from forty-three to forty-eight cents on the La Crosse and Chicago and Milwaukee Divisions, where the through traffic is several times as great as the local traffic. Again, if it costs from twenty to twenty-five cents to stop a locomotive without a load, then the cost of operating switch engines which stop and start again every few minutes is certainly much out of proportion to the cost which is indicated by figuring through the various statistical reports which are issued by the railway companies. There are, perhaps, runs where the cost of such items as train service and locomotive service may be as great for a local train making only one hundred miles in a day as for a through train making from one hundred and fifty to two hundred miles in the same time. But in such cases the greater cost for the local trains is largely offset by a smaller cost for maintenance and repairs and other items which depend upon and which are usually held to vary directly with the mileage made. If the items that are thus affected either way balanced, and if the number of trains and the loading was the same in both cases, the cost per unit of transportation would not be materially affected. But the conditions as a whole are not so evenly balanced. When all the factors both ways are

summed up it will undoubtedly be found that the local traffic is relatively more costly than the through. This is a situation, however, that can be fairly adjusted through a proper allotment of the movement expenses. In some cases it can be done by allowing three times as much in the way of movement expenses for the local haul as for the distance beyond. In other cases again some other proportion may apply. These facts also are of considerable importance in this case and should receive due consideration.

From the facts which have thus been examined, the respondent, by whom they were presented, drew the conclusions that in the case of sugar beets the terminal expenses were seventeen per cent higher than the average for the system, and that the movement expenses were from eighteen to twenty-five per cent higher than this average. While these conclusions do not seem to be sustained by the facts, it may throw additional light upon the situation if we follow his suggestion, and apply these facts to the amount which, under his apportionment of the expenses for Wisconsin as between the passenger and freight traffic, should be charged to the latter, and from these figures compute the cost of transporting beets for the various distances. For this purpose we have determined, as closely as possible from data at hand, the average terminal expense and the average movement expense, for an average loading of 22 tons to the car. We have then added 17 per cent to the terminal expenses and so adjusted the movement expenses as to allow three times as much for the local haul, or for the first one hundred miles, as for the distance beyond. To the cost of the freight traffic has been added the Wisconsin proportion of the interest on the bonds and of the dividends on the stock, when the latter is figured at six per cent. On this basis the costs per ton of transportation for the various distances would be: For 20 miles, 26.37 cents; for 30 miles, 37.55 cents; for 50 miles, 48.73; for 75 miles, 62.70; for 100 miles, 76.68 cents; for 150 miles, 85.98 cents; for 200 miles, 95.28 cents.

Owing to the greater traffic density in Wisconsin, these figures are considerably lower than those which would be obtained if the same methods were applied to the traffic statistics for the entire system. They are also much lower than the tariff on sugar beets now in effect; the differences being especially noticeable for the shorter and for the longer distances. If the road's ap-

portionment of the expenses is even approximately correct, then the above figures ought also to represent quite closely what should be the present rates on a low grade commodity like beets. We are of the opinion, however, that these rates would be too low. But, if aside from the apportionment between the two classes of traffic, these figures are built up on correct principles, then they should be a fairly correct measure of the relation which rates for the different distances ought to bear to each other; and would also indicate that the present rates on beets are not very well adjusted.

But important as the facts which have thus been examined may be, they are not the only ones upon which we may base our decision in this case. For the purpose of obtaining more definite information concerning both the units of transportation and units of service we have carefully analyzed the operating expenses of the roads. We have endeavored to fairly apportion these expenses between the different classes of traffic and to find some trustworthy methods upon which they might be properly separated between terminal and movement expenses, and also by which both the terminal and the movement expenses may be equitably adjusted according to kind and volume of the traffic. We have also endeavored to ascertain the difference in the cost between the local and through traffic, and to find some basis upon which the movement expenses can be so adjusted that each of these classes of traffic is adequately provided for. We fully realize the difficulties involved in determining these facts. The basic data relates only to past transactions and are not always satisfactory in other respects. The results obtained show only average costs. At the same time there does not appear to be any great change in the conditions from time to time, or in the relation which the various factors involved bear to each other. Considering everything, the results we have obtained cannot be far out of the way, and in view of this fact they are of great assistance in determining what constitutes a fair and reasonable rate even in specific cases. While it is not practicable to enter upon a more detailed discussion of these figures at this point it can be said that they indicate quite clearly that the rates complained of in this case are, under the circumstances, more than fairly remunerative to the carriers. They further show that the rates which are enumerated in the within order will yield the carriers a fair profit on their investment.

In view of the facts which have thus been examined and be-

cause of the conclusions to which they have led, we are of the opinion that the rates complained of, and which are now charged for the transportation of sugar beets and sugar beet pulp in this state, are too high, and these rates are therefore declared to be unreasonable and discriminatory, and it is our judgment and determination that they should be substituted by rates which are just and reasonable.

The complaints of the petitioners would also seem to include the present joint rates on sugar beets, or those rates which are charged when the beets are transported over the lines in this state of more than one of the respondent Railway Companies. The present joint rates on beets seem to be quite generally fixed at about ten cents per ton above the local rates for a like distance. No testimony was offered by either side in this case which threw any light upon the question whether the existing differences between the joint and local rates were just and reasonable. On the other hand, it was rather admitted by the petitioner that the transfer of the cars from the lines of one railway company to those of another involved an extra or additional service and expense on the part of the carriers, which should be taken into consideration in fixing joint rates. In view of these facts, and without passing upon the absolute reasonableness of the existing differences between the joint and local rates, it is our opinion that these differences, whatever they may be, should not be disturbed at this time.

The rule complained of with respect to the minimum weight per load in each car reads as follows: "Minimum weight 10% less than the marked capacity of car, but not less than 30,000 lbs., except cars loaded to their bulk capacity will be charged at actual weight if not less than 30,000 lbs." It appeared from the testimony that the application of this rule often results in a higher charge for a lesser quantity. For instance, an 80,000 lbs. car if loaded to its visible capacity will hold about 50,000 lbs., and the load will be billed and charged for on the basis of this weight. If, on the other hand, it should for some reason happen to be loaded to less than the visible capacity, or with only 40,000 lbs., then the minimum weight under the rule will be raised to 72,000 lbs., and the charges based on this weight, thereby causing an unjust increase in the charges exacted. It also appeared that an ordinary box car, particularly when without grain doors, will not even hold 30,000 lbs. of beets. These facts were not disputed by the respondents, but it was

shown by them that the rule was not enforced except by the Wisconsin Central Railway, and that the remaining railway companies named herein based their charges on the actual weight, but not on less than 30,000 lbs. Many of the objections which were raised against the application of the above rule to sugar beets were also raised against their application to sugar beet pulp. In addition to this the beet pulp is as yet little more than a refuse which must be removed in some way, and which for this reason also ought to be exempt from any rule that might result in the imposition of an extra charge in the transportation of the same. It therefore appears to us that the rule in question is unreasonable and unjust, and we are of the opinion that another rule should be put into effect which is just and reasonable.

The earnings and operating expenses as reported by the Illinois Central Railroad Company for that part of its lines which are operated in Wisconsin indicate that so far as this Railroad Company is concerned the rates on sugar beets and sugar beet pulp complained of are not unreasonable. Further, the lines of this company are so located that it does not carry any considerable proportion of any other part of the traffic either into or out from the sugar beet factories in question. For these reasons it is our opinion that the complaint of the Rock County Sugar Company insofar as it relates to the Illinois Central Railroad Company should be dismissed.

It is therefore ordered:

(1.) That on the Chicago, Milwaukee & St. Paul Railway Company, the Chicago, St. Paul, Minneapolis & Omaha Railway Company, and the Wisconsin Central Railway Company, the rates named in paragraph 4 of this order shall be hereafter charged for the transportation of sugar beets and sugar beet pulp between stations on their lines in Wisconsin and Chippewa Falls, Wisconsin.

(2.) That on the Chicago, Milwaukee & St. Paul Railway Company the rates named in paragraph 4 of this order shall be hereafter charged for the transportation of sugar beets and sugar beet pulp between stations on its line in Wisconsin and Menomonee Falls, Wisconsin.

(3.) That on the Chicago, Milwaukee & St. Paul Railway Company and the Chicago & North Western Railway Company, the rates named in paragraph 4 of this order shall be hereafter charged for the transportation of sugar beets and sugar beet

pulp between stations on their lines in Wisconsin and Janesville, Wisconsin.

(4). That the rates ordered to be hereafter charged in paragraph 1, 2 and 3 of this order shall be as follows: 25 miles and under, \$.40 per ton of 2000 lbs.; 26 to 50 miles, inclusive, \$.50 per ton of 2000 lbs.; 51 to 75 miles, inclusive, \$.65 per ton of 2000 lbs.; 76 to 100 miles, inclusive \$.80 per ton of 2000 lbs.; 101 to 125 miles, inclusive, \$.95 per ton of 2000 lbs.; 126 to 150 miles, inclusive, \$1.10 per ton of 2000 lbs.; 151 to 175 miles, inclusive, \$1.20 per ton of 2000 lbs.; 176 to 200 miles, inclusive, \$1.30 per ton of 2000 lbs.; 201 to 225 miles, inclusive, \$1.40 per ton of 2000 lbs.; 226 to 250 miles, inclusive, \$1.50 per ton of 2000 lbs.; 251 to 275 miles, inclusive, \$1.60 per ton of 2000 lbs.; 276 to 300 miles, inclusive, \$1.70 per ton of 2000 lbs.

(5). That where joint rates on sugar beets and sugar beet pulp are now in effect on each of the said railway companies the joint rates which shall be hereafter charged for the transportation of sugar beets and sugar beet pulp over the lines of more than one of the said railway companies between stations on their respective lines in Wisconsin and Chippewa Falls, Menomonee Falls, and Janesville, Wisconsin, shall not be more than ten cents per ton greater than the rates which are named in paragraph 4 of this order;

(6). That the minimum weight of a load of sugar beets and sugar beet pulp in each car shall not be more than 30,000 pounds;

(7). That the complaint of the Rock County Sugar Company so far as it relates to the Illinois Central Railroad Company be dismissed.

It is recommended that where the present joint rates on sugar beets do not also apply to sugar beet pulp the joint rates which are named in paragraph 5 of this order for sugar beets when transported between the stations named over the lines of more than one of the said Railway Companies shall also be made to apply on sugar beet pulp when the same is transported between the same stations over the lines of more than one of the said Railway Companies.

Dated this 28th day of November, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICSON,

Commissioners.

No. 74.

ROCK COUNTY SUGAR COMPANY

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY, CHICAGO & NORTHWESTERN RAILWAY COMPANY AND ILLINOIS CENTRAL RAILROAD COMPANY.

M. G. Jeffris, for Petitioner.

Wm. Ellis, for C., M. & St. P. Ry. Co.

S. A. Lynde, for C. & N. W. Ry. Co.

Jones & Schubring, for I. C. R. R. Co.

See Number 72

No. 75.

VALVOLINE OIL COMPANY

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY AND CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

H. L. Potter, for Petitioner.

No appearance for Respondents.

See case number 3

No. 76.

J. B. MC. FARLAND

vs.

CHICAGO & NORTH-WESTERN RAILWAY
COMPANY.

For Petitioner, H. A. Kading and G. H. Flood.

For Resopndent, R. H. Aishton, General Manager.

Complaint against a carrier for refusal to stop a certain through express train at a certain village station.

Held, that while the inhabitants of the village from which the complaint came were undoubtedly suffering certain inconveniences, under all circumstances in the case it would not be just and reasonable to compel the Railway Company to stop the train in question at said station. Complaint dismissed.

The petitioner is a resident of the village of Eden and makes the petition in his own behalf as well as in behalf of other residents of the village of Eden and of the surrounding country. The petition sets forth that the line of the Chicago & Northwest-ern Ry. between Milwaukee and Fond du Lac is the only line of railway running through Eden and serving that village and adjacent territory; and that the Railway Company has failed and is now failing to furnish reasonable and adequate facilities to the inhabitants of the village and territory indicated.

The petition further alleges that the population of the vil- lage of Eden is two hundred, which, together with the popula- tion of Marblehead, a quarry settlement near Eden, and the in- habitants of the thickly settled surrounding farming country, constitutes a large permanent population which affords consid- erable passenger traffic throughout the year. Many persons travel between Eden and Fond du Lac, but there is no train leaving Fond du Lac which stops at Eden later than forty-one minutes past one o'clock in the afternoon, arriving at Eden shortly after two o'clock, which is entirely inadequate for the needs of the population.

There is also considerable traveling between Eden and Mil- waukee. Under the present schedule persons living at or near Eden must take the train which passes through Eden at five

minutes past two o'clock in the afternoon in order to go to Milwaukee or take some other train earlier in the day. There is a train, known as number 16, which leaves Fond du Lac at about fifteen minutes after five o'clock in the afternoon which does not now stop at Eden but which if it did stop there, would accommodate the passengers who desire to go from Fond du Lac to Eden later than 1:41 in the afternoon, and from Eden to Milwaukee later than 2:05 in the afternoon. The petitioner prays that the Railroad Commission issue an order compelling the Chicago & Northwestern Railway Company to stop train number 16 at Eden for taking on and discharging passengers at said station.

The answer of the Chicago & Northwestern Railway Company admits that there are quarries near Eden at which a number of men are employed but denies that the village of Eden has a population of over two hundred inhabitants; that on the contrary, the last census shows Eden to contain but one hundred and fifty inhabitants and that at the quarries there reside about one hundred families. The Company denies that the passenger traffic from Eden is in any respect greater than that which can ordinarily be expected from a village of that size, and that during the last seven or eight years the receipts from the sale of tickets at Eden have averaged between \$2,000.00 and \$2,500.00 per year; and that the number of tickets sold to Fond du Lac at Eden during the last year has averaged about eight per day.

The Railway Company admits the correctness of the train schedules as described in the petition, but denies that the convenience of the public requires the stopping of train number 16 either to let off passengers from Fond du Lac or to take on passengers destined to Milwaukee. The present train schedule for the village of Eden is as follows: Leaving time, *north-bound*, 9:45 a. m., 3:33 p. m., 8:50 p. m.; leaving time, *south-bound*, 7:13 a. m., 11:48 a. m., 2:05 p. m. There are three passenger trains each way on Sundays, so that for every day in the week, including Sunday, the inhabitants of Eden have the service of three trains in each direction.

The answer of the Railway Company further maintains that train number 16 is a through express train which runs from Lake Superior points to Chicago in competition with trains over the Chicago, Milwaukee & St. Paul Railway, having a shorter mileage, and that it would be a great injustice to compel the re-

spondent company to stop train number 16 at Eden for the accommodation of the relatively small number of people who desire to travel over the five or six miles between Fond du Lac and Eden. The answer asserts that the village of Eden is receiving its full quota of trains; in fact far more than would be warranted by the amount of traveling from the said village.

The hearing on this complaint was held in the office of the Commission on October 9, 1906. The petitioner was represented by two witnesses, H. A. Kading and G. H. Flood; the respondent was represented by R. H. Aishton, general manager. After the hearing the secretary of the Commission visited Eden and Marblehead where the quarries are located, interviewed citizens of the village, collected information, and made a written report to the Commission.

The witnesses on behalf of the petitioner maintained that Marblehead had a population of about three hundred and fifty people and that it was only about one and one-fourth miles, and not three miles distant from Eden. They claimed that the three trains each way daily did not now afford the inhabitants of the village and surrounding country adequate service on week days, for the reason that the morning trains going north come so close together and that passengers are obliged to return from Fond du Lac before two o'clock, giving them practically only three hours, including the dinner hour, in Fond du Lac. Public offices are closed from twelve until two, so that for the purposes of public business a citizen of Eden really has only two hours if he desires to travel to and fro on a train of the respondent company. The witnesses further maintained that Eden was just as important as many other stations at which train number 16 made stops; for instance, Campbellsport, Kewaskum, Barton, West Bend and Jackson. Perhaps West Bend should be excepted. This claim regarding the relative amount of business done at Eden is more than borne out by the statistics of the Railway Company, covering transactions at this station, as will be seen by the following official figures:

Station.	Freight Receipts.		Tickets.	Total.
	Forwarded.	Received.		
Eden (proper)	\$6,700 40	\$6,749 06	\$2,466 98	\$15,916 44
Eden (quarry)	49,233 85	14,205 55	.....	63,439 40

Station.	Freight Receipts.		Tickets.	Total.
	Forwarded.	Received.		
Campbellsport	\$8,134 73	\$8,932 53	\$7,961 75	\$25,029 01
Kewaskum	14,700 41	13,232 38	6,497 27	34,490 05
Jackson.....(forwarded and recd) .....	.....	8,101 00	3,605 00	11,706 00

If the passenger service were a fixed function of the volume of the freight traffic, as has been maintained before this Commission in a different case involving another railway company, Eden and Marblehead, regarded as one village, would be entitled to more consideration with respect to the passenger service than many of the towns mentioned by the witnesses at which train number 16 now stops. Nor can there be any question regarding the inconvenience caused to persons who desire to go from Fond du Lac to Eden later in the afternoon, or to Milwaukee from Eden at that time of day. The population at Marblehead appears to be well settled and permanent, the testimony being that during the winter months the inhabitants number only about fifty less than during the summer. This would seem to insure a fairly steady movement of passengers to and from Eden and vicinity.

However, three trains daily would generally be regarded as adequate for a village of the size of Eden and even for stations much larger; and were it not for the "unhandy" train schedule between Fond du Lac and Eden it is probable that no complaints would be made. The trains appear to run at hours which are inconvenient to the inhabitants. The crux of the question at issue is the urgency of the need for better train service at Eden as compared with the sacrifice involved on the part of the Railway Company in stopping train number 16.

Train number 16 was described by the general manager as one of the most important trains operated on the Northwestern system.

“It starts at Marquette, Michigan, traverses the upper peninsula of Michigan, traverses the entire length of the State of Wisconsin from Marinette where it enters the State to Milwaukee and through Racine and Kenosha on to Chicago. It carries more passengers than any train that we operate through the State of Wisconsin in this territory.”

This train serves the northern peninsula of Michigan, territory adjacent to the west shore of Green Bay, the Fox River Valley, the country south of Fond du Lac to Milwaukee and Chicago. In making up the schedule for this train the company endeavored to consider the necessities of the local towns along the line as well as the requirements of the through business. It was not thought that train number 16 was a necessity at Eden and it was essential that time should be saved wherever possible. Number 16 starts out on a schedule of practically thirty miles an hour for a distance of one hundred and seventy-six miles to Green Bay. Between Green Bay and Fond du Lac the speed is a little over thirty-two miles an hour; and between Fond du Lac and Milwaukee it is thirty-four miles an hour, including all stops. The actual running time is much faster. One of the special efforts of the employes along the line is to get train number 16 through on time. This train carries large quantities of express matter and mail, in addition to baggage attendant upon the passenger business. This makes it one of the heaviest trains on the system. The contract with the United States Government requires good time and certain connections. If number 16 is thirty or more minutes late in arriving at Milwaukee a special train is made up at that place and run to Chicago, thus necessitating two sections of train number 16 between Milwaukee and Chicago. The running of these two sections involves the deadheading of from one to three cars, the engine and the engine crew, back from Chicago to Milwaukee. During January, 1906, train number 16 was run in two sections from Milwaukee to Chicago seven times. During February, eight times; during March, April, May, June, July and August, once each month; during September, twice; during October, once; during November, up to the 20th, twice. These figures corroborate the testimony regarding the difficulty of operating train number 16 on time.

Feeling that the people of Eden should if possible receive additional accommodations in the form of train service, the Com-

mission considered the possibility of having a freight train carry passengers between Fond du Lac and Eden. For this purpose train number 284, known as the Peninsular Division Freight train, suggested itself; but on looking up the records of this train we found it to be entirely impracticable, for the reason that it seems to be "regularly irregular," as the following record of leaving at Fond du Lac will show:

Number of times train number 284 was late thirty minutes or less	158
Number of times train number 284 was late thirty minutes and less than one hour	83
Number of times train number 284 was late over one hour	62

These figures afford convincing proof of the impracticability of attempting to utilize the Peninsular Division Freight for passenger service between Fond du Lac and Eden. No other freight train operated at present appears to be available. This resolves the entire question finally into the advisability and justice of compelling the Railway Company to stop train number 16 at Eden. Winter is at hand and the above records show that it will be especially difficult to attempt to stop number 16 during the next few months without deranging the schedule and causing hardships to the company. Under all the circumstances in the case it is our judgment and determination that the present train facilities furnished to the inhabitants of Eden and the surrounding territory are fairly adequate for the winter months; and that if the Railway Company meanwhile cannot discover a way of affording accommodations to the people of Eden later in the afternoon than the present trains after April 1, 1907, this Commission will entertain a petition to reconsider the present complaint and then take such action as may be just and reasonable.

IT IS THEREFORE ORDERED that this complaint be and it hereby is dismissed.

Dated this 24th day of November, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

John Barnes,

B. H. Meyer,

Halford Erickson.

Commissioners.

No. 77.

OSCEOLA MILL AND ELEVATOR COMPANY

vs.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY COMPANY.

Jas. A. Frear, for Petitioner.

A. H. Bright, for Respondent.

Complaint against the Minneapolis, St. Paul & Sault Ste. Marie Railway Company alleging inadequate team track facilities at the village of Osceola.

- Held*, (1) That the team track facilities afforded by the above named Railway Company at Osceola, Wis., are inadequate and that not less than six hundred feet of additional team track available for public use should be furnished.
- (2) That where conditions are such that a team road can be provided on the outside of a team track as well as on the inside, and at substantially the same expense, such road should be constructed on the outside of such team track rather than between it and the main track, so as to lessen the liability to accident.

The Osceola Mill and Elevator Company, hereafter called the petitioner, filed with the Railroad Commission a petition, setting forth that it was the owner of two mills in the village of Osceola, in Polk county, Wisconsin, and that it desired to build a spur track so as to connect said mills with the Minneapolis, St. Paul & Sault Ste. Marie Railway, hereinafter called Railway Company, and that said Railway Company refused to permit any connection to be made between its railroad and such spur track. The petitioner prayed for an order requiring the Railway Company to permit the connection to be made. The Railway Company in its answer alleged that the point at which the petitioner desired to connect its spur track with the railroad of the respondent Railway Company was outside of the yard limits of Osceola, and that it was beyond the power or jurisdiction of the Commission or any other body to compel the Railway Company to make the connection. A hearing was had upon the issue thus made up, which resulted in a decision adverse to the petitioner; the Commission holding that the point at which the petitioner desired to make the connec-

tion was outside of the yard limits or station grounds at Osceola, and that it had no power or jurisdiction, under the circumstances, to make the order prayed for.

It appeared at the hearing that the station grounds of the Railway Company were very much congested at Osceola and that sufficient side track room was not afforded in order to give reasonable and adequate service to the patrons of the railway at this point; and the petition was amended on the hearing so as to allege that the facilities afforded the public at Osceola were inadequate. The Railway Company declined to meet the issue thus raised on the hearing, on the original petition, on the ground that it had no notice that such a question was to be injected into the proceedings and that it was entitled to the statutory notice before being obliged to meet the issue thus raised. The petitioner expressed a desire to secure a decision on the question raised in the original petition, and also requested that the hearing on the issue raised by the amended petition be postponed so as to give the Railway Company sufficient time in which to prepare its defense thereto.

The Commission likewise served notice on the Railway Company that it would, on its own motion, investigate the matter of the alleged inadequacy of the service furnished to the patrons of its railway station at Osceola. The question raised by the amended petition, and by the notice of investigation by the Commission on its own motion, was set for hearing on September 11, at which time and place the petitioner appeared by its attorney James A. Frear and the Railway Company appeared by its attorney Alfred H. Bright. Both of the parties submitted testimony in support of their contentions.

The petitioner appears to be, by all odds, the largest shipper at Osceola, handling in the neighborhood of one thousand carloads of freight per year. It has two mills and an elevator at that point and makes it its principal place of business. It also operates a large number of other elevators, most of which are located on the line of the said Railway Company. It has no side track running to either of its mills and is obliged to haul the grain that it desires to manufacture a considerable distance from the cars upon which it is shipped in to the mills, and has to haul the manufactured product a like distance when the same is being shipped out. The testimony would indicate that

about two-thirds of the carload business at Osceola station is done by the petitioner. M. J. O'Reilly appears to be the next largest shipper, handling about 175 carloads a year of lumber and building material. The proposed side track which the petitioner desired to build would serve the petitioner and Mr. O'Reilly and would relieve the congested condition on the present team track. With the proposed spur track in operation and serving the two largest shippers, the team track facilities would, in all probability, be ample for the wants of the remaining shippers and patrons of the road at Osceola. The testimony shows that it is a somewhat difficult matter to get reasonable side track facilities at Osceola, owing to the contour of the country, without spending a considerable sum of money. It is needless, however, to go into a discussion of the facts for the purpose of determining whether or not the present facilities afforded to shippers and patrons of the Railway at Osceola are adequate. The testimony of the petitioner showed, we think, very clearly that they were inadequate, and the representative of the Railway Company admitted that they were inadequate and that something should be done to better the existing conditions. The only dispute between the parties is to what extent conditions should be improved, or, in other words, how much additional room should be provided that would be available at Osceola for the purpose of a team track. The Railway Company at the hearing suggested two methods by which existing conditions might be remedied, and expressed a decided preference for one of the two, presumably because it was the cheaper.

The present team track in use at Osceola appears to be about 1320 feet long from switch to switch. It is located south of the main track, and the clearance between the two tracks at the widest point is forty-seven feet, with cars standing on the tracks. The team track is not accessible from the south side, except in one instance, where the owner of a warehouse located on the side track has built a platform for his own convenience. The remaining portion of the team work is done between the two tracks. The depot building is located on the south side of the main track, and between the main track and the team track. Of the 1,320 feet of team track, somewhat less than 400 feet is available for loading purposes and that on the inside of the track only. The remainder of the space is either

occupied with warehouses, streets, loading platform, or other obstructions that make it unavailable. One plan suggested by the Railway Company to relieve the situation was to build a spur track extending west from the west end of the depot platform, parallel with the main track and as close thereto as practicable. The amount of additional team track room to be provided by the building of this proposed track would be from 180 to 200 feet. With cars on the proposed spur track and on the present team track, the available space for the loading and unloading of cars and the passage of teams would be about 31 feet. It was claimed on the hearing by the petitioner, and, we think, with justice, that the building of this particular spur would afford no relief whatever, as the room between the tracks would not be sufficient to permit the free ingress and egress of teams. It appeared at the hearing that considerable produce was hauled in by farmers and loaded directly from their wagons on the cars. During the busy hours of the day the congestion might well be such in this space that conditions would be better as they now are than with this side track in. The handling of teams unaccustomed to railway trains within a space of this kind is necessarily attended with some danger.

Laying aside these objections, however, we are convinced that with this additional piece of spur track the facilities at Osceola would be wholly inadequate for the handling of the business there. The railway was built through this point about nineteen years ago, and since that time no change whatever has been made in the side track facilities. For many years, no doubt, the facilities were ample for the business of the place. During the first years that the road was built two or three hundred carloads a year appear to be the maximum that was handled at Osceola outside of the less than carload lot business. The carload lot business at the present time amounts to about fifteen hundred carloads a year, and the less than carload lot business has also increased very greatly. The wants and needs of the station have very largely outgrown the early facilities that were afforded, and which were ample at the time. It was not claimed by the engineer of the Railway Company in his testimony that the proposed spur track which has been referred to was anything more than a temporary makeshift, or that it would afford the patrons of the Railway

Company the facilities to which they were entitled. After the testimony was taken on this hearing the Commission sent its engineer to view the *locus in quo* and report upon the desirability of decreasing the space between the present team track and the main line, and also to report upon the adequacy of the relief that would be furnished in consequence of the building of such spur track. The report of the engineer coincides with the impressions which the Commission gained from the testimony on the hearing, and is to the effect that the spur track proposed would furnish very little, if any, relief, and that it might be a positive disadvantage. His report also coincides with the opinion of the Commission, that if the full 200 feet were available for team track purposes the facilities would still be inadequate and not such as the people of Osceola are entitled to, considering the amount of business transacted at that station.

In the opinion of the Commission the Railway Company should furnish at least 600 feet of additional team track for the convenience of shippers at Osceola and should render that amount of additional side track, when built, available to shippers by constructing the necessary roads along its right of way to enable shippers to use such additional team track.

The second scheme proposed by the Railway Company, but objected to by it on account of the expense, practically contemplated the extension of the present side track in a westerly direction a sufficient distance to furnish the additional room needed, and the building of a highway so as to make such additional track when built accessible to the public. Admittedly the additional room can be furnished. So long as it is furnished, and is made accessible to the patrons of the road, the Commission is not disposed to prescribe where or how the additional room shall be furnished. What the Commission holds in the present instance is that the plan of building a spur track from the west end of the depot platform will not furnish adequate facilities, and that the Railway Company should furnish at least 600 feet more than it is furnishing at the present time, in order to render the facilities adequate, and that this team track must be made available to the patrons of the road by the building of a wagon road where necessary in order to allow teams to load and unload cars on such additional track.

we are satisfied that the side track extension can be built in close proximity to the main line and the team road provided on the south side of such extension, instead of between the two tracks, and that the construction of such side track in such manner will not entail any more expense upon the Railway Company than if the same were built and arranged so that the loading and unloading should take place between the spur and the main track instead of on the south side of the spur track. We believe that where accommodations of this kind can be furnished without any additional expense, it is in the interest of public policy to require the accommodation to be furnished in such a way that the liability to accidents will be lessened, and, while we do not decide how close the proposed spur track shall approach the main track, we do decide that it is feasible to have the road or highway on the outside instead of on the inside of such spur tracks, and that it should be so built.

We are not unmindful of the fact that the expense of the proposed side track extension will be considerable, but neither can we ignore the fact that the shippers at Osceola for years have been handicapped by insufficient accommodations to a greater extent than those at any other point of equal importance that we know of. If the item of expense were considered an important factor by the Railway Company it was within its power to relieve the situation without the expenditure of a dollar.

It is therefore determined that the service in the way of team track facilities now furnished to the patrons of the respondent Railway Company at Osceola are inadequate, and that said Railway Company should furnish at least six hundred feet of additional and available team track accommodations at said point, in order to make the service thereat reasonably adequate to the demands of the public, and,

IT IS ORDERED that the respondent, the Minneapolis, St. Paul & Sault Ste. Marie Railway Company proceed to erect, construct, furnish and maintain not less than six hundred feet of additional side track room for use by the patrons of said road at Osceola station for a team track, and for such other lawful and legitimate purposes as the public and the patrons of said road at said point may need to use such side track for in the transaction of their business, the location of such track to be

determined by said Railway Company, subject to the condition that the same must be erected at a point that will be reasonably convenient for the public desiring to use the same.

IT IS FURTHER ORDERED that said Railway Company furnish a suitable road over and along its right of way leading to and adjacent to said track, so that the same will be available to loaded teams engaged in work of delivering freight to cars along such side track and in hauling freight therefrom, such road to connect with the present highway passing under the respondent's railway about 350 feet east of the east switch at said station.

IT IS FURTHER ORDERED that said road be furnished along the outside of such side track and not between the same and the main track of said road and that it be built at such a grade that cars can be conveniently loaded from vehicles on said road.

A period of ninety days will be considered a reasonable time within which to comply with the terms of this order.

Dated this 4th day of October, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 78.

IN THE MATTER OF MIXED CARLOADS.

This matter is still under consideration.

No. 79.

UNDERWOOD VENEER COMPANY

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

Kreuzer, Bird & Rosenberry appearing for Petitioner.

S. A. Lynde appearing for Respondent.

The above entitled matter involves the question of freight rates on veneer logs, from Lenox and other points on the Cran-

don line of the respondent Company to Wausau. A copy of the complaint was served on the respondent Company, but before it was heard the respondent Company granted the demands of the petitioner and the petition was withdrawn.

No. 80.

F. A. KRUEGER

vs.

WISCONSIN CENTRAL RAILWAY COMPANY.

Kelley & Wyseman appearing for Petitioner.

Thomas H. Gill appearing for Respondent.

On October 4, the petitioner filed a complaint in the above entitled matter, alleging that the station facilities afforded the the inhabitants of the village of Quarry, in Manitowoc county, Wisconsin, are inadequate to the necessities of the inhabitants of that place, and asked the Commission for relief. The matter came on for hearing on October 30, at which time both parties to the controversy appeared and presented testimony and arguments. The matter is still under consideration.

No. 81.

CHRIST GROSSMAN

vs.

CHICAGO, MILWAUKEE & ST. PAUL
RAILWAY COMPANY.

H. E. Andrews, for Petitioner

Wm. Ellis, for Respondent.

Application to Establish a Station at Lewiston.

- Held*, (1) That a station should be established at some reasonably convenient point as nearly midway as practicable between Kilbourn and Portage.
- (2) That owing to the danger of operating trains if a station with side track facilities were established at Lewiston one would not be ordered at that point provided a station were established at some other convenient point.

The complaint in the above entitled proceeding was filed with the Commission on October 6, 1906. A hearing was ordered

thercon and a considerable amount of testimony was offered by the petitioner and respondent in support of their respective claims. The complaint in the above proceeding is practically identical with the complaint of Edward Guildner against the above named Railway Company, which was heard by the Commission and in which a decision was rendered under date of June 27, 1906. A restatement of the issues raised by the petition and answer in this proceeding would serve no useful purpose and reference, for a statement of the facts, is made to the decision in the Guildner case. The principal fact alleged in this proceeding that was not set up in the Guildner case was to the effect that the station facilities furnished at Cheney were totally inadequate to the wants and demands of the people living in the vicinity of Cheney and Lewiston.

On the hearing in this proceeding H. E. Andrews appeared as attorney for the petitioner, Christ Grossman, and William Ellis appeared in behalf of the Chicago, Milwaukee & St Paul Railway Company.

The testimony submitted in the two cases was of the same general character. On the last hearing the petitioner went into more detail in reference to the quantity of freight that was produced in the immediate vicinity of Lewiston and that would be shipped from that point if a station were established thereat. The country adjacent to Lewiston and Cheney is well settled particularly to the north of the railroad, and the amount of freight that would be furnished for shipment perhaps would not vary materially from that furnished by the ordinary farming community where a like area would be drawn from. The testimony showed that perhaps more than the average amount of potatoes was grown in the vicinity of Cheney and Lewiston. On the hearing in the present case the petitioner presented facts tending to show quite conclusively that the present station facilities at Cheney were very crude and were inadequate to the demands of the public.

The Commission was impressed on the hearing with the fact that adequate station facilities should be furnished by the Railway Company at some reasonably convenient point upon its road between Portage and Kilbourn. The distance is given as being eighteen miles and no regular station is maintained at any intermediate point between the two places named. It almost goes without saying that the railroad passing through an old settled

and well developed country should maintain some intermediate station at which an agent should be employed and at which freight and passengers could be handled in the usual and customary way. It was practically admitted by the respondent railway company on the hearing that adequate facilities were not now furnished and that a station building should be erected and a station agent maintained to take care of the wants of the patrons of the road at Cheney.

The petitioner admitted upon the hearing that the convenience of the public at the present time did not require that more than one regular station should be established between the points in question. He did claim, however, that such station should be established at Lewiston rather than at Cheney. The reasons advanced in support of this contention were that Lewiston was practically midway between Portage and Kilbourn; that there were good highways leading to Lewiston; that the convenience of a greater number of people would be served by maintaining a station at Lewiston than at Cheney and that it was undesirable that a station should be maintained at Cheney for the reason that the only road that was accessible for use was a bad one at best and was liable to be overflowed and become impassible in times of high water. In addition to this it was shown that no regularly laid out public highway led to Cheney station. All of these contentions in favor of the establishment of a station at Lewiston are undoubtedly true.

On the other hand, the Railway Company urges now, as it did before, serious objections to the establishment of a regular station at Lewiston. There is only a comparatively short piece of straight track on either side of where the station would be established. The curves on either side are very considerable and the view on one side at least is very much obscured by a cut. The railroad is double tracked between Kilbourn and Portage and the block system has been installed and is being operated on this portion of the road. It appeared in the testimony that eighteen freight trains and five passenger trains passed over the road each way every twenty-four hours. Some of the passenger trains are the heaviest and fastest trains on the road and the same may be said of the freight trains. At Cheney at the present time an operator is kept for the block system, and passing tracks are also maintained and some buildings have been constructed by the company at this point. It appeared in the testimony in the

Guildner case that the expense of removing the improvements that are now at Cheney to Lewiston would amount to eight or nine thousand dollars, and while no testimony to that effect was offered on the present hearing it was admitted in the argument that the expense of making the change would be considerable. The reason given by the Railway Company for removing this station from Lewiston to Cheney was on account of the danger of maintaining a station and passing tracks on a comparatively short piece of straight track such as is found at Lewiston. It was stated that the change was made in the interest of safety in operation and that the inconvenience of operation at Lewiston would be very great.

The officials of the Railway Company offered upon the hearing to deliver free of charge at Lewiston, or any other convenient point that might be designated, a sufficient quantity of cinders to fill up the road between Cheney and Lewiston and also to provide free ingress and egress to Cheney station and to erect a station building at that point and maintain an agent thereat, so that freight might be regularly billed from such station and delivered therefrom in the usual and customary way where stations are maintained.

The witnesses in behalf of the Railway Company were apparently very strongly of the opinion that the dangers that would result from the transfer of the station facilities from Cheney to Lewiston were actual and not imaginary. Apparently, there was no consideration except the one of safety that led to the removal of the station from Lewiston in the first instance. We are not disposed to do anything that will unreasonably add to the hazards of railway operation. While the inconvenience of the farmers living in the vicinity of Lewiston may be considerable because of the extra two miles they will have to haul their produce to Cheney, and because of the expense the town may be put to in the way of making a good road, still this consideration does not appeal to us as being as important as that of safeguarding as far as possible the lives of passengers and trainmen. We have considered this case without any reference to the former hearing or former decision and have reached the conclusion on the facts presented that we would not be justified in ordering a station to be established at Lewiston under all the circumstances.

We express the view, however, that a suitable station building

should be put up at some reasonably convenient point somewhere nearly midway between Kilbourn and Portage; that an agent should be maintained thereat; that adequate side track and team track facilities should be furnished; that the side track, team track, and depot buildings should be made accessible to those desiring to transact business with the railway company, and that some means should be provided by which parties desiring to reach the railway can do so over some road that is open to the general public. If the facilities in question can be furnished at Cheney we think the people living in the vicinity of that station, and in the vicinity of Lewiston, will be reasonably well accommodated for the present at least. If they cannot be furnished at Cheney, then they should, in our judgment, be furnished at some other convenient point, and if they are not furnished within a reasonable time this Commission will entertain an application for the establishment of a station as herein indicated. We apprehend, however, from the statements made by the representatives of the Railway Company that the requisite facilities will be furnished at Cheney within a reasonable length of time. We would also suggest that a suitable platform be erected at Lewiston for the accommodation of shippers of milk and cream.

For the present, the relief asked for in the complaint, which is the establishment of a regular station at Lewiston, with side track facilities and an agent, will be denied and the complaint dismissed.

Dated this 31st day of November, 1906.

RAILROAD COMMISSION OF WISCONSIN,

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

No. 82.

C. SCHECKLER

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

The petition in the above entitled matter was filed on September 27. The petitioner alleges that he is a grower and shipper of Holland and domestic cabbage, residing near the station of Berryville, Racine county, Wisconsin, and complains that the respondent company maintains no exclusive

team track at said station; that the track which shippers are compelled to use is used by said company as a passing track, that cars placed thereon are frequently moved and not returned for considerable periods of time; that train crews neglect and refuse to place and spot cars at points where they can be reached by persons desiring to load them.

That the respondent company does not furnish sufficient cars for the needs of the business of the shippers at the station, and that it will not furnish petitioner cars to load to points off the lines of the Chicago & Northwestern Railway.

A copy of the complaint and notice of investigation was served upon the respondent company on September 28. On October 9, the Commission received a letter from the petitioner withdrawing his complaint.

No. 83.

CHARLES GILLETT

vs.

MILWAUKEE ELECTRIC LIGHT & RAILWAY COMPANY
AND
MILWAUKEE HEAT, LIGHT & TRACTION COMPANY.

Petitioner, in his own behalf.

C. M. Rosencrantz, for Respondent.

Miller, Mack & Fairchild, of Counsel.

Petition was filed in the above entitled matter alleging that the rates of charge made for the transportation of persons between Milwaukee and Wauwatosa are excessive and that the service between said places is inadequate. The respondent companies have filed answers and the matter will come on for hearing on January 8, 1906.

No. 84

GREENLEAF STONE COMPANY

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Ellis, Merrill & Silverwood, for Petitioner.

Wm. Ellis, for Respondent.

The petitioner complained that it was in the business of quarrying and crushing stone and shipping crushed stone to points on the lines of the Chicago, Milwaukee & St. Paul Railway, and that the respondent company had neglected and refused to furnish it with cars sufficient to carry on its business. The matter was set for hearing on October 30, 1906. On that date the parties appeared and filed a stipulation dismissing the complaint, subject to its being placed on the calendar of the Commission on five days notice by the petitioner to the respondent.

No. 85.

GREENLEAF STONE COMPANY

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Ellis, Merrill & Silverwood, for Petitioner.

William Ellis, for Respondent.

The petitioner in the above entitled matter complained that the rates charged by the respondent company for transporting stone from Greenleaf to certain points on the line of the Chicago, Milwaukee & St. Paul Railway are exorbitant, excessive and unreasonable and so high as to prevent the petitioner from selling its stone at the said points. The matter was set for hearing on October 30. On that date the parties appeared and entered into a stipulation withdrawing and dismissing the complaint.

No. 86.

THOS. B. FARMER

vs.

DULUTH, SOUTH SHORE & ATLANTIC RAILWAY COMPANY.

Petitioner, in his own behalf.
A. B. Eldredge, for Respondent.

The petitioner in the above entitled matter complains that the respondent Railway Company operates a passenger train arriving at Sault Ste. Marie, Michigan, at 5:30 o'clock in the afternoon, passing Marengo Junction, on the line of the Wisconsin Central Railway Company and the said Duluth, South Shore & Atlantic Railway Company, at an early hour in the morning; that the said train does not stop at Marengo Junction, compelling persons who desire to go to points north and south on the line of the said Wisconsin Central Railway to take another train on the said Duluth, South Shore & Atlantic Railway where the connection is less satisfactory, or else compelling them to travel by some other route to their destination. The matter is set for hearing Decembr 11, 1906.

No. 87.

IN RE INVESTIGATION BY THE COMMISSION, ON ITS OWN MOTION, OF THE RATES CHARGED ON WASTE LUMBER PRODUCTS.

Thos. H. Gill, for the Wisconsin Central Railway Company.
S. A. Lynde, for Chicago & Northwestern Railway Company.
Wm. Ellis, for Chicago, Milwaukee & St. Paul Railway Company.
Thos. Wilson, for Chicago, St. Paul, Minneapolis & Omaha Railway Company.

The above entitled matter grew out of the complaint of Commission on September 18. (See case No. 61) The investigation is on a question as to whether or not the present class-

ification and present rates charged by railways in Wisconsin for transporting short pieces of boards or lumber varying in length from twelve inches to forty-seven inches, sometimes referred to as pine cuttings or pine clippings, are reasonable, and whether or not changes should be made in the present classification or rates, or both, so as to reduce the present rate of charge now made for the transportation of such material. A hearing was ordered in the said matter on the 30th day of October, 1906, at which time the Wisconsin Central Railway Company, Chicago, Milwaukee & St. Paul Railway Company, Chicago & Northwestern Railway Company and the Chicago, St. Paul, Minneapolis & Omaha Railway Company, appeared by their attorneys. After the said hearing the matter was taken under consideration. It is still pending.

No. 88.

W. H. ANDREA

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Petitioner, in his own behalf.

Wm. Ellis, for Respondent.

On October 18, petition was filed complaining that the passenger train service of respondent Company afforded by the present schedule between Milwaukee and Corliss is inadequate and insufficient for the needs of persons traveling between said points. The matter is set for hearing on December 11, 1906.

No. 89.

H. P. BRADLEY

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Petitioner, in his own behalf.

William Ellis, for Respondent.

Petition was filed on October 27, 1906, complaining that the respondent Company discriminates in the rates on merchandise

in carload lots from Milwaukee to Wauwatosa, in that it charges a rate of forty cents per ton or more for such service while a switching rate of \$5.00 per car for transporting merchandise from Milwaukee to West Allis and North Avenue station is charged, and that the rate charged to the inhabitants of Wauwatosa is discriminatory. The matter has been set for hearing on December 11, 1906.

No. 90.

IN RE WISCONSIN CENTRAL RAILWAY COMPANY
CHARGE ON CONSTRUCTION MATERIAL FOR MANUFACTURING PLANTS.

Thos. H. Bill, for W. C. Ry. Co.

C. E. Vroman, for C. M. & St. P. Ry. Co.

Rights of carriers to make reduced rates not open to the general public on machinery and material used in the construction of manufacturing plants.

The Wisconsin Central Railway Company issued a circular setting forth that in accordance with its uniform practice, for the purpose of encouraging the upbuilding of manufacturing plants along its line, it would haul the machinery and material used in the construction of such plants at one half the regular rate charged for carrying such freight. On an application to the Railroad Commission for a construction of chapter 362, Laws of 1905, in so far as said act might affect the legality of the rule in question.

Held, (1) That under section 6 of the act referred to, provided that nothing therein contained should be "construed to prevent concentration, commodity, transit and other special contract rates, but all such rates shall be open to all shippers for a like kind of traffic under similar circumstances and conditions," the carriers might make commodity rates for the shipment of the building material and machinery in question and ship the same there under.

(2) That a lower rate might legally be made to the manufacturer on such commodities than to a dealer therein, the conditions and circumstances under which the two kinds of shipments are made being dissimilar.

Under date of August 28, 1905, the Wisconsin Central Railway Company filed with this Commission a letter, the material portion of which reads as follows:

"To permit the industrial advancement of the State this company will transport construction material and machinery to be employed in the erection and first operation of

factories built at points located on its line within the State of Wisconsin at fifty per cent of the regular tariff rate on such material and machinery. The articles to be billed and collected for on the basis of the full tariff rate, and a refund of fifty per cent of the charges made, upon presentation and surrender of the original paid freight bills accompanied by a certificate from the agent at the point where the material was used.

"This has been the practice for years but we have never published any tariff in regard to it, nor do we do so now, except in so far as this advice to you may be so construed."

Pursuant to such letter, as we are advised, the Wisconsin Central Railway Company has hauled construction material and machinery for manufacturing plants at one half the regular tariff rates.

The Chicago, Milwaukee & St. Paul Railway Company called the attention of the Commission to the fact that the Wisconsin Central Railway Company was in fact moving machinery and building material under the above letter and that such action was in violation of the provisions of chapter 362, Laws of 1905. The St. Paul Company took the position that it did not desire to lose traffic obeying the law while a competing carrier was securing the traffic by reason of its unlawful acts, and asked that the Commission take appropriate action to prevent the discrimination that was being practiced.

The Commission requested the representatives of the railway companies to appear and argue the question in difference between them, and pursuant thereto Mr. Thos. H. Gill appeared for the Wisconsin Central Railway Company, and Mr. Chas. E. Vroman for the Chicago, Milwaukee & St. Paul Railway Company.

The provisions of the statute were discussed at some length. The attorney for the Wisconsin Central Company expressed himself as being very clearly of the opinion that his company had a perfect right under the law to make and follow the rule in question. The attorney for the St. Paul Company was just as clear that the action of the Central Company was discriminatory and unlawful and came in conflict with the express terms of the statute. Ever since the argument the Commission has been very much in doubt on the question raised and has not as yet that confidence in its conclusions that the attor-

neys had in theirs. Pending a decision by the Commission on the question the St. Paul and North Western Companies have filed tariffs which meet the Wisconsin Central rate. The question raised, as well as the legality of the tariffs filed, is before the Commission for decision. If the tariffs in question are found to be discriminatory and unlawful it is our duty to see that they are withdrawn. Indeed, the companies have expressed their entire willingness to abide by whatever ruling the Commission makes.

Sec. 12 of chapter 362, Laws of 1905, provides that on complaint to the Commission that any rates are unreasonable or "unjustly discriminatory" notice is to be given to the carrier and if such rates are not changed by the carrier a hearing is to be ordered. The section further provides that the Commission may on its own motion investigate any rate that it believes to be unreasonable or "unjustly discriminatory."

Sec. 14 provides that when the Commission finds any existing rate to be unreasonable or "unjustly discriminatory" it shall substitute therefor a reasonable rate.

Sec. 22 defines discrimination as follows:

"If any railroad . . . shall . . . demand, collect or receive from any person, firm or corporation a greater or less compensation for any service rendered or to be rendered by it for the transportation of persons or property, or for any service in connection therewith, than that prescribed in the published tariffs then in force, or established as provided herein, or than it charges, demands, collects or receives from any other person, firm, or corporation for a like and contemporaneous service, such railroad shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared to be unlawful."

Sec. 6 provides:

"Nothing in this act shall be construed to prevent concentration, commodity, transit and other special contract rates, but all such rates shall be open to all shippers for a like kind of traffic under similar circumstances and conditions, and shall be subject to the provisions of this act as to the printing and filing of the same."

We first naturally turn for judicial aid to the construction placed by the courts on the Interstate Commerce Act. Section 2 of that law, like section 22 of our own, defines "unjust discrimination." Our act forbids the carrier charging one ship-

per more than another "for a like and contemporaneous service." The Federal statute forbids the carrier charging one shipper more than another for "a like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions."

We are convinced that if the reduced rate can be made it must be under the provisions of section 6 of the Wisconsin law. Section 22 prohibits a railroad company from charging one shipper more than another for "a like and contemporaneous service." If a carrier ships two carloads of brick in the same train from Milwaukee to Oshkosh, one consigned to a dealer in brick, and the other to a party erecting a manufacturing plant, it would be preposterous to say that the service in the two cases was not "like and contemporaneous." It follows that the same charge should be made each shipper, unless there is some other provision of the law which renders section 22 inapplicable. Such provision, if there is any, is found in section 6 hereinbefore quoted. It permits the making of concentration, commodity, transit and other special contract rates, but all such rates must be open to all shippers of a like kind of traffic "under similar circumstances and conditions."

Most of the material and machinery used in the construction of manufacturing plants is shipped on commodity tariffs and all might be. The question is, can one rate be made for the builder of the factory and another for the dealer in the same kind of material, where the service performed is the same in each case? The answer to the query depends upon the construction which should be placed on the words "under similar circumstances and conditions." Is there anything so dissimilar between a shipment of a carload of brick to a person engaged in the construction of a manufacturing plant and one engaged in building a store as would admit of one shipper being charged half what the other pays?

Such rates as the Wisconsin carriers may make under section 6 of our law should be governed by the same legal principles that are applied to section 2 of the Federal act. Each statute provides that the same charge must be made for a like and contemporaneous service performed under similar circumstances and conditions.

In a case that was not reviewed by the courts the Interstate Commerce Commission has held that a lower rate could not lawfully be made under section 2 of the Federal law on coal

used in generating steam than that made on coal intended for ordinary fuel consumption. *In re Charges on Coal by L. & N. Ry. Co.*, 5 I. C. C. R. 466.

The analogy between this decision and the question under consideration is close. The practice condemned was discontinued before the decision and there is no discussion of the point that is of any aid to us.

The Interstate Commerce Commission also had before it for consideration the question of the right of a railway company to make a charge for the transportation of logs and when the lumber was shipped from the log so transported to allow on the shipment of the lumber a reduction from what the rate would otherwise be on account of rates charged for the transportation of the logs in the first instance. It was claimed that such a practice was discriminatory within the meaning of section 2 of the Interstate Commerce Act. The Commission after discussing the universality of the practice complained of and of the money investments that were made on the strength of such practice held that the shipment of the log from the forest to the mill and of the manufactured product from the mill to the market might be considered and treated as a single service and that a lower rate might be made than the sum of the log and lumber rates in force, treating each shipment as being separate and distinct from the other. The Commission said:

“What we hold is that the shipment of the log to the mill and the lumber from the mill may, under the circumstances of this case, be treated as in the nature of a through shipment from the point where the log is received to the point where the lumber is finally delivered, and that the carrier may make such allowance toward the cost of moving the log as would be fairly involved in moving the lumber from that point, and that it may do this by joint agreement with the carrier bringing the log to the mill, provided that carrier is a common carrier by rail.”

Central Yellow Pine Assn. vs. V. S. & P. R. Co., 10 I. C. C. R., 193, 214, 215.

The Interstate Commerce Commission has also had before it the practice that prevailed on certain Southern roads of allowing cotton to be shipped to certain concentrating points for the purpose of grading and compressing, the local rate being paid to the concentration point in the first instance, and

when the shipment was made from that point a through rate being put in force covering the charge that would have been made if the cotton had been originally shipped from the point of origin to the point of final destination, the shipper being allowed a credit of the amount paid locally to the concentration point on the final shipment. The Commission held that the practice was not illegal or discriminatory under the provisions of the Interstate Commerce Act. *In re Unlawful Rates and Practices in Transportation by the Kansas City, Memphis & Birmingham R. R. Co.*, 8 I. C. C. R., 121.

The alleged discrimination in the matter of cotton rates was also before the Supreme Court of Alabama under a statute of that state preventing discriminations and it was held by that court that the practice referred to was not discriminatory so long as all parties desiring to make shipments thereunder were treated alike. The court said that the practice did not grant undue preference or advantage to one person and did not impose an unreasonable disadvantage on another; that as a matter of fact the same charge was made where the service was like and contemporaneous and therefore there was no discrimination.

Laurel Cotton Mills vs. Gulf & Ship Island R. R. Co.,
37 Southern 137.

The Supreme Court of the United States has held that through and local service were performed under dissimilar circumstances and conditions so that a higher charge could be made for the local than for the through service.

Union Pacific Ry. Co. vs. United States, 117 U. S. 355.

So too it has been held that water competition created dissimilar circumstances and conditions that justified a lower rate of charge between the competitive than between the intermediate points. In the *Import Rate* case it appeared that the proportion of the through rate received by the railway companies transporting goods from Atlantic and Gulf ports to California points, that were shipped from Europe, were much lower than the rates charged on the same articles, where the shipments originated in the seaport towns. For instance, the rate on boots and shoes shipped from Liverpool to San Francisco by way of New Orleans was \$1.07 per 100 pounds, of which amount the rail carrier from New Orleans to destination absorbed 80 cents, while the rate charged on a shipment of boots

and shoes originating in New Orleans and destined for the same point was \$3.70 per 100 pounds. This difference was justified by the railway carrier on the ground that it was necessary to meet water competition and had to be made or else traffic would be lost. The Supreme Court overruled the decision of the Interstate Commerce Commission holding adversely to the railway companies, (4 I. C. C. R. 447) and also that of the Circuit Court and held that the circumstances under which the two classes of shipments were made were dissimilar.

Texas Pacific Ry. Co. vs. Interstate Commerce Commission, 162 U. S., 197.

In the *Import Rate* case, above cited, the court uses this language:

“Even in construing the terms of a statute, courts must take notice of the history of legislation, and out of the different possible constructions, select and apply the one that best comports with the genius of our institutions and, therefore, most likely to have been the construction intended by the law-making power. Commerce in its largest sense, must be deemed to be one of the most important subjects of legislation, and an intention to promote and facilitate it, and not to hamper or destroy it, is naturally to be attributed to Congress.” 162 U. S., 218, 219.

Speaking of the purposes and objects of the Interstate Commerce Act in the *Social Circle* case, the court said:

“Subject to the two leading prohibitions that their charges shall not be unjust or unreasonable, and that they shall not unjustly discriminate, so as to give undue preference or disadvantage to persons or traffic similarly circumstanced, the act to regulate commerce leaves common carriers as they were at the common law, free to make special contracts looking to the increase of their business, to classify their traffic, to adjust and apportion their rates so as to meet the necessities of commerce, and generally to manage their important interests upon the same principles which are regarded as sound, and adopted in other trades and pursuits.”

Cin., N. O. & T. P. Ry. Co. vs. Int. Com. Com., 162 U. S., 184, 197.

The above quotation, which is really language used by Judge Jackson in the Circuit Court in the case of the *Interstate Com-*

merce Commission vs. Baltimore & Ohio R. R. Co., 43 Fed. Rep., 37, is again cited with approval in the opinion in the case of the *Southern Pacific Railway Co. vs. Interstate Commerce Commission*, 200 U. S., 536, 544.

The *Party Rate* case arose out of a practice resumed by the Baltimore & Ohio R. R. Co. of selling tickets to a party of ten or more at a less price than was charged to a single passenger. A competing carrier instituted proceedings against the Baltimore & Ohio Company before the Interstate Commerce Commission for the purpose of preventing the latter company from continuing the practice of selling such reduced rate tickets. The Interstate Commerce Commission decided that the action of the Baltimore & Ohio R. R. Company amounted to a discrimination and was unlawful. It was said that the practice of carrying two passengers between the same points and on the same train, charging one more for the service than the other was clearly a discrimination and that the circumstances and conditions under which the parties were traveling were identical.

The railway company refused to comply with the order of the Commission and an action was brought in the United States Court to compel obedience thereto. The case was carried to the Supreme Court of the United States for final decision and that court held that the circumstances and conditions under which the two passengers traveled were so dissimilar as to admit of the carrier selling a reduced rate ticket to one and not to the other. The court said:

“In order to constitute an unjust discrimination under section 2, the carrier must charge or receive directly from one person a greater or less compensation than from another, or must accomplish the same thing indirectly by special rate, rebate or other device; but in either case it must be for a like kind of traffic, under substantially, similar circumstances like kind of traffic, under substantially similar circumstances and conditions.’ To bring the present case within the words of this section, we must assume that the transportation of ten persons on a single ticket is substantially identical with the transportation of one, and, in view of the universally accepted fact that a man may buy, contract, or manufacture on a large scale cheaper proportionately than upon a small scale, this is impossible.”

Interstate Commerce Commission vs. Baltimore & Ohio R. R. Co., 145 U. S., 263.

It should be remarked in reference to this case, however, that there is some language in the decision which tends to limit its application to the carriage of passengers.

In the cases arising under the Interstate Commerce Act in construing the meaning of the phrase "similar circumstances and conditions," the railroads justified their position on the ground that competitive conditions compelled them to act as they did or lose the traffic. If a reduced rate on material for a manufacturing plant can be justified it must be on other grounds than competitive traffic conditions. The reduced rate is given for the purpose of encouraging the construction of manufacturing plants that will produce traffic for the railroads directly and perhaps indirectly also. From an economic point of view the development of manufacturing is important to the State and should be encouraged. The purchaser of building material and machinery for a factory does not come in competition with the local dealer in such articles, unless it can be said that the dealer might be able to sell the factory man if he were placed on even terms in the matter of rates. We apprehend, however, that ordinarily the builder of a manufacturing plant can buy his construction material as cheaply as the local dealer can. The dealer, however, may well claim that it is a discrimination against him to charge him more for a service than someone else is charged for like service, although the discrimination in fact works no injustice. In all probability it was entirely foreign to the intention of the legislature to prevent carriers from encouraging manufacturing industries in the manner indicated, but if the language of the act is clear the intent must be read therefrom according to the general rules of statutory construction.

The nearest case in point on the question under consideration decided by a court that we have been able to find arose in Pennsylvania. The legislature of that state passed a law prohibiting any undue or unreasonable discrimination by any common carrier in charges for transportation of freight within that state or coming from or going to any other state. The act also provided that no railroad company should charge, demand or receive from any person or corporation for the transportation of property, or for any service in connection therewith, a greater sum than it charged or received from any other person, company or corporation for a like service from the same place upon like conditions and under similar circumstances. The act fur-

ther prohibited any company from making any undue or unreasonable discrimination between individuals, either in regard to the matter of rates or charge or facilities furnished for transportation.

A company intending to engage in the manufacture of wire nails made a contract with the Pennsylvania Railroad Company, by which it agreed, in consideration of the establishment of the factory, to haul coal at thirty cents per ton, provided the amount consumed was not less than twenty tons a day, and provided further, that a certain specified amount of outgoing freight should be shipped from the plant. A large manufacturing plant was built and a town grew up around it, and in time coal dealers established themselves in business at the village. The manufacturing company sold some coal to its employes but did not engage in the business of selling coal generally. The rate charged to the dealers in coal in the village was very much in excess of the contract rate made with the manufacturing company, and the dealers claimed that the act of the railroad company in charging them a higher freight rate than was charged to the manufacturing company amounted to a discrimination. The dealers paid the excessive charge under protest and commenced an action to recover the same back. The decision in the case involved principally the question as to whether or not the dealers were being discriminated against and whether or not the shipments to the manufacturing company and to the dealers were made "upon like conditions and under similar circumstances." The court said:

"The plaintiffs were dealers in coal merely while the nail company was a manufacturer of fabrics, and itself consumed the coal it received. They were therefore not competitors in the same business, and the lower rate to the manufacturer would not, under the contract, effect the business of the plaintiffs injuriously. . . . The business of the plaintiffs paid but one freight to the defendant while the business of the nail company paid not only that freight, to wit; for hauling the coal to the nail works, but also in addition to that, another and entirely independent freight to the defendant on all the products manufactured by the nail company. This was a most important and vital difference in the conditions and circumstances of the two shipments. The authorities are very clear and strong that where an additional freight is obtained by means of a lower charge the discrimi-

nation is justified both at common law and under the statute. . . . It entirely destroys, in our opinion, the fundamental allegation of the plaintiffs that the shipment of coal to the plaintiffs, and the nail works, were made 'upon like conditions and under similar circumstances.' For the shipments of coal to the plaintiffs yielded but one freight to the defendant, while the shipments to the nail works yielded not only the same incoming freight on the coal, of at least twenty tons a day, but the additional outgoing freight of thirty to forty tons a day of frabies manufactured by the nail works. In view of this testimony how can it possibly be said that the conditions of the two shipments are alike and other circumstances similar? That the railroad company may lawfully secure to itself so important an addition to its business by making a lower charge to one customer than to others, is fully established by the authorities as we shall presently see. The manufacture and sale by the nail works of nails was outside of, and entirely harmless to, the business of the plaintiffs, and hence a lower price for coal consumed by the nail works was neither an undue or an unreasonable discrimination against the plaintiffs, because it was an immaterial circumstance as affecting their business. . . . The truism that circumstances alter cases applies here and, under a different state of circumstances, a discrimination may be reasonable and lawful, which, were the circumstances the same, would be undue and unreasonable. In order to render lawful an inequality of charge, the goods must be carried under different circumstances, and the question whether the difference is material or essential arises in each particular case."

Hoover vs. Pennsylvania R. R., 156 Pa. St., 220, 231, 232, 240.

The material differences between the two classes of shipments as they appear to us are;

(a) No actual harm or injustice results to anyone from giving the lower rate to the manufacturer. (b) The dealer suffers no injury or wrong in his business and may be in fact benefited by the lower rate to the manufacturer. (c) The giving of such low rate tends to encourage and build up our manufacturing plants, a desirable thing for the state from an economic standpoint, and also for the railroad companies.

None of the differences mentioned would exist if two dealers were involved instead of a dealer and a manufacturer.

We are met at this point by the contention of counsel for the Chicago, Milwaukee & St. Paul Railway Company that any such distinction involves the taking into account the purpose for which the shipment was made, whereas the service only should be considered. If this contention is correct very many rates are badly out of joint. *Special rates* on saw logs and other raw material destined for manufacture and reshipment over the line furnishing the raw material are made in consideration of receiving the shipment of the outgoing product. Lower charges are made on shipments of grain where the carrier receives a portion of a through rate than the same carrier makes for identically the same service originating and terminating on its own line. Milling in transit rates are made that are sometimes the same and sometimes slightly in advance of the through rate. The service is just the same as would be performed if two local shipments covering the distance of the through shipment were made, although the sum of the locals would be much higher than the through rate plus the charge for milling in transit. Section 6 provides for concentration rates which take into account the purpose for which the articles shipped under such rates are concentrated.

We think the purpose for which material is used can be legitimately considered in determining whether it is discriminatory or not. We have held that a lower rate may be made on raw material where the same is to be manufactured and shipped over the line of road hauling it than on the same class of raw material where it is consumed and produces no additional freight after the initial shipment. We think this is justifiable on the theory that the real service performed by the carrier in the case of the shipment by the manufacturer is to take the raw material from the mine or forest and deliver the product manufactured therefrom to the consumer. Of course in the case of shipment of building material for a factory no subsequent haul is received from such material but the factory does produce business for the carrier in another way.

That part of the Pennsylvania Statute under consideration in the Hoover case differs in no essential particular from section 6 of our law and the principle established in the Hoover case, if it is good law, is decisive of the question under consideration here.

The language quoted from *Social Circle Case* (162 U. S. 197) is that in the absence of rates being unreasonably high

or unjustly discriminatory the carriers are "free to make special contracts looking to the increase of their business." This language of course applies to the Interstate Commerce Act, but the purpose of the Wisconsin law as expressed in its title is to "prevent the imposition of unreasonable rates, prevent unjust discrimination, etc.," and the language of the court in the case cited construing section 2 of the Interstate Commerce Act would be just as applicable to section 6 of the Wisconsin law.

So while there is no dissimilarity in the service that may be performed for the manufacturer and the dealer, there is a dissimilarity in the conditions, objects and purposes under which the two shipments are made, enough in our judgment to warrant the carrier in putting in the lower tariff on the shipment to the manufacturer if it sees fit to do so.

We have carefully considered the argument that it would be a dangerous practice to let down the bars and say that the purpose for which a shipment is made can be taken into account in any case. It was in substance said that such a construction would emasculate one of the most salutary and important provisions in the law, and that once the rule was established that the purpose for which a shipment was made could be considered, we were paving the way for an infinite variety of trouble in the future.

The trouble with this contention is that if the State should attempt to establish a system of cast iron rules the whole subject of transportation charges would be revolutionized. An arbitrary system of charges has been built up by the carriers for which in many instances no good reason ever existed, and in the majority of which no good reason exists today, except the one very important reason that business conditions and enterprises have adjusted themselves to the system of rate making in vogue and that any attempt at a radical equalization in charges would create an unwarrantable disturbance in the existing order of things.

While we regard the question submitted as close and doubtful, we have reached the conclusion that the practice of giving reduced rates on material and machinery used in the construction of manufacturing plants is not a violation of chapter 362, Laws of 1905. All parties constructing such plants, however, should be treated alike and without discrimination, and we think some general rule should be promulgated by the railway

companies, along the line of that issued by the Wisconsin Central Railway Company.

Dated this 29th day of October, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN.

By JOHN BARNES,
B. H. MEYER,
HALFORD ERICKSON,
Commissioners.

No. 91.

VILLAGE BOARD OF THE VILLAGE OF FALL CREEK

vs.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY
COMPANY.

J. O. Ziemann, for Petitioner.
Thos. Wilson, for Respondent.

The petition in the above entitled matter was filed on November 9, complaining that the highway crossing over the tracks of the respondent company in the village of Fall Creek is dangerous, and asks the Commission to make an order commanding the respondent company to maintain either a watchman or some device at said point to warn persons about to go upon said crossing of the approach of trains. The matter has been set for hearing on December 11, 1906.

No. 92.

HARVEY CLARK

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COM-
PANY.

Petitioner, in his own behalf.
Wm. Ellis, for Respondent.

The petition in the above entitled matter was filed on November 12. The petitioner alleges that he is the superintend-

ent of the Wisconsin School for the Blind, near Janesville, Wisconsin, and that cars of ice are shipped to him for use in said school, from State Hospital station on the line of the Chicago & Northwestern Railway Company; that respondent is a common carrier and maintains a side track near the said Wisconsin School for the Blind; that it refuses to switch cars of ice from the yards of the Chicago & Northwestern Railway Company to said side track, though it performs a similar service for other persons. The matter has been set for hearing for December 11, 1906.

No. 93.

H. C. HOPSON

vs.

UNITED STATES EXPRESS COMPANY AND AMERICAN
EXPRESS COMPANY.

Petitioner, in his own behalf.

The petition was filed in the above entitled matter on November 14, complaining that the respondent Companies have established certain limits in the city of Madison beyond which they will not call for nor deliver packages; that the said limits are unreasonable and discriminatory. A copy of the petition and a notice of investigation was served on each of the said respondent companies. On November 26, the Commission received a letter from the petitioner saying that the respondent companies had increased their delivery limits and that he desired to withdraw his complaint.

No. 94.

VAUGHN MANUFACTURING COMPANY

vs.

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

R. W. Hibbard, for Petitioner.

S. A. Lynde, for Respondent.

The petition was filed in the above entitled matter on November 17. The petitioner complains that the tracks of the re-

spondent company cross those of the Chicago, Milwaukee & St. Paul Railway Company at Watertown Junction, and that both of the said companies maintain a station at said junction, and that the respondent company instead of transferring freight at said junction carries it to the depot sixty rods from the crossing, and then transfers it by team, charging the drayage to the shipper, and that said service and charge are unnecessary and unreasonable. The matter has been set for hearing on December 11.

No. 95.

KILBOURN ADVANCEMENT ASSOCIATION

vs.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

C. W. Smith, for Petitioner.

Wm. Ellis, for Respondent.

The petition in the above entitled matter was filed on November 26. Petitioner complains that the passenger train service at the village of Kilbourn City is inadequate for the needs of the people of that community. The matter is still pending.

No. 96.

COLIN W. WRIGHT

vs.

ILLINOIS CENTRAL RAILROAD COMPANY.

Petitioner, in his own behalf.

Jones & Schubring, for Respondent.

The petition in the above entitled matter was filed on November 28. Petitioner complains that the passenger train service between Monroe and Madison is inadequate for the needs of the inhabitants of the city of Monroe. The matter is still pending.

No. 97.

IN RE APPLICATION OF CHAPTER 362, LAWS 1905,
TO CERTAIN STREET RAILWAYS.

Jurisdiction of the Railroad Commission over the business of Street Railway Companies.

Inquiry by the Milwaukee Electric Railway & Light Company as to its liability to report to the Railroad Commission accidents occurring on its lines within the limits of the City of Milwaukee.

Held, (1) That the Milwaukee Electric Railway & Light Company is a railroad company within the meaning of Section 2, Chapter 362, Laws of 1905.

(2) That inasmuch as the lines of said railway company extend beyond the limits of the City of Milwaukee, it is subject to the provisions of Chapter 362, aforesaid, both as to its urban and inter-urban business, and, therefore, accidents occurring within the limits of the City should be reported.

Mr. Clark M. Rosecrantz, the attorney for the Milwaukee Electric Railway and Light Company, a corporation operating a street railway in the city of Milwaukee, whose lines extend beyond the limits of the city, has submitted to the Railroad Commission the question whether or not said company is obliged to report to the Commission accidents occurring on its lines within the city.

The question is an important one inasmuch as it involves the whole subject of the jurisdiction of the Railroad Commission over most of the street car lines in the State.

Section 2 of chapter 362, Laws 1905, defines the term "railroad" as used in the act to mean and include all corporations and their lessees that now or may hereafter own, operate, manage or control any railroad or part of a railroad as a common carrier in this state, or cars or other equipment used thereon.

Subdivision *a* of section 2 extends the provisions of the act to the transportation of passengers and property between points within the state and also to all railroad corporations that do business as common carriers upon or over any line of railroad within this state and to any common carrier engaged in the transportation of passengers and property wholly by rail or partly by rail or water.

Subdivision *b* of section 2 provides that the act "shall not apply to street or electric railroads *engaged solely in the transportation of passengers within the limits of cities.*"

The inquiry under consideration is whether or not a street railway company that transacts business as a common carrier that is partly urban and partly done beyond the limits of the city in which it is operating, comes under the provisions of chapter 362, Laws of 1905, as to the business it transacts both inside and outside of the city.

The legislature evidently understood and believed that in the absence of the provision of subdivision *b* referred to, the act would include all electric and street railway companies whether doing business outside of the limits of their cities or not. Otherwise those doing a strictly urban business would not be exempted from the terms of the act. The intention on the part of the legislature to place the electric and street car lines doing an interurban business under the provisions of the act is also manifest.

In the absence of subdivision *b*, which is so clearly indicative of legislative intent, it might be a debatable question whether street railway companies were included within the terms of the act or not. If a street or electric line of road is a "railroad" then it is included in the act. If the use of the phrase "passengers and property" in subdivision *a* means passengers or property then street and electric lines would be included within the terms of the act.

When the word "railroad" is used in a statute it is often a perplexing question to decide whether street railways should be held to be included. The authorities are not altogether harmonious on the question. The citations following show the general trend of judicial construction of the question under consideration.

In *Funk vs. St. Paul City Ry. Co.*, 61 Minn., 435; 63 N. W. 1099, 1100, the court had under consideration a statute which provided that every railroad corporation owning or operating a railroad in that state should be liable for all damages sustained by any agent or servant thereof by reason of the negligence of any other agent or servant thereof without contributory negligence on his part when sustained within the state.

The question under consideration was whether or not the word "railroad" as used in the statute included street railways. The court said:

"Perhaps it may be conceded that, technically speaking, the term 'railroad' would include a street railway, so far as its roadbed is made of iron or steel rails for wheels of cars to

run upon; but where there is doubt about the true meaning of the word or the term used in the law, legislative intent is not to be determined from that particular expression, but from the general legislation upon the same subject matter."

The Minnesota court held that it was not the intention of the legislature to include street railway companies within the terms of the statute. One reason urged in support of this view was that at the time the statute was enacted there were no electric or cable street railways in existence in the state and that the legislative intention could hardly be construed to extend to railroads that were not in existence. The court further said that where the words of a statute are not explicit the intention is to be collected from the context, from the occasion and necessity of the law, and the mischief felt, and the object and remedy, in view. Further that

"If the language used is entirely free from ambiguity, and broad enough to include unknown things which might spring into existence in the future, they would be deemed to come within, and be subject to, the evident meaning of the terms used."

And that

"Where the language of the statute is in any manner obscure or of doubtful meaning, we may recur to the history of the time when it was enacted, and seek in that history for the mischief and defect which the statute was intended to remedy."

Applying these principles and drawing some deductions from the language of the act itself the court held that it was not the intention of the legislature to include street railway companies in the statute.

The court cites with approval the holding of the Supreme Court of the United States in the case of the *United States vs. Union Pacific Railroad Co.*, 91 U. S., 72, in which the court said:

"The courts in construing a statute may with propriety recur to the history of the times when it was passed; and this is frequently necessary, in order to ascertain the reason as well as the meaning of the particular provisions of it."

In *State vs. Duluth Gas & Water Co.*, 76 Minn., 96; 79 N. W. 1032, 1034, the supreme court of Minnesota had under con-

sideration the question whether or not the statute providing for the manner in which railroads should be taxed included street railway companies or not. The court said a practical construction had been placed upon the act by the state holding that the term railroad meant an ordinary commercial railway and that it did not apply to street railways. The court rather adopts the idea that where the term railroad is used in the statute it means an ordinary commercial railway engaged in the business of carrying freight and passengers and that where a street railway is intended to be included it is designated as such.

In *Fidelity Loan & Trust Co. vs. Douglas*, 104 Iowa, 532; 73 N. W. 1039, 1040, the supreme court of Iowa had under consideration the question whether or not a statute which provided that a judgment in a personal injury case should be alien against the property of the railroad company prior and paramount to that of a mortgage applied to a street railway company as well as to an ordinary steam railway. The court in commenting upon the act said that eight of the ten sections in the law clearly related to commercial railroads, and that while the language of the act was broad enough to include street railway companies still the conclusion drawn from the act taken as a whole was that the legislature did not mean to include street railway companies within its intent and meaning. There is a dissenting opinion in this case which holds that one of the principal things to consider in determining what the interpretation of the statute should be, is the evil which the statute was intended to remedy and arguing from this basis the dissenting judge adopts a different construction of the act than that adopted by the majority of the court. The judges, however, appear to be unanimous upon the proposition that the language of the act was broad enough to include both classes of railways and the only question to be considered was whether or not it was intended to include both of them.

In *New Eng. Company vs. Oakwood Street Ry. Co.*, 75 Fed., 162, Judge Taft construed a statute giving laborers a lien on railroads for work performed in the construction of the same to include street as well as steam roads. He held that considering the purpose for which the statute was enacted it was only fair to assume that the legislature intended that the laborer should be protected in the case of the one kind of road as well as the other.

In *Massachusetts Loan & Trust Co. vs. Hamilton*, 88 Fed., 588, 590, the court construed a statute of Montana, providing that a judgment against a railroad corporation for labor should be a lien paramount to a mortgage or trust deed. In this case the court held that the statute did not apply to street railway companies although the act is broad enough to include them. After reviewing the legislation of Montana and the provisions of its constitution the court concludes that the legislature regarded railroads and street railways as being different in their character, and that the statute in question was intended to include only the so-called railroads of commerce. The court held that the word "railroad" in itself has no such fixed definition as to enable a court to determine whether by its mere use in the statute it applies to street railways or not; that it may be used in its broad sense which includes a street railway or any other kind of a road on which rails of iron are laid for wheels of cars to run upon whether propelled by steam, electricity, horse or other power, or it may be used in its technical sense which does not apply to street railways; that as a general rule statutes are presumed to use words in their popular sense and the safest rule of construction is to take the entire provisions of the statute and thereby ascertain, if possible, what the legislature intended. The meaning must depend upon the context and be ascertained from the occasion and necessity of the law, the mischief felt, and the object and remedy in view.

In *Thomson-Houston Co. vs. Simon*, 20 Oregon, 60, a statute giving railroad companies the right of condemnation was considered and it was held that it did not apply to street railways. The court discussed the various statutes bearing on the question and drew the inference therefrom that it was not the intention of the legislature to confer the power in question upon street railway companies.

In *Lincoln Street Ry. Co. vs. McClellan*, 54 Neb. 672, the court held that the statute making every railroad liable for damages inflicted on the person of passengers while being transported except where the injury was the result of criminal negligence did not apply to street railway companies. Considerable stress was laid on the fact that at the time the statute was passed all of the street railways in Nebraska were operated by horse power, the transportation being slow and comparatively free from danger, and it was decided that such lines as street

railways were not within the contemplation of the legislature when the statute was passed.

In *Ferguson vs. Sherman*, 116 Cal. 169, the California court construed a statute of Kansas limiting the personal liability of stockholders of railroads and held that such an exemption did not extend to stockholders of street railways. The purpose which the legislature had in mind in passing the exemption law was discussed and considered by the court, and it was held that such purpose did not apply to the case of street railway companies.

In *Savannah T. & I. of H. Ry. vs. Williams*, 117 Ga. 414, a chartered street railway company was held to be a railroad company within the meaning of the statute making railroad companies liable to one servant for injuries inflicted by a fellow servant.

In *Gyger vs. Railway Co.*, 136 Penn. St. 96, the court held that the term "railroad" and "railway" were synonymous and that there was no warrant for applying the one term to an ordinary steam road and the other to a street railway company. The court said:

"When either or the other of these words is used in a statute and the context requires that the particular kind of road is intended, that kind of road will be held to be the subject of the statutory provision; but if the context contains no such indication, and either of the words is used in describing the subject matter, the statute will be held applicable to every species of road which is embraced within the general sense of the word used."

It was held in this case that the constitutional provision preventing the consolidation of parallel competing lines of railroad did not apply to street railways but the decision was put upon the ground that it was manifest from the provisions of the constitution themselves, that such railways were not intended to be included.

In *Rafferty vs. Traction Co.*, 147 Pa., 579, and in *Millvale vs. Railroad Co.*, 131 Pa., 1, it was held that the words "railroad corporations" include all railroad corporations unless their comprehensive character is restricted by words of limitation found in the title or in the body of the act.

In *Cheetham vs. McCormick*, 178 Pa., 186, the court considered the constitutional provision of the state of Pennsylvania

nia providing that no corporation shall issue stock or bonds except for money, labor done or money or property actually received and in connection therewith an act of the legislature passed to enforce this constitutional provision against railroad corporations. It was held that the term "railroad corporations" as used in the act of the legislature applied to street railway companies within the meaning of the act.

In *Lieberman vs. Chicago & South Side Rapid Transit Co.*, 141 Ill., 140, the court held that a general act providing for the incorporation of companies "for the purpose of constructing and operating any railroad in the State" was broad enough to authorize the incorporation of an elevated street railway company.

In *Price vs. State*, 74 Ga., 378, an act making it a crime to place obstructions on a railroad track, was held broad enough to include a street railway.

In the case of *In re Washington Street Railway*, 115 N. Y., 442, it was held that the general railroad law of New York of 1850 included horse railroads.

In *Birmingham Ry. Co. vs. Jacobs*, 92 Ala., 187, it was held that a street railway using dummy engines was a railroad within the meaning of the Alabama statute requiring railroad trains to stop within 100 feet of a track crossing.

In *Katzenberger vs. Lawo*, 90 Tenn., 235, it was held that a dummy line, whether operated within or without the limits of a municipality, although exclusively engaged in carrying passengers, is a railroad within the meaning of statutes prescribing certain precautions for the prevention of accidents on railroads.

In *Central Bank vs. Worcester Horse Railroad Co.*, 13 Allen, 105, it was held that a horse railway was within the exception of the Massachusetts statute providing that insolvent proceedings might be instituted against any corporation except railroad and banking companies although at the time of the passage of that statute no company had been established in that state for the purpose of laying rails on the public highways and running horse cars thereon.

In *Johnson vs. Louisville R. Co.*, 10 Bush (Ky.), 231, the court held that a statute making railroad companies liable for negligence was applicable to any kind of railroad whether propelled by horse or steam power.

In *Stillwater M. & St. P. Ry. vs. Boston & Maine R. R. Co.*,

(N. Y.) 64 N. E., 511, it was held that the act of 1850, re-enacted in 1890, which conferred on a steam railroad company the right to cross or unite its railroad with any other railroad before constructed and further providing that every railroad company whose road was intersected by any new railroad should unite with such in having the necessary connections with the requisite facilities, applied to the intersection and connection of a street railway operated by either electricity or steam with a railroad operated by steam.

There is perhaps more apparent than real conflict between the decisions cited. The great weight of authority is certainly in favor of the proposition that the term "railroad" is broad and comprehensive enough to and does in itself include a street railway as well as the ordinary steam road. In determining whether or not a street railway company should be included within the term "railroad" the courts look at the purpose for which the statute was passed, as well as at its language, for the purpose of determining whether or not the legislature intended to include within the term, street as well as steam railways. Where it is apparent that the legislature did not intend to include street railways under the designation of "railroads" the courts will adopt what is found to be the legislative intent in construing the statute. Where the language of the act is such that it appears to be the intention to include street railways under the designation "railroads" the courts will so construe the act as to include them. Where there is nothing in the language of the act or in the purpose for which it was framed from which it can be inferred that it was the intention of the legislature to either include or exclude street railways from the term "railroads" the weight of authority seems to be that they should be included. The declaration of the legislature in subdivision *b* of section 2 to the effect that the statute should not be construed to extend to street railways engaged solely in the transportation of passengers within the limits of cities would indicate (1) that the preceding language of the act was broad enough to include and did include all street railways, and hence the exception; and (2) that it was the intent and purpose of the legislature to subject to the provisions of the act all street and electric lines not embraced within the exception. We think, therefore, that the conclusion reasonably follows that street and electric lines of road are subject to all of the provisions of chapter 362, of the Laws of Wisconsin for the year 1905, except

those roads that are exempt from the provisions of the law, by subdivision *b* of section 2 of the act.

Assuming that the word railroad as used in section 2 of the act includes street railways, the question is, does subdivision *b* exclude or exempt such of them as do an interurban business from the provisions of the act as to the urban business transacted.

The language of the provision seems to be very plain. It is not to "apply to street and electric railroads *engaged solely* in the transportation of passengers within the limits of cities." The test of inclusion or exclusion is the character of the business performed. If that business is solely urban the railway does not come under the provisions of the act. If the business is not, according to the plain reading of the act, the railway does come under its provisions.

The only doubt would seem to be whether the act should be so construed as to subject the portions of the lines beyond the city limits to the provisions of the act and not those within the city. There is nothing in the language of the act itself that justifies the separation or division, because plainly enough the statute says that street railway companies that are not solely engaged in carrying passengers within urban limits are included. It is the business of the company in its entirety and not any particular part of its line that the statute speaks of.

Is there anything about the act that so strongly expresses a legislative intent at variance with the language of the act that the words should be disregarded and the intention followed?

In *Nichols vs. Halliday*, 27 Wis., 409, the court held that any interpretations which lead to an absurdity should be rejected and also interpretations that would render a statute void should be avoided if possible, and that if in any law the courts find an omission of something essential to it, or which is a necessary result of its provisions and requisite to give the law full effect, they might supply what was wanting but not expressed and extend the law to what it was manifestly intended to embrace, but in its terms did not include.

In *Clark vs. Janesville*, 10 Wis., 165, the court said that courts can look beyond the letter of the law in interpreting it as all written instruments are construed by the light of surrounding circumstances. The existing condition of things, the evils to be remedied, the objects to be attained, may all be looked at and frequently require to be looked at with the closest scrutiny

and the clearest judgment in order to determine what the law is. But beyond that courts cannot go.

In *Harrington vs. Smith*, 28 Wis., 59, the court said that the true rule for the consideration of statutes is

“To look to the whole and every part of the statute, and the apparent intention derived from the whole, to the subject matter, to the effects and consequences, and to the reason and spirit of the law; and thus to ascertain the *true* meaning of the legislature, though the meaning so ascertained may sometimes conflict with the literal sense of the words.”

On page 67 of the same opinion it is said:

“And there are other rules of construction I have considered, and which, perhaps, I ought not to omit here. One rule is, that a statute ought, upon the whole, to be so construed that, if possible, no clause, sentence or word shall be superfluous, void, or insignificant. Another and kindred rule is that every clause and word of the statute shall be presumed to have been intended to have some force and effect.”

In *Ogden vs. Glidden*, 9 Wis., 42, the court said:

“Adopting the cardinal rules, that the acts of the legislature are to be construed according to the intent of the legislature which passed them; that in ascertaining that intent we are first to look to the language in which they have spoken; and if that language is plain and unambiguous, interpretation is not allowable, we do not see how any doubt could have arisen upon this act. It is a question of grammatical, not of legal construction, and depends for its determination upon the principles of our language.”

In *Brightman vs. Kirner*, 22 Wis. 57, the court said:

“The first general maxim of interpretation is, when the words of an act are in clear and precise terms—when its meaning is evident and leads to no absurd conclusions, there can be no reason for refusing to admit the meaning the words naturally present, and go elsewhere in search of conjecture in order to restrict or extend the act. To do this would be but to evade the law, and to adopt a method fraught with the most dangerous consequences; since there is no law, however definite and clear in its language, which might not by such a rule of interpretation be defeated.”

In *Battis vs. Hamlin*, 22 Wis, 640, the court said:

“The correct rule in the construction of statutes, as well

as other instruments, is to take the words in their ordinary grammatical sense, unless such construction would be obviously repugnant to the intention of the framers, or would lead to some other inconvenience or absurdity."

In *Mundt vs. S. F. R. R. Co.*, 31 Wis., 457, the court said:

"Courts cannot correct supposed errors, omissions or defects in legislation. The office of interpretation is to bring out the sense where the words used are in some manner doubtful, and where these are plain and unambiguous the court cannot depart from the language of the statute. This court has too often of late had occasion to repeat and enforce these rules, to permit them now to be called in question or disregarded. It is only where the intention of the legislature is ambiguously expressed, so as to be fairly capable of two or more meanings, that interpretation or any latitude of construction is allowable. It is only in such cases that the courts are at liberty to accept or act upon what is termed the doctrine of equitable construction."

In *Gilbert vs. Dutruit*, 91 Wis., 665, the court said:

"It is not allowable to interpret what has no need of interpretation. When the meaning is evident, and leads to no absurd conclusions, there can be no reason for refusing to admit the meaning which the words naturally present; to go elsewhere in search of conjecture in order to restrict or extend the act would be but an attempt to elude it. Such a method, if once admitted, would be exceeding dangerous, for there would be no law, however definite and precise in its language, which might not by interpretation be rendered useless." . . . So interpreting the statute before us, as the words express clearly the sense and intent, we must hold to that. There is no room for the application of rules for judicial construction. It is only where the intent is ambiguously expressed that the rules of construction come in."

In *Berger vs. Berger*, 104 Wis., 286, the court said:

"The language of the statute seems plain and unmistakable, 'such homestead shall descend, free of all judgments and claims against such deceased owner or his estate except mortgages lawfully executed thereon and labor and mechanics liens.' The mere right to acquire a lien cannot be called a mortgage. That term applies only to conveyances in writing of equitable interests in land as security. To give any

other meaning to it, or to make any exception when the statute plainly says there shall be none, would violate the plainest principles of statutory construction. It is often said that in the construction of statutes courts should look to the effects and consequences, but that applies only where there is room for construction,—where there is ambiguity of expression or where to follow the literal sense would lead to some absurd result. Here there is no ambiguity. The language is plain.”

Our first impression on reading this statute was that the legislature did not intend to subject that portion of the lines of street railway companies that were entirely within the limits of cities to the provisions of chapter 362, of the Laws of 1905. We could see no good reason why a street railway line that was wholly within the limits of a city should be exempt from regulation, while a street railway line in a neighboring city of substantially the same kind that happened to run a short distance beyond the confines of the city should be subject to the provisions of the law. The legislature had the undoubted right to include those railway lines that extended beyond the limits and exclude those that did not. The more study we have given to this statute the more convinced we have become that the language used is plain and unambiguous and is not open to two constructions. For this Commission to engraft on the law an exception which the legislature did not make in the act, and which would from our point of view be directly in conflict with the plain wording of the act, would not be permissible. If, as we hold, a street railway is a railroad within the meaning of section 2 of the act, and all such railroads are subject to the provisions of the act, excepting only those exclusively engaged in the carrying of passengers wholly within the limits of a city, we do not see where we would be justified in holding that the act applied only to that portion of the railroad that fell outside the city limits. It seems to us that the railway company as an entirety is exempt or it is not; that there is no ground for saying that it is exempt in part and subject to the terms of law in part. It is only fair to presume in the case of an act that was passed, after the amount of discussion that preceded the passage of this act, that if the legislature had intended to restrict or limit the jurisdiction of the Commission to such

parts of the interurban railway as lay outside of the limits of an incorporated city it would have said so.

It seems to us that any street railway which does a business outside of a city comes plainly within the terms of the act as to its entire lines and that to hold that urban lines of such a railway should be excluded from the terms of the statute would be writing into it, not only a provision that is not fairly to be implied, but one that would be directly antagonistic to the language of the statute as it now stands.

The fact that some electric lines of road would be subjected to the terms of the act as to their urban business while others would not, has lead us to look for a reasonable construction that would exclude the urban business of all such lines. There are some strong considerations which might lead to a contrary view if the language of the act were open to construction.

It is true that theoretically, and perhaps practically, cities can regulate street car companies within their limits to a considerable extent, while the regulation of interurban lines must be under state control if the control is to be efficient, and these facts might supply a reason why the legislature should seek to regulate interurban business only. It is none the less true that business of a single corporation engaged in urban and interurban transportation can best be considered as an entirety. In determining whether or not a given rate of charge is reasonable it would often be difficult to separate out the operating expenses or earnings of the interurban portion of the line from the urban portion. The same cars and the same employes are used in both kinds of service and the fares collected generally if not almost invariably in interurban service are in part for travel in a city. The same employes are engaged in both kinds of line repairing and other expenses are no doubt incurred that are common to both portions of the line. This would be true of the salaries of officers and the general expense of the company. In the matter of valuation, which is a necessary preliminary to the fixing of a rate, the drawing of an arbitrary line and fixing separately the worth of the portions of the corporate property that fall on either side of it is unsatisfactory. On the whole there is perhaps no adequate reason for subjecting the property of a street railway company that lies beyond the limits of a city to one species of regulation and that within the limits of a city to another, where the kind of business done is the same in both instances, and the entire business is intra

state. If an electric railroad is to be regulated at all, the reasons for regulating its entire transportation business are much stronger than are the reasons for regulating only a part of the business. We think there is no ambiguity about the language of the statute and therefore it is not open to construction. If the language were ambiguous and we were at liberty to construe it we are not at all satisfied that a different conclusion should be reached. Our conclusion is that any street railway company that is not solely engaged in the transportation of passengers within the limits of cities is subject to chapter 362, Laws of 1905, both as to its urban and interurban business and that the reports of accidents should include both classes of business.

Dated this 14th day of September, A. D., 1906.

RAILROAD COMMISSION OF WISCONSIN.

By JOHN BARNES,

B. H. MEYER,

HALFORD ERICKSON,

Commissioners.

PART III.

Informal Complaints and Other Informal Matters.

(Numbers refer to case numbers in the record books of the Commission containing the informal complaints.)

1. C. S. Porter & Co., Fox Lake, Wis. Refusal of the Chicago, Milwaukee & St. Paul Ry. Co. to connect with a side track to be constructed for the purpose of locating a wood and coal yard, elevator, etc.

After some correspondence with the petitioner and the Railway Company the Commission was informed by the petitioner that the matter had been adjusted. Later, however, the Commission was informed that the company was still refusing to proceed with the work, although it had caused a survey for the proposed side track to be made and the grade had been in part or entirely established. After several informal meetings in the offices of the Commission two commissioners visited Fox Lake for the purpose of making a personal inspection. Both the petitioner and the Railway Company were represented at the conference at Fox Lake but no agreement was reached. After still further negotiations on the part of the Commission with both parties it was finally agreed that the company should construct the side track on condition that the petitioner deposit a certified check with the company to cover the estimated cost of the work, the unexpended balance, if any, to be returned to the petitioner on the completion of the side track. An itemized statement showing in detail the figures on which the estimated cost was based was submitted to the Commission and by the Commission it was in

turn submitted to its engineer. After the work was completed and the connections made the petitioner again submitted the itemized bill, which in turn was submitted by the Commission to its engineer and found to be substantially correct and reasonable.

2. Complaint of widow on account of withdrawal of free transportation for herself and her two children, granted by the Railway Company, together with a certain amount of cash, in settlement of claims against the Railway Company as a result of the death of her husband while in the employ of the company in discharge of his duty.

The Commission held that there was nothing in the Railroad Commission law to interfere with the execution of bona fide contracts and that the law should not be made the means of depriving this widow of the full benefit of the settlement made with the Railway Company at the time of her husband's death.

3. Complaint in regard to the rates on paper from points in northern Michigan to Salt Lake, Butte, and other western points, as compared with the rates on the same commodity from the same points to San Francisco and Seattle.

All the questions involved were purely inter-state matters and therefore outside of the jurisdiction of this Commission.

4. H. Bergheger & Co., Stitzer, Wis. Claim against the American Express Company for the loss of perishable goods shipped to Chicago, upon which express charges had been prepaid but which were not delivered to the consignee on account of strike in Chicago at the time of the arrival of the goods.

The complainant was informed that while the Commission would be glad to do all in its power to investigate this matter it did not possess the powers of a court, and could therefore not adjudicate purely legal questions between shippers and carriers. A number of letters passed between the Commission and the interested parties, but the Express Company declined to pay the claim, stating that they were exempted by their contract of carriage from liability on account of loss by reason of mobs, riots, etc., there being rioting at Chicago at the time of shipment, making delivery impossible and compelling the Express

Company to send the commodity in question to Milwaukee where it was sold. This, it was claimed, was the very best that could have been done, that could reasonably have been expected. The Express Company having refused to settle the claim, the Commission advised the complainant that the only tribunal that could enforce his claim was the court.

5. William W. Herrick, National Soldier's Home, Milwaukee, Wis. Refusal of the Railway Company to grant reduced or half fare rates to old soldiers.

Complainant was informed that there was nothing in the Railroad Commission law to prevent railway companies from selling reduced rate tickets to inmates of soldiers' homes.

6. Withdrawal of a pass given in settlement of claims on account of the death of a brother in a railway accident in the employ of the Company.

The Commission held that since this pass was given as part settlement of a claim for damages against the Railway Company that the granting of such pass would not come under the designation of free transportation.

7. Concerning the legality of half tariff rates on construction materials for new industries.

The legality of such rates has been upheld by the Commission in this and other cases to be subsequently noted. Tariffs applicable exclusively to construction material for new industries have been issued by different railway companies and are on file in the office of the Commission. See formal complaints page 322.

9. Complaint on account of failure of certain carload shipments to arrive.

Correspondence between the Commission and the Railway Company led to active search for the cars, which were discovered within a few days and placed on the team tracks for delivery. The delay was caused by the exceedingly congested condition of the freight yards in Chicago.

10. Refusal of the Railway Company to erect a notice board at certain crossings.

The law bearing upon the case was submitted to the petitioner in order that he might insist upon his legal rights.

11. Inquiry regarding minimum weights on scrap iron from Ashland to Chicago and rates on rags from Ashland to Neenah and Milwaukee.

The rates in force were compiled by the Commission and correspondence conducted with both parties

12. Julius Timme, Gurnee, Wis. Overcharge in rates on household goods from Butternut, Wis., to Gurnee, Wis.

Complainant asked to submit documents in the case, whereupon the Commission looked up the rates and investigated the facts and submitted the same to the Railway Company, which allowed the claim to the amount of the overcharge.

13. James L. Gates and others, Milwaukee, Wis. This case was originally a complaint on behalf of James L. Gates, on account of the refusal of the railway companies to grant reduced rates to home seekers.

Subsequent to the filing of this complaint the Wisconsin Immigration & Development Association was organized. On the date of its organization this Association met in conference with the Railroad Commission, at which the claims and desires of the Association and its members were presented. After hearing the arguments and corresponding with numerous individuals and firms throughout the state the Commission rendered an opinion in the case on July 20, 1905, which is given in full on page 23. Since this opinion has been issued numerous other letters from land seekers and land agents have come to the Commission which involved the same question in one form or another.

(See decision on page 23 of this report.)

14. Miner Brothers, Carter, Wis. Refusal of the Chicago & Northwestern Railway Company to maintain a railway station at Carter.

On request of the Commission a census of the inhabitants of the place was taken and the results submitted to the Commission. One of the Commissioners visited Carter in conference with a representative of the Railway Company and the

complainant. At this conference it was agreed that the Railway Company erect at the village of Carter a small depot building and to arrange to have the same kept open and heated during the Winter time before the arrival of trains. The Company also agreed to put up a small building to accommodate freight that is being shipped in less than carload lots, such building to be erected near the plant of Miner Brothers, who are substantially the only shippers dealing in less than carload lots to any considerable extent. This arrangement was accepted by both parties and the case was therefore closed.

15. Guy England, Pembine, Wis. Claim for loss caused by the killing of stock on the railway track.

The jurisdiction of the Commission in the matters of claims was explained, to the effect that the Commission is not a court, and claims of this kind can only be enforced through the courts.

16. Wells & Chase, Dorchester, Wis. Inquiry as to the rights of shippers to have connections made with side tracks.

Wells & Chase were informed that the law appears to be plain that it would be their duty to defray the entire expense of the construction of the track and the laying of the rails up to the right of way of the Railway Company. The law is very indefinite and uncertain as to whose duty it is to defray the expense of putting in the switch and making the connection from the railway track to the limit of the right of way. Possibly the question as to who should pay this part of the expense depends on circumstances and conditions. The law is definite and certain with respect to the following points: (1) that the entire expense of construction and equipment of the track up to the right of way of the Railway Company must be borne by the firm desiring such construction; (2) that the Railway Company must permit the connection to be made when the conditions exist that are specified in chapter 386 of the Laws of 1905. The indefinite point in connection with the matter is who shall defray the expense of making the actual connection with the track and extending the same to the boundary of the right of way.

This case was discussed informally in the offices of the Commission, a representative of the Railway Company visited Dorchester, and as a result the matter was satisfactorily adjusted.

17. H. J. Canar & Co., Mondovi, Wis. Rates on salt from Milwaukee to Mondovi.

The rates on salt to Mondovi and various other places in the northwestern part of the State were compiled by the Commission and submitted to the parties in interest. After correspondence with the general freight agent the Company agreed to reduce the rate on salt to Mondovi to bring it into line with the rates on salt to points with which Mondovi competes. Chicago, St. Paul, Minneapolis & Omaha tariff Amendment No. 3 to G. F. D. 16598 quotes the new rate at 10 cents per 100 lbs. for all stations on the Mondovi branch. The former rate was $12\frac{1}{2}$ cents.

18. Little Wolf River Lumber Co., Manawa, Wis. Complaint against the Chicago, Milwaukee & St. Paul Ry. Co. regarding rate on lumber of 13 cents from Knowlton to Sheboygan.

After investigation and compilation of rates to competitive points and correspondence with the interested parties the desired application for an $8\frac{1}{2}$ cent rate was granted.

19. Complaint for refusal of Railway Company to transport cars on reconsignment in accordance with system previously in vogue.

Several informal meetings between the Commission and interested parties were held in the offices of the Commission and the detailed facts in the case examined. It appeared that contrary to the assumption of the petitioners, the Railway Company had not had in effect a uniform rule governing the reconsignment of cars, but each case had been handled by itself. The matter complained of was adjusted and the Chicago, Milwaukee & St. Paul Ry. Co. at once issued a circular prescribing uniform rules for the reconsignment of cars.

The Commission further sent out circulars of inquiry to many shippers and to all the leading railway companies doing business in the state, calling for information with respect to the reconsignment of cars in carload shipments of commodities such as coke, wood, lumber, stone, etc. This was done with a view of securing information which would enable the Commission to act promptly in reconsignment cases should the occasion arise. The matter was discussed informally with

the Railway Companies on several different occasions, and with commendable promptness all the leading companies issued a general rule governing reconsignment. This rule reads as follows:

“Between all points in Wisconsin freight of all kind in carloads when no change has been made in the original contents may be reconsigned to a point beyond on a direct line at an additional charge of \$2.00 per car above the current tariff rate from the point of origin to final destination, subject to regular car service charges. One reconsignment only will be allowed.”

The above is substantially the wording of the reconsignment rule of all the companies. See also case number 30.

20. Chester D. Cleveland, Neenah, Wis. Inquiry as to the right of railway companies to continue the custom of several years standing of transporting yachts participating in races at the annual regatta free of charge on certification of the secretary of the Yachting Association.

The Commission assumed that the purpose of adopting the custom of free transportation for racing yachts was to stimulate passenger travel. It was advised that the annual regattas held on Lake Winnebago attracted a large number of spectators, and that the carrying of racing boats free of charge was in the nature of a contribution toward the success of an entertainment that might and probably did tend to increase the revenues of the companies, by reason of increased passenger traffic. The shipments in question did not involve any discrimination because of business competitors not being treated alike. Considering the reason for granting the concession in the first place, as understood by the Commission, and the purpose for which the shipment was being made, and the fact that no injury resulted from the custom to any one, unless it might be to the carrier, the Commission held that the practice might be continued, if the Railway Companies saw fit, provided all persons desiring to ship yachts for a like purpose were treated without discrimination.

21. S. N. Rowley, Darlington, Wisconsin. Complaint against three cents per mile passenger fare and submitting certain facts with respect to excursion rates charged by railway com-

panies, the latter being presented as evidence in regard to the remunerativeness of certain rates.

All such matters were considered in connection with the passenger cases reported elsewhere. See page 97.

22. Complaint against Railway Companies for failure to make joint rates on lumber between specified points.

The matter was taken up with both parties; considerable correspondence passed between them, but after the Railway Company had voluntarily refused to issue the joint rate demanded the complainant did not see fit to continue his case by filing a formal complaint.

23. Giddings, Lewis & Co., Fond du Lac, Wis. Rates on pig iron from Mayville to Fond du Lac.

The general freight agent of the Railway Company claimed that the rates on pig iron from Mayville to Fond du Lac were fair and equitable as compared with the rates on pig iron to the Fox River group from the various lake ports through which pig iron from the East moves to such markets. The Commission made a compilation of rates bearing upon this case and submitted the results to both the Company and the petitioner. The case was closed by the Company's reducing the rate between Mayville and Fond du Lac from 60 cents to 50 cents, with corresponding reductions to various other points, as published in Supplement No. 5 to C. M. & St. P. G. F. D. 26769, which was accepted as a satisfactory solution by the petitioner.

24. Right of Notaries Public to use advertising mileage.

The case was submitted to the attorney general, who issued an opinion regarding the proper construction to be placed upon chapters 362, Laws of 1905; 486, Laws of 1905; and 357, Laws of 1899, all of which bear upon the question of free and reduced transportation. The opinion of the attorney general is a detailed discussion of the various legal points involved as well as a presentation of the main court decisions bearing upon the same. It is held that it is the settled policy of the State of Wisconsin that no person holding a position under the laws thereof or under the ordinance of a city or town and no candidate or member of a political party shall be the holder or user of free transportation in any form or receive favors in that

respect from railway companies which are not extended to the public in general, and that it is unlawful for railway companies to furnish the same to state officers, committees or candidates, and that transportation acquired by a public officer which is paid for in whole or in part by services is free transportation as defined by chapter 486, Laws of 1905.

25. W. J. Druecker, 112 South Clark St., Chicago. Complaint regarding rates on lime from Lime Kilns, Wis., to points in Wisconsin south of Milwaukee, especially Racine and Kenosha, as compared with rates on the same commodity from Chicago to such points.

The rates on lime from lime producing points in southern and eastern Wisconsin were compiled and the results made the basis of informal conferences in the office of the Commission. The competitive relations of points like Lime Kilns, Grafton, Cedarburg, Germantown, Eden, Brillion, etc., were considered in detail. After a careful examination of all of the facts in the case the Company voluntarily reduced the rate on lime from six cents per 100 lbs. to four cents per 100 lbs. from Lime Kilns to Racine, Wis., thus placing Lime Kilns on a basis where it was able to compete with other manufacturing points similarly situated.

26. Complaint as to rates on live stock from Caryville, Wis., to Chicago.

This being an inter-state rate the Commission has no authority except to investigate. After an examination of the rates from the point complained of, and the rates from other points in that territory, it appeared that the rate complained of was not a discriminatory rate. The question of the absolute level in the rates on live stock is now under consideration by the Commission.

27. Complaint as to highway crossing.

The facts in the case were ascertained and the law applicable thereto quoted.

28. Wautoma Milling Co., Wautoma, Wis. Overcharge in freight rates from Wautoma, Wis., to Chicago.

The claim for overcharge rested in part upon the fact as to the tariff which was in effect at the time the shipment was

made. The published rates were examined and the exact dates of their publication as well as the date of shipments ascertained, and the usual correspondence with respect to claim conducted.

29. Rates on cement from Green Bay, Wis., to Rhineland, Wisconsin.

On examination it appeared that the rate between Green Bay and Rhineland was in excess of the rate between Milwaukee and St. Paul. After correspondence with the Railway Company the rate complained of was reduced to the Milwaukee-St. Paul basis, thus placing Green Bay on the same footing with Milwaukee. Other questions raised by the petitioner involved the matter of lake competition and the relation of the various lake ports to one another.

30. H. E. McEachron Co., Wausau, Wis. Complaint regarding reconignment charge of \$2.00 per car.

See case No. 19.

31. Kiel Mfg. Co., Kiel, Wis. Refusal of Chicago, Milwaukee & St. Paul Ry. Co. to place cars on shipper's side tracks for loading less than carload shipments.

Petitioner stated that the Railway Company refused to continue to load less than carload shipments on petitioner's side tracks, as it had done theretofore, on the ground that such loading was in violation of the Railroad Commission Law of Wisconsin. After correspondence with both parties the company resumed its custom of permitting such loading.

32. Complaint as to rates on oats and potatoes from Chetek, Wis., to points on Lake Superior.

After some correspondence and collection of facts the petitioner advised the Commission that it was impossible for him to furnish the desired information. This information was necessary to the Commission in order to pursue its inquiries and the matter was therefore dropped.

33. O. G. Kinney, Colfax, Wis. Complaint as to rates on grain from Colfax, Wis., to Milwaukee, Wis.

This complaint was made the subject of a good many letters and some informal conferences but nothing came of these.

Later the complainant filed a formal complaint, which was made a part of the proceedings in the matter of grain rates in Wisconsin, referred to in that part of the present report which deals with formal complaints. See page 198.

34. Little Wolf River Lumber Co., Manawa, Wis.. Complaint regarding rates on hard coal from Green Bay to Manawa, referring also to the inequality in coal rates to Manawa as compared with rates on the same line of railway to points in western Wisconsin. A conference was held in the office of the Commission with the general freight agent of the Green Bay & Western Railroad, as a result of which a new schedule of rates providing for reductions and re-adjustments, to various points on the Green Bay & Western, including Manawa, was agreed upon. These rates are published in G. F. D. 1223.

35. Complaint as to inter-state express rates; also as to certain telegraph rates.

The subject of this complaint was made the matter of considerable correspondence between the complainant, the Commission, and the Express Company involved. Representatives of the Express Company expressed a desire to have more specific information furnished them as to the grievances of the complainant. The Commission did not feel certain that it understood exactly what the grievances were and requested the complainant to submit a clear statement of his complaint. For some reason the request of the Commission was not complied with and the matter was therefore dropped until the entire express business can be taken up.

36. Complaint regarding switching charges on stone at Janesville, Wis.

It appears that the complainant had made a contract for the delivery of a number of carloads of stone to a point near the railway track in the city of Janesville where he was constructing a residence. This contract with the owners of the quarry was entered into on the assumption that the Railway Company would continue to transport such stone at the switching charge which had been in effect theretofore. One carload of stone was thus shipped. The Company refused to haul additional cars on the ground that it was prohibited under the Rail-

road Commission law from performing switching services of this kind for the price named and that the complainant would be obliged to have his stone shipped as if billed from Avalon, the first station out of Janesville, on this line to Madison. This case is typical of a number of similar cases to which the attention of the Commission was called during the first few months of its existence. Since that time the railway companies have compiled and published their switching schedules for all stations within the State of Wisconsin, as a result of which complaints of this kind are not likely to recur.

37. L. G. Ramm, Medford, Wis. Complaint against Wisconsin Central Railway Co. for refusal to grant free transportation to exhibitors at the Wisconsin State Fair.

The complainant was informed that chapter 362, Laws of Wisconsin for 1905, permits the Railway Company to transport property which is to be exhibited at the Wisconsin State Fair free or at reduced rates. The law further provides that upon any shipment of live stock or other property of such a nature as to require the care of an attendant the railway may furnish to the shipper, or some person designated by him, free transportation for such attendant including return passage to the point at which the shipment originated, provided that there shall be no discrimination in reference thereto between such shippers. Since the complainant did not desire to ship any live stock, or any other species of property that required the care of an attendant while the property was in transit, it was held that the complainant had no right to such free transportation and that the Wisconsin Central Railway Company was correct in its position that the law forbids the giving of the free transportation which was requested.

38. Complaint as to the rules of the Wisconsin Car Service Association.

The complainant took the position that the rule of the Car Service Association requiring the payment of demurrage after 48 hours was unjust and unreasonable, on the ground that at small places, where facilities for unloading are not always as good as they are at larger places, it is a physical impossibility to unload certain commodities within that time, especially when the weather conditions are unfavorable and when a consider-

able number of cars arrive at the same time. This matter was taken up by the Commission with the manager of the Wisconsin Car Service Association, who answered the series of questions which the complainant had submitted. After the rules had been thoroughly discussed and explained the complainant dropped the matter.

39. Complaint regarding overcharge on household goods shipped from Portland, Ore., to Neenah, Wis.

The Commission submitted to the complainant a statement of the published rates in effect between the points mentioned and explained the position of the Commission with reference to claims of this kind.

40. Dodge Creameries Company, Lake Mills, Wis. Complaint regarding through rates on dairy products from Lake Mills to the Atlantic seaboard.

Complainant's rate to Chicago is 30.8 cents per 100 lbs., 21.5 cents to Waukesha, and 25.5 cents to Milwaukee. In billing to New York or any of the seaboard towns it pays 28 cents to Chicago on through billing and 65 cents per 100 lbs. from there to the seaboard. If it ships to Waukesha, to which the rate is 21.5 cents, and unloads the butter and rebills the same, thus taking the Chicago or 100 per cent points rate to the seaboard, the total through rate is 6½ cents or more below the rate by way of Chicago. In other words the complainant desires a through rate from Lake Mills to Atlantic seaboard points which is equal to the combination of rates from Lake Mills to Waukesha and thence to the seaboard.

The question raised by the complainant involved in part a construction of the concentration rules in effect on the Chicago & Northwestern Railway, and also the construction of the rules governing rates to the seaboard from points outside of 100 per cent territory. After some correspondence and several informal conferences in the offices of the Commission this apparent anomaly in the rate was corrected and shipments are now made on a through billing directly from Lake Mills to eastern points, based on Waukesha rates.

41. Complaint as to rates on lumber from Birnamwood, Wis., to Waterloo, Wis

The Railway Company refused voluntarily to issue a joint rate between the points mentioned and the complainant refused to file a formal complaint; therefore the matter was dropped.

42. Complaint as to express rates on automobiles.
Correspondence only.

43. Hugo Schwarting, Green Bay, Wis. Complaint regarding express rates on magazines between Chicago and Green Bay.

This being an inter-state rate the Commission is without jurisdiction. Nevertheless, the matter was investigated and correspondence with interested parties conducted. The complainant desired to have the Express Company put into effect the same rate from Green Bay to Chicago that was in effect from Chicago to Green Bay. The Express Company maintained that shipments from Chicago to Green Bay were made regularly in definite quantities and that because of the volume of the shipments and the regularity with which they were made a lower rate could be charged than for return shipments, which were made irregularly and in quantities varying greatly from time to time. The company expressed its willingness to accept the same charge for return shipments if the same quantities were to be offered for shipment.

44. R. S. Joslin, Mauston, Wis. Complaint alleging discrimination in granting space for coal sheds.

The complainant stated that ground desired by him had been given to a competitor and that thereby it has been impossible for him to develop his business in the manner to which he believes he is entitled. A sketch was submitted showing the relative location of the different properties adjacent to the right-of-way and on the right-of-way. After considerable correspondence the complainant wrote the Commission that he was satisfied with the manner in which the Railway Company had adjusted things.

45. Minnie B. Young, Watertown, Wis. Complaint on account of the refusal of the Chicago, Milwaukee & St. Paul Railway Co. to give transportation to the family of an old employe.

The facts detailed in this communication are quite tragic, showing that the supporters of this family one after another were stricken down through mishaps and accidents and that one of the chief enjoyments of the aged mother was free transportation which enabled her to visit her daughters who lived in widely separated localities. It appears that no legal claim was definitely established at any time. In brief, the position of the Commission was as follows: In cases where employes were injured in the service of a railway company and promises of transportation were made because of and in settlement of any claims that might arise because of such injuries, and such arrangement constituted a contract, it is not free transportation and does not come within the provisions of the law; furthermore, the law expressly provides that destitute and homeless persons may be carried free of charge.

46. Mason-Donaldson Lumber Co., Rhinelander, Wis. This complaint relates to the rates on lumber from Superior, Ashland, Odanah and the Superior territory in general to points in southern Wisconsin.

At the first conference held in reference to this matter a representative of the Railway Company stated that he had under consideration a rearrangement of these rates which, when put into effect, would correct the situation complained of. After some correspondence which did not lead promptly to the desired results the complainants filed a formal complaint. A member of the Commission also made a special report upon this subject. The complaint was finally withdrawn. (See Case No. 4, Formal Complaints.)

47. Medford Fruit Package Co., Medford, Wis. Complaint regarding rates on bushel baskets and berry-crates; also in regard to the classification of certain commodities manufactured by the complainant.

This complaint was formulated with great care and detail by the complainant and voluminous correspondence ensued and after much effort in this direction, beside several informal conferences, it was impossible to reach a satisfactory conclusion and a formal complaint was filed. (See Case No. 34, Formal Complaints.)

This case illustrates perhaps better than any other what was

referred to in the first part of this report when the statement was made that where informal methods finally fail a loss of time was likely to ensue. Had this case been taken up in a formal manner at once it probably would have been disposed of with much less trouble and at an earlier date than was actually the case; but even so an isolated case like this does not impeach our confidence in the general rule to follow informal methods until it is clearly futile to proceed further under them.

48 David Muir & White, Fond du Lac, Wis. Complaint on account of the refusal of the Wisconsin Central Railway Co. to permit less than carload shipments to be loaded on a switch away from a station and then to switch such partially loaded car from the warehouse to the depot grounds.

The Company claimed that under the new law all less than carload loading would have to be done at the depot, and that the switching of a less than carload shipment from the complainant's warehouse to the depot would be a discrimination under the law. This case is similar to several others which were brought to the attention of the Commission during the first few months of its existence. In this, as in the other cases, the railway companies yielded in their interpretation of the law and the complainant was therefore permitted to load less than carload shipments at his warehouse and to have the same taken by the locomotive from there as had been customary theretofore.

On October 15, 1906, the Chicago, St. Paul, Minneapolis & Omaha Railway Co. issued G. F. D. No. 22183 which reads in part as follows: "This company will switch without charge less than carload shipments of merchandise in lots of 6,000 pounds or more between industries located on its line and from depots provided that each separate consignment in the car pays the less than carload rate into or out of such depots."

49. Krom Bros., Bloomville, Wis. Complaint in regard to the rates on grain and feed stuffs between Minneapolis and Bloomville on a branch of the Chicago, Milwaukee & St. Paul Railway.

The rate on oats from the Twin Cities to Bloomville was 14 cents and the rate to Heineman 7.5 cents; mixed carload ship-

ments of grain were 14 cents to Bloomville as compared with 10 cents to Heineman. Bloomville is only one and one-half miles farther than Heineman and the complainant maintained that he was being discriminated against as compared with persons engaged in the same business in Heineman. The existence of this great difference in the rate for so short a distance was explained by the Railway Company as having been due to the gradual extension of the system and the necessity of drawing the line between the 7.5 rate and the higher rate at some point. At an informal conference it was agreed to reduce the rate making the Bloomville rates 1 cent higher than the Heineman rate which the complainants accepted as satisfactory.

50. H. J. Canar & Co., Mondovi, Wis. Complaint regarding rates between Mondovi and St. Paul and Minneapolis.

The complaint alleged that the rates between Mondovi and the Twin Cities were too high as compared with rates on the same commodity between Mondovi and Chicago. This referred especially to fourth class rates. The Chicago rate was 25 cents and the Minneapolis rate 24 cents. The complainant was informed that the rates complained of being interstate this Commission would have no power except to investigate, report and bring before the Interstate Commerce Commission. Further information was called for.

51. Riverside Fibre & Paper Co., Appleton, Wis. Inquiry in regard to the right of the Railway Company to make half tariff rates on machinery and materials used in constructing manufacturing plants.

At a conference between a member of the Commission and the manufacturing firm the manager of the establishment stated that their building was not yet completed and that they had no positive contract with the Railway Companies in regard to the charge that was to be made on materials shipped in but that they had an understanding whereby they expected to receive half rates on such material. The general question involved in this case was disposed of in another connection in an opinion issued by the Commission. (See Case No. 87, Formal Complaints.)

52. C. N. Lippitt, Beloit, Wis. Complaint on account of the refusal of the C. & N. W. Ry. Co. to check a trunk containing, among other things, blankets.

Refusal of the Railway Company rested upon the construction of the published rules governing the transportation of baggage. This and some other cases to which the attention of the Commission was called led to an inquiry with reference to the rules governing the transportation of baggage. Different companies submitted their printed rules and discussed the same and answered such inquiries as were put to them in letters relating to the subject. It is believed that the railways now apply uniform rules to all alike.

53. M. Sherman, Fort Atkinson, Wis. A complaint because of the refusal of the Railway Company to grant reduced rates to veterans of the Civil War.

For reasons explained in Part 1 of this report the question of reducing rates to veterans of the civil war was submitted to the attorney general. The attorney general held, and in this opinion the Commission fully coincide, that when railway companies were in the habit of giving reduced rates to soldiers of the civil war before the passage of the Railroad Commission law they were not precluded from continuing that practice under the law. Under the construction put upon the law by the Commission and the attorney general the railway companies need not discontinue the practice because of the Railroad Commission law. If the railway companies desired to discontinue this practice for the purpose of increasing their revenues that is quite another question.

54. S. S. Little, Menasha, Wis. The complainant, in his capacity of city clerk of the city of Menasha, complained of the neglect or refusal of the Railway Company to build a cement walk across its right-of-way at street intersection; also the inquiry as to the power of municipalities to compel railway companies to raise or lower their tracks so as to conform to the grades established by local authorities. The correspondence in this case included an opinion from the attorney general substantially as follows: "Chapter 173, Laws of 1899, as amended by chapter 159, Laws of 1905, empowers the board of public works of any city to fix the standard for sidewalks

and to compel the owners of property to build such sidewalks along their property adjoining public highways. Railroad companies and other corporations are not exempt from the provisions of the law. It is my opinion that so far as railroad crossings are concerned the city authorities have the power to require the elevation of railroad tracks. This power was given to cities under sub-division 51 of sections 925-52 Wisconsin Statutes 1898. It is quite probable that without any statute on the subject, cities would have the right in the exercise of their police powers when the safety and convenience of the public demands to require the elevation of tracks at street crossings. Railroad corporations are subject to such legislative control as may be necessary to protect the public against danger and the exercise of such power is a proper exercise of the police power of the state. *R. R. Company vs. Bristol*, 151 U. S. 656. A city may change its grade of streets and compel the railroad company to conform thereto."

55. Hummel & Downing, Milwaukee, Wis. Inquiry with reference to the advance made by the United States Express Company in the rates on paper boxes.

The same question was raised in another complaint discussed in this report. (See No. 61.)

56. Cornelius Wheeler, Governor National Home for Soldiers, Milwaukee, Wis. Complaint because of the refusal of railway companies to continue the custom of granting inmates of soldiers' homes half rates.

Both the Commission and the attorney general held that a reduced rate is permissible under section 8 of the Commission Law provided such a rate is given to all alike who are inmates of such homes receiving support therein under the terms of the statutes referred to. The complainant also submitted extracts from laws of the United States bearing upon both national and state homes. Negotiations were carried on directly between Governor Wheeler and the railway companies resulting in the restoration of the half rate fare.

57. Upham & Alger, Chicago, Ill. Complaint regarding the rates on lumber from Rhineland to Milwaukee and Racine as compared with rates from Ashland to the same points.

The rate from Ashland to Milwaukee and Racine is 10 cents as compared with an 11 cent rate from Rhinelander, Tomahawk and adjacent points to Milwaukee and Racine. It was explained that the Ashland rate is governed by water competition and that the same cannot be used as the measure of the reasonableness of a rate from interior towns.

58. A complaint alleging discrimination by granting to certain private contractors the free use of cinders accumulated in the round-house of the Railway Company.

59. Badger Fruit & Produce Co., Ripon, Wis. Complaint because of the refusal of C. & N. W. Ry. Co. to refund an alleged overcharge on a shipment of apples from Ripon to Calumet, Michigan.

In the first place this is a question of legal claim over which the Commission has limited jurisdiction as explained in Part I. In the second place the matter complained of is interstate commerce and outside of the direct jurisdiction of this Commission. It was claimed on behalf of the Railway Company that the alleged overcharge was due to errors in weight. The shipper appears to have taken as his basis for the calculation of freight rates an estimated weight of a certain number of pounds per barrel while the company claims to have taken the actual weight. The complainant was informed that the Commission had no authority to compel the Railway Company to allow claims and that there appears to exist a bona fide dispute between the parties as to the exact facts in the case and that the only place in which such dispute can be settled is in the courts.

60. A verbal complaint against the Chicago, Milwaukee & St. Paul Railway Company, alleging discriminatory rates on oats and other grain from points in eastern Wisconsin to Berlin. The complainant filed an expense bill which had been given to him by a resident of Berlin, for whom he was acting. The consignee was written to for further information, but he advised the Commission that he had nothing further to offer and the matter was discontinued.

61. Ira L. Henry Co., Watertown, Wis. Protest against the proposed change in classification of paper boxes by Express Companies.

The Express Company made the application for changes in the classification of paper boxes in connection with a similar application applying to other commodities. Immediately on the receipt of such application the Commission sent letters of inquiry to all parties who would have interest in the matter, whose names and addresses could be ascertained. The Express Companies were also informed that before the Commission could intelligently consider a question of that kind it would be necessary for them to submit to the Commission detailed financial statements on the basis of which some judgment might be formed with reference to the returns afforded to the express companies by the existing classification and rates. Following this correspondence the express companies petitioned the Commission for leave to withdraw their application.

62. Richard Neunebel, Newberg, Wis. Complaint in regard to less than carload rates on hay from Rice Lake to Milwaukee.

The complainant was informed that the rate charged was the published rate and that the road would therefore have no right to charge him any other. If, however, it was the belief that the rate was unreasonable or otherwise unjust the Commission would hear the case and decide it on its merits.

63. Green Bay & Western Railroad Co., Green Bay, Wis. Request for a ruling with reference to the publication of tariff schedules in shorter periods of time than those prescribed by law.

This inquiry is similar to a number of cases which have from time to time come before the Commission involving a request to be permitted to make a certain rate effective in less than ten days time. In all applications of this kind the Commission has acted in accordance with the facts before it. Where no harm could apparently be done and possibly a little or much good be derived from having a rate go into effect in less than ten days the Commission has granted authority to do so. In a number of instances rates have been authorized by telephone or telegraph. In these cases the circumstances were urgent and the Commission felt fully justified in exer-

cising the discretionary powers which the law has, we think wisely granted to it.

64. Johnson Service Co., Milwaukee, Wis. Complaint alleging a combination of express companies for the purpose of keeping up rates and alleging further that twenty years ago rates were lower than they now are.

The complainant was requested to submit to the Commission statements of rates paid by him on articles transported in connection with his business for as many years back as possible. Other manufacturers and shippers in the state were requested to report similar facts. Letters were addressed to the Express Companies asking them to submit tariffs or schedules of rates which were in effect in the State of Wisconsin for the years 1885, 1890, 1895 and 1900, the rates for 1905 are on file in the office of the Commission. Since the Express Companies have never heretofore been required to file all their rates it was found impossible to collect the desired information. Some old rate schedules were secured but all the material available at present is not nearly sufficient for making an intelligent comparative study of express rates in effect during certain preceding decades. It is of course well known that under the new Interstate Commerce Law all interstate express rates will be filed with the Interstate Commerce Commission. As suggested elsewhere in this report the Commission contemplates a thorough investigation of the entire subject of express rates.

65. McGuire Hay & Grain Co., Chippewa Falls, Wis. Complaint on account of the refusal of the C. & N. W. Ry. Co. to pay for damages sustained in shipping a car of hay in a defective car from Rosedale to Chicago.

The powers and duties of the Commission in the matter of claims were explained to the complainant and the usual correspondence conducted.

66. N. P. Johnson, Breed, Wis. Complaint against the Chicago & Northwestern Railway Company for charging an excessive rate on logs from Breed, Wisconsin, to Chicago, Illinois.

It is the custom of railway companies to carry logs at a low rate to manufacturing plants located at points on their respective lines. Under such an arrangement it is calculated

that the outgoing rate on lumber will compensate for the relatively low rate on logs in. The railways maintain that they ought not to be expected to carry logs to a point like Chicago at less than the lumber rate which was the claim set up by the complainant. The rate charged on the shipment of logs concerning which complaint was made was the legally published rate and the only rate applicable.

67. Gaynor Cranberry Co., Grand Rapids, Wis. Inquiry relating to special rates to cranberry pickers along the line of the Green Bay & Western Railway.

After correspondence at an informal conference in the office of the Commission it was held that the Railway Company had the power under the law to continue the custom of granting reduced rates to cranberry pickers providing there is no discrimination among different employers of that kind of labor.

68. Schroeder & Daly, Milwaukee, Wis. Complaint in regard to rates on butter from Sturgeon Bay to Milwaukee compared with the rate to Chicago.

The published rate from Sturgeon Bay to Milwaukee was 33 cents and from Sturgeon Bay to Chicago 22 cents. The tariff giving the 22 cent rate contained a notation that the same was granted on account of water competition. At an informal conference it was admitted by all that there was as much water competition at Milwaukee as there was at Chicago, and that therefore Milwaukee was entitled to the benefits of this competition. The Railway Company at once made arrangements with the C. & N. W. Railway for the joint rate of 22 cents to Milwaukee.

69. Great Northern Railway Company.

Application for approval of interlocking plant at State Line.

70. Green Bay & Western Railroad Company. Request for a ruling with respect to the custom of granting employes of the company half tariff rates for shipments of coal for home consumption.

It was held by the Commission that if such reduced rates were given as a part consideration for services performed and and the coal thus shipped was used by employes in their own

households it would be permissible to grant such rates provided the tariff giving the rate was published and filed with the Commission like all other rates.

71. Stearns Bros., Monroe, Wis. Complaint regarding rates on milch cows from Cumberland, Wis., to Monroe, Wis., as compared with the rates from Cumberland to Chicago and from equi-distant Iowa points.

On examination of the tariffs it was found that there were no joint rates in effect between the Omaha and the Illinois Central Railways and that under the circumstances the Commission would have no power to act, should it finally decide that some action was necessary, unless the complainant made a formal complaint consequent upon the refusal of the Railway Company to quote him a reasonable joint rate. The rates on cattle throughout the state are now being considered by the Commission.

72. D. G. James, Treasurer, Wisconsin Veterans' Home, Waupaca, Wis. Complaint in regard to the withdrawal by the Railway Company of free transportation to the officers of the said Home and half rates to the inmates of the Home.

This matter was taken up with the officers of the Wisconsin Central Railway Company and the Wisconsin Passenger Association. The complainant had conferences with the Commission and with the officials referred to, as a result of which satisfactory arrangements were made and a tariff published soon thereafter authorizing the granting of half rate tickets to inmates of the Waupaca Home.

The question of the validity of such action was submitted to the attorney general who held that the Wisconsin Veterans' Home at Waupaca was not a state institution although support is given to it by the state; that its officers or trustees are elected by the Grand Army of the Republic and are not state officers and that consequently they may receive or may accept free and reduced transportation. He also held that the Wisconsin Veterans' Home was a charitable institution supported mainly by the state and that the trustees and inmates of that institution "come within the exception contained in section 8 of chapter 362, Laws of 1905, as agents of a charitable institution and the inmates not being state officers, may law-

fully receive such favors in the way of transportation or reduced fare as the railway companies may choose to extend."

73. J. R. Monteith, Preston, Wis. Complaint on account of the failure of the C. & N. W. Ry. Co. to furnish proper station facilities at Preston.

The complaint is signed by the petitioner and one hundred twenty-two residents of Preston and the immediate vicinity. The Commission took the matter up at once with the Railway Company which agreed to proceed immediately to install a waiting-room which will be provided with seats and kept warm. The company also agreed to arrange to have some one act as station agent at that place although the business of the company at Preston was not sufficient to warrant any large expenditure of money on their part in the maintenance of this station. The arrangements agreed to by the company were entirely satisfactory to the citizens of Preston.

74. Chicago & Northwestern Railway Co. Application for the approval of interlocking plant at Laona.

75. Chicago & Northwestern Railway Co. Application for the approval of interlocking plant at Montrose Siding.

76. Chicago & Northwestern Railway Co. Application for the approval of interlocking plant at Calumet Yard Junction near Sheboygan.

78. Ashland Iron & Steel Co., Ashland, Wis. Complaint against the Chicago, St. Paul, Minneapolis & Omaha Railway Co. for the withdrawal of a special rate on wood from various points on its line to Ashland, Wis.

The complaint of the Ashland Iron & Steel Co. was made about the same time that the Chicago, St. Paul, Minneapolis & Omaha Railway Co. submitted its application for leave to withdraw the rate in question. An informal conference was held and not long thereafter a formal hearing, at the conclusion of which the Commission issued its decision in the matter which is printed as case No. 2 in the Formal Complaints

79. Lamoreux & Shea, Ashland, Wis. Inquiry regarding rates on logs from points on the Superior & Southeastern Railway Company's line to Ashland.

The contents of the letter were immediately communicated to the Railway Company and shortly thereafter the complainant wrote the Commission that the differences between their client, the Lake Superior Lumber & Box Co., and the Railway Company had been amicably adjusted.

80. Chicago, Milwaukee & St. Paul Railway Co. Application for the approval of an interlocking plant on Washington Street, Milwaukee.

81. W. H. Prisk, Monticello, Wis. Complaint regarding a dangerous railway crossing near the city of Monticello, Green County.

The petitioner is chairman of the town of Mount Pleasant in which Monticello is situated. After some correspondence, an informal conference, and a visit to the locality by one of the Commissioners, it appeared to the petitioner that possibly nothing would come of these proceedings and he therefore filed a formal complaint. The matter, however, was settled informally but the account of the proceeding is published in connection with case No. 14 of the Formal Proceedings.

82. Wisconsin Central Railway Company. Request for ruling in regard to the granting of stop-over privileges on hunters' tickets at points north of Abbotsford on the Wisconsin Central Railway.

The Company was informed that if it would file with the Commission the rules and regulations governing such stop-over privileges the Commission would approve of the same and authorize it to go into effect immediately if desired.

83. Inquiry regarding the application of the long and short haul clause to shipments from points intermediate between the Twin Cities and Chicago.

The correspondent is a resident of Lodi, Wis. The inquiry related to the legality of charging the higher rate from an intermediate point than is charged from St. Paul and Minneapolis to Chicago. He was informed that the Interstate Commerce Law provides that no greater amount shall be charged for the short

haul than for the long haul when the short haul is included within the long and the circumstances and conditions are substantially similar. There is no long and short haul clause in the Wisconsin law and the railway companies undoubtedly have the right to charge more from intermediate points than from competitive points farther away provided that the competition at such more distant points is sufficient to establish dissimilar conditions by virtue of which under a decision of the Federal Supreme Court they may charge less than from nearer points on the same line for shipments in the same direction.

84. A. J. Cierzan, Dodge, Wis. Complaint on account of the refusal of the Green Bay & Western Railway Company to build a stock-yard or "shut-in" at Dodge in Trempealeau County.

The Railway Company offered the complainants the following alternative: (1) Complainants to build a small stock-yard at their own expense and the company to reimburse them by allowing one-half of its earnings on each car until the total expense has been covered; (2) the company to build a small yard and chute.

85. W. E. Martner, Prairie du Chien, Wis. Inquiry regarding the right of a railway company to pay the tolls on livestock and produce carried to it over a certain bridge.

It was held that there did not appear to be any very good reason why the tolls were paid by the company in the first instance, neither does there appear to be any good reason why the practice should be continued. It seemed to the Commission that it would be wholly outside of its power to order a continuation of such practice, as the Railway Company was acting within its rights in refusing to continue this privilege any longer.

86. Teckemeyer Candy Co., Madison, Wis. Complaint regarding the rate on peanuts in carload lots from Norfolk, Virginia to Madison, Wis.

This is an inter-state rate and therefore not directly under the jurisdiction of the Commission. Rates on peanuts from Norfolk, Virginia, to Madison, Wis., and quite a number of other

points, were compiled both for all rail and rail and water routes and the information placed at the disposal of the complainant.

87. Lake Chetek Chatauqua Assembly, Chetek, Wis. Inquiry regarding contract with the Railway Company for the transportation of lecturers and other parties.

It appears that the management of the Lake Chetek Assembly had generally succeeded in securing free transportation of lecturers and other persons participating in the program and continuation of this privilege was desired but the Railway Company refused to grant free transportation as it had been granted theretofore. Both the attorney general and the Commission held that the parties for whom free transportation was desired did not fall within the exceptions provided for in the Railroad Commission law and that therefore they were not entitled to free transportation.

88. Request for information with respect to the laws governing construction of side track by shippers and forcing connections with the same and the railway track.

89. The Soo Fuel Co., Chicago, Ill. Claim for overcharges against the C. & N. W. Ry. and M. T. & W. Ry. for their failure to pay certain claims. This complaint rests primarily upon the alleged excessive charge from Tomahawk to Harrison of 4 cents per hundred pounds as compared with the rate from Harrison to Sheboygan of 5 cents; and both of these as compared with the rate of 9 cents from Tomahawk to Sheboygan and 7.5 cents from Tomahawk to Chicago. The Commission found that the rates charged were in accordance with the published tariffs and that therefore no overcharge had been made.

90. Kanawha Fuel Co., Milwaukee, Wis. Inquiry regarding the liability of carriers for damages occasioned by delays in transit and the right of a railway company to charge for the transferring of coal in transit; and finally the right of the company to make a shipper pay for the grain doors if the same are necessary.

As the law now stands it does not permit the shipper to charge the Railway Company demurrage or a penalty for failure to furnish cars and this Commission is not empowered to make

any rule or regulation to that effect. In regard to the delay of goods in transit the Commission held that it is the common law duty of the carrier to transport goods with reasonable promptness and in the event of its failure to do so it would be liable to the shipper for the resulting damages if any. Such damages, however, could be enforced only through the courts.

91. Frank Wallin, Lannon, Wis. Complaint on account of the failure of the Railway Company to provide an adequate supply of cars.

In response to inquiries by the Commission the Railway Company submitted a full statement of the number of cars which had been provided and the dates upon which the same were sent to Lannon as well as the dates upon which cars were shipped out loaded. The Commission sent a special representative to make inquiries on the ground. Subsequent to the investigation the supply of cars appears to have been satisfactory.

Some complaint was also made regarding the rate on crushed stone. In order to determine whether or not such complaints rested upon a substantial foundation the Railway Company as well as the shippers were requested to submit to the Commission statements of the value of the different classes of stone transported in order that the relation between the value and the rate might be more definitely investigated.

92. W. W. Paneratz, Menasha, Wis. Inquiry regarding switching charges imposed by the C. & N. W. Ry. Co.

Since the date of this complaint the switching charges of the Railway Company have been filed in full with the Commission. Certain facts which were essential to the Commission were not furnished and therefore nothing further was done. The publication of the switching tariffs probably removed all cause for further complaint.

93. In the matter of commutation tickets.

This was a complaint on account of the refusal of the Railway Company to sell commutation tickets to one place when they sold similar tickets to numerous other places. The Commission instituted an inquiry in order to determine the manner in which commutations were generally issued. It was ex-

plained by the Railway Company that in making commutation rates it has been the custom of all the railway lines in the country to base the rates on the frequency of individual travel and on the volume of travel. The rules governing the selling of reduced rate tickets are on file in the office of the Commission and such tickets appear to be available to all alike on equal terms. The extent to which commutation tickets can be sold to all places indiscriminately is primarily a matter of business judgment for the Railway Company. The Commission has no power to compel the railway company to sell tickets at reduced rates. Inquiry into the matter of passenger fares in general embraces a part of this complaint.

94. John B. Gruber, Catawba, Wis. Complaint on account of the inadequacy of the station facilities at Catawba, Wis.

While this complaint was at first taken up informally and the Railway Company promised to provide better facilities, it was necessary in order to bring about the desired change to hold formal hearings and to make an order. The account of this complaint is contained in case No. 10 of the Formal Complaints.

95. Inquiry regarding telegraphic instructions issued by a railway company.

Complaint was made to the Commission that telegraphic instructions issued to the agents of a railway company had disregarded the general published rules regarding car supply to the disadvantage of the state business as compared with interstate business. On inquiry the Commission found that no such telegraphic instructions had been issued to the agents and that so far it was possible to determine the facts of the case no discrimination was practiced.

96. Complaints regarding passenger fares.

E. Martner, Prairie du Chien, Wis., and W. D. Connor of Marshfield, Wis., addressed communications to the Commission with respect to the matter of the proposed two cent passenger fares. All these complaints were consolidated in the formal hearings on the passenger fares given in the formal complaints.

97. Kaukauna Lumber & Manufacturing Co., Kaukauna, Wis. Complaint on account of the failure of the Chicago, Milwaukee & St. Paul Railway Company to make joint rates with the Chicago & Northwestern Ry. Co. to Kaukauna, Wis.; also complaint regarding the rate on sand from Two Rivers and other points to Kaukauna.

Complainant ships lumber from Wausaukee on the C. M. & St. P. Ry. to Kaukauna on the C. & N. W. Ry. The rate from Wausaukee to Green Bay is 5.5 cents per hundred pounds and from Green Bay to Kaukauna 4 cents per hundred pounds, making the sum of the locals 9.5 cents. From Appleton to Kaukauna the rate is $3\frac{1}{4}$ cents. The sum of the local rates which the complainant is obliged to pay depends somewhat upon the points at which shipments are transferred. Special inquiry was made regarding these complaints by a member of the Commission. The only way in which lumber rates could be changed would be by formal proceeding on complaint after the railway companies had refused to publish joint tariffs. The complaint regarding the rate on sand was with respect to a charge of 4 cents from Two Rivers to Kaukauna as compared with a rate of 2.5 cents from the other points nearly equi-distant. The Railway Company at once adjusted the rates on sand.

98. Anderson & Ekern, Whitehall, Wis. Complaint on behalf of a client of the above named attorneys for the refusal of the G. B. & W. Ry. to furnish cars.

Soon after the complaint had been conveyed to the Railway Company the superintendent called upon the complainants and their client and agreed to furnish the necessary cars.

99. Lake Superior Terminal and Transfer Ry. Co., Superior, Wis.

Application for the approval of an interlocking plant on Catlin Avenue, Superior.

100. National Wholesale Lumber Dealers' Association, New York, N. Y. Complaint against the C. M. St. P. Ry. Co. for charging \$16.00 for switching a car of lath at Milwaukee from Lindwurm on the C. & N. W. Ry. to the Chestnut Street team tracks of the C. M. & St. P. Ry.

On investigation the Commission found that this charge of \$16 was the regular distance tariff rate for the haul over the C. M. & St. P. Ry. Co.'s tracks. No switching tariff covering the transportation had been published and the companies generally object to performing switching service under conditions of this kind. The complainant made application for a refund on account of the alleged overcharge. This involved the question of claims, to be taken up in the usual manner. Since the above complaint was made a complete switching tariff for Milwaukee has been published.

101. Thomas H. Fielding, Mills, Wis. Complaint against the C. St. P. M. & O. Ry. Co. for their failure to furnish cars for the shipment of wood.

The attention of the railway officials was called to this complaint and within a short time relief was granted. The Railway Company stated that owing to the very heavy traffic it had been impossible to supply all the cars desired but that they had been doing the very best possible. Later the complainant wrote the Commission that he was receiving a satisfactory number of cars every day and that he had no further complaint to make.

102. William McNamara, Stanton, Wis. Complaint on account of the failure of the C. St. P. M. & O. Ry. to furnish adequate side track facilities.

The Railway Company took the position that owing to the pressure of other business it had been delayed in making the improvements contemplated to meet the requirements of the of the complainant. Later the complainant wrote the Commission that the work had been completed in accordance with his wishes and that he was entirely satisfied.

103. Minneapolis, St. Paul & Sault Ste. Marie Railway Co. Application for authority to cancel "Class B" rates as applied to lumbermen's supplies and loggers' outfits.

Immediately on the receipt of this application the Commission addressed letters to a large number of lumbermen who were thought to be interested in the existing rates on lumbermen's supplies. When the replies to these letters came in it was found that a number of firms objected to the can-

cellation. A day was set for the hearing upon the merits of the application. Soon after this notice had been sent out the traffic manager of the railway withdrew the application for the cancellation of the rates and the old rates were continued on loggers' outfits and lumbermen's supplies.

104. Eastern Ry. of Minnesota. (See 105.)

105. Great Northern Railway Co. Request of the Commission for a true and correct copy of all leases now in force and effect on elevator properties owned by it in the city of Superior. This request was made by the Commission at the instance of Attorney General L. M. Sturdevant who addressed to the Commission the following letter: "A request has been made to this office to bring some action to compel the Great Northern Railway Company to operate its elevators "A," "S" and "X" at Superior as public elevators or warehouses and in that connection it is brought to my attention that these elevators have, or claim to have been leased to A. D. Thompson Company of Duluth, and it is also claimed by Thompson & Company that said elevators are operated as private elevators and as the lessees of such they refuse to receive therein grain from the public in general or from any person they may choose to refuse the use thereof. Before any steps are taken it is important that I obtain a copy of this lease or be informed of its contents. I therefore request the Wisconsin State Railroad Commission that under the provisions of section 18, chapter 362 of the Laws of 1905, that the said Railroad Commission by order or subpoena require the Great Northern Railway Company to produce within this state at such place as such Commission may delegate, a copy of any lease or leases made between said company and any other person or corporation of the said elevators hereinbefore described. I also request that the said Commission, or some person employed by it for that purpose, shall at your earliest convenience demand of said Great Northern Railway Company, the inspection of said lease as provided in subdivision *b* of sec. 18 of chap. 362, Laws of 1905." The Secretary of the Commission visited the offices of the Great Northern Railway and secured copies of the desired leases.

106. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel a large number of tariffs on lumber and logs.

On the receipt of this application letters were sent to firms in different parts of the state who were thought to be interested in the tariff. Replies showed that several firms objected to the withdrawal of certain ones of the specified tariffs. Those tariffs of the proposed cancellation to which no objections were made were allowed to lapse while the others were continued in effect.

107. Chicago, Milwaukee & St. Paul Ry. Co. In the matter of Circular No. 62 relating to the transportation of baggage and reading in part as follows: "You will refuse to accept for transportation for hunters, campers, fishermen, summer-resorters, etc. who are residents of Wisconsin, any article such as tents, camp equipage, or any other article not authorized to be carried as ordinary baggage. The rules stated above must be carefully observed to avoid discrimination which is prohibited by the law and is punishable by severe penalties," and requiring the enforcement of storage and baggage rules in Wisconsin. The Commission took the position that the interpretation of the law suggested by the circular was not in accordance with the interpretation placed upon the law by the Commission. It did not appear to the Commission that the circular in its present form could be justified under the law, in fact it appeared to be a violation of the law. After the objections had been stated the Railway Company promptly withdrew Circular No. 62 and substituted therefor Circular No. 54.

108. Northern Pacific Railway Co. Application for permission to publish a rate on coal from Superior to Wiehe, Wis., and intermediate points. Application granted.

109. Victory Mercantile Co., Augusta, Wis. Claim against C. St. P. M. & O. Ry. Co. on account of loss sustained by the failure of the Railway Company to deliver certain cars of hay.

The basis of this claim and the amount thereof was at once submitted to the Railway Company and the complainant advised not to proceed until after the company had had an opportunity to make an investigation and report to this Commission. Within a few weeks thereafter the complainant informed the Commission that his claim had been settled in full and that he desired to withdraw his complaint.

110. Green Bay & Western Railroad Co. In the matter of elevator service at Whitehall, Wis.

Certain parties at Whitehall had possession of an elevator site on the right-of-way of the railway under lease from the Railway Company. The lease is for an indefinite term of years, terminable on the 22nd day of October of any year on giving notice to the lessee. By the terms of the lease the lessees agreed to handle nothing but hay and straw. It is alleged that some time ago they altered their house for handling grain and that three days before the time set for the expiration of their lease they began buying grain. This the Railway Company claimed was contrary to their lease. The Railway Company also took the position that there were five other grain buyers at Whitehall who afforded sufficient competition for the trade at that point and who could adequately meet the requirements of business; that every additional grain buyer increased the number of cars needed to handle the business without increasing the volume of the business. This required the company to maintain a larger equipment than would otherwise be necessary; consequently the company objects to having the firm in question engage in the grain business under the terms of the lease. A representative of the company had a conference with the Commission in regard to the matter; he agreed to visit the locality to make a personal examination and it was finally concluded to acquiesce in the situation as then existent.

111. Illinois Central Railway Company. Application for authority to increase the minimum weight on carloads of hard and soft coal as follows: hard coal, carloads, minimum weights increased from 30,000 pounds to 40,000 pounds per car. This to apply except where marked capacity of the car is less, in which event the marked capacity of the car will govern, but in no case less than 40,000 pounds. The rule for soft coal is substantially identical with the above for hard coal. Letters were addressed to coal dealers in the various parts of the state and no objections were raised, consequently the application was granted.

112. Northern Pacific Railway Co. Application to lower the rate on soft coal from Nettleton Avenue, Superior, to Iron River from \$1.00 to 75 cents per ton. Application granted.

115. Hubard Elevator Co., St. Paul, Minn. The matter complained of by the above firm was later disposed of in formal proceedings as reported in case No. 14 of the Formal Complaint.

116. Chicago & Northwestern Railway Co. Application for authority to advance the minimum weight on hard and soft coal to 40,000 pounds.

This was one of a number of similar applications from other railway companies made on the ground that the average size of the freight cars had greatly increased and that 40,000 pounds was a relatively low minimum in consideration of the actual capacity of the cars. The Commission insisted upon the inclusion in the rule of the provision that the minimum weight shall not exceed the marked capacity of the car. The company accepted this provision and the application was granted.

117. Northern Pacific Railway Co. Application for authority to change the minimum weight on coal from Ashland to points in Wisconsin. This application was disposed of in the same manner as the application on the same subject recorded above.

118. National Express Co. Application for permission to make certain changes and additions to classification No. 16 revised to August 1, 1905.

After correspondence with interested shippers none of whom raised objections the application was granted.

119. Rock County Concrete Stone Company, Janesville. Complaint on account of the refusal of the C. & N. W. Ry. and C. M. & St. P. Ry. Companies to set out cars for unloading less than car load shipments on track away from the depot.

The points involved in this complaint are essentially like those described in case No. 48, which see.

120. American Express Co. Application for the approval of certain additions and changes in classification. After due investigation application was approved.

121. American Express Co. Notice of the intention to increase certain rates between certain stations in Wisconsin.

Correspondence with interested shippers did not reveal any objections to the proposed change. A date was set for a hearing on the merits of the application and no complaints were made. It was found that the changes sought to be made were changes which merely involved the elimination of certain inconsistent rates which were out of line with those to and from surrounding points and which were in reality a discrimination. It was claimed that those rates had crept into the Company's tariffs through carelessness or error. In view of the fact that there were no objections from interested parties the Commission approved the application.

122. Door County Democrat, Sturgeon Bay, Wis. Request for ruling on the following point: "Is there anything in the new laws governing railroads and railroad rates that prevents them from granting excursion rates of less than $1\frac{1}{3}$ fares to any ten or more people that apply for same; granting the same rate to any and every one who applies for it on that same specified date and train?"

The applicant was referred to the opinion of the Commission in the matter of Wisconsin Immigration & Development Association which will be found in case 1 of the Formal Complaints. The Commission took the position that rates may be given to a party of excursionists or to a party of persons traveling on a party ticket on rates that are not open to the single traveler although he is traveling the same distance on the same train. On the other hand, railway companies are not prohibited from giving rates as low as they please as long as such rates do not amount to free carriage but they must not discriminate. Similar inquiries came from other persons to the effect that they had been informed that the Railroad Commission law prohibited the granting of excursion rates. Correspondents who took this position were told their interpretation of the law appeared to the Commission to be not only in direct conflict with its plain terms but also in direct conflict with the construction which the courts had placed upon similar acts.

123. Rev. Thomas Fagan, Milwaukee, Wis. An inquiry in respect to the application of the provision of section 8, chapter

362, Laws of 1905, relating to reduced rates granted to ministers of the Gospel and ecclesiastical students.

It was held by the Commission that the Railroad Commission law of Wisconsin did not prevent railway companies from selling tickets to certain classes or societies at less than the rates open to the public generally where such tickets had been sold at such rates prior to the passage of the law. It was held to be within the power of the railway companies to sell tickets to theological students at less than the regular rates. The Commission was inclined to hold, however, that the railway companies would not have the right to discriminate in favor of any particular sect. If reduced rates are given to theological students of one denomination a general rule should be adopted applying to other denominations.

124. Chicago, Milwaukee & St. Paul Railway Co. Application for authority to establish a minimum of 40,000 pounds on hard and soft coal. See case No. 111.

125. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application to establish a minimum weight on coal of 40,000 pounds. See case 111.

126. Northern Pacific Ry. Co. Application for authority to apply a rate of 50 cents per cord on wood destined for charcoal kilns from Maple, Wis., to Ashland, Wis., a distance of 44 miles. The question involved in this application is identical with that disposed of in the case of the Ashland Iron & Steel Co. recorded in case No. 2 of the Formal Complaints.

127. Wisconsin Mirror Plate Co., Fond du Lac. Complaint on account of the failure of the C. & N. W. Ry. Co. to pay a claim for damages for breakage.

The disposition of this claim took some little time and a good many letters but it was finally settled to the satisfaction of the complainant.

128. An inquiry with respect to the powers of the Commission especially with reference to the making of rates.

The reply of the Commission gives the provisions of the law with reference to the questions raised, the leading court decisions upon each of the points and the general view of the situation as reflected in these.

129. Wisconsin Central Railway Co. A request for an opinion of the Commission with respect to certain provisions of the Railway Commission law which appeared to the legal department of the Railway Company to admit of a variety of interpretations.

After some correspondence a general statement was submitted the company covering the leading questions. These related to such matters as classification, greater or less compensation for certain services (Sec. 8), commutation tickets and excursion rates, free or reduced transportation, definitions of charitable societies, homeless persons, soldiers, etc.

130. Victory Mercantile Co., Augusta. Complaint against C., St. P., M. & O. Ry. Co., for a failure to furnish cars promptly between specified dates.

Investigation of the company showed that out of fifty-two cars furnished during the period covered by the complaint the complainant had received eighteen. The company also claimed that at no time during the month in question had the warehouse of the complainant company been full and that therefore the complainant was in a position to take advantage of all the business which was offered by the farmers during that period. The Company further claimed that the complaint arose at a time when the roads were suffering from the annual car famine and that, on the whole, the city of Augusta had been well taken care of.

131. Joe Galster, Black River Falls. Complaint in regard to the rate on oak sleigh runners between West Bend and Black River Falls.

The complainant was informed that the rate which he had been charged was the regular rate for second class commodities. Whether or not the runners shipped were correctly classed depends upon the condition in which they were shipped. If the runners were only sawed to shape but not bent or finished they would be classed in the fourth class and take a rate of only 21 cents per hundred pounds. Since the complainant did not state in what condition the runners were shipped it was impossible for the Commission to decide whether or not the correct rate had been charged. In view of the fact that the complainant did not reply any further it was assumed

that the runners in question had been shipped in such form that the rate which was actually charged was the legal rate.

132. Chicago, Burlington & Quincy Ry. Co. Application for the cancellation of a certain tariff and permission to issue a new one in place thereof, permitting milling in transit at Watertown, Wis. Granted.

133. Northern Pacific Ry. Co. Application for authority to publish a rate of 65 cents per ton on soft coal from Ashland to Iron River. Granted.

134. United States Express Co. Application to amend classification in regard to automobiles and carborundum grinders from North Milwaukee, and a number of other items. After correspondence it was found that interested parties engaged in trade or manufacture of the articles named, objected to only one out of the twelve items, hence the Commission approved the eleven and refused to approve the application in regard to carborundum grinders. It was found that shippers of this commodity had an agreement with the Express Company by which the existing rate was to be continued for sometime in the future. The Express Company agreed to an extension of time of six months which was accepted as satisfactory by the manufacturers.

135. A. L. Fontaine, Grand Rapids. Inquiry regarding the power of the Commission to force railway companies to install gates at dangerous grade crossings in cities.

The Commission took the position that the matter complained of came under its jurisdiction. This was sometimes before the special session of the legislature which adopted an amendment which eliminated all doubt as to the power of the Commission in regard to crossings. The writer later filed a formal complaint which was one of several filed in regard to this particular crossing and the proceedings are outlined in case No. 8 of the Formal Docket.

136. R. J. Doud, Beloit. Complaint against the C. & N. W. Ry. Co. for an alleged overcharge for six passenger tickets from Racine to Beloit.

On investigation it was found that the passengers traveled by way of Milwaukee, hence the complaint resolved itself into

a question of fact as to whether or not the passengers of their own free will traveled by way of Milwaukee, or whether they traveled by that circuitous route for the convenience of the company: The rate charged was the regular published rate between Racine, Milwaukee and Beloit but not the rate by the short line.

137. In the matter of rates from Weston.

This complaint involved the question of rates to the various Lake Michigan ports as compared with the rates from Weston to interior towns like Madison and Beloit. The rate to lake ports was ten cents and the rate to the interior towns mentioned was twelve, twelve and one-half, and to other towns in proportion. The low rate to lake ports was justified on the grounds of water competition.

138. In the matter of train connections at Ripon.

After the attention of the Commission had been called to this matter correspondence was conducted with the general passenger agents of the C. & N. W. and C. M. & St. P. Rys. The passenger departments of the two roads agreed to make a slight re-adjustment of the time schedules so as to permit of the desired connections being made at Ripon.

139. Marinette, Tomahawk & Western Ry. Co. Application for authority to put into effect certain rates. Application granted.

140. Northern Pacific Railway Co. Application for authority to put into effect certain rates on lumber to Superior. Granted.

141. United States Express Co. Application for authority to change certain classifications and rates enumerated in the application. One application involved cancellation of the minimum charge of 30 cents on shipments of laundry from La Crosse to all points in the State of Wisconsin. A conference was held between the officials of the Express Company and representatives of the laundry companies interested, as a result of which the existing rule was allowed to stand.

142. William Hanner, Beloit. Complaint on account of the refusal of the Wisconsin Central Ry. Co. to bill a car of potatoes from Montello to Beloit.

This complaint came at first through letters signed by Mr. Hanner and later through letters written by his attorneys, Rosa & Adams. The main question involved was the right of the Railway Company to refuse to accept shipments in its own cars which involved the sending of its cars away from its own line. The company maintained that it should not be compelled to send its own cars to foreign points especially during the busy season during which this complaint was made. On the part of the complainant the main point was that of damages, which the Commission treated in the usual manner as suggested in several cases of claims described above.

143. Northern Pacific Ry. Co. Application for authority to publish a switching rate of \$2 per car between industries on the Northern Pacific tracks at Washburn and Ashland and connecting lines; and of \$3 per car at Iron River; also an application for authority to publish a rate of 10 cents per hundred pounds between Ashland and Washburn on less than carload freight of all classes. Application granted.

144. Randolph Wagon Co., Randolph. Complaint on account of the failure of the C. M. & St. P. Ry. Co. to furnish cars.

Soon after this matter was called to the attention of the Railway Company by the Commission the complainant advised the Commission that cars had been furnished.

145. Chicago & Lake Superior Ry. Co. Application for authority to put into effect a passenger rate of 25 cents between Cambridge and London and of 40 cents round-trip between these towns. Application granted.

146. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for the approval of an interlocking plant at Lake Shore Junction.

147. Northern Pacific Ry. Co. Application for authority to publish a rate of \$1 per ton on hard and soft coal between Ashland and Superior. Granted.

148. United States Express Co. Application for authority to change classifications on a series of articles specified in the application.

After due investigation the application was granted.

149. Wisconsin Central Ry. Co. Application to withdraw a certain tariff which had been issued by mistake. Application granted.

150. Wisconsin Central Ry. Co. Application for authority to establish a minimum rate of 40,000 pounds on carload shipments of coal.

Application granted on the same conditions that similar application granted in case 111 above and others were granted.

151. Anton Loehr, St. John. Complaint against the C. M. & St. P. Ry. Co. on account of its refusal to build a side track at St. John. After a good deal of correspondence and an informal conference a formal complaint was entered which was heard and decided as stated in case No. 13 of the Formal Complaints.

152. Complaint alleging discrimination in the rates on cranberries from cranberry producing areas to Chicago as compared with the rate to St. Paul.

The rate complained of was a rate of 48 cents to St. Paul as compared with a rate of 30 cents to Chicago. The Commission expressed its willingness to investigate this question but advised the complainant that it did not have the power under the law to force a reduction in rates should an examination indicate the justice of such a reduction.

153. M. M. Hayes, Kilbourn. Complaint against the C. M. & St. P. Ry. Co. for overcharge on a passenger ticket between Dexterville and Kilbourn.

Correspondence with the Railway Company in regard to this case brought out the fact that certain errors had crept into the published tariff and that while the fare collected was the published rate it was nevertheless an error which the company at once corrected as well as similar errors which were detected in other tariffs.

154. Plumb & Nelson Co., Manitowoc, Wis. Complaint against the C. M. & St. P. Ry. Co. and the Wisconsin Central Ry. Co. for their refusal to publish joint rates between Plymouth and Manitowoc and intervening points.

This complaint was later made a matter of formal complaint and decision rendered as shown in case No. 16 of the Formal Docket.

155. B. C. Rosencrans, Wauzeka. Complaint on account of a shortage in cars on the Wisconsin and Western Ry.

Correspondence with the Railway Company brought an explanation which appeared to be unsatisfactory to the complainant. The Commission advised the complainant that in case the company did not provide cars with reasonable promptness it was open to him to make any complaint in reference to the service which would receive the careful attention of the Commission and if necessary a formal hearing on the matter would be ordered. No reply was received by the Commission.

156. American Express Co. Application for the approval of certain changes in and additions to its classification. Approved after investigation.

157. United States Express Co. Application to change classifications on certain commodities. Approved after investigation.

158. Northern Pacific Railway Co. Application for authority to establish a switching charge of \$3 per car between the mill and elevator at Grantsburg, Wis. Granted.

159. National Express Co. Application for authority to make certain changes in and additions to classification. Granted.

160. Thomas Wiler, Wautoma. Complaint against the C. & N. W. Ry. Co. for its neglect in not returning to him certain cars which he had fitted up for shipping potatoes. The usual correspondence with the Railway Company was conducted.

161. Gould, Wells & Blackburn Co., Madison. Complaint regarding the rate on peanuts from Norfolk, Virginia, to Madison.

Complaint stated that the rates on peanuts by lake and rail from Norfolk, Virginia, to Minneapolis was 40 cents per hundred pounds while the only rate quoted to Madison was a rate of 47 cents per hundred all rail. On inquiry it was found that peanuts were not as a matter of fact shipped from Norfolk to Madison by lake and rail and that therefore, in the light of Federal Court decisions, the rate of 40 cents could not be used as a measure for the reasonableness of the rate of 47 cents. This complaint of course related to interstate rates over which the Commission has only limited powers.

162. John T. Karnopp, Almond, Wis. Complaint because the Wisconsin Central Ry. Co. had made excavations near school-house grounds depositing the earth therefrom on the school grounds.

The matter was taken up with the Railway Company and the complainant was informed that if the Railway Company refuses to remove the dirt it could be compelled to do so only through the courts. This Commission has not the power to order work to be done and to enforce its order in a case of this kind.

163. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel certain rates on logs.

After correspondence application was granted.

164. In the matter of routing of passengers. Complaint because the passenger had been routed in an extremely circuitous way compelling him to spend a day and a night in reaching his destination whereas if he had been routed more directly he might have reached his destination relatively early in the evening of the same day on which he started.

This complaint led the Commission to make some inquiries with respect to the custom of the railways in the state to route passengers. Some information has been collected and the Commission intends to make additional inquiries in the future. It appears to be a custom on the part of some of the companies to route passengers from certain of their stations in an extremely circuitous manner if thereby they can get a longer part of the haul irrespective of the expense and inconvenience which may be caused thereby to the passengers

165. Wisconsin Central Ry. Co. Application for authority to reduce its rates on lime to New Richmond from certain lime producing centers so as to harmonize the rates with the rates in vogue on the C. St. P. M. & O. Ry.

After investigation application was granted.

166. George Beal, Madison. Complaint on account of the failure of the Northern Pacific Ry. Co. to deliver certain household goods shipped from Staples, Minn., to Madison.

The usual correspondence was conducted with a view of locating the shipment.

167. W. H. Jordan, Glen Haven. Complaint against the Chicago, Burlington & Quincy Ry. Co. alleging inadequacy of station facilities at Glen Haven.

The complaint related more especially to an early train which passes through the town and for which the station was not opened and warmed although a number of passengers desired to take this train almost daily, it being an important one. After correspondence with the Railway Company it was agreed that the company should open, warm and light the station, place a man in charge of the same and also connect the station by telephone with a nearby station in order that passengers may be informed beforehand whether or not the train is on time.

168. Adams Express Co. Applications to amend classification so as to permit the company to refuse shipments of matches. Application granted.

169. Winebago Realty Co. Inquiry regarding the rights of shippers to transport logs and other forest products over the branch line known as Roddis Spur.

After some correspondence the complainant informed the Commission that the Roddis Lumber Co. had named a rate and agreed to transport the products in question.

170. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to refund to the Dells Pulp & Paper Co. 3 cents per hundred on shipments of pulp from Eau Claire to Ladysmith.

The Commission replied as follows: "The Railroad Commission has for obvious reasons repeatedly declined to pass on the legality of claims presented by shippers against railway companies. We do not think that we ought to violate that rule in the present instance because the request comes from a railroad company rather than a shipper. It seems to us the matter should properly be referred to and be decided by your legal department and if necessary by a court."

171. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to specify date of expiration of certain rate on ties between specified points. Granted.

172. Lake Chetek Chautauqua Assembly. See case No. 87.

173. M. M. Hayes, Kilbourn. Complaint on account of overcharge in passenger fare between Dexterville and Lone Rock. The correspondence in this case was similar to that described in case No. 153.

174. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel twenty-seven different tariffs in effect on their line.

After investigation, granted.

175. Wisconsin Central Railway Co. Application for authority to cancel a proportional tariff in effect between points on its line to Neenah-Menasha.

The Commission addressed letters to all the paper and pulp mills which might be interested in this application. The matter was also discussed at several informal conferences and at formal hearings. It was finally disposed of in the case of the Island Paper Co. against the Wisconsin Central Ry. Co. which case being No. 6 of the Formal Docket.

176. C. R. Boardman, Madison. Request for an opinion regarding the legality of the acceptance by the adjutant general of a rate of one cent per mile for members of the Wisconsin national guard when on inspection tours and other matters of public business.

The Commission held: "That section 8 of chapter 362 of the Laws of 1905 was amended at the special session of the legis-

lature so as to permit railroad companies to sell at reduced rates such classes of tickets as were usually and customarily sold at reduced rates prior to the passage of the Railroad Commission law. It is therefore perfectly legal for the adjutant general to ask for such rates as have heretofore been issued and customarily given to the parties about whom the inquiry is made. In fact this was the interpretation that was put upon the law by this Commission before it was amended at the special session, but the amendment was adopted so as to clear up any doubt there might be regarding the interpretation of the act."

177. Hatten Lumber Co., New London. Inquiry regarding the authority of the Commission over weights and shipments from Wisconsin to other points.

The inquiry stated that the lumbermen of the state were having a good deal of trouble with the Western Railway Weighing Association and Inspection Bureau on account of overcharges. It was claimed that railway companies sometimes overweigh cars ten or twelve thousand pounds and later refuse to correct the weight. Such overcharges have the effect of an advance in rates.

On request additional information in regard to the custom of weighing lumber and other products was submitted to the Commission, the matter was also taken up with the proper officials of the various railway companies and is still under consideration.

178. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel certain rates on pulp wood from certain points in Wisconsin to Fox River and Wisconsin River points.

Among the letters received in response to inquiries sent out to manufacturers several objected to certain ones of the tariffs and as to these the Railway Company withdrew its application for cancellation.

179. Chicago & Northwestern Ry. Co. Application for authority to cancel rate of 33 cents on coated rubber cloth between La Crosse and Fond du Lac.

Correspondence with interested parties showed that there was no objection and the application was granted.

180. L. Grimsrud, Westby. Inquiry regarding the right of railway company to collect ten cents in addition to the regular passenger fares in cases where passengers pay their fares on trains.

Correspondence showed that this inquiry related especially to the La Crosse South Eastern Ry. The Commission took the following position: "Section 1798 *a*, Wisconsin Statutes 1898, provides that no railroad company in this state whose gross receipts exceed \$3500 per mile shall collect a greater sum for transportation of persons than 3 cents per mile. The La Crosse & South Eastern R. R. Co. has not as yet filed any report with this Commission showing what its gross earnings per mile are but has been requested and has promised to do so in the near future. We understand, however, that the road was recently built and that in all probability the earnings will not approximate that amount. If the road came within the section quoted we should be of the opinion that the excessive charge would be clearly illegal. Where passengers get on at stations where they have no opportunity to purchase tickets it would be perhaps unreasonable to exact any penalty for their failure so to do, inasmuch as the railroad company had not afforded the proper facilities for the purchase. Where there is an opportunity to purchase railroad tickets, we do not see anything unreasonable in the regulation, provided the legal limit of charge is not exceeded. It would undoubtedly be within the right of the railroad company to refuse to allow any passengers to board trains without tickets where an opportunity was afforded for their purchase....."

181. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel certain rates on pulp wood to Fox River points.

After investigation application granted.

182. Hatten Lumber Co., New London. Complaint against the C. & N. W. Ry. Co. because of its failure to furnish cars at Aniwa and asking advice with respect to the course which they should pursue in the matter.

Soon after the complaint was made the Commission received a letter from the complainant to the effect that the assistant superintendent of the Railway Company had called on them

and had promised to keep them supplied with cars for the balance of the season. The complainant also stated that it was now receiving all the cars which it needed.

183. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel a certain rate on shingles between specified points. Granted.

184. C. Starkweather & Son, Beaver Dam. Complaint against Wisconsin Central Ry. Co. on account of failure to refund alleged overcharges on shipments of lumber from Athens to Beaver Dam.

After some correspondence it was ascertained that the Railway Company refused to allow the claim for the reason that the milling in transit rate does not apply to any freight originating on another line of road. The Commission informed the complainant that if he desired to have a milling in transit rate established for material which does not originate on the Wisconsin Central Line it would be necessary to bring the matter formally before the Commission after his application for such joint rate had been refused by the companies. The question involved was partly one of the relation between the Wisconsin Central and the Abbotsford & Northeastern Ry. The Railway Company submitted to the Commission a statement of the traffic relations existing between it and the Abbotsford & N. E. Ry. Co. The Commission, of course, had no power to attempt to enforce the payment of this claim any more than it has power to enforce the payment of any other claim, as frequently pointed out in connection with correspondence relating to claims.

185. James L. Gates, Milwaukee. Request for an interpretation by the Commission of the amendment to chapter 362, Laws of 1905 affecting homeseekers rates and free transportation.

Similar letters were received from other land men, and in general the Commission called attention to that amendment to section 8 which expressly permitted railways to sell reduced rate tickets to such persons and classes, to whom such tickets were customarily sold before the enactment of the law.

186. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel certain rates on ore.

Interested parties had no objections and the application was granted.

187. Northern Pacific Ry. Co. Application for authority to establish a rate of five dollars per car on logs and cedar poles between Wiehe and Bellwood.

After inquiry application was granted.

188. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel rate on lumber between Fairchild and points on the Green Bay & Western Railroad.

Interested parties raised no objection and the application was granted.

189. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel the rate on lumber between certain points and Marshfield.

No objections were raised and application granted.

190. Green Bay & Western R. R. Co. Application for authority to transport free of charge two carloads of ensilage for free distribution among farmers.

It was represented by the company that the canning factories at Sturgeon Bay and Sawyer had about 250 carloads of pea vine ensilage which they desired to sell. The Railway Company took the matter up with several shippers some distance away from the canning factories, who had not yet had an opportunity of experimenting with this kind of feed, and induced them to try the feed under the conditions offered by the Railway Company. Under the peculiar circumstances disclosed in the correspondence the Commission held that it was not in violation of law to transport this ensilage free of charge.

191. Marinette, Tomahawk & Western Ry. Co. Application for authority to put into immediate effect special rate on hemlock pulp wood.

Granted.

192. Hiram M. Kendall, Osceola. Request for an opinion regarding the right of railway companies to give passes to old employes.

Amendments to chapter 362 of Laws of Wisconsin, 1905, passed at the special session of the legislature, were quoted. The provisions of the law appeared to fit the case of the correspondent exactly.

193. Complaint regarding the rate on foil used in the transportation of cheese as compared with the rate on nails and similar commodities.

This informal complaint resulted in voluminous correspondence between the Commission and the railway companies and the Southwestern Wisconsin Cheesemen's Protective Association which finally lodged a formal complaint which was heard and decided as recorded in case No. 24 of the Formal Complaints.

194. Inquiry regarding the right of railway companies to grant reduced and round trip tickets.

195. Wisconsin Central Ry. Co. Request for ruling regarding the right of railway companies to make a low rate on raw material upon the express condition that the entire products of manufacture from such raw material shall be shipped to the market over the line which made the haul at the reduced rate.

The Commission held that it was perfectly legal and legitimate for the Railway Company to make a lower rate on raw material on condition of receiving the manufactured product therefrom for shipment than it would be required to make on the shipment of such raw material where the same was consumed at the point of destination; or, if manufactured, there was no agreement to ship the manufactured product over the road hauling the raw material. Also, that the road hauling the unmanufactured commodity has a perfect right to require a reasonable guaranty that the contract to ship the manufactured product will be carried out by the shipper. A reasonable interpretation of section 6 of the Railroad Commission law clearly permits the making of such special rates.

196. American Express Co. Application for approval of certain additions to and changes in the classification. Granted.

197. National Express Co. Application for approval of certain additions to and changes in the classification. Granted.

198. Hazelhurst & Southeastern Ry. Co. Inquiry regarding the classes of persons to whom passes may be issued.

199. Wisconsin Central Ry. Co. Approval of the interlocking plant at Owen, Wis.

200. Miner Bros., Carter. Complaint regarding rates on lumber between Carter and Viroqua.

See Formal Complaints, case No. 15.

201. Inquiry as to whether a town must bear the expense of building a bridge over a stream when the bridge stands on railway land.

Held that the town must stand the expense.

202. Adams Express Co. Application for authority to change classification of whiskey.

Granted.

203. J. F. Schwalbach, South Germantown. Complaint against the C. M. & St. P. Ry. Co. alleging that the rates charged on freight to South Germantown are excessive as compared with rates charged to other places with which South Germantown competes.

The complainants submitted documents showing specifically the localities to which the more favorable rates were in effect and the influence of this upon their ability to compete with dealers in such localities. The Railway Company submitted a diagram showing the adjustment of rates at lake ports as fixed by water competition and the influence of these rates applicable to stations near the lake shore on the rates more distant from the lake. It was shown that the tendency was to get away from the influence of water competition and bring the local rates back to the normal distance tariff basis as soon as possible. The complainant finally wrote the Commission that other matters were more important to him just then and requested his complaint to be left open until a later date when he hoped to take it up again.

204. Approvals of statements submitted by the railway companies to the State Treasurer.

These are reports required under the law to be submitted by all the railway companies in the State.

205. The John Weeks Lumber Co., Stevens Point. Inquiry regarding the rates in effect on logs on railways in Wisconsin other than the Wisconsin Central.

The Commission compiled the more important log tariffs in effect on the different roads and submitted them to the correspondent. Log rates were discussed informally at several conferences.

206. La Crosse & Southeastern Ry. Co. Application for authority to put into immediate effect a new tariff on tobacco from points on their line to La Crosse.

This application was made for the purpose of accommodating tobacco growers at local points along the line of the La Crosse & Southeastern. The draft of the tariff submitted to the Commission appeared to be satisfactory and the application was granted.

207. Adams Express Co. Application for approval of certain changes in classification of millinery, artificial flowers feathers and straw goods.

A large number of letters was sent out by the Commission to interested dealers in all parts of the State. A good deal of opposition was shown to exist to the proposed changes and the application was therefore withdrawn.

208. John H. Allan Seed Co., Sturgeon Bay. Complaint against Railway Company for failure to pay a claim.

This claim rested upon an interstate shipment, the Ahnapee & Western and the Pere Marquette Co. being the interested lines. The amount of the claim was only 73 cents. The claimant stated that the Pere Marquette line had rejected the payment of his claim on the ground that the amount was too small for a voucher. The reply of the Commission was in part as follows: "In a matter of this kind involving the collection of a debt this Commission cannot make any order or judgment that would be binding on the carrier as it is an administrative

body and cannot perform judicial functions. The collections would have to be enforced through the court but we do not think it will be necessary for you to resort to the courts to collect a bill which the Railway Company admits is due and declines to pay for an absurd reason."

209. Roddis Lumber & Veneer Co., Marshfield. Complaint against the Wisconsin Central Ry. Co. for discontinuing certain rates in effect prior to January 1, 1906.

The Commission first inquired whether these rates were fixed by tariff or special contract or otherwise. On further investigation it transpired that the amount of the refund, which was claimed, was not an overcharge, but that the Railway Company had in that particular instance based its charge on the published tariff which was in force at the time the shipment was made. The Commission held that a reduction in the amount of the charge specified in that tariff amounted to a rebate, pure and simple; but it was further held that if the charge was in itself excessive and unreasonable the complainant had a remedy in the courts to recover and "we do not see how we can give official sanction to the legality of your claim as it stands and refuse to put the stamp of approval on almost any other claim for a rebate. Certain it is that we cannot attempt to nullify the law which provides that the published rate shall be the legal rate."

210. Inquiry as to methods of procedure before the Commission and request for an opinion on a certain statement of facts which it is intimated existed.

Held that it was inadvisable as a general rule to answer broad questions like the one submitted unless at the same time the Commission is also informed of the concrete facts to which it is intended the reply is to be applied.

211. Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. Inquiry as to the interpretation of chapter 362, Laws of 1905 with respect to the report of free and reduced transportation to employes and their families.

Held that the law makes it obligatory upon railway companies to furnish a list of all passes given to residents of Wisconsin whether they are employes or not.

212. National Wholesale Lumber Dealers' Association, New York, N. Y. Complaint against the C. & N. W. Ry. and the C. M. & St. P. Ry. for the rate charged on shipment of lumber from Merrill to Sheboygan.

This shipment involves the matter of a joint rate. The rate charged was the sum of the locals. If shipments are made frequently between points named and the railway companies have refused on application to publish a joint rate this Commission has power to hear an application for a joint rate and prescribe such rates if the facts submitted at the hearing justify it.

213. In the matter of log rates between stations on the C. M. & St. P. Ry.

This involved correspondence between lumber dealers at various points with a view of determining the commercial conditions under which existing rates were established.

214. George J. Thiele, Taylor. Complaint against the Wisconsin Central Railway Co. for an overcharge on a carload of potatoes shipped from Amherst, Wis., to Morristown, Tenn. This claim rests upon an apparent misunderstanding on the part of the complainant or a misquotation on the part of the Railway Company. The rate which the complainant was actually obliged to pay was much in excess of the rate which he states he was told would be charged for the shipment in question. The Wisconsin Central Ry. Co. took the matter up with its connecting lines, numerous letters have passed between the various parties interested and up to the present the matter has not been closed. There appears to be some difficulty in securing all the facts in the case since the shipment was made in November, 1902.

215. Evergreen Nursery Co., Sturgeon Bay. Complaint regarding rates on pine cones from Sturgeon Lake, Minn. to Sturgeon Bay, Wis.

The rate which was quoted to the complainant was 65 cents between the two points named. After correspondence with the railway companies concerned and other parties interested a joint rate of 20 cents was published under which the shipments moved.

216. National Express Co. Application for change in classification.

Objections were made by certain shippers and the date for the proposed change was postponed and complaints withdrawn.

217. American Express Co. Same as case 216.

218. Adams Express Co. Same as case 216.

219. United States Express Co. Application for change in classification of oyster empties, money, millinery and automobiles.

Objections were raised and the application withdrawn.

220. R. P. Gupstill, Rhinelander. Refusal of the C. & N. W. Ry. Co. to construct a side track to a point on Pells Lake near Genoa Junction.

The complainant had purchased a tract of land near the lake for the purpose of constructing a large ice-house thereon and housing ice from the lake and shipping it over the C. & N. W. Ry. The location of the ice-house would be some distance away from the main line of the railway. Complainant claimed that he had verbal promises from officials of the company that the connection would be made, but when he made application for the same it was refused. The Commission corresponded with the different parties but of course this matter was purely a case for the courts.

221. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to issue a new tariff on logs between stations named.

Approved.

222. Augusta Produce Co., Augusta. Complaint because of the failure of the C. St. P. M. & O. Ry. Co. to furnish refrigerator cars.

The general freight agent explained that this order involved a foreign car which it took some time to secure and that the same had been secured as promptly as possible.

223. In the matter of sanitation of cars and stations.

This is an inquiry by the Commission into the rules, regulations and practices affecting the sanitation of cars and stations. Various railway companies submitted what published or other material they had bearing on this subject and the Commission is still gathering information with respect thereto.

224. G. J. Anderson, Itasca. Inquiry regarding the classification of potatoes in carload and less than carload lots.

225. Thomas H. Fielding, Mills. Complaint on account of a charge made by the C. St. P. M. & O. Ry. Co. for transferring wood at a junction point.

It appears that the complainant had frequently made shipments between points named as well as other points and that it had been customary for the Railway Company to give notice of excess weight on a car after the same had been weighed at the junction point. That upon the receipt of such notice the complainant could generally dispose of the excess load in that locality and thus save himself from loss. On the occasion complained of the Railway Company employed a man to throw off the excess load. This was the chief basis of the complaint. The usual correspondence in regard to claims was carried on in this case.

226. J. P. Smith, Sedley, Saskatchewan, Canada. Complaint regarding the passenger rates in force between Wisconsin points and points in Canada, and Wisconsin points and Portal, North Dakota.

It appears that the complainant resides or has an office in an interior Wisconsin town and that he is interested in the movement of immigrants from Wisconsin to the points named. The general passenger agent of the C. M. & St. P. Ry. Co. submitted a letter in which the differences in these rates were explained on the basis of competition. The Commission wrote to the correspondent that the Federal Supreme Court had held that the competition created dissimilar conditions which would justify the railway companies in doing the things complained of. This being an interstate matter the Commission was without jurisdiction.

227. Adams Express Co. Application for authority to make certain changes in the classification.

228. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to adopt certain changes in the classification recommended by the Western Classification Committee at a meeting of that Committee in Los Angeles in January, 1906.

Similar applications were received from the other railway companies. Representatives of the traffic department of these railways explained that practically all the changes, with a few exceptions, were in the nature of reductions, and that in the few items in which a slight advance was made the same was made at the request of manufacturers, jobbers and shippers of those commodities. In all cases the proposed changes had previously been agreed upon by the railways and the interested manufacturers and shippers. The applications were therefore approved.

229. C. J. Boeckler, Broederville. Complaint against the Stanley, Merrill & Phillips Ry. Co. alleging excessive charges.

The Commission submitted a series of questions to the complainant with a view of getting information which was necessary in order to arrive at some judgment regarding the merits of the complaint. Such statement of facts was not received.

230. Loveland Co., Washburn. Right of a railway company to abandon its line.

This inquiry was the result of a rumor that a certain line of railway was about to be abandoned. The Commission took the position that this was a matter upon which the attorney general ought finally to express an opinion but it was also stated that there probably was nothing in the Railroad Commission law to prevent a railway company from abandoning an unprofitable line under certain conditions.

231. H. S. Wunderlich, Koepenick. Complaint on account of overcharge on shipments of lumber from Koepenick to Lynxville.

These shipments of lumber were made over the C. & N. W. and the C. B. & Q. Rys. The joint tariffs covering shipments between points on these two lines of road appeared to be indefinitely worded so that different constructions could be placed upon them. The Commission found some difficulty in

determining from the published tariffs what the actual rate was. Correspondence regarding this case extended over a long period of time and finally the claim was paid by the Railway Company for the reason that the rate originally collected was not in strict accordance with the wording of the published tariff at the time the shipments were made.

232. Oshkosh Fuel Co., Oshkosh. Claim against the C. M. & St. P. Ry. Co. covering an alleged overcharge on a shipment of cord-wood from Oshkosh to Fisk.

On examination it was found that the rates complained of, and on the basis of which a claim for overcharge was made, were the published rates and that, therefore, the complainant had no just basis for his claim unless it could be shown that the rates collected were of themselves unreasonable or discriminatory. The question of discrimination among localities including the points from and to which the shipments in question were made was not taken up.

233. L. C. Whittet, Edgerton. Complaint against the C. M. & St. P. Ry. Co. for charging a higher rate from Steuben than from La Farge to Edgerton, Steuben being an intermediate point.

It was found that the rate in effect between La Farge and Edgerton was \$1.65 per cord while the rate from Steuben was 5 cents per hundred pounds, which on a distance basis amounted to appreciably more than the rate from La Farge. There was also a question regarding the weight of the wood. The Commission found that the conditions under which these shipments were made were substantially similar and that therefore no ground existed for violating the long and short haul principle. The Railway Company ordered the claim paid.

234. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to cancel certain rates on logs and bolts to Eau Claire and Chippewa Falls.

After correspondence with interested manufacturers the application was approved.

235. Ole Barton, Primrose. Complaint that the passenger fare between Marshfield and Madison was different according to the direction in which the traveling was done.

The complaint related specifically to the charge of \$4.85 from Marshfield to Madison while the return rate from Madison to Marshfield was only \$4.20. On examination it was found that the rate actually charged was not in excess of the legal rate of 3 cents per mile and that on the return trip from Madison to Marshfield the short line distance governed and that on this account the C. & N. W. Ry. Co. had been collecting only \$4.20.

236. F. C. Maertz, Milwaukee. Complaint against the C. & N. W. Ry. Co. for failure to furnish cars at points on the extension from Lakewood.

The situation seemed urgent and the Commission exchanged several telegrams with the parties interested followed up by a series of letters. These communications revealed the fact that the Lakewood spur was operated by the Oconto Lumber Co., and that therefore request for cars should be made to that company rather than to the C. & N. W. Ry. The Oconto Lumber Co. asserted that no applications had been made to it for these cars. The complainant finally wrote to the Commission that the C. & N. W. Ry. Co. had furnished him all the cars which he desired.

237. L. H. Mead, Shell Lake. Complaint against the C. St. P. M. & O. Ry. on account of the rate charged on a carload of Christmas trees shipped from Minong to Milwaukee and from there to St. Paul.

This carload of Christmas trees had been shipped from Minong to Milwaukee at a charge of \$24. and then re-shipped without unloading from Milwaukee to St. Paul at a charge of \$50. On an examination of the tariffs and the rules and regulations governing the shipment of Christmas trees and moss it was found that an error had possibly been made, and that class rates instead of lumber rates had been charged on the shipment from Milwaukee to St. Paul.

238. J. H. Hoyt, Fall River. Inquiry regarding the right of a railway company to condemn additional land for a right-of-way on which land fruit and shade trees and buildings were located.

Held that this was a question for the court and not for the Commission.

239. Victory Mercantile Co., Augusta. Claim on account of an alleged overcharge on a shipment of coal.

The rate from Milwaukee and other lake ports on coal to Eau Claire is \$1.00 per ton. The rate from these same points to Augusta is \$1.40. Augusta is an intermediate point and complainant claimed that he was entitled to as low a rate as Eau Claire. The Wisconsin Commission law does not contain the prohibition regarding the long and short haul which is contained in the Interstate Commerce law and by which it is prohibited to charge more for a shorter haul than for a longer when the shorter is included in the longer, the traffic moving in the same direction under substantially similar conditions. The rate to Augusta was therefore not a violation of the Commission law. This rate as well as other similar questionable adjustments are under consideration at the present time.

240. United States Express Co. Application for changes in the classification of oysters packed with or without ice.

Letters were sent out to oyster dealers throughout the State and no objections were raised and the application was approved.

241. Zien Bros., Milwaukee. Inquiry whether or not express companies are obliged to notify consignors in case shipments are refused by the consignee.

Held that the law requires express companies to notify the shipper in the event a shipment is refused by the consignee.

242. V. S. Keppel, Holmen. Inquiry regarding the powers of the Commission in investigating the books of railway companies and asking specifically whether it was within the power of the Commission to determine whether or not certain individuals had purchased mileage books or had received passes.

Correspondent was informed that the records of the railway companies were such that it was impossible to state at a later time whether or not a certain person had purchased a mileage book at some considerable time previously. All passes

granted since the enactment of the Commission law are reported to the Commission. The purpose of the inquiry was obviously to determine whether or not certain public officials had secured financial profit through the use of mileage books or free transportation in the transaction of public business for which the local political unit had paid. The Commission expressed its willingness to assist public officials and others in compelling obedience to laws but it is impossible to say who did and who did not purchase mileage books.

243. L. P. Fox, Chilton. Inquiry regarding the powers of the Commission to compel railway companies to make connections at junction points.

Correspondent informed that cases like those cited in his letter came clearly within the jurisdiction of the Commission.

244. Wisconsin Central Ry. Co. Inquiry regarding the possibility of having certain intra-state rates go into effect on less than ten days notice as required by law if this is necessary in order to meet changes in interstate rates.

Held, that it was within the discretionary powers of the Commission to permit of such changes in the rates applicable between points in the State if that is necessary in order to meet interstate rates.

245. Bemis-Hooper-Hayes Co., Oshkosh. Complaint on account of proposed advance in the minimum weight of carload shipments of fruit from California.

The correspondent alleged that a little over a year ago the minimum on carload shipments of fruit had advanced from 30,000 to 40,000 pounds and that it was currently reported that a still further advance was to be made to 50,000 pounds. The correspondent was requested to send the Commission accurate data with reference to the amount of fruit which is customarily placed in a car. It being an interstate rate the Commission would have no power except to investigate and, possibly, to bring before the Interstate Commerce Commission.

246. Berres-Gehl Manufacturing Co., West Bend. Complaint regarding less than carload rates on certain commodities between West Bend, Milwaukee and other points.

This complaint related to the freight rates on castings, structural iron, sheet iron, agricultural implements and other iron goods, between West Bend, Milwaukee, Chicago and Fond du Lac.

The rates in effect between the different points named on the commodities in question were compiled and sent to the complainant.

247. In the matter of passenger fares between Monroe and Madison.

The C. M. & St. P. Ry. Co. charges \$1.10 for tickets from Monroe to Madison, while if the passenger uses a mileage book 74 miles are lifted, or the equivalent of \$1.48 if a 2,000 mile book is used and \$1.85 if a 1,000 mile book is used. This is a discrimination against the users of mileage books. On inquiry it was found that this practice was also in vogue between Mineral Point and Madison and was the result of competition with the Northwestern at Dodgeville, which point is reached by stage from Mineral Point. It was explained by the Railway Company that the normal rate between Monroe and Madison via C. M. & St. P. Ry. was \$1.83, when the Illinois Central was opened for traffic, being a short line, the rate was reduced to \$1.10. It developed, however, that the service via the longer line by way of Brodhead and Janesville was more satisfactory and that travelers using mileage books preferred to pay the greater charge. "We have never assumed that because it was desirable, from a business standpoint or from a standpoint of satisfying the public, to meet a selling rate between two points it was necessary to meet the conditions prevailing via competing lines on mileage tickets on which the net rate per mile is less than the regular fare. . . . Steps will be taken to withdraw this mileage from use and to cancel the use of the short line rate between Monroe and Madison. . . ." The rates between Monroe and several other points were considered in connection with certain formal complaints which were later brought before the Commission and an account of which is given there.

248. E. R. Wagner Manufacturing Co., North Milwaukee. Complaint regarding rates on iron forgings in boxes and barrels from Milwaukee to Sheboygan in less than car lots.

After considerable correspondence the complainant filed a formal complaint which is disposed of under Case No. 42, Formal Complaints.

249. Gould, Wells & Blackburn Co., Madison. Complaint on account of overcharge on a carload of canned salmon shipped from Portland, Oregon, to Madison.

The initial shipment was made over the Oregon Railway & Navigation Co. and delivery at Madison was made over the C. & N. W. The rates applicable to shipments of this kind were compiled and submitted to the complainant as well as the railway companies. The C. & N. W. agreed to take up the matter with the Oregon Railway & Navigation Co. even though it is customary in cases of this kind to negotiate with the initial carrier. The claim was paid.

250. T. B. Davis, Downing. Complaint on account of refusal of the Wisconsin Central Ry. Co. to permit stop-over privileges in unloading carload shipments of salt at several stations.

Complainant claimed the right to unload at more than one station at an additional charge of \$5. because this was permitted in the unloading of lime. It is also permitted in loading certain commodities. The Railway Company took the position that unloading at more than one station was permitted in the case of lime because it was a highly perishable commodity and that without this privilege relatively few consignees in that section of the State could avail themselves of the low carload rate. Correspondent was informed that the Commission could express no opinion with reference to the merits of his claim without a hearing.

251. Edward Maldaner, Watertown. Complaint regarding the rate on coal from Milwaukee and the rate on stone to Watertown and Chicago.

The rate on coal complained of was a rate of 5.5 cents per hundred pounds from Milwaukee to Hubbleton, eight miles beyond Watertown, as compared with a rate of $3\frac{3}{4}$ cents from Milwaukee to Watertown. The rate on stone complained of was a rate of 2 cents per hundred pounds between Richwood and Watertown, a distance of five miles, as compared with a

rate of 4 cents per hundred pounds between Hubbleton, Watertown and Chicago, a distance of 140 miles. The rates applicable to this case were compiled and submitted to the complainant, a representative to the Railway Company called upon the complainant and a new tariff providing for satisfactory adjustments was promptly issued by the company.

252. Geo. W. Smith, Tioga. Complaint regarding rates in effect on the Fairchild & Southeastern Ry.

Commission requested a more definite statement of facts which was not received.

253. Stanley, Merrill & Phillips Ry. Co. and Wisconsin Central Ry. Co. Application for authority to cancel certain rates on lumber between specified points. After correspondence with interested parties application was granted.

254. George Lyle, Oregon. Complaint against the C. M. & St. P. Ry. Co. for the loss resulting from failure of Railway Company to place a carload of sheep where the same could be unloaded.

After correspondence the claim was paid.

255. Northern Pacific Ry. Co. Application for authority to cancel rates applicable to shipments of telegraph poles and ties in car lots.

After correspondence application was granted.

256. Wells & Chase, Dorchester. Complaint against Wisconsin Central Ry. Co. because of its refusal to construct a side track.

This was made the subject of a formal complaint which was disposed of in Case No. 43.

257. Brown Bros. Lumber Co., Rhineland. Inquiry regarding lumber rates in effect on the C. & N. W. Ry. Co. between various points mentioned.

Compilations of these rates were made and submitted to the correspondent.

258. G. W. Jones Lumber Co., Appleton. Inquiry regarding

the powers of the Commission over joint rates and stating why the complainant desires to have joint rates established between certain points named.

Powers of the Commissions in matters of joint rate were set forth in letter to correspondent.

259. James E. Lyons, Colby. Complaint regarding joint rates on hay from Coxie station, on the Fairchild & North-Eastern Ry., to Ironwood and Wakefield, Michigan. The Fairchild & N. E. Ry. Co. was requested to furnish the Commission complete information regarding the rates in effect from points on its line to the points mentioned and the correspondent was informed accordingly.

260. L. C. Whittet, Edgerton. Complaint regarding the rate on lumber from Elcho to Edgerton.

This was made a matter of formal complaint which is disposed of in Case 35, Formal Complaints.

261. A. E. Wing, Whitehall. Inquiry regarding the right of a shipper to route his shipment over certain rails.

The law applicable to this question was submitted to the correspondent.

262. Kaukauna Lumber & Manufacturing Co., Kaukauna. Complaint against C. & N. W. Ry. Co. for failure to make prompt deliveries of shipments from Chicago and Oshkosh to Kaukauna.

Complainant submitted a series of expense bills and bills of lading showing that unnecessary time had been consumed in making these shipments as a result of which he had suffered loss.

Matters complained of were promptly remedied by the Railway Company.

263. In the matter of concentration rate on cheese. Inquiry from the General Freight Agents of several railway companies regarding the existing system of concentration rates, especially the practice of shipping cheese in a direction away from the market, which has grown up under the concentration system. All matters relating to cheese rates were disposed of in the case of the Southern Wisconsin Cheese-

men's Protective Association, Case No. 24 of the Formal Docket.

264. Wisconsin Central Ry. Co. Application for authority to change the minimum weights on wall-plaster, asbestos, cement and stucco in car lots from 24,000 to 30,000 pounds. Letters were sent to dealers in and consumers of these commodities in all parts of the state. Although only a few objections were raised the minimum was allowed to stand, for the reason that an advance to 30,000 pounds would, under circumstances, be a hardship on contractors near the close of the season and to small contractors in the smaller towns at all seasons.

265. Wisconsin Central Ry. Co. Application for approval of interlocking plant near Donald.

266. Owen & Northern Ry. Co. Application for approval of interlocking plant near Ladysmith.

267. H. E. McEachron, Wausau. Complaint on account of the refusal of the C. & N. W. Ry. Co. to refund an alleged overcharge on a carload shipment of hay when the car was loaded to its full visible capacity.

This as well as some questions relating to shipments of hay was disposed of in the case of the Loftus-Hubbard Elevator Co. against the Wisconsin Central Ry. Co. See Case No. 14, Formal Complaints.

268. Edward W. Guildner, Levee. Complaint against C. M. & St. P. Ry. Co. for discontinuing Lewiston station near Portage.

This matter was later taken up in a formal way and disposed of in Case No. 42 of the Formal Docket.

269. Wisconsin Central Ry. Co. Application for authority to make effective immediately a rate on lumber between Milwaukee and Manitowoc and intermediate points to Merrillan in conjunction with the Green Bay & Western R. R.

Application granted.

270. E. R. Wagner Manufacturing Co., North Milwaukee. Petition for reduction in rates on springs and axles for children's vehicles, K. D., L. C. L., from Milwaukee to various points in Wisconsin.

After considerable correspondence this was taken up in formal complaint and disposed of in Case No. 50.

271. Manitowoc Malting Co., Manitowoc. See Formal Complaints, Case No. 37.

272. Wisconsin Sugar Co., Milwaukee. Complaint regarding rules governing minimum weights on shipments of beets to sugar factories.

Correspondence and informal conferences followed this complaint and the matter was finally disposed of in formal hearings as recorded in Case No. 73 of the Formal Docket.

273. John Schroeder Lumber Co., Ashland. Complaint regarding the rate on lumber between Ashland and Crystal Falls, Michigan.

On examination it was found that no commodity rate was in effect between the points mentioned and that the rate which was actually charged was one cent below the Superior-Duluth rate to the same point.

274. Chicago, Milwaukee & St. Paul Ry. Co. Request for ruling from the Commission regarding the application of certain short line rates to competitive points on the C. M. & St. P. Ry.

It was represented that occasionally, through the lack of knowledge or error on the part of employes, discrepancies crept into the published tariffs under which it was impossible for the road to meet short line competition. Specific instances were cited and the Commission was asked whether it would be possible to secure changes in misfits in the rate of the kind indicated in less time than the ten days prescribed by law. *Held*, that changes such as those indicated in the letter could be made and that the Commission was always willing to exercise discretionary powers provided full statements of the facts were submitted in each case.

275. Levin & Norden, Ashland. Complaint regarding the rates on hay and oats between Chetek and Ashland.

On examination it was found that the rates charged were the published and lawful rates and that therefore the Commission could not recommend to the Railway Company the payment of the alleged overcharge.

276. Wisconsin Central Ry. Co. Application for authority to publish a new rate on pulp-wood between Eau Claire and Neenah and Menasha effective immediately.

Granted.

277. Inquiry regarding rates on potatoes in car load lots between Kilbourn City and Belleville.

Rates reported to the correspondent.

278. Otto Fuerst, Milwaukee. Complaint against C. & N. W. Ry. Co. for failure to deliver promptly baggage as a result of which complainant suffered financial loss.

The complaint enumerated a number of instances in which his trunk was not delivered and because of the failure of such non-delivery he was unable to transact business and was subjected to financial loss the amount of which was stated.

The Railway Company paid the claim.

279. La Crosse & Southeastern Ry. Co. Inquiry regarding the duty of the Railway Company to file excursion rates when such rates are to go into effect in less than ten days.

Held, that the Company might issue excursion tickets on less than ten days notice provided previous permission was secured from the Commission.

280. A. J. Rose, Park Falls. Complaint regarding the condition of a crossing on the line of the Roddis Lumber & Vencer Co.

Correspondence with both parties brought out the definite facts in the case and the fault appeared to lie on both sides. The Company promised to do everything reasonable for the protection of the crossing complained of.

281. Green Bay Fibre & Paper Co., Green Bay. Complaint regarding rates on wood pulp between Green Bay and other Fox River points.

The rate complained of was a rate of 5 cents from Green Bay to Kaukauna, Appleton and Menasha as compared with a rate of 2.5 cents between Kaukauna and Appleton and Menasha.

The distance between Kankauna and Menasha is fourteen miles and between Green Bay and Kaukauna is thirty-six miles. It was claimed that the rate from Green Bay to Kaukauna and other Fox River points should not be more than 4 cents. Other rates were presented in the same way in the complaint. Correspondent was informed that the Commission had under consideration all these rates on wood-pulp with a number of parties and that the question involved was ultimately one of absolute reasonableness of the rates. The Commission could not express an opinion in advance regarding the reasonableness of the rates complained of and suggested that if the matter was of sufficient importance to him he might file a complaint, when the question would be considered on its merits.

282. Lloyd Scott, Belleville. Complaint regarding rates on immigrant's movables between Marshfield and Belleville.

This was primarily a question of fact as to the amount of furniture loaded in each of the cars and the conditions under which the third car required for making the shipment was ordered.

The tariffs and the rules governing shipments of this kind were submitted to the complainant.

283. Zou Bros., Milwaukee. Complaint against C. M. & St. P. Ry. Co. for alleged neglect to notify a shipper of the refusal of goods by the consignee.

This complaint led to extensive correspondence regarding the rules and customs of railway companies with respect to the notification of consignees and shippers. The published rules require the companies to notify both parties.

284. In the matter of passenger rates to colonization agents and homeseekers.

The main points involved in this inquiry are disposed of in Case No. 1 of the Formal Docket.

285. Hugh O'Connor, Milwaukee. Inquiry regarding the use of a pass.

Referred to the Attorney General.

286. Chicago & Northwestern Ry. Co. Application for authority to operate interlocking plant at Bain.

287. Nels Swanson, Almena. Complaint against Soo Ry. for flag crossing in the village of Almena.

Correspondence with the Railway Company.

288. A. C. Gower, Chippewa Falls. Complaint against Wisconsin Central Ry. on account of a dangerous crossing at Badger Mills.

Complaint transmitted to the Company and the law governing such cases submitted to the complainant.

289. Guy Dick, Hillsdale. Complaint against Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. for failure to supply adequate station facilities at Hillsdale.

The complaint alleged that there were no adequate facilities for handling freight and that goods were frequently left exposed to the weather. The Commission requested complainant to submit statement regarding the size of the village and the amount of business transacted at that station, all of which was submitted to the Railway Company which agreed to provide better facilities.

290. A. J. McDonald, Superior. Complaint against C. & N. W. Ry. Co. for alleged overcharge on a shipment of piling from Sanborn to Two Rivers. See below.

291. A. J. McDonald, Superior. Complaint against C. & N. W. Ry. Co. and Northern Pacific Ry. Co. for alleged overcharge on ten cars of piling shipped from Spider Lake to Racine and Sheboygan.

These complaints involved five different claims. The tariffs applicable to each shipment were compiled and submitted both to the Railway Company and to the complainant. A conference was held over the matter and the usual correspondence regarding claims conducted.

292. A. J. McDonald, Superior. Complaint against C. St. P. & O. Ry. Co. for their refusal to switch a car of piling in St. Paul.

The car in question was ordered from the Northern Pacific to a private switch connection with the Omaha. The Omaha refused to switch this car as a result of which complainant was obliged to haul the piling from the Northern Pacific tracks at an expense of \$10, which was the amount of his claim. The Omaha Co. maintained that the track on which delivery was requested was not an industry track but merely a team track. The St. Paul yards are conveniently located with reference to the building where the material was to be used. "It is not the custom at St. Paul, or elsewhere, for railway companies to use their team tracks for the loading or unloading of freight other than that received or forwarded over their own line. It therefore was entirely in line with this practice and we declined to switch this particular car to the track delivery requested. It is customary for this company in St. Paul and elsewhere to switch carload freight to and from tracks which are built for the purpose of serving a particular industry such tracks being designated as industry tracks."

293. Chicago, Milwaukee & St. Paul Ry. Co. and Chicago & Northwestern Ry. Co. In the matter of rates to colonization agents and homeseekers.

See Case No. 1 of Formal Docket.

294. Frank Klath, Leopolis. Inquiry regarding rates on handles and boxed hardware.

Correspondent requested to describe the manner in which handles were put up for shipment. No answer received.

295. Sandoval Zinc Co., Chicago.

See Formal Complaint Docket, No. 48.

296. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Inquiry regarding an amendment to an existing tariff naming a rate on milk and cream in cans between Minong and Eau Claire and Chippewa Falls.

297. Giles H. Putnam, New London. Complaint regarding alleged discrimination on the part of the Green Bay & Western R. R. in its joint rates for concentration with the Chicago, Milwaukee & St. Paul Ry. at Plymouth and other points.

Complaint was investigated but the correspondent did not follow the matter up.

298. Northern Pacific Ry. Co. Application for authority to put into immediate effect a rate on wood bolts between designated points. Granted.

299. Wisconsin Fruit Package Co., Crandon. Complaint against C. & N. W. Ry. Co. and Wisconsin Central Ry. Co. for rates charged on shipments of berry-box material from Crandon to points on these lines.

Complainants have submitted extensive and well formulated facts. The matter has been informally discussed and is still under consideration.

300. Berris-Gehl Manufacturing Co., West Bend. Inquiry regarding rates between West Bend and Milwaukee on designated commodities.

After correspondence had been opened complainant informed the Commission that the Railway Company had promised to reduce rates and the complaint was withdrawn.

301. Marshfield Stave Co., Marshfield. Complaint against Wisconsin Central Ry. Co. for alleged overcharge on a shipment of excelsior from Marshfield to Algoma.

On examination it was found that the rates charged were the published rates and that the Commission could not sanction the repayment of the alleged overcharge. The laws are as binding on the Commission as they are on the carriers and shippers.

302. Reassignments, cars and shipments.

A further inquiry by the Commission into the existing rules and regulations governing reassignments.

303. George Tuttle, Winnebago. Inquiry regarding the right of railway companies to give free or reduced transportation to destitute or homeless persons.

The law governing this submitted to the correspondent.

304. Wisconsin Central Ry. Co. Application for authority to put into effect emergency rates on lumber between Menasha and Rhinelander via Prentice and the Soo line.

Application granted.

305. A. J. Empey, Milladore. Complaint against Wisconsin Central Ry. Co. for alleged overcharge in shipment of bolts from Milladore to Menasha. The Wisconsin Central tariffs applicable to the shipment were quoted to the correspondent and the rules governing minimum weights quoted. Apparently, tariff and rules had been observed. The usual correspondence regarding claims.

306. La Crosse Rubber Mills Co., La Crosse. Complaint regarding rates from La Crosse to certain eastern points as compared with rates from these same eastern points to La Crosse on various kinds of rubber goods.

The rates applicable to interstate shipments of the kind indicated in the complaint were looked up and submitted to the correspondent.

307. Fred Andres & Co., Milwaukee. Inquiry regarding the amount of clearance required by law for a building which projects over railway tracks.

Correspondent referred to section 2, chapter 348, Laws of 1905.

308. Wisconsin Central Ry. Co. Application for authority to publish emergency joint rate on stone between Ashland and Rhinelander.

Granted.

309. Wisconsin Central Ry. Co. Application for authority to publish a rate on stone in car load lots between Colfax and Eau Claire and Chippewa Falls.

Granted.

310. A. R. Krouskopf, Richland Center. Complaint regarding rates on lumber between Richland Center, Jefferson and Fort Atkinson.

See Formal Complaint No. 46.

311. Chicago & Northwestern Ry. Co. Application for approval of interlocking plant at Willow.

312. W. J. Campbell, Oshkosh.
See Formal Complaint No. 61.

313. Wilbur Lumber Co., Milwaukee. Inquiry regarding rule governing mixed carload shipments of hard and soft coal. This matter was taken up by the Commission and disposed of as reported in Case No. 57 of the Formal Docket.

314. F. E. Parker, Superior. Complaint against C. & N. W. Ry. and C. St. P. M. & O Ry. on account of alleged excessive rate charged on shipments of lumber from Saxon to Ashland.

This complaint of excessiveness in the rate rested upon a comparison with the rate charged over the Duluth, South Shore & Atlantic Ry. The Northwestern and Omaha companies claimed that the comparison was an unfair one for the reason that they were obliged to haul their shipments over an extremely circuitous route.

315. Joseph Liberty, Stetsonville. Complaint against Wisconsin Central Ry. for refusal to stop certain trains at Stetsonville.

See Formal Complaint No. 56.

316. J. F. Conant Manufacturing Co., South Milwaukee. Inquiry regarding the right of a railway company to make a refund on account of alleged overcharges on shipments of logs from points in northern Wisconsin to South Milwaukee.

The correspondent recited in detail the conditions under which these shipments were made and the manner in which the former rate under which he had shipped ever since his business was established had been abrogated. Various provisions of the law applicable to this case were presented and discussed by the Commission.

317. Wolf River Paper & Fibre Co., Shawano. Complaint regarding rates on coal from Milwaukee to Shawano.

See Formal Complaint No. 55.

318. W. H. Douglas, Prentice. Complaint on account of excessive rates charged on shipments of feed from Armour, South Dakota, to Prentice, Wisconsin.

The rates applicable to this shipment were compiled and additional information called for from the complainant.

319. F. H. Magdeburg, Milwaukee. Complaint on account of the refusal of the C. M. & St. P. Ry. Co. to grant certain excursion rates to old soldiers.

It appears that the complaint was the result of the refusal of the Railway Company to grant reduced rates to old soldiers for certain re-unions when the number attending such conventions was less than one hundred. *Held*, that there was nothing in the Railroad Commission law of Wisconsin to prevent the Railway Company from granting such rates if the same had been customarily granted before the enactment of this law.

320. Thomas Wilson, General Counsel, Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Request for ruling regarding the issuance of free passes.

321. Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. Request for ruling regarding "contract" passes.

It appears that the persons to whom passes in question had previously been granted had received them in consideration of the right of way which they had given to the Railway Company. *Held*, that under the law no citizens of Wisconsin could accept free transportation unless they came expressly within the excepted classes.

322. Wisconsin Central Ry. Co. Application for authority to publish a rate on eggs, effective immediately, between Portage and Wausau.

Granted.

323. Ashland Lime, Salt & Cement Co., Ashland. Complaint regarding rates on lime on the Chicago, St. Paul, Minneapolis & Omaha Ry.

The rates complained of were rates which were the result of water competition, which explains the apparent lack of adjustment in the rates between the different localities.

324. Joseph Nevin, superintendent of fisheries. Request for an opinion regarding the right of the Railway Company to haul free of charge car of the state fish commission.

Held, that the law permitted the free transportation of this car but that the inmates of the car must pay their fares.

325. Wisconsin Central Ry. Co. Application for authority to put into immediate effect rate on castings between Neenah and Rhinelander.

Granted.

326. J. P. Holland, Watertown. Inquiry whether a candidate for a public office who is connected with a newspaper has a right to use newspaper mileage while he is conducting his campaign.

This question was referred to the attorney general who decided that the proposed use of advertising mileage by the person in question was unlawful.

327. Rib River Land Co., Medford. Complaint on account of alleged discrimination in car supply.

A subsequent communication stated that cars were being furnished and that the Commission should not proceed with the complaint.

328. W. G. Bissell, Lodi. Complaint against C. & N. W. Ry. Co. regarding rates on brick.

See Formal Complaint No. 53.

329. Kaukauna Lumber & Manufacturing Co. Complaint against C. & N. W. Ry. on account of the rate on sand from Two Rivers to Kaukauna.

After the attention of the Railway Company was called to the complaint the desired rate was published.

330. Ward Bloss, Salem. Inquiry whether a man who purchased a farm adjoining a lake and builds a side track from

the lake to the right-of-way of the Railway Company for the purpose of shipping ice can compel the Railway Company to make connection.

The law governing compulsory making of connections was submitted to the correspondent.

331. Vaughn Manufacturing Co., Jefferson. Complaint alleging that express rates had been advanced from 20 to 40 per cent during the last eighteen months.

Complainant informed that if he chose to make a formal complaint the Commission would, of course, bring the matter to a hearing promptly in accordance with law; but that under the pressure of numerous other things which the Commission was considering it could not at that time on its own motion proceed to any extended investigation of express rates.

332. Wisconsin Central Ry. Co. Application for authority to put into immediate effect a rate of 5 cents on bulk bottles between Milwaukee and Oshkosh to meet the same rate over the C. M. & St. P. Ry.

Granted.

333. W. L. Oltman, Ellsworth. Complaint against C. St. P. M. & O. Ry. on account of rate charged on sugar between New York and Ellsworth.

More details relating to the shipments were called for but not furnished.

334. Joseph McCarthy, Kaukauna. Complaint regarding rate on sand from Two Rivers to Kaukauna.

Complaint was disposed of as shown in Case 329 above.

335. W. W. Wells, Mayor, Sparta. Inquiry regarding the right of a railway company to grant a special rate to the city of Sparta for the transportation of road making material.

Section of Wisconsin railroad law quoted to the effect that is it within the province of the Railway Company to grant such reduced rate

336. Chicago & Northwestern Ry. Co. Application for approval of interlocking plant near Sheboygan.

337. Green Bay & Western R. R. Co. Request for an opinion regarding the right of the Company to carry a circus advertising car and advertising employes free of charge when the Company does not carry the circus itself.

It appears that for years past the Green Bay & Western had carried the advertising car of circuses and advertising agent free of charge in consideration of the increased traffic which the Green Bay & Western would derive from the travel between points on its line to points on those connections at which circuses exhibited. The company claimed that in the case of its failure to carry the advertising cars as heretofore it would lose hundreds of dollars in revenue.

Held, that section 28 of the Railroad Commission Law does not empower the Commission to suspend the anti-pass law and that no emergency has arisen such as is clearly contemplated by the statute. There is, however, no objection to the companies transporting advertising cars at a greatly reduced rate provided a tariff governing the same is published. The Commission will permit the same to become effective if necessary at once. Agents transported in the advertising car must pay their fares although reduced rates such as are customarily sold may be provided for such agents within the limitations prescribed by law.

338. Wisconsin Central Ry. Co. Application for authority to put into immediate effect a rate of \$1.25 per gross ton on pig iron from Ashland to Menomonie.

Granted.

339. John B. Kolsbun, St. Paul. Complaint regarding an alleged overcharge in passenger fare between St. Paul and Wisconsin, Wis.

The distance is forty-nine miles and the charge \$1.65 which the complainant alleges is in excess of what is legally permissible. This being an interstate rate the Railway Company requested the complainant to take the matter up directly with them and that they would arrange the matter satisfactorily.

340. P. A. Johnson, Deronda. Complaint alleging lack of station facilities at Dwight on the Soo line.

See Formal Complaint No. 55.

341. La Crosse Interstate Fair Association. Opinion regarding the right of officers of the Fair Association to use advertising mileage.

Held, that the mileage so given is free transportation within the meaning of the anti-pass law. Where newspaper owners are officers or candidates for office they are prohibited by the statute from accepting mileage as a consideration for advertising in their papers. In the case of officers of the Fair Association it is understood that no mileage is to be issued to any person also holding a public office. The Commission sees no reason from a legal standpoint why if the Railway Company desires to advertise in the premium lists it may not do so and pay for such advertising in the form of mileage to officers and other representatives of the Fair Association.

342. Davis Bros. Stone Co., et al., Lannon. Complaint regarding lack of adequate car supply in the Lannon quarry district.

Immediately after the attention of the Railway Company had been called to this the Commission received a letter from the complainant to the effect that the situation had very much improved and that there was then very little to complain of.

343. C. L. Powers, Fond du Lac. Complaint alleging overcharge on the part of the C. M. & St. P. Ry. on a shipment of a boat from Columbus to Schleisingerville.

This overcharge was the result of the application of a new rule which was applied to shipments of articles like boats. The Railway Company promptly refunded the overcharge after the application of the new rule had been abrogated. See Formal Complaint No. 54.

334. Curtiss & Yale Co., Wausau. Claim against the C. M. & St. P. Ry. Co. for alleged overcharge on a shipment of lumber from Wausau to Rhinelander jointly over the C. M. & St. P. and the Soo lines.

On examination it was found that no joint rate had been published covering shipments over the Milwaukee and Soo lines between Wausau and Rhinelander and that the sum of the two

locals, being the amount charged for the shipments in question, was greatly in excess of the published rate on the C. & N. W. Ry. for shipments between the same points for the same commodity.

Held, that the present case appears to involve the hardship which it is difficult to avoid in the enactment of general laws. It is a legal question in reference to which the Commission has no discretionary powers whatsoever. The Railroad Commission law expressly provides for the publication and filing of tariffs and imposes a penalty for charging, demanding, collecting or receiving a greater or less compensation than is specified in such printed schedule. A large number of cases covering the same point can be cited. The Railroad Commission law of Wisconsin would not be complied with by making a collection at the tariff rate in the first instance and then refunding a part of the amount collected, provided, that the same is not unreasonable in itself in which case a court might order a refund. The refund asked for in the present case would be in the opinion of this Commission a violation of the law. The Commission is always ready in cases of this kind to sanction the publication of new rates without delay but it has no authority to suspend the operation of the statute.

345. Wisconsin Central Ry. Co. Application for authority to put into immediate effect switching tariff on sand between pit and industries at Mellen.

Granted.

346. L. Kleimenhagen, Kilbourn City. Complaint against C. M. & St. P. Ry. Co. for alleged excessive rates charged on shipments of coal to Kilbourn City for the use of the municipality.

On the receipt of the complaint the Commission informed the correspondent that it was to be assumed that this coal was shipped directly from the mines and that the reasonableness of the rate complained of would depend to a large extent on how far the coal was being transported. Definite facts were called for and a statement made that as soon as such information was received the Commission would be in position to prosecute the inquiry. The information was not received.

347. Harvey Bros., Chicago. Complaint against C. M. & St. P. Ry. for alleged excessive rates on hay between Oconto and certain places in southern Wisconsin as compared with the rate to Chicago.

This is an interstate matter over which the Wisconsin Commission has only limited jurisdiction. The rate between Oconto and Fox Lake, Burlington and similar places is complained of as compared with the rate to Chicago. The published tariffs apply Chicago rates as a maximum to points on the direct line intermediate between Oconto and Chicago. The Railway Company maintained that Fox Lake and Burlington were not intermediate on the direct line and that hence there was no violation of either the published tariff or the law.

348. Chicago, Milwaukee & St. Paul Ry. Co. Request for an opinion of the Commission regarding the right of the Company to issue tariffs on materials used in the construction of manufacturing buildings at half the published rates.

See decision of the Commission in this case, Formal Docket No. 94.

349. Beach & Bowers, Beaver Dam. Complaint against C. M. St. P. Ry. Co. for its refusal to transport the private cars belonging to complainants.

See ruling of this Commission in the case of Don C. Hall against C. M. & St. P. Ry. Co., formal docket No. 41.

350. John H. Fowles, Milwaukee. Request for an opinion of the Commission regarding the right of a permanent employee of a railway company, giving his undivided time to that company, to use free transportation in the event of his entering as a private in the State Militia.

This question was submitted to the Attorney General who after citing a number of decisions and commenting upon the same came to the conclusion: "that a private in the militia service of the State does not hold either a public office or a position within the meaning of the statutes and constitutional provision of this State above cited, and that a private in the militia service of the State is not prohibited thereby from asking for, receiving or using free or reduced transportation from the railway company; and in the case mentioned by Mr.

Fowles where, as he states, the private is in the continued service: that is, giving his undivided time to the railway company, he might, under the provisions of Sec. 8 of Chap. 362, Laws of 1905, as amended by chap. 13 Laws of the Special Session of 1905, in any event lawfully receive and use free transportation or reduced rates for himself or members of his family."

351. Wisconsin Central Railway Co. Application for the approval of an emergency rate on spool stock in car lots from Menasha to Rhinelander via Prentice at 9 cents per hundred pounds.

Granted.

352. Gurney Refrigerator Co., Fond du Lac. Inquiry regarding rates on forest products.

Correspondent informed that various rates on forest products had been informally before the Commission and that the same were still under consideration, that if the correspondent desired to make formal complaint the Commission would hear the same on its merits.

353. Wisconsin Central Railway Co. Application for authority to put into immediate effect a rate of 7.5 cents on masquite from Chippewa Falls to Milwaukee.

Granted.

354. Wisconsin Central Ry. Co. Application for authority to put into immediate effect rate on old rails, Ashland to Bruce, \$2.25 per gross ton.

Granted.

355. Davis Bros. Cheese Co., Plymouth. Complaint regarding certain rates on cheese into Plymouth.

The complaint had reference especially to violations of the long and short haul principle because cheese was being hauled into Sheboygan at a lower rate than into Plymouth although in reaching Sheboygan it passes through Plymouth. This, it was claimed, gave Sheboygan an advantage over Plymouth on concentration and on shipments out. The situation was explained on the basis of water competition.

356. King & Barteles Lumber Co., Cleveland, Ohio. Complaint regarding rates on lumber from Merrill to Sheboygan over the C. M. & St. P. and C. & N. W. Rys.

The rate complained of was the published rate.

357. F. W. Ploetz, Coloma. Inquiry as to statutes covering the construction of side tracks to warehouses.

Referred to section 802, Revised Statutes. *Held*, that when parties desire additional side track facilities for carrying on their business and for their special convenience and not for the convenience of the general public, parties desiring such conveniences must bear the expense of building the same.

358. Wisconsin Central Ry. Co. Application for authority to put into immediate effect a joint rate of \$1.35 per ton on soft coal from Manitowoc to La Crosse. Granted.

359. Osceola Mill & Elevator Co., Osceola. Complaint against the Minneapolis, St. Paul & Sault Ste Marie Ry. Co. for its refusal to put in additional side tracks.

See formal complaint No. 60.

360. A. Weiss, Gillett. Complaint against C. & N. W. Ry. Co. for discontinuing refrigerator car service at Gillett.

The interruption in refrigerator service was only temporary for reasons explained by the company and the service was reinstated promptly.

361. Chicago, Milwaukee & St. Paul Ry. Co. Approval of interlocking plant at Bay View.

362. Charles G. Frohmader, Chelsea. Claim against Wisconsin Central Railway on account of damage to merchandise in transit.

Claim settled by the Company.

363. James E. Lyons, Colby. Complaint against C. St. P. M. & O. Ry. Co. for its failure to pay an alleged overcharge on shipments of hay from Coxie to Wakefield, Michigan.

The complaint was to the effect that complainant had shipped hay between points mentioned at a rate of 13 cents and

that without notice such rate had been advanced to 19 cents; and the claim was put in for the difference. Upon examination it was found that the rate of 13 cents was quoted in error and that the published rate was 19 cents.

364. Wisconsin Central Ry. Co. Application for authority to put into immediate effect rate of 2.5 cents on sand between Stevens Point and Fond du Lac.

Granted.

365. C. H. Siebold, Camp Douglas. Request for an opinion regarding the legally permissible speed of trains in running through incorporated villages and particularly in crossing streets unprotected by crossing gates.

Inquiry referred to the attorney general who rendered an opinion quoting section 809, Wisconsin Statutes for 1898, and prescribing the penalty for its violation. Reference to biennial report of the attorney general for 1904 pages 366 to 376, in which the principle of the complaint is fully discussed.

366. R. H. Thomas & Sons, Sheboygan Falls. Complaint against C. & N. W. Ry. for charging a higher rate between Princeton and Sheboygan Falls than between Princeton and Sheboygan.

Correspondence with the Railway Company brought out the fact that the rate from Princeton to Sheboygan had also been made the maximum rate for intermediate points and that hence the rate charged to the complainant was higher than the tariff which should actually have been applied. Rate was corrected and a claim put in for a refund of the excess which had been erroneously charged.

367. Wisconsin Central Ry. Co. Application for authority to publish a rate on stone of 1.5 cents car lots between Waukesha and Fond du Lac, effective immediately.

Granted.

368. Medford Fruit Package Co., Medford. Complaint regarding rates on baskets and classification and rates on fruit packages in general.

One phase of the complaint was disposed of in a ruling of the Commission. See Formal Complaint No. 35. By the terms of this decision the Commission was to take up further the matter of classification and rates on fruit packages in the event of the failure of the railway companies to agree meanwhile on some satisfactory classification and rate. No such agreement has been reached and the matter is at present under consideration.

369. Wisconsin Chair Co., Port Washington. Request for an opinion regarding the right of the Railway Company to make a refund on two cars which were reconsigned.

Held, that the general rules governing reconsignment provided for reconsignment to a point beyond on the direct line without change of contents of the cars. These conditions had not been met in the instances in question and therefore a refund would be unlawful.

370. Pick Bros. & Co., West Bend.

See formal complaint No. 62.

371. W. F. DiVall, Montfort. Complaint regarding loss of two steers.

The superintendent of the Railway under whose jurisdiction this matter came informed the Commission that he had no knowledge of the killing of this stock before his attention was called to it by the Commission. The claim was promptly settled.

372. Standard Mercantile Co., Tomahawk. Complaint alleging that certain railway companies had refused to pay all claims for less amount than one dollar.

The Railway Company is entitled to the amount shown by the published tariff, no more and no less. If it has collected more than this amount it may be compelled to refund the excess charge whether such excess amounts to 50 cents or to \$1,000.

373. John Josart, Minocqua. Complaint against Railway Company for killing stock.

The usual correspondence with respect to claims and also information sent to correspondent regarding the statutes regulating the speed of trains, fencing of station grounds, etc.

374. Anthony Metzger, Superior. Complaint against Railway Company for its refusal to permit a property owner whose access to public highways is completely cut off by said Railway Company to construct a crossing.

Still under consideration.

375. J. H. Hoyt, Fall River. Complaint regarding farm crossing.

Complainant alleges that Railway Company threatens to abolish his private crossing and thus to prevent his having access to certain portions of his farm. The statutes applicable to cases of this kind were brought to the correspondent's attention and the matter was also taken up with the Railway Company. Still under consideration.

376. A. J. Smith, Sayner. Complaint against C. M. & St. P. Ry. Co. for discontinuing the station agent at Sayner and inquiry regarding the report that the Company is intending to take up a certain part of its line.

Correspondence with the Railway Company showed that it was not the intention of the Railway Company to take up any part of its line and that the agent at Sayner was discontinued during the winter months for the reason that this was merely a summer station. The Railway Company submitted statement of earnings at that station on the basis of which it is claimed it would be out of the question to maintain an agent all the year round. The company has made an arrangement with a local merchant to act as agent and thus afford reasonable facilities during the winter months.

377. La Crosse Plow Co., La Crosse. Complaint against C. & N. W. Ry. Co. for charging a higher rate from La Crosse to Black River Falls and points in territory adjacent to that city than from La Crosse to Eau Claire; and also for charging a higher rate from La Crosse to Black River Falls than from St. Paul to Black River Falls.

Under consideration.

378. Bloomer Produce Co., Bloomer. Complaint regarding rates on mixed carload shipments over the C. St. P. M. & O. Ry. See Formal Complaint No. 66.

379. Wisconsin Central Ry. Co. Application for authority to publish a rate of 9 cents on soft coal between Ashland and Prentice effective immediately.

Granted.

380. Ira B. & E. M. Bradford, Augusta. Complaint against C. St. P. M. & O. Ry. Co. for charging higher rate from Lake Michigan ports into Augusta than into Eau Claire which is located beyond Augusta.

On examination it was found that the rate to Eau Claire was made by the Wisconsin Central Ry. in order to meet the competition of other lines from Lake Superior points. The Railway Companies maintained that under the decisions of the United States Supreme Court they have a right to violate the long and short haul principle under existing circumstances. A readjustment of coal rates has been made the subject of informal conferences and is still under consideration.

381. Ole P. Munson, Ferryville. Complaint against La Crosse & Southeastern Ry. Co. for alleged refusal to pay wages to former employes.

The power of the Commission in cases of this kind is limited but the Commission secured information relating to stockholders and officers of the Company which was transmitted to the complainant.

382. La Crosse & Southeastern Ry. Co. Application for authority to put into immediate effect a reduced rate between La Crosse and Westby.

Granted.

383. Adams Express Co. Application for authority to put into immediate effect a reduced rate on merchandise between Milwaukee and Alma.

Granted.

384. Grand Rapids Milling Co., Grand Rapids. Complaint against C. M. & St. P. Ry. Co. for refusing to permit milling in transit over its lines at Grand Rapids.

It was explained by the company that milling in transit at

Grand Rapids would involve a haul from Tomah or New Lisbon to Grand Rapids, many miles off the direct line and the haul back; that this was contrary to all established rules governing milling in transit; that the company was willing to allow milling in transit at Grand Rapids if shipments are billed from points on its line to be transferred to the Green Bay and Western at Winona. In other words, the Milwaukee Ry. Co. is willing to allow milling in transit at Grand Rapids under a joint tariff with the Green Bay & Western but not for shipments exclusively over its line which would thus be taken off the direct line.

385. C. M. Rosecrantz, Milwaukee. Request for an interpretation of section 30, chapter 362, Laws of 1905 as applicable to street railway companies. See number 420.

386. In the matter of the records kept by the railway companies concerning car supply.

The following letter was sent out to the officials of all the different railway companies: "During the past year this Commission has received a number of complaints alleging car shortage and discrimination in the supply of cars. The season during which car shortage is most likely to occur is now at hand; (letter dated August 14) complaints are likely to arise again as they have in the past. In order that such complaints may be properly met, would it not be desirable to adopt some system of recording orders for cars and the sequence in which such orders have been filled? Such a record would enable the various railway companies as well as the Commission to determine the facts in each case and thus dispose of cases in regard to car shortage effectively and promptly. With this in view we invite your suggestion regarding the best methods of keeping the car supply record."

One of the large companies promptly informed the Commission that a record similar to that contemplated by the Commission was being kept by that company. Other companies took the matter up at once and in a very short time all the companies adopted suitable records on the basis of which it is hoped that the merits of any particular complaint regarding car supply can be determined.

387. C. Starkweather & Son, Beaver Dam. Complaint against the C. M. & St. P. Ry. Co. on account of the rates on fuel wood and trimmings from Hermansville and Wells, Michigan to Waupun and Beaver Dam, Wis.

The Railway Company established a new rate and the complaint was withdrawn.

388. Wisconsin Central Ry. Co. Application for authority to publish, effective immediately, a rate of $3\frac{3}{4}$ cents on pulp wood from Ashland to Eau Claire.

Granted.

389. Chippewa Brick Manufacturing Co., Chippewa Falls. Complaint against railway companies entering Chippewa Falls on account of rates on common brick which are alleged to be excessive and discriminatory as compared with rates charged on the same commodity from competing points.

In connection with this and similar complaints on the part of other brick manufacturers the brick rates applicable throughout the State of Wisconsin were compiled by the Commission and submitted to the complainant. These compilations showed that the alleged discrimination in favor of certain points which compete with Chippewa Falls manufacturers did not exist. The making of commodity rates to certain localities is still under consideration.

390. Northern Hardwood Lumber Co., Marshfield. Inquiry regarding right of shippers to make connection with side tracks and alleging discrimination in the construction of side tracks.

Correspondent referred to section 1802, Wisconsin Statutes of 1898 as amended by chapter 386, Laws of 1905. The Railroad Commission Law of Wisconsin is opposed to every species of favoritism and discrimination. If an examination of the facts involved in this case should disclose that the Railway Company is refusing to do for the complainant what it has been doing and still is doing for others under substantially similar circumstances and conditions complainant would have cause for complaint on the ground of discrimination. Such a complaint the Commission will hear on its merits.

391. Evergreen Nursery Co., Sturgeon Bay. Complaint regarding certain interstate express rates.

The rates complained of being entirely interstate this Commission took the matter up with the Interstate Commerce Commission, at whose hands the complaint is being investigated.

392. Wausau Paper Mills Co., Wausau. Inquiry regarding the right of a railway company to withdraw a joint tariff wholly within the State where the rate has been in force previous to January 1, 1906.

Held, that a railway company has a right to withdraw any existing tariffs, except those established by the order of the Commission, on ten days notice, in accordance with law. Complaints arising out of such withdrawals will be heard by the Commission on their merits.

393. H. M. Blumenthal, Columbus. Request for an opinion regarding the right of a railway company to refuse to refund on the surrender of the cover of a 2,000 mile ticket when such ticket has been used by other parties than the one who purchased the same.

This question was submitted to the attorney general who submitted an opinion to the effect that the reduced rate at which the 2,000 mile ticket was sold was based upon certain conditions among them being a condition that such ticket should be used exclusively by the purchaser. Such a provision is valid and therefore the railway company has a right to refuse to refund when the same has been violated.

394. R. M. La Follette, Madison. Complaint against C. M. & St. P. Ry. Co. on account of the inadequacy of the train service on the Prairie du Chien Division.

This complaint was disposed of in connection with the formal complaints of F. C. Smith and L. H. Baneroft, See Case No. 69.

395. A. E. Wing, Whitehall. Complaint against C. St. P. M. & O. Ry. Co. for its refusal to stop cars in transit to finish loading of live poultry.

It appears that all but two or three of the railway companies, members of the Western Trunk Line Committee, have in effect a rule by which a shipper of live poultry can finish loading a car of live poultry at a second station by the payment of \$5.00 additional. This rule is not on the Omaha. The matter was

considered in informal conference and correspondence. Complainant has given notice that he will bring the matter forward in formal complaint which will be heard on its merits.

396. J. H. Grasslie, Spring Valley. Complaint against the Drummond & Southwestern Ry. regarding the service and failure to publish tariffs.

The matter was taken up with the company which has since complied and filed its tariff.

397. Ira E. Smith, Cassian. Request for an opinion regarding the right of a railway company to demand compensation for a grade crossing where a highway is laid out across its tracks.

Held, that if the railway is constructed across the highway the law is absolutely clear that it must keep the crossing in good condition for public use; if, however, the railway was built first and the highway was laid out across the railway after the railway was built the town must bear the expense of constructing the highway. See Statutes of Wisconsin 1299, 1299a to 1299h, inclusive.

398. A. Rueth, Sun Prairie. Complaint against C. M. & St. P. Ry. Co. for failure to furnish adequate supply of cars.

The Railway Company submitted copies of the record of the number of cars ordered, on hand, loaded and empty and the number of cars supplied to the complainant. At an informal conference the superintendent of the division in question and the conductor of the train who distributes cars appeared and explained the actual practice. Except discriminations which resulted from the action of a substitute conductor the distribution of cars appears to have been made as equitable as possible under the circumstances.

399. C. S. Porter & Co., Fox Lake. Complaint against C. M. & St. P. Ry. Co. on account of rates charged on hard and soft coal between Milwaukee and Fox Lake as compared with rates charged to other points.

The Company reduced the rate to Fox Lake so as to bring it in line with rates to other points.

400. The John Lauson Manufacturing Co., New Holstein.

Complaint alleging that rates from Chilton to eastern points are excessive as compared with rates from points which compete in the same line of manufacturing but more remote from such eastern points.

Specifically, the question at issue was the relation of the rates on gasoline engines and similar manufactured products from Chilton to the East as compared with the rate from Fox River points to the East. The Chilton rate was 31 cents while the rate from the more distant Fox River points was 22.5 cents. This was a violation of the well known long and short haul principle concerning which, however, there is no express provision in the Wisconsin statute. The Interstate Commerce Law prohibits such violations unless the circumstances are dissimilar. The Railway Company promptly readjusted these rates so as to put New Holstein on the same basis with Fox River points.

Another point at issue was the right of the complainant to a refund on his shipments at the higher rate. The Commission held that since these shipments had been made at the published rate any departure therefrom would be unjustifiable unless such rates should be declared to be unreasonable in themselves and a court should order the refund to be made on that ground. The Commission was also requested to express an opinion regarding the reasonableness of certain rates. This the Commission declined to do for the reason that the arguments on both sides had not been presented and that the question of the reasonableness of these rates might come before the Commission for adjudication.

401. H. P. Bradley, Town Clerk, Wauwatosa. Complaint on account of the refusal of the C. M. & St. P. Ry. Co. to place Wauwatosa on the same basis with West Allis and North Milwaukee in regard to switching.

The question involved is the geographical extent of the territory in which published switching rates may be applied. The C. M. & St. P. and the C. & N. W. Ry. Co's. do not at present include Wauwatosa within their "terminal limits" and for that reason the regular distance tariffs are applied in moving cars between Milwaukee terminals and the Wauwatosa depot. This case has been made the matter of formal complaint. See Case No. 68.

402. Greenleaf Stone Co., Green Bay. Complaint regarding rates on stone from Greenleaf to points on the C. M. & St. P. Ry.

After some correspondence this was made a matter of formal complaint. See Case No. 84.

403. Wadhams Oil Co., Milwaukee. Complaint regarding the rate on a car of soda ash from Milwaukee to Baraboo.

It appears that the rate on soda ash from Milwaukee to La Crosse is 10.5 cents and from Milwaukee to Baraboo is 14 cents. The complainant maintained that Baraboo, being an intermediate station on the line of the C. & N. W. between Milwaukee and La Crosse, should not take a rate in excess of the La Crosse rate. The Railway Company maintains that the La Crosse rate is dictated by competition and that the Baraboo rate is in itself reasonable. There being no long and short haul provision in the Wisconsin law the complainant can secure no relief under that law except on complaint and hearing in reference to the merits of the rate in itself.

404. W. F. Weiler, Bloomer. Inquiry regarding the right of the complainant to use newspaper mileage.

Referred to opinion of the attorney general indicated in another case cited above.

405. Rev. J. B. McFarland, Eden. Complaint alleging inadequacy of train service at Eden.

After some correspondence a formal complaint was entered and the case heard and decided as recorded in Case No. 75 of the Formal Docket.

406. W. L. Oltman, Ellsworth. Complaint regarding the rate on soap between Kansas City and Ellsworth as compared with the rate to St. Paul and also as compared with the rate between Chicago and Ellsworth.

The rate on soap and other commodities between Kansas City and Hudson is the same as to St. Paul; but the railway company has refused to extend the group of cities to which the Kansas City-St. Paul rates apply to Ellsworth. Ellsworth pays the Kansas City-St. Paul rate plus the local rate from Hudson to Ellsworth. On shipments from Chicago to Ellsworth, Ellsworth takes the Chicago-St. Paul rates.

407. Fred A. Krueger, Quarry. Petition for the establish-

ment of a station at Quarry on the line of the Wisconsin Central.
See Formal Complaint No. 79.

408. O. H. Thompson, President, Village Board, Rio. Complaint against C. M. & St. P. Ry. regarding the failure of the Company to construct a proper crossing over its track.

This matter comes under the jurisdiction of the town or village board in the first instance.

409. John H. Allan Seed Co., Sheboygan. Complaint against Wisconsin Central, C. & N. W., C. M. & St. P. Rys. on account of the rates charged for the transportation of peas and beans and other seeds used for seed purposes.

This complaint was very carefully drawn and elaborated with much detail. The companies are still considering the various matters involved and the final conclusion has, therefore, not yet been reached.

410. Noll & Co., Chilton. Complaint against the C. M. & St. P. Ry. Co. on account of the rates charged for the transportation of woven wire and building paper from Chicago to Chilton.

All the rates involved are interstate rates. Complaint alleges an excessive difference in the rate on carload and less than carload shipments. A compilation of rates on wire along different lines and in different states shows that the relation between carload and less than carload rates is generally about what it is in the case of the rates from Chicago to Chilton. There exists, therefore, no discrimination against Chilton in this respect although it may be an open question whether or not the relations in the rates between carload and less than carload shipments are as equitable as they can be made. Building paper is shipped as third class in less than carload lots. This appears to be a high classification for so low grade a commodity. The matter is still under consideration.

411. John Powell, Argyle. Complaint alleging lack of station facilities at Argyle on the line of the Illinois Central R. R. Co.

Under consideration.

412. John A. Gaynor, Grand Rapids. Request for an opinion regarding reduced rates to cranberry pickers.

Referred to a similar case cited in Case No. 67 above.

413. R. B. Watrous, Milwaukee. Inquiry regarding the legality of the proposed extension of time on excursion tickets held by a group of Indians who were brought to the Wisconsin State Fair. It was not proposed to grant a general extension of time to the holders of excursion tickets placed on sale on account of the State Fair.

Held, that the law applicable to the case was perfectly clear and that the Commission did not recognize any great public interest or emergency which would justify it in recommending such an extension of time on these tickets, if it were legally permissible to do so, and work a discrimination against the holders of all other similar tickets. The law expressly prohibits discriminations of this kind.

414. E. Elbertson, Augusta. Complaint on account of the coal rates from Milwaukee to Augusta being higher than to Eau Claire, Augusta being an intermediate point.

This matter is still under consideration.

415. Eimon-Oyaas-Fowler Co., Superior. Complaint alleging excessive and unreasonable rates on various commodities on the C. St. P. M. & O. Ry. between points in northern Wisconsin.

Correspondent submitted a number of commodities on which he believed the rates were excessive. The Commission could not express an opinion regarding the reasonableness of these rates in advance because the matter might come up for formal hearing and the correspondent was informed that if he would submit the complaint his case would be heard in accordance with law.

416. A. H. Opsahl, De Forest. Complaint on account of the loss of a phonograph shipped by express.

Inquiries were sent to the local express office and soon thereafter the missing phonograph was located.

417. S. A. Baird, Waukesha. Complaint on account of inadequate facilities in delivering carload shipments at certain localities in or near Waukesha.

The complainant later informed the Commission that the matter complained of had been remedied by the company.

418. Complaint regarding the minimum weight on stallions and jacks.

On inquiry the Railway Company informed the Commission that as a matter of fact single animals shipped in this way required practically an entire car and that the present minimum weight did not properly compensate the companies for the work that they were actually doing. Matter still pending.

419. Frank Nemachek, Appleton. Complaint on account of the refusal of the C. & N. W. Ry. Co. to furnish passes to employes.

Correspondent referred to the sections of the law applicable to his complaint.

420. Under date of August 7 Mr. Clarke M. Rosecrantz, attorney for the Milwaukee Electric Railway and Light Company, addressed a letter to the Commission, desiring to be informed whether or not, under the provisions of chapter 362 of the Laws of Wisconsin for the year 1905, the Railway Company in question was obliged to make a report to the Railroad Commission of accidents happening within the city limits of the city of Milwaukee. In this connection it was stated that the street railway company in question operated certain lines that extended beyond the city limits of the city of Milwaukee. Inasmuch as the inquiry involved a decision upon the jurisdiction of the Commission over street railway lines, it was investigated carefully by the Commission. After such investigation was made by the Commission it asked the attorney general of the State for his opinion thereon, which was furnished under date of September 28, 1906.

Because the subject is one of general importance, we deemed it best to print the opinion with the decisions made in formal hearings. See page 338.

421. A. L. Thomas, Green Bay. Petition for increased track facilities at complainant's place of business in Green Bay.

Complainant informed that compulsory connections with side tracks could be made only within the yard limits.

422. Milwaukee Produce & Fruit Exchange, Milwaukee. Com-

plaint on account of the rates on fruits and vegetables between Chicago and Milwaukee.

The complaint rested upon a resolution of the Milwaukee Produce and Fruit Exchange to the effect that the rates complained of were at present unreasonable and excessive. The different classes of fruits and vegetables were enumerated. All these rates being interstate, complainants were informed of the limited powers of this Commission. The Railway Companies took the position that the rates complained of were already low, being largely regulated by water competition and that they should defend the rates as they now stand.

Complainants were informed that the Commission could not bring the complaint formally before the Interstate Commerce Commission without a previous investigation regarding the merits of the complaint and that this could not be ascertained without a hearing, which the Commission would hold if complainant desired.

423. John J. Blaine, Boscobel. In the matter of train connections between the C. & N. W. and C. M. & St. P. Ry. Co. at Woodman and Wauzeka.

This is one of the various questions involved in the matter of train service on the Prairie du Chien Division of the C. M. & St. P. Ry. These particular connections are still under consideration.

424. J. B. Laun, Kiel. Complaint regarding the rates on lumber from Donald to Kiel.

The rates complained of are the published rates and the Commission cannot order the same changed without a hearing. Petitioner was advised that a hearing would be held if he desired to file a formal complaint. As yet none has been filed.

425. Manitowoc Malting Co., Manitowoc. Petition for re-adjustment of rates from Chilton and surrounding points to Manitowoc and Milwaukee.

The matter was discussed in informal conference between the Malting Company and the Railway Companies in the offices of the Commission. A second conference was held at Milwaukee and as a result of these conferences an adjustment of rates satisfactory to the three railway companies and the petitioner, as

well as the Railroad Commission, was agreed upon. The rates were published, effective immediately.

426. Winneconne Lumber Co., Oshkosh. Request for an opinion regarding the right of the correspondent to secure from the Railway Company a refund or rebate on shipments made prior to the enactment of the Railroad Commission Law.

Petitioner was informed that if the rates under which his shipments were made prior to the enactment of the Commission law, which were lower than the published rates, rested upon a written or verbal contract he was probably entitled to the benefit of such rates. The Railroad Commission Law of Wisconsin is not retroactive. On shipments made since the enactment of the Commission law no rebate can lawfully be paid and no deviation from the published tariff is permissible except on an order of the court which may declare the published rate to have been excessive and unreasonable in itself. This relates to shipments within the state only. A 7 cent rate for interstate shipments on which the published rate was 8.5 cents is in violation of Federal laws.

427. In the matter of brick rates.

Correspondent is an attorney representing large brick manufacturing interests. The brick rates in Wisconsin have been compiled and the matter is now under consideration.

428. Wisconsin Central Ry. Co. Application for authority to publish a rate on graphite ore of 25 cents, effective immediately, between Junction City and Stevens Point.

429. W. H. H. Macloon, Janesville. Inquiry regarding classification of freight based upon the cost of service.

430. H. S. Wunderlich, Koepenick. Complaint alleging overcharge on a shipment of lumber from Summit Lake, Wis., to Waterloo, Iowa.

Claim adjusted.

431. Edward Guildner, Levee. Complaint alleging lack of station facilities at Levee.

See Formal Complaint No. 43.

432. C. S. Dodge, Monroe. Complaint against C. M. & St. P. Ry. Co. on account of rate charged for the transportation of cheese box shooks in bundles, in less than carload lots, from Monroe to points on the Mineral Point Division of the C. M. & St. P. Ry.

This complaint was submitted verbally to the Commission and was withdrawn after a conference between the complainant and the Railway Company.

433. La Crosse & Southeastern Ry. Co. Application for authority to put into effect excursion rates from La Crosse to Viroqua.

434. E. J. Marcouiller, Oconto Falls. Complaint regarding the rate on pianos from Chicago to Oconto Falls as compared with the rate from Chicago to other points in the same territory.

Complaint rested probably upon a confusion of Chicago and Chicago Heights, the latter being 27 miles south of Chicago situated on the Chicago & Eastern Illinois Ry. and from which the rate is 65 cents as compared with a rate of 43 cents from Chicago.

435. W. D. Hurlbut, Chicago. Complaint regarding rates on lumber between Menasha and Grand Rapids and claiming right to refund.

The rates collected were the published rates and any refund from the same is unlawful.

436. Robert Schneller, Baraboo. Inquiry regarding the minimum rate on hay.

See opinion in the case of the Loftus-Hubbard Elevator Co. vs. Wisconsin Central Ry. Co. Page 80.

437. John Strange Paper Co., Menasha. Request for an opinion regarding the right of a railway company to make a low switching charge.

From a legal standpoint there is no objection to a railway company making as low a switching charge as it sees fit provided the same is made without discrimination.

438. B. Heineman Lumber Co., Antigo. Inquiry regarding the rules governing shipments of logs in train loads.

This Commission has not yet officially passed upon the question whether or not shipments made in train loads are entitled to a somewhat lower rate than carload shipments.

439. Rev. H. J. Fuhrman, Fall Creek. Complaint regarding personal injury sustained while climbing over a freight train when the crossing was blocked.

The law applicable to the complaint suggested and complainant informed that claims for personal injuries can be enforced only in the courts.

440. C. Scheckler, Racine. Complaint alleging lack of service and facilities at Berryville.

After a considerable correspondence a formal complaint was filed and case set for hearing. A representative of the Railway Company made investigations on the ground. Before the date fixed for hearing arrived the complainant advised the Commission that his grievances had been removed to such an extent that he did not desire to further prosecute his complaint.

441. Menasha Woodenware Co., Menasha. Request for an opinion regarding the right of a railway company to make a refund.

The rate actually paid was 8.5 cents which was the published rate. It appears that for a long time before the enactment of the Commission law the rate actually collected was 7 cents. Complainant now desires refund of the difference. *Held*, that 8.5 cents was the published rate and that a refund could not be approved by the Commission and that if the complainant was entitled to any relief it must be obtained through the courts by an action to recover the excess charged over and above a reasonable rate.

442. C. F. Latimer, Ashland. Inquiry regarding the right of a railway company to make reduced rates on wood destined to charcoal kilns.

The point involved was decided in Case No. 2 of the Formal Docket.

443. Thomas & Eberhart Coal Co., La Crosse. Complaint on account of refusal of the C. & N. W. Ry. Co. to switch cars between its lines and the C. B. & Q. Ry.

Correspondent asserted that the Railway Company refuses to do this because it was not permissible under the law. The Wisconsin law does not prohibit this and the correspondent was informed accordingly.

444. E. J. Ellenwood, Duluth. Complaint on account of the classification of white pine trimmings by the C. St. P. M. & O. Ry.

See Formal Docket, Case No. 61, W. J. Campbell vs. C. St. P. M. & O. Ry.

445. Frost Bros. & Kenzie, Avoca. Complaint on account of the rates on cheese box material shipped from Elmhurst to Avoca.

On examination it was found that the rates collected were the sum of the local published rates. These rates were lawful rates. The complainant was advised that the Commission had authority to establish joint rates if the carriers refused so to do and would entertain a formal complaint and order a hearing if desired. As yet no formal complaint has been filed.

446. H. C. Westphal, Poynette. Complaint regarding rates on nails.

The rates complained of were entirely interstate.

447. W. H. Andrea, Milwaukee. Complaint on account of the train service between Milwaukee and Corliss.

After careful examination the representatives of the Company reported to the Commission that beyond one suggested change it was impossible to remedy the situation.

Formal complaint filed, see Case No. 88 .

448. Wisconsin Central Ry. Co. Application for authority to publish a rate of 7.5 on barley between Oshkosh and Green Bay to meet the rate over the C. M. & St. P. Ry.

Granted.

449. Rev. E. G. Strassburger, Cedarburg. Complaint on account of the loss sustained through the alleged carelessness of

the Railway Company in carrying a trunk unchecked out of Madison and depositing it exposed to the weather at a nearby station where no agent was maintained.

After full investigation it appeared that there was no legal liability on the part of the company if the facts were as the Railway Company claimed.

450. J. A. Johnson, Rio. Complaint against C. M. & St. P. Ry. Co. for delay in forwarding a shipment of eggs.

After investigation the company admitted its neglect and promptly requested complainant to send in a bill for the amount of the loss sustained by him.

451. Wisconsin Central Ry. Co. Application for authority to publish a joint rate, effective immediately. of 7 cents on pulp wood, Ashland to Merrill.

The purpose of this was to secure raw material for mills at Merrill which would otherwise be obliged to shut down temporarily.

Application granted.

452. F. R. Constance, Waupaca. Complaint on account of a grade crossing at the point where the private way, connecting the two parts of the farm which the railway divides, crosses the track.

Still under consideration.

453. B. F. Broezel, Mauston. Inquiry whether the charter of the C. M. & St. P. Ry. Co. permits the company to conduct eating-houses along the line of its road.

Held, that eating-houses are necessary for the convenience and comfort of the traveling public and that the establishment and maintenance of such houses is properly a part of the duty of a public carrier.

454. Mohr-Stotzer Lumber Co., Portage. Complaint against C. & N. W. Ry. for failure to furnish cars at Galloway. A satisfactory explanation of the delay was made by the Railway Company and the desired equipment furnished.

455. Manufacturers' Committee, Superior Commercial Club, Superior. Complaint regarding the rates between Superior

and Solon Springs as compared with the rates between Minneapolis and Solon Springs; and also the rates between Superior and Bloomer as compared with the rates between Chicago and Bloomer.

Following its general custom the Commission did not pronounce judgment regarding the reasonableness of these rates and the complainant was advised that the only way in which an opinion could be secured from the Commission in this matter would be to file a complaint which would be heard in accordance with law; or, the Commission might take the matter up on its own motion. But in either case opportunity must be given to the parties interested to present their side of the case.

456. United States Leather Co., New York. Inquiry regarding the rules governing the weighing of cars.

This inquiry had reference primarily to the weighing of tan bark. One conference has been held and the case is still pending.

457. E. Arnold and other citizens of Belleville. Complaint against the Illinois Central R. R. Co. alleging inadequate station facilities at Belleville.

The Illinois Central Co. is investigating the matter and will report to the Commission.

458. Geo. Harland, Mauston. Complaint against the United States Express Co. for failure to return empty poultry crates.

The Express Company informed the Commission that at times when the traffic is extremely heavy empty poultry crates were sometimes unloaded at an intermediate point in order to make room for express matter other than return packages. The Express Company immediately put on an additional car and gave assurance that the crates would be promptly returned hereafter.

459. John Fisse, Dorchester. Complaint against the Wisconsin Central Ry. Co. for failure to furnish cars for shipping hay; also car shortage at Curtiss.

The General Freight Agent of the Railway Company assured the Commission that his company was doing everything in its power to give each shipper his proper proportion of the available cars; that the shipments in question were to be made to Atlanta, Ga.; and that the Wisconsin Central could not permit

its own cars to go so far off its line and that it was obliged to wait for a supply of equipment from the southern line.

460. Ziemann & Brusewitz, Fall Creek. Complaint against the C. St. P. M. & O. Ry. on account of their failure to maintain a watchman or signal bell at a dangerous crossing in the village.

A formal complaint has been filed. See Page 325.

461. Thomas B. Farmer, Minneapolis, Minn. Complaint on account of the failure of the D. S. S. & A. Ry. to stop its early morning train at Marengo Junction.

Formal complaint was filed, see Case No. 85.

462. T. Metzger, Superior. Complaint against the Great Northern Ry. for failure to provide a proper crossing.

The Railway Company stated that this matter had not been brought to its attention before and that it would investigate immediately.

463. Wisconsin Central Ry. Co. Application for authority to put into immediate effect a rate of 22 and 28 cents per hundred pounds for carload and less than carload shipments, respectively, between Plymouth and Ashland to meet a competitive rate.

Granted.

464. James Callan, and others, Caledonia. Complaint against C. M. & St. P. Ry. Co. for failure to put in and operate crossing gates at a dangerous crossing in the village of Caledonia.

Under consideration.

465. Henry E. Fitch, Nekoosa. Complaint against C. M. & St. P. Ry. Co. for refusing to permit the loading of two kinds of coal on the same car without requiring the payment of freight on the minimum carload weight for each class of coal loaded.

The question was practically passed upon in a previous case. See Formal Complaint Case No. 48. The principle involved is also receiving consideration in the investigation of the Commission in the matter of mixed carload shipments.

466. Wisconsin Central Ry. Request for an opinion regarding the right of the Company to make certain corrections of errors which occurred in the issuing of a specified tariff and certain amendments and supplements thereto.

Held, that the Railway Company either had or had not a legal right to protect the rate in question. The law makes the published rate the legal rate and the approval of the Commission would not give any force to the proposed action of the Railway Company, nor would it protect the company in case such approval were to be given.

467. Wisconsin Veneer Company, Rhinelander. The Wisconsin Veneer Company made complaint to the effect that the rates charged it on shipments of veneer from Rhinelander to Oshkosh and Sheboygan were excessive and discriminatory, inasmuch as that company was charged a higher rate than was charged to its competitors. It appeared from the tariffs on file with the Commission that the rates charged for carrying veneers from Wausau and Marshfield to Oshkosh and Sheboygan were the same rates as were charged from those points for carrying lumber to Milwaukee. The rate on lumber from Rhinelander to Milwaukee was ten cents per hundred pounds, whereas the rate charged on veneers to Oshkosh was thirteen cents per hundred pounds and to Sheboygan eighteen cents per hundred pounds. Inasmuch as the Milwaukee rate on lumber was applied to the shipment of veneers from Wausau and Marshfield, the Commission requested the Railway Company to apply the Milwaukee rate on lumber from Rhinelander to the shipments of veneers from Rhinelander to Oshkosh and Sheboygan. After correspondence and personal consultation with one of the traffic officials of the Chicago & Northwestern Railway Company, the change requested was made and the Wisconsin Veneer Company was given the Milwaukee lumber rate on veneer shipments to Oshkosh and Sheboygan.

468. Cameron Farmers Equity Produce Co., Cameron. Complaint against C. St. P. M. & O. Ry. Co. on account of car shortage.

After the attention of the company had been called to the complaint the complainant notified the Commission that at the time of writing they were getting all the cars they needed.

469. Wisconsin Fruit Package Co., Crandon. Complaint against the C. & N. W. Ry. Co. regarding certain objectionable features in the classification of basket lumber, knocked down, tied in bundles, as compared with the rates charged on berry box lumber, scarfed, knocked down, claiming that basket lumber is packed in bundles and bales like box lumber, has a greater weight and less value and takes a higher rate.

The contentions of the complainant were very carefully formulated and have been submitted not only to the C. & N. W. but also to the Wisconsin Central and C. M. & St. P. Ry. Cos. by whom they are now being considered. This whole question of classification and rates on fruit packages is under consideration.

470. Daniel Sprague, Portage. Complaint on account of the failure of the railway companies to deliver household goods.

The shipment was made from Lancaster on the C. & N. W. Ry. to Portage on the C. M. & St. P. On investigation the companies reported that there were delays in both Madison and Portage. In Madison the delay was due to the illness of the party who regularly made the transfers and in Portage to the condition of the station house, it having been necessary to store goods temporarily in a freight car so that the weekly check was not made. The companies assumed full responsibility and settled the matter promptly.

471. H. C. Williams, Union Grove. Complaint against the the C. M. & St. P. Ry. Co. on account of failure to furnish cars.

Complainant informed the Commission that at noon of the day in which he made his complaint there were waiting at the station 104 wagons loaded with cabbage but on account car shortage the cabbage could not be transferred to the railway. The attention of the company was called to this matter by telephone and within a few hours a special engine brought eight cars which afforded the necessary relief. Additional cars were sent later in the day.

472. George P. Miller Lumber Co., Madison. Complaint against the Wisconsin Central Ry. Co. for failure to furnish cars.

The complainant reported that he had a large number of

rush orders to points beyond the Wisconsin Central, many of which orders would probably be cancelled unless cars could be supplied promptly. The Wisconsin Central maintains that it would be discrimination against shippers on its line to permit its own equipment to go off the line and that for the orders of the complainant it is dependent on the action of connecting carriers.

473. Frank Vanderheiden, Wrightstown. Complaint against the Green Bay Traction Co. for charging alleged excessive rates between Wrightstown and De Pere.

474. Citizens of Red Granite. Complaint against the C. & N. W. Ry. Co. for failure to furnish adequate passenger service on the branch line running into Red Granite.

The matter was presented to the Commission in informal conference by representatives of Red Granite and a second conference was held between representatives of the Railway Company and the village in the offices of the Commission.

475. Chicago, Milwaukee & St. Paul Ry. Co. Application for authority to change the rate on grain between Reeseville and Elba and Milwaukee.

The application was for a reduction from 7.5 cents to 7 cents at these points for the reason that certain competitive points on the C. & N. W. Ry. made it difficult to get grain to move to Reeseville and Elba. Application was granted.

476. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to make a refund on shipment of lumber which moved under the published tariff but for which by mistake an agent of the company had quoted a rate lower than the rate given in the published tariff.

After considering all the facts in the case the Commission held that to permit the payment of this refund would be a violation of law.

477. Owen Bros. Co., Milwaukee. Complaint on account of the lack of proper adjustment in the grain rates from points in southern Wisconsin and northern Illinois to Milwaukee as compared with the rates from these same points to Chicago.

The Commission received a number of communications from

the complainant as well as from persons residing in various towns in southern Wisconsin and northern Illinois. Informal conference was held in the office of the Commission at which Mr. G. H. D. Johnson and Mr. D. G. Owen represented the Milwaukee grain interests and Mr. F. P. Eyman and Mr. E. S. Keeley represented the railway interests.

Still under consideration.

478. Hazelhurst & South Eastern Ry. Co. Inquiry as to the right of a railway company to discontinue the running of trains which carry passengers.

The reply of the Commission stated that if it is proposed to discontinue present service some interested person might take the matter up and make formal complaint to the effect that the service was inadequate and under the statute the Commission would be compelled to consider the question and pass upon it according to its merits.

479. Green Bay & Western R. R. Co. Inquiry regarding the right of a railway company to make a refund on tickets sold to cranberry pickers at the rate of one and one-third of the single fare for the round trip.

Held, that a reduced rate must be made to all persons engaged in the cranberry traffic and that it should be published before the passengers move on the basis of the same.

480. Flood & Flood, Eden. Complaint alleging overcharge on shipments of grain and also complaint of the condition of the small freight cars furnished for grain shipments.

The matter of overcharge is being investigated in the claim department of the Railway Company and the other matters complained of have been under consideration by the Railway Company in direct correspondence with the complaints.

481. R. M. Boyd, Racine. Inquiry regarding the right of land-seekers to secure half rates within the State of Wisconsin.

Opinion of the Commission issued with reference to this question submitted to correspondent and further advised that the interstate privileges which have hitherto prevailed will terminate January 1, 1907, on account of the provisions of the new interstate commerce law.

482. Rev. A. M. Conklin, Ingram. Complaint on account of the attempt of the Soo Railway Company to collect \$12 additional on a shipment of household goods when \$32 had been paid in advance at the point of shipment.

On examination it was found that the \$32 which had been paid at the point of shipment was the correct rate if the sum of the locals was to be regarded as the rate applicable, this shipment being a joint shipment over the Wisconsin Central and the Soo. It was also found that another tariff, which applied primarily to interstate shipments could be made applicable to the shipments in question and presumably on the basis of this tariff the Soo attempted to collect the \$12 additional. The Soo Railway later withdrew its claim to the \$12, and the Railroad Commission recommended the abrogation of the joint tariff which resulted in a higher charge than the sum of the locals. It is pretty nearly a universal rule to make the sum of the locals the maximum rate between any two points over two or more lines of railway.

483. G. Hasler, Du Plainville. Complaint on account of the inability of the complainant to ship the minimum weight required by the Wisconsin Central Railway Company for shipments of hay.

Complainant was informed of the findings of the Commission in the case of the Loftus-Hubbard Elevator Co. against the Wisconsin Central and requested to keep a record of the initials and numbers of the cars as well as the condition of the hay loaded with a view of discovering any injustice that might still exist in the rules governing shipments of hay as modified by the order of the Commission.

484. Yawkey-Bissell Lumber Co., Arbor Vitae. Complaint regarding the rates charged by the C. & N. W. on saw-dust and baled shavings from Woodruff to Baraboo.

The rate on baled shavings, carloads, between Woodruff and Baraboo is 8.5 cents; the rates on shavings were quoted to the complainant.

485. Ever Ellingstad, Elk Mound. Complaint on account of the failure of the C. St. P. M. & O. Ry. Co. to furnish cars for shipments of household goods. The Railway Company was at

once advised of the complaint and a car was furnished. Complaint was later made about delays in transit. The Railway Company claims that the car was forwarded on schedule time and delays were unavoidable.

486. Complaint regarding joint rates on lime.

Complainant informed that the only way in which the matter could be disposed of was by formal complaint, blank for which was forwarded.

487. Nash & Nash, Manitowoc. Inquiry regarding the rules and regulations governing the distribution of empty cars.

Complainants informed that before the Commission could express any opinion regarding the situation referred to in the letter it would be necessary to determine what the facts in the case are.

488. G. D. Fellows, Racine. Complaint alleging overcharges in rates and weights by the C. & N. W. and C. M. & St. P. Ry. Cos.

Correspondence with different officials of the Railway Companies resulted in certain explanations and at the present time the complaint appears to have been pretty nearly disposed of.

489. Helmer Milling Co., Fond du Lac. Complaint alleging discrimination in the rate charged on cement to manufacturers of lime as compared with the rate charged on cement to dealers.

An examination of the tariffs showed that for certain stations between Fond du Lac and Milwaukee, and Fond du Lac and Sheboygan a rate of 4 1-6 cents per hundred pounds was quoted for shipments of cement to lime manufacturers. This rate, traffic officials explained, was put in as a concentration rate to enable manufacturers of lime to fill orders for lime and cement. Complainants alleged and in support of their allegation submitted certain facts, showing the rate was in fact taken advantage of by jobbers and dealers with whom firms doing a jobbing business came directly in contact, and that thus the 6 cent rate, which was charged the one party, very greatly handicapped them in competition with other parties who were

paying only the 4 1-6 cent rate per hundred pounds. The Railway Company has expressed its willingness to modify the rates and what the exact rate will be is at present under consideration.

490. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Inquiry regarding the right of the Railway Company to protect a rate of \$1 per ton on coal which was orally given by an agent but which is not the published rate.

Held, that the published rate was the only lawful rate and that it would be in violation of law to protect the lower rate said to have been quoted in error.

491. Wisconsin Central Ry. Co. Application to publish, effective at once, a rate of 19 cents on cranberries between Grand Rapids and Fond du Lac in carload lots and 25 cents in less than carload lots.

Granted.

492. Chicago & Northwestern Ry. Co. Application for authority to reduce the rate on grain between Bancroft, Wild Rose and Almond from 10 to 9.5 cents so as to bring the same in line with rates at corresponding stations on the Wisconsin Central.

Granted.

493. Olof Rosen, Rhinelander. Complaint on account of the connections made at Monico Junction by trains on the C. & N. W. Ry. from Watersmeet and Rhinelander.

The Railway Company explained that the former connections which were satisfactory were summer arrangements only and that the train in question could not be operated during the winter but that they would do the best they could without the summer train; also promised to confer with the complainant before the next summer schedule is determined upon with a view of suiting the convenience of the people in the locality.

494. L. A. Rose, Aniwa. Complaint alleging discrimination in the distribution of cars; also inquiry regarding law governing the condemnation of land by railway company for purpose of constructing side tracks running to manufacturing plants

along their lines. Reply of Commission saying that the Supreme Court of Wisconsin had held that under the statutes of the state such condemnation could be made.

495. R. P. Koenig & Co., Watertown. Complaint against C. & N. W. Ry. Co. for refusal to grant milling in transit rates to Watertown on shipments of rye from Necedah to Milwaukee.

After correspondence with the Railway Company a new tariff was issued granting milling in transit privileges at Watertown on grain between Necedah and Milwaukee. Following the publication of the tariff complainant requested the Commission to hold that the Railway Company could refund the higher rate which was paid on some shipments of rye before the new milling in transit tariff went into effect. *Held*, that such a refund would be unlawful.

496. W. H. Putnam, River Falls. Complaint on account of the rates on grain from River Falls and surrounding points to Chicago and Milwaukee.

The reply of the Commission called attention to the fact that most of the rates complained of were purely interstate rates and outside of the jurisdiction of this Commission; also that according to the analysis of the accounts made by the Commission it would be unlawful for the Commission to prescribe rates as low as those which had been requested by correspondents although the Railway Company might voluntarily publish and maintain in effect a rate lower than that which the Commission might prescribe.

497. La Crosse & Southeastern Ry. Co. Application for authority to grant reduced rates to delegates to a teachers association.

Granted.

498. Inquiry whether the Dunbar & Wausaukee Ry. was a common carrier; also complaint regarding a charge of 80 cents per cord on wood for a haul of fifty miles.

The Railway Company complained of is a common carrier and incorporated as such and must carry freight offered for a reasonable compensation. What is a reasonable compensation for one railway is not necessarily reasonable for another and the Commission cannot decide the questions raised without giving both parties an opportunity to be heard.

499. H. C. Blilie, Prentice. Complaint alleging that the Wisconsin Central Ry. is appropriating land outside of its one hundred foot strip of right-of-way which the complainant had had in undisputed use and possession for more than 23 years.

Correspondence with the Railway Company indicated the nature of the grant to the company of a two hundred foot strip all of which had not been fenced in. Complainant informed that this was primarily a question of fact and a case which the court must decide if an amicable agreement could not be reached

500. Wisconsin Central Ry. Co. Amendment No. 5 to W. C. Tariff No. A-163, making certain changes in rates on grain from certain stations.

Some of the rates contained in this tariff were at variance with the order issued by the Commission in the *Matter of Grain Rates* and the Railway Company at once made the corrections when its attention was called to the errors which had been made.

501. Neillsville Cash Milling Co., Neillsville. Complaint alleging excessive charges in an itemized statement of the expense incurred in the construction of a proposed side track.

Complainant informed that if a more detailed statement would be submitted the engineer of the Commission would be requested to make a report upon the bill of expense as submitted.

502. E. M. Larson, Stockholm. Complaint alleging inadequacy of train service on the C. B. & Q. at Stockholm and asking whether relief could be secured.

A copy of the law forwarded to complainant. In accordance with custom the Commission did not express an opinion on the merits of the complaint in advance of a hearing at which each party can present its side.

503. Aultman & Taylor Machinery Co., Chicago, Illinois. Complaint alleging excessive rates in shipment of a clover huller from Schleisingerville to Iola as compared with the rates to Iola from Chicago and Milwaukee.

On examination it was found that Schleisingerville took Milwaukee and Chicago rates. The Chicago, Milwaukee & St.

Paul charged a slightly lower rate than the Wisconsin Central for the reason that shipments over the Chicago, Milwaukee and St. Paul between Schleisingerville and Iola must pass through Milwaukee thus making the haul much longer than over the Central; if the charge were not made slightly lower for the longer distance according to general experience the road having the long haul would probably do no business.

504. W. N. Fuller, Cumberland. Complaint on account of the connections made between the Soo and Omaha trains at Turtle Lake.

The attention of the managers of both companies has been called to this matter and one of them has already indicated his willingness to make a slight change in the schedule which will make closer connections possible and no doubt the other company will acquiesce in whatever other additional changes may be necessary.

505. Herman Simon, Wausau. Complaint on account of the removal of spur track at Trapp station on the C. M. & St. P. Ry.

On investigation it was found that according to statistics submitted by the Railway Company the total amount of freight forwarded from Trapp station during the fiscal year ending June 30, 1906, was \$96.48, while the revenue on freight shipped in was only 25 cents. Letters were sent to firms who formerly shipped from there requesting them to submit statement indicating the amount of business done and the C. M. & St. P. Ry. Co. is investigating the situation with a view of making a report to the Commission.

506. Menomonie Hydraulic Pressed Brick Co. Inquiry regarding the right of a railway company to charge more for a short haul than for a long haul when the short is included with in the long and the long haul is an interstate haul.

The specific rates and places were named and the influences of competition pointed out in the communication. Correspondent informed that there is no long and short haul clause in the Wisconsin railway law and that if all the hauls in question were purely state hauls the question involved would have to be settled on the basis of the absolute reasonableness of the

rates rather than by comparison on the long and short haul basis. The different factors which courts have recognized as justifying a violation of the long and short haul principle were indicated.

507. Chicago & Northwestern Ry. Co. Application for authority to make certain changes in Tariff 546-B.
Application granted.

508. Robbe Bros. & Dahl, Strum. Complaint on account of the refusal of the C. St. P. M. & O. Ry. Co. to permit partial unloading on certain carload shipments.

The carload was billed to Strum but was stopped for partial unloading at Osseo. Complainant assumed that he could partly unload at that point at an additional charge of \$5. whereas the Railway Company charged the local rate of \$12.

The charge actually levied by the Railway Company was in accordance with the published tariff and therefore the only legal rate. The Railway Company has not adopted the rule, of somewhat wide application, which permits partial loading or unloading at an additional charge of \$5.

509. W. B. Elwell, Frederic. Complaint on account of difficulty in securing cars; also alleging discrimination in the distribution of cars.

After correspondence with the Railway Company and the complainant the latter wrote a letter stating that his needs had been met.

510. Charles A. Keith, Evanston, Ill. Complaint against C. & N. W. Ry. Co. for taking off more from a mileage book than the actual distance warranted.

The name and number of the mileage book in question was submitted to the Railway Company which is now investigating the complaint.

511. J. W. Puffer & Sons, Linden. Complaint alleging discrimination in the distribution of cars for shipments of potatoes.

512. Charles E. Brill, West Rosendale. Complaint regarding station facilities at West Rosendale.

The Commission submitted figures taken from statistics filed by the Railway Company indicating the amount of business done at the station and requesting complainant to examine the same and provide whatever additional information he could secure for the use of the Commission.

513. Thompson & Burton, Chicago, Ill. Complaint against Green Bay & Western R. R. Co. for refusal to make joint rates on coal from certain Illinois points to points on its line.

Complainants informed of the limited jurisdiction of this Commission over interstate rates and the legal provisions governing joint rates called to their attention.

514. G. H. Fuller, Spring Lake. Complaint on account of the refusal of the Railway Company to furnish car lining for shipments of potatoes.

It is customary for the railway companies throughout the state not to provide this lining but for the shippers to attend to the same. Complainant requested to furnish specific facts tending to show discrimination if any exists.

515. L. Kleimenhagen, Kilbourn City. Complaint against C. M. & St. P. Ry. Co. on account of its failure to stop passenger train No. 56, passing through Kilbourn at 9:15 p. m. going east.

Under consideration.

516. Quantius Bros., Montello. Complaint alleging discrimination on the part of the Wisconsin Central in the matter of car supply.

Complainants requested to furnish the Commission with specific facts.

517. J. Buchholz, Glen Flora. Complaint on account of the failure of the Railway Company to provide cars and to forward the same promptly when loaded.

After some correspondence with the superintendent of the car service of the Railway Company the complainant wrote the Commission to the effect that he had procured the desired cars.

518. Henry Krueger, Bonduel. Complaint alleging overcharge on a shipment of live-stock to Chicago.

On examination it was found that the carload of hogs and sheep in question contained one calf. The minimum weight for cattle and calves is 22,000 pounds. By including the one calf with the shipment of hogs and sheep the shipment became a mixed carload shipment which under the published rules takes the highest rate at the highest minimum, thus increasing the freight charges on this one carload considerably in excess of the value of the calf.

519. S. H. Van Guderson, Fenwood. Complaint alleging discrimination in the distribution of cars.

520. Chicago, St. Paul, Minneapolis & Omaha Ry. Co. Application for authority to issue, effective immediately, a tariff covering shipments of railway ties to certain specified stations.
Approved.

521. M. Lapidus, Neenah. Complaint against Wisconsin Central for alleged overcharge on demurrage; also alleging discrimination in the application of demurrage rules.

The rules of the Wisconsin Car Service Association applicable to this case were submitted to the complainant and he was requested to submit specific facts upon his complaint.

522. A. J. Rose, Park Falls. Complaint against Roddis Lumber and Veneer Co. for their failure to keep in proper condition a highway crossing on the Roddis spur running northward from Park Falls.

The complainant alleges that the lumber company removes the planking between the tracks at the beginning of winter making it difficult for loaded teams to cross.

The matter is still under consideration.

523. Colfax Store Co., Colfax. Complaint on account of car shortage at Colfax.

524. C. Eby, Rhinelander. Complaint against railway company for its refusal to permit loading of logs on side tracks constructed by other parties and refusing to construct a side track at which complainant might load his supply.

Owners of existing side tracks were unwilling to permit the loading of these logs unless the same were sold to them. The law applicable to this case was submitted.

525. Inquiry regarding the right of a Railway Company to make a refund on shipments made between the date of the effectiveness of an order of the Commission establishing certain rates and the date upon which a corrected tariff issued by the railway company became effective, the Railway Company's tariff contained several rates at variance with those published by the Commission, such variations being due to clerical errors.

Held, that after the date of effectiveness of the order of the Commission the rates prescribed therein are the legal rates.

526. John C. Yunker, South Milwaukee. Complaint alleging overcharge on a carload shipment of coal from Milwaukee to South Milwaukee.

The difficulty arose over the existence of separate tariffs to manufacturers and to other consumers. Claim has been adjusted.

527. F. J. Walker, Northport. Complaint against the Green Bay & Western R. R. Co. alleging inadequate station facilities.

528. A. I. Bennett, Kilbourn City. Complaint alleging inadequate car supply for the coal traffic to Kilbourn City.

529. A. C. Gower, Chippewa Falls. Complaint alleging excessive rates on sugar beets.

This will be disposed of in the beet sugar cases. See Formal Complaints No. 73.

530. Pribbenow & Laabs, Curtiss. Inquiry regarding the power of the Commission to compel railway companies to furnish cars for shipment beyond their respective lines.

During the autumn months there is a great demand for cars and the railway companies are probably within their rights when they refuse to let their cars go off their own lines when the amount of business on their lines, locally, is sufficient to require the entire equipment.

531. Beldenville Lumber Co., Bruce. Complaint against the Minneapolis, St. Paul & Sault Ste Marie Ry. Co. on account of advancing the rates on lumber between Bruce and Osceola.

On examination it was found that the new tariff, against which complaint was made, did not advance the rate and that as a matter of fact the rate was still the same as it had been.

532. Harry Lawler, Chicago. Complaint against C. & N. W. Ry. Co. alleging discrimination in favor of a competitor in the construction of side tracks.

Complainant is a dealer in ice and has purchased a considerable tract of land on the shores of Lake Geneva on the assumption, which he claims was verbally given by an official of the Railway Company, that he would be able to secure a side track to the ice-house which he intends to construct. It is alleged that the Knickerbocker Ice Co. has prevented such action on the part of the Railway Company and that furthermore the Railway Company has constructed side tracks under similar conditions for numerous other dealers in ice.

533. William and August Esch, Genoa Junction. Complaint against C. & N. W. Ry. Co. alleging discrimination in the construction of side tracks to ice-houses.

The subject of this complaint was substantially similar to the preceding one. Complainants have invested some \$40,000 in the property to which they desire a side track to be constructed. One ice-house has been constructed and the lumber is on the ground for the construction of the second. In order to reach these ice-houses with a spur track it will be necessary to cross a fifty foot strip belonging to a rival company. Complainants desire to have the Railway Company exercise its right of eminent domain and secure the condemnation of the strip of land in question.

534. C. W. Cheney & Co., Eau Claire. Complaint to the effect that it is impossible for shippers of hay to load the required minimum.

Complainant's attention was called to the decision of the Commission in the case of Loftus-Hubbard Elevator Co. and he was requested to keep a record of future shipments in order that the facts with respect to the ability or inability to load

the required minimum might be definitely ascertained. Complainant informed that it must be assumed that shippers and carriers, alike, will attempt to carry out reasonable regulations in good faith; "If future experience should show that the railway companies are actually constructing cars for the purpose of evading rules the matter can be speedily taken up under the law."

535. George Pellegrin, Merrill. Complaint against C. M. & St. P. Ry. Co. on account of demurrage charges.

The rules of the Car Service Association applicable to the case were submitted.

536. T. C. Udell, Genoa Junction. Inquiry regarding rates on live-stock between Montello and Lyons, via Portage.

The legal rates were quoted.

537. Osseo Mercantile Co., Osseo. Complaint on account of car shortage; also alleging the inability of shippers to load the required minimum of hay.

This case was handled in essentially the same way as No. 534.

538. William Heise & Son, Alma. Complaint against the C. M. & St. P. Ry. Co. on account of its failure to furnish cars for the shipment of grain from Alma, on the C. B. & Q. Ry., to Milwaukee.

It is a rule of the Railway Company during times of car shortage not to permit its equipment to go off its line when the same can be avoided. Cars were supplied to the complainant.

539. Northern Pacific Ry. Co. Application for authority to publish a rate of \$7.50 per car on wood bolts from dead and down timber from Iron River, and points north thereof, to Washburn.

Granted.

540. Eugene S. Turner, Port Washington. Complaint on account of unsatisfactory rates on cement, brick and sand into and out of Fredonia.

541. W. S. Frazier, Milwaukee. Request for an opinion as to whether or not the Independent Order of Good Templars is a charitable institution.

Correspondent requested to state the specific facts to which such opinion is to be applied and that on receipt of such definite statement the Commission will endeavor to submit an opinion.

542. W. C. Blissett, Oshkosh. Complaint against C. & N. W. Ry. Co. alleging overcharge on a shipment of two carloads of apples from Millers and Barker, New York, to Oshkosh, Wis.

The difficulty in this question appears to have arisen from the existence of different rates between the same points. One through rate is quoted by an eastern carrier providing for a through rate of 37 cents; whereas Wisconsin carriers publish a local rate of 12.5 cents between Oshkosh and Milwaukee and a proportional rate of 12 cents between the same points. The regular rate between the New York points mentioned and Milwaukee is 21 cents which together with the 12 cents proportional rate would make the combined through rate 33 cents. The construction and application of these tariffs is still under consideration.

543. Alex McKenzie, Mayhews. Complaint against C. M. & St. P. Ry. Co. on account of its failure to furnish refrigerator cars for shipments of cabbage to New Orleans.

Telephone message from Railway Company to the effect that cars would be set in at once.

544. Chicago & Milwaukee Electric Railway Co. Blue-prints filed showing plans of proposed interlocking plant to be placed at the crossing of the Chicago & Milwaukee Electric Ry. Co.'s tracks with those of the C. & N. W. Ry. near Kenosha.

545. Chicago & Milwaukee Electric Ry. Co. Blue-prints filed showing alignment and grade of Chicago, Milwaukee & St. Paul Ry. at the crossing of the tracks of that company by those of the Chicago & Milwaukee Electric Ry.

546. B. Franzen, Fredonia. Complaint of rate charged on car of crushed stone shipped from Grafton to Fredonia.

The Commission asked for some definite information and received from the complainant the freight bill for the car. An examination of the tariff showed the rate charged to be correct and the complainant was advised thereof.

547. Laun Bros., Wausaukee, inquiring if Commission had jurisdiction over the Wisconsin & Northwestern Ry., formerly the Wisconsin & Northern Ry., to which the Commission replied that the company in question is not incorporated as a common carrier but that it had issued certain tariffs in connection with the C. M. & St. P. Ry. thus holding itself out as such, making it subject to the jurisdiction of the Commission as other railways are.

548. Complainant is a market gardner and ships fertilizers in and the produce he raises out by the carload. He desires a side track and wishes the company to put one in at its own expense and asks the Commission if it has jurisdiction to order such track.

Held, that there is no authority conferred on the Commission to compel a carrier to build a private side track at its own expense; that the powers of the Commission are limited to those given in section 1802, Revised Statutes, which provide that where the track is within the yard limits the party desiring it must build it at his own expense and the company must connect it with their tracks, the expense of which, however, the party must pay.

549. J. M. Bushnell, Wyocena. Petition for the stoppage of C. M. & St. P. train No. 5 at Wyocena. The matter has been referred informally to the Railway Company and it still pending.

550. Jacob Shrake, Bagley. Complaint that the C. B. & Q. Ry. discriminates against the inhabitants of that village in not stopping its train No. 2 at that point.

The matter was referred to the Railway Company and is still pending.

552. Complaint of station facilities at Saxon on the line of the C. & N. W. Ry. Co.

The matter has been informally referred to the Railway Company and is still pending.

553. Ross Lumber Co., Arbor Vitae, stating that the C. M. & St. P. Ry. Co. for a number of years had an open tariff rate on lumber for factory use from Arbor Vitae to Wausau; that

the Chicago & Northwestern Ry. Co. did not publish such a rate but maintained a higher tariff; that complainant each year shipped a portion of its product by the C. & N. W. Ry. Co. on the higher tariff and that at the end of each year it filed a claim with the Railway Company for the difference between the rate charged by the C. & N. W. and the tariff rate of the C. M. & St. P. and the C. & N. W. allowed the claim; that they filed their claim for this amount covering the year 1903 but the railway company refused to allow it alleging that it was not permitted under the laws of Wisconsin.

The complainant asked for an opinion on the matter to which the Commission responded: "The shipments, as we understand it, were made prior to June 16, 1905. If you had a right to a refund of the excess charge such right accrued prior to that time, and it was only because of the failure of the railway company to pay the claim that it remains unpaid. This Commission has frequently held that a matter of this kind is not affected by the passage of chapter 362 of the Laws of Wisconsin for 1905, which is the act creating the Railroad Commission and defining its powers."

554. Schmidt & Stork, West Bend, enclosing freight bill and asking whether C. & N. W. Ry. Co. had overcharged them or not. The tariffs were examined and the complainant was informed that the amount charged was the tariff rate.

555. Torrey Cedar Co., Clintonville. Complaint that prior to June 16, 1905 the Chicago & Northwestern Ry. Co. in error quoted a lower rate than the published tariffs and shipment was made thereon. Full tariff rate was charged complainant and claim filed for difference. The Railway Company declined the claim saying that under the Wisconsin law there was no way to adjust it.

Held, that valid claims that were outstanding at the time of the passage of the Railroad Commission law were not affected by the passage of that law and if the company could lawfully pay such claim before its passage they could still do so.

656. D. W. McNamara, Montello. Complaint of passenger train service given to the inhabitants of Montello by the Wisconsin Central Ry. Co.

The matter has been informally referred to the railway company and is still open.

557. Hall W. Mahoney, La Crosse. States that he is the City Attorney of La Crosse and also local attorney of a railway company and that as such local attorney has a pass over the lines of the road and wishes to use the pass when traveling on the business of the railway company.

The Commission responded that the question was properly referable to the attorney general but that since the passage of chapter 362, Laws of 1905, with the amendments thereto, the Commission is under the impression that such use is unlawful.

557. *In re* Increase of the Capital Stock of the Chicago & Northwestern Railway Company. Request from Hon. James O Davidson, Governor of Wisconsin, that the Commission investigate the proposed issue of one hundred million dollars additional capital stock by the Chicago & Northwestern Ry. Co. On Nov. 22 a letter was addressed to Marvin Hughitt, president of the Chicago & Northwestern Ry. Co., asking him: first, whether any of the additional stock provided for has been issued and disposed of; second, whether it is the intention of the company to place such stock upon the market and to sell it at the current market price; third, whether it is the intention of the company to give the stockholders the preference in the sale of the new issue, and at what price the sale is to be made; fourth, to ascertain what purpose the company had in providing for this additional issue; fifth, for what purpose the company intended to use the money derived from the sale of the new issue; sixth, if any portion of the additional issue provided for has already been disposed of and at what price it has been sold. To which Mr. Hughitt replied, in substance, that none of the additional stock has been issued or disposed of at the present time; that the action of the company's stockholders merely *authorized* the increase of capital stock and that no action has yet been taken by the stockholders or directors for any actual issue of the newly authorized stock; that the purposes in view in providing for the additional stock were those mentioned in section 1826 of the Revised Statutes of Wisconsin; that no portion of the additional capital stock has been disposed of in any way.

PART IV.



Statistics.

DIRECTORS AND OFFICERS OF ALL RAILWAYS DOING BUSINESS IN WISCONSIN.

Name of Company.	Post office address of general office.	Directors.			
1. Abbotsford & Northeastern.....	Milwaukee, Wis.....	Fred Rietbrock.....	L. W. Halsey.....	Thos. H. Gill.....	A. C. Rietbrock.
2. Ahnapee & Western.....	Sturgeon Bay, Wis.....	Edw. Decker.....	M. C. Haney.....	David Decker.....	Henry Fetzer.
3. Big Falls R'y Co.....	Oshkosh, Wis.....	S. M. Wall.....	J. H. Wall.....	T. R. Wall.....	O. H. Thomas.
4. Bayfie d Transfer Ry.....	Bayfield, Wis.....	Geo. H. Noves.....	J. M. Smith.....	H. C. Hale.....	A. W. Fairchild.
5. Chicago, Milwaukee & St. Paul.....	Chicago, Ill.....	Peter Gaddes.....	Roswell Miller.....	Wm. Rockefeller.....	Jno. A. Stewart.
6. Chicago & Northwestern.....	Chicago, Ill.....	Albert Keep.....	Chauncey M. Depew.....	Samuel F. Barger.....	James C. Fargo.
7. Chicago, St. Paul, Minneapolis & O.....	St. Paul, Minn.....	Albert Keep.....	Chauncey M. Depew.....	E. E. Osborn.....	J. M. Whitman.
8. Chicago, Burlington & Quincy.....	Chicago, Ill.....	Robert Bacon.....	Geo. F. Baker.....	Geo. C. Clark.....	Wm. P. Clough.
9. Chicago, Lake Shore & Eastern.....	Chicago, Ill.....	E. H. Gary.....	W. E. Cory.....	F. W. Sutton.....	R. B. Campbell.
10. Illinois Central.....	Chicago, Ill.....	Chas. S. Deneen.....	Chas. M. Beach.....	J. T. Harahan.....	Cornelius Vanderbilt
11. Drummond & Southwestern.....	Drummond, Wis.....	F. W. Gilchrist.....	F. H. Drummond.....	John S. Owen.....	A. J. Rust.
12. Duluth, South Shore & Atlantic.....	Marquette, Mich.....	Richard B. Angus.....	John W. Sterling.....	R. Y. Hebden.....	Thos. W. Pearsall.
13. Dunbar Wausaukee.....	Menomonee, Mich.....	W. C. Culbertson.....	J. W. Wells.....	J. A. Culbertson.....	
14. Duluth, Superior & West Terminal.....	St. Paul, Minn.....	D. M. Philbin.....	E. I. Farrington.....	E. Sawyer.....	J. A. Murphy.
15. Eastern Railway Co. of Minnesota.....	St. Paul, Minn.....	Louis W. Hill.....	E. I. Farrington.....	E. Sawyer.....	W. R. Beggs.
16. Fairchild & Northeastern.....	Fairchild, Wis.....	N. C. Foster.....	E. M. Foster.....	G. A. Foster.....	E. J. Foster.
17. Green Bay & Western.....	Green Bay, Wis.....	S. S. Palmer.....	Mark T. Cox.....	C. L. Blair.....	Wm. J. Hunt.
18. Iola & Northern.....	Green Bay, Wis.....	S. S. Palmer.....	Mark T. Cox.....	Wm. J. Wilson.....	J. A. Jordan.
19. Kewaunee, Green Bay & Western.....	Green Bay, Wis.....	S. S. Palmer.....	Mark T. Cox.....	C. L. Blair.....	J. A. Jordan.
20. La Crosse & Southeastern.....	La Crosse, Wis.....	W. S. Cargill.....	H. C. Wood.....	Jas. B. Taylor.....	P. Valer.
21. Lake Superior Term. & Trans.....	St. Paul, Minn.....	D. M. Philbin.....	W. F. Fitch.....	L. W. Hill.....	H. J. Horn.
22. Great Northern.....	St. Paul, Minn.....	Louis W. Hill.....	R. I. Farrington.....	E. Sawyer.....	Frank B. Ward.
23. Hillsboro & Northeastern.....	Hillsboro, Wis.....	W. H. H. Cash.....	E. Hammer.....	F. I. Pinch.....	Wm. Lind.
24. Marinette, Tomahawk & Western.....	Tomahawk, Wis.....	J. W. Bradley.....	Edward Bradley.....	R. B. Tweedy.....	Wm. T. Bradley.
25. Mineral Point & Northern.....	Chicago, Ill.....	Chas. W. McIlhon.....	David B. Jones.....	Thomas D. Jones.....	J. H. Janeway Jr.
26. Minneapolis, St. Paul & Sault Ste. M.....	Minneapolis, Minn.....	Thomas Lowry.....	Edmond Pennington.....	W. D. Washburn.....	W. L. Martin.
27. Northern Pacific.....	St. Paul, Minn.....	J. P. Morgan.....	Lewis Cass Ledyard.....	Howard Elliott.....	Chas. Steele.
28. Northwestern Coal R'y.....	Superior, Wis.....	M. H. Taylor.....	W. R. Woodford.....	H. H. Grace.....	C. E. Wales.
29. Robbins Railroad.....	Rhineland, Wis.....	F. S. Robbins.....	Chas. S. Chapman.....	Hattie L. McIndoe.....	R. D. Caldwell.
30. Stanley, Merrill & Phillips.....	Eau Claire, Wis.....	J. T. Barber.....	S. G. Moon.....	C. D. Moon.....	J. B. Galbraith.
31. Roddis Lumber & Veneer Co.....	Marshfield, Wis.....	W. H. Roddis.....	Hamilton Roddis.....	Sara L. Roddis.....	
32. Winona Bridge R'y Co.....	Chicago, Ill.....	W. W. Baldwin.....	Mark T. Cox.....	T. S. Howland.....	C. I. Sturges.
33. Superior & Southeastern.....	Grandview, Wis.....	Jno. E. Glover.....	Geo. C. Glover.....	L. E. Glover.....	L. A. Baker.
34. Wisconsin & Michigan.....	Chicago, Ill.....	J. N. Faithorn.....	Jno. R. Walsb.....	Jno. P. Hopkins.....	E. C. Ritscher.
35. Whitcomb & Morris.....	Morris, Wis.....	J. H. Jenkins.....	D. C. Buckstaff.....	Chas. Barber.....	H. J. Sprague.
36. Wisconsin Central.....	Milwaukee, Wis.....	W. L. Bull.....	W. A. Bradford Jr.....	H. F. Whitcomb.....	Howard Morris.

DIRECTORS AND OFFICERS OF ALL RAILWAYS DOING BUSINESS IN WISCONSIN.

Name of Company.	D.IRECTORS.				
1. Abbotsford & Northeastern.....	Wm. L. Erbach.....	Howard Greene.....	Nathan Decker.....	H. J. Wunderlich.....	
2. Annapee & Western.....	L. A. Karel.....				
3. Big Falls.....	H. W. Anthes.....				
4. Bayfield Transfer Ry. Co.....	B. K. Miller.....				
5. Chicago, Milwaukee & St. Paul.....	J. Ogden Armour.....	Fredrick Linton.....	Joseph Milbank.....	Samuel Spencer.....	Frank S. Bond.
6. Chicago & Northwestern.....	H. C. Frick.....	David P. Kimball.....	Marvin Hughitt.....	Frank Work.....	James Stillman.
7. Chicago, St. Paul, Minn. & Omaha.....	Thomas Wilson.....	David P. Kimball.....	Marvin Hughitt.....	John A. Humbird.....	
8. Chicago, Burlington & Quincy.....	Geo. B. Harris.....	Jas. J. Hill.....	Jas. N. Hill.....	John J. Mitchell.....	Chas. E. Perkins.
9. Chicago, Lake Shore & Eastern.....	A. F. Banks.....	K. K. Knapp.....	F. D. Raymond.....		
10. Illinois Central.....	Stuyvesant Fish.....	Edw. Harriman.....	John Jacob Astor.....	Chas. A. Peabody.....	John C. Welling.
11. Drummond & Southwestern.....	P. D. Rust.....				
12. Duluth, South Shore & Atlantic.....	Jas. O. Bloss.....	E. V. Skinner.....	W. F. Fitch.....	Chas. Drinkwater.....	Sir T. G. Shaughnessy
13. Duluth, Superior & Western Terminal.....	J. H. Gruber.....				
14. Eastern Railway Co. of Minnesota.....	D. M. Philbin.....				
15. Fairchild & Northeastern.....	Willard Foster.....				
16. Green Bay & Western.....	J. A. Jordan.....				
17. Iola & Northern.....	J. C. Thurman.....				
18. Kewaunee, Green Bay & Western.....	J. C. Thurman.....				
19. La Crosse & South Eastern.....	E. J. Tull.....				
20. Lake Superior Terminal & Transfer.....	Emerson Hadley.....	A. W. Trenholm.....			
21. Great Northern.....	Henry W. Cannon.....	Jas. J. Hill.....	William B. Dean.....	Samuel Thorne.....	Fdk. Weyerhaeuser.
22. Hillsboro & Northeastern.....	G. Weinstein.....				
23. Marinette, Tomahawk & Western.....	C. H. Grundy.....				
24. Mineral Point & Northern.....	Walter D. Main.....				
25. Minneapolis, St. Paul & Sault Ste. Marie.....	G. R. Newell.....	C. H. Pettit.....	Alfred H. Bright.....	E. A. Young.....	Sir W. C. Van Horne.
26. Northern Pacific.....	Geo. W. Perkins.....	John S. Kennedy.....	D. Willis James.....	Geo. F. Baker.....	William Sloane.
27. Northwestern Coal.....	C. P. White.....				
28. Robbins Railroad.....	Emma B. Robbins.....				
29. Stanley, Merrill & Phillips.....	F. H. L. Cotten.....				
30. Winona Bridge Ry. Co.....	J. A. Jordan.....				
31. Superior & Southeastern.....	H. C. Baker.....				
32. Wisconsin & Michigan.....	W. T. Abbott.....				
33. Wisconsin Central.....	Fred T. Gates.....	W. F. Vilas.....	Geo. M. Cumming.....	John Crosby Brown.....	Jas. C. Colgate.

31-R. R.

REPORT OF THE RAILROAD COMMISSION.

DIRECTORS AND OFFICERS OF ALL RAILWAYS DOING BUSINESS IN WISCONSIN—Continued.

Name of Company.	Directors—Continued.				
1. Chicago, Milwaukee & St. Paul	A. J. Earling	Charles W. Harkness	Herman S. LeRoy..	Henry H. Rogers	
2. Chicago & Northwestern	Oliver Ames	Zenas Crane	W. K. Vanderbilt	F. W. Vanderbilt	H. McK. Twombly.
3. Chicago, St. Paul, Minneapolis & O.	Norman B. Ream	Zenas Crane	W. K. Vanderbilt	F. W. Vanderbilt	H. McK. Twombly.
4. Chicago, Burlington & Quincy	Walther Luttsen	Samuel Thorne	Robert Walton Goelet		
5. Illinois Central	Geo. H. Church	Jno. W. Auchincloss	Sir W. C. Van Horne		
6. Duluth, South Shore & Atlantic	Sir T. G. Shaughnessy	R. B. Angus			
7. Minneapolis, St. P. & Sault Ste. Marie	Grant B. Schley	William P. Clough..	Jas. N. Hill	Amos T. French	Alex. S. Cochrane.
8. Northern Pacific	Gerald L. Hoyt	Geo. A. Fernald			
9. Wisconsin Central					

DIRECTORS AND OFFICERS OF ALL RAILWAYS DOING BUSINESS IN WISCONSIN—Continued.

NAME OF COMPANY.	Directors.	GENERAL OFFICERS.			
		President.	1st Vice-President.	2nd Vice-President.	3rd Vice-President.
1. Abbotsford & Northeastern		Fred Rietbrock	L. W. Halsey		
2. Ahnapee & Western		Edw. Decker	David Decker		
3. Big Falls R'y Co.		J. H. Wall	S. M. Wall		
4. Bayfield Transfer Ry		Geo. H. Noes	J. M. Smith		
5. Chicago, Milwaukee & St. Paul		A. J. Earling	E. W. McKenna	J. H. Hiland	
6. Chicago & Northwestern	Byron L. Smith*	Marvin Hughitt	E. E. Osborn	W. A. Gardner	H. R. McCullough.†
7. Chicago, St. Paul, Minneapolis & O.	Byron L. Smith	Marvin Hughitt	E. E. Osborn	J. T. Clark	
8. Chicago, Burlington & Quincy		Geo. L. Harris	D. Miller	D. Willard	
9. Chicago, Lake Shore & Eastern		A. F. Banks			
10. Illinois Central		Stuyvesant Fish	John C. Welling	J. T. Haraban	A. G. Hackstaff.
11. Drummond & Southwestern		F. W. Gilchrist	A. J. Rust		
12. Duluth, South Shore & Atlantic		Wm. F. Fitch	Sir T. G. Shaughnessy	Geo. H. Church	
13. Dunbar & Wausaukee		W. C. Culbertson	J. W. Wells		
14. Duluth, Superior & Western Term'l.		D. M. Philbin	J. A. Murphy		
15. Eastern Railway Co. of Minnesota		Louis W. Hill	R. I. Farrington		
16. Fairchild & Northeastern		N. C. Foster	E. J. Foster		
17. Green Bay & Western		S. S. Palmer	J. A. Jordan		
18. Iola & Northern		S. S. Palmer	J. A. Jordan		
19. Kewaunee, Green Bay & Western		S. S. Palmer	W. W. Cargill		
20. La Crosse & Southeastern		W. S. Cargill	H. C. Wood		
21. Lake Sup. Terminal & Trans. R'y Co.		D. M. Philbin	W. F. Fitch		
22. Great Northern		Jas. J. Hill	Louis W. Hill	R. I. Farrington	E. S. Nichols.‡
23. Hillsboro & Northeastern		E. Hammer	F. I. Pinch		
24. Marinette, Tomahawk & Western		R. B. Tweedy	Edward Bradley		
25. Mineral Point & Northern		Charles W. McIlhenn	David B. Jones		
26. Minneapolis, St. P. & Sault Ste. Marie		Thomas Lowry	Edmond Pennington	W. L. Martin	
27. Northern Pacific		Howard Elliott	Jas. N. Hill	J. M. Hannaford	C. M. Levey.
28. Northwestern Coal R'y	Payne Whitney	M. H. Taylor	C. E. Wales	W. R. Woodford	
29. Robbins Railroad		F. S. Robbins	Chas. S. Chapman		
30. Stanley, Merrill & Phillips		S. G. Moon	C. D. Moon		
31. Roddis Lbr. & Veneer Co		W. H. Roddis			
32. Winona Bridge R'y Co		W. W. Baldwin	J. A. Jordan		
33. Superior & Southeastern		Jno. E. Glover	Geo. C. Glover		
34. Wisconsin & Michigan		J. P. Hopkins	W. T. Abbott		
35. Whitcomb & Morris		J. H. Jenkins	D. C. Buckstaff		
36. Wisconsin Central		H. F. Whitcomb	Howard Morris		

* Cyrus H. McCormick, Chauncey Keep. † M. M. Kirkman, J. M. Whitman. ‡ B. C. Campbell.

DIRECTORS AND OFFICERS OF ALL RAILWAY OFFICERS DOING BUSINESS IN WISCONSIN.—Continued.

NAME OF COMPANY.	GENERAL OFFICERS.				
	Secretary.	Treasurer.	Chief Engineer.	General Solicitor, Attorney or Counsel.	Assistant Solicitor Attorney or Counsel.
1. Abbotsford & Northeastern.....	Thos. H. Gill.....	A. C. Rietbrock.....		L. W. Halsey.....	
2. Ahnapee & Western.....	Henry Fetzer.....				
3. Bayfield Transfer Ry.....	H. C. Hale.....			Geo. H. Noyes.....	
4. Chicago, Milwaukee & St. Paul.....	E. W. Adams.....	F. G. Ranney.....	D. J. Whittemore.....	Geo. R. Peck.....	Burton Hanson.....
5. Chicago & Northwestern.....	E. E. Osborn.....	R. H. Williams.....	E. C. Carter.....	Lloyd W. Bowers.....	
6. Chicago, St. P., Minneapolis & O.....	E. E. Woodman.....	R. H. Williams.....	C. W. Johnson.....	Thos. Wilson.....	J. B. Sheean.....
7. Chicago, Burlington & Quincy.....	T. S. Howland.....	T. S. Howland.....	T. E. Calvert.....	J. W. Blythe.....	C. M. Dawes.....
8. Chicago, Lake Shore & Eastern.....	F. D. Raymond.....	F. D. Raymond.....	A. Montzheimer.....	K. K. Knapp.....	W. D. Haynie.....
9. Drummond & Southwestern.....	F. H. Drummond.....	F. H. Drummond.....			
10. Duluth, South Shore & Atlantic.....	Jas. Clarke.....	E. W. Allen.....	V. D. Simar.....	A. B. Eldridge.....	A. E. Miller.....
11. Dunbar & Wausaukee.....	J. A. Culbertson.....	J. A. Culbertson.....			
12. Duluth, Superior & West'n Terminal.....	J. H. Gruber.....	E. Sawyer.....			
13. Eastern Railway Co. of Minnesota.....	E. Sawyer.....	E. Sawyer.....	A. H. Hogeland.....	R. A. Wilkinson.....	W. R. Begg.....
14. Fairchild & Northeastern.....	G. A. Foster.....	G. A. Foster.....			
15. Green Bay & Western.....	Mark T. Cox.....	Mark T. Cox.....			
16. Iola & Northern.....	Mark T. Cox.....	Mark T. Cox.....			
17. Kewaunee, Green Bay & Western.....	Mark T. Cox.....	Mark T. Cox.....			
18. La Crosse & Southeastern.....	Jas. B. Taylor.....	Jas. B. Taylor.....	Geo. P. Bradish.....	W. S. Burrows.....	
19. Lake Superior Term. & Trans. Ry Co.....	C. P. Brown.....	H. H. Parkhouse.....		J. A. Murphy.....	
20. Great Northern.....	E. T. Nichols.....	E. Sawyer.....	A. H. Hogeland.....	R. A. Wilkinson.....	W. R. Begg.....
21. Hillsboro & Northeastern.....	John A. Cash.....	F. I. Pinch.....			
22. Illinois Central.....	A. G. Hackstaff.....	E. T. H. Gibson.....	A. S. Baldwin.....	J. M. Dickinson.....	
23. Marinette, Tomahawk & Western.....	J. W. Froelich.....	R. B. Tweedy.....			
24. Mineral Point & Northern.....	Walter D. Main.....	Walter D. Main.....			
25. Minneap., St. P. & Sault Ste. Marie.....	C. F. Clement.....	C. F. Clement.....	Thos. Greene.....	A. H. Bright.....	H. B. Dike.....
26. Northern Pacific.....	Geo. H. Earl.....	Chas. A. Clark.....	W. L. Darling.....	Francis Lynde Stetson.....	Charles W. Bunn.....
27. Northwestern Coal Ry Co.....	P. S. Elwell.....	P. S. Elwell.....			
28. Robbins Railroad.....	Hattie L. McIndoe.....	F. S. Robbins.....			
29. Stanley, Merrill & Puillips.....	F. H. L. Cotten.....	J. T. Carber.....			
30. Roddis Lumber & Veneer Co.....	Hamilton Roddis.....	Hamilton Roddis.....			
31. Witona Bridge Ry Co.....	H. W. Weiss.....	T. S. Howland.....			
32. Superior & Southeastern.....	Severt Jacobson.....	L. A. Baker.....	G. W. Carrington.....		
33. Wisconsin & Michigan.....	B. Shaw.....	B. Shaw.....	B. C. Gowen.....	W. T. Abbott.....	
34. Whitcomb & Morris.....	H. J. Sprague.....	H. J. Sprague.....			
35. Wisconsin Central.....	Charles M. Morris.....	W. R. Hancock.....	Chas. N. Kalk.....	Edward W. Sheldon.....	Thos. H. Gill.....

DIRECTORS AND OFFICERS OF ALL RAILWAYS DOING BUSINESS IN WISCONSIN—Continued.

Name of Company.	GENERAL OFFICERS.				
	Comptroller or Auditor.	General Manager.	General Freight Agt. or Freight Traffic Manager.	General Passenger Agent or Passenger Traffic Manager.	General Superintendent.
1. Abbotsford & Northeastern	A. C. Rietbrock	Fred Rietbrock .....	.....	David Decker	Wm. L. Erbach
2. Ahnapee & Western	David Decker	David Decker .....	.....	.....	.....
3. Bayfield Transfer Co. ....	.....	H. C. Hale .....	.....	.....	.....
4. Chicago, Milwaukee & St. Paul	H. G. Haugan	W. J. Underwood	E. S. Keeley	F. A. Miller	D. L. Bush
5. Chicago & Northwestern	J. B. Redfield	R. H. Aishton	M. Hughitt, Jr	W. B. Kniskern	W. E. Morse
6. Chicago, St. P., Minneapolis & O	L. A. Robinson	A. W. Trenholm	H. M. Pearce	T. W. Teasdale	S. G. Strickland
7. Chicago, Burlington & Quincy	C. I. Sturges	J. M. Gruber	G. H. Crosby	P. S. Eustis	H. D. Judson
8. Chicago, Lake Shore & Eastern	F. W. Sutton	R. B. Campbell	F. E. Learned .....	.....	A. H. Westfall
9. Drummond & Southwestern .....	.....	F. H. Drummond .....	.....	.....	.....
10. Duluth, South Shore & Atlantic	A. E. Delf .....	.....	W. W. Walker	Mart Adson	C. E. Lyttle
11. Dunbar & Wausauke	W. R. Godshall .....	.....	.....	.....	G. M. Maxson
12. Duluth, Superior & West Terminal	R. I. Farrington .....	.....	.....	.....	.....
13. Eastern Railway Co. of Minnesota	Jno. G. Draw .....	.....	.....	.....	.....
14. Fairchild & Northeastern	C. M. Sherwood	N. C. Foster	C. M. Sherwood .....	.....	Willard Foster
15. Green Bay & Western	J. C. Thurman	J. A. Jordan	W. C. Modisett	W. C. Modisett	F. B. Seymour
16. Iola & Northern	J. C. Thurman	J. A. Jordan	W. C. Modisett	W. C. Modisett	F. B. Seymour
17. Kewaunee, Green Bay & Western	J. C. Thurman	J. A. Jordan	W. C. Modisett	W. C. Modisett	F. B. Seymour
18. La Crosse & Southeastern	S. J. Lennon	P. Valier	A. L. Eidemiller	A. L. Eidemiller	P. Valier
19. Lake Superior Term. & Trans. R'y .....	.....	.....	.....	.....	C. P. Brown
20. Great Northern	John G. Drew	F. E. Ward	W. W. Broughton	A. L. Craig	G. T. Slade
21. Hillsboro & Northeastern	J. A. Cash	W. H. H. Cash .....	.....	.....	.....
22. Illinois Central	Con. F. Krebs	L. G. Rawn	T. J. Hudson	A. H. Hanson	T. B. Harriman
23. Marinette, Tomahawk & Western .....	.....	.....	.....	C. H. Grundy	C. H. Grundy
24. Mineral Point & Northern	J. E. Aylward	W. A. Jones .....	.....	.....	.....
25. Minneap., St. P., & Sault Ste. Marie	C. W. Gardner	Edmond Pennington	W. L. Martin	W. R. Calloway	G. R. Huntington
26. Northern Pacific	H. A. Gray	H. J. Horn	J. G. Woodworth	A. M. Cleland	F. W. Gilbert
27. Northwestern Coal R'y Co.	W. H. Godwin	E. P. White .....	.....	.....	Chas. Gallagher
28. Bobbins Railroad	M. Germond	F. S. Robbins .....	.....	.....	R. D. Caldwell
29. Stanley, Merrill & Phillips	F. H. L. Cotten	K. C. Morehouse	K. C. Morehouse .....	.....	.....
30. Roddis Lumber & Veneer Co .....	.....	G. W. Campbell .....	.....	.....	.....
31. Winona Bridge R'y Co. ....	.....	.....	.....	.....	D. Cunningham
32. Superior & Southeastern .....	.....	.....	.....	L. E. Glover	F. W. Young
33. Wisconsin & Michigan	M. F. Schulze .....	.....	.....	J. C. Fitzgerald	S. N. Harrison
34. Whitcomb & Morris .....	.....	.....	.....	.....	.....
35. Wisconsin Central	Robert Toombs .....	.....	Burton Johnson	J. C. Pond	E. F. Potter

To the Hon John J. Kempf, State Treasurer: Herewith find statement showing cost debtedness, total mileage of railroads within the State of Wisconsin, all as reported to and being according to the provisions of section 1795, Revised Statutes of Wisconsin for

Name of Company.	Total cost of railroad in Wisconsin, Dec. 31, 1905.	Total gross receipts of railroad in Wisconsin, year ending Dec. 31, 1905.	Total net earnings of railroad in Wisconsin, year ending Dec. 31, 1905.	Interest bearing indebtedness of railroad in Wisconsin, year ending Dec. 31, 1905.
1. Abbotsford & Northeastern...	\$232,000 00	\$32,044 60	\$6,729 51	\$120,000 00
2. Ahnapee & Western	542,048 04	63,363 53	⁵ 10,242 86	612,000 00
3. Big Falls Railway Co.....		6,799 92	⁶ 633 25	5,000 00
4. Bayfield Transfer.....	3,407,782 99	3,447 98	² 2,810 44	1,655,865 10
5. Chicago, Milwaukee & St. P.....	60,469,561 72	15,681,878 32	5,959,092 70	30,168,146 25
6. Chicago & Northwestern.....	155,903,656 11	16,763,523 36	⁷ 17,058,478 52	¹³ 8,942,538 01
7. C., St. P., M & O.....	128,253,141 81	5,586,995 55	²¹ 6,641,933 96	¹² 2,567,839 18
8. Chicago, Burlington & Quincy	²¹² 12,155,873 60	2,675,289 02	907,682 54	²⁴ 5,536,100 66
9. Chicago, Lake Shore & E.....		90,709 51	⁶ 117,860 60	167,075 71
10. Chicago & Lake Superior.....	58,483 77	5,233 95		
11. Illinois Central.....	3,231,824 22	109,736 48	⁵⁴ 5,817 94	1,725,139 00
12. Chippewa River & Northern..	25,000 00	10,230 55	6,272 22	
13. Chi., Harvard & Geneva Lake	164,086 53	11,921 07	1,264 61	76,250 00
14. Chippewa Valley & Northern.	110,314 98	9,942 72		
15. Drummond & Southwestern..	203,556 79	14,292 09	⁵ 5,814 55	50,000 00
16. Duluth, S. S. & Atlantic.....		308,999 11	8,215 30	
17. Dunbar & Wausaukee.....	71,033 02	22,193 94	8,665 31	
18. Fairchild & Northeastern.....	218,241 56	31,009 14	11,812 60	218,241 56
19. Great Northern.....		1,134,385 99		
20. Green Bay & Western.....	10,100,000 00	583,519 93	34,012 81	
21. Hawthorne, Nebagamon & S.....	151,290 66	49,612 65	⁵⁴ 4,389 60	
22. Hazelhurst & Southeastern.....	108,634 91	22,690 10	11,358 41	
23. Hillsboro & Northeastern.....	60,000 00	10,868 17	4,200 00	14,000 00
24. Iola & Northern.....	71,400 00	6,476 65	1,314 38	
25. Kewaunee, Green Bay & West.	1,072,950 00	110,338 11	12,691 03	408,000 00
26. John R. Davis Lumber Co., Logging Ry.....	30,750 00	1,606 02		
27. L. S. Term. & Trans. R'y Co.....	314,053 58	14,507 50	⁵⁷ 3,686 48	195,000 00
28. Mattouen Railway Co.....	85,000 00	26,846 02	⁵⁶ 6,753 06	85,000 00
29. Marinette, Tomahawk & West	533,603 00	57,569 79	⁵¹⁹ 2,263 51	414,758 93
30. Minneap. St Paul & Ashland	² 500,000 00	56,107 32	⁵¹⁷ 7,988 98	320,000 00
31. M., St. P. & Sault Ste. Marie.	15,404,446 29	1,903,110 67	935,258 76	9,947,558 06
32. Northern Pacific.....		565,454 56	92,471 97	
33. Northwestern Coal R'y Co....	237,663 13	19,748 64	1,051 12	220,000 00
34. Oshkosh Trans. Co., op. by C & N. W.....	70,000 00	11,261 00	6,993 68	
35. Robbins Railway Co.....	34,676 32	25,251 12		
36. Stanley, Merrill & Phillips.....	733,493 20	128,002 99	⁵¹² 12,001 78	538,428 35
37. Winona Bridge R'y Co.....	413,808 75	13,339 73	9,723 93	201,319 68
38. Wisconsin & Michigan.....	2,168,924 44	176,747 65	¹¹⁵ 15,036 45	1,470,719 71
39. Whitcomb & Morris.....	11,064 40	3,439 36	⁵⁶⁹⁸ 37	
40. Wisconsin Central.....	47,487,503 07	5,836,877 05	2,070,258 79	24,566,561 32
41. Wisconsin Western.....	521,400 00	72,127 18	32,388 21	
42. Mineral Point & Northern....	955,047 81	28,978 04	⁴ 533,286 13	450,000 00
43. La Crosse & Southeastern....	771,342 08	40,914 77	16,337 36	750,000 00
44. Laona & Northern.....	106,962 98	17,300 01	4,873 23	44,176 69
45. Marathon County Railway....	32,700 00	8,486 70		8,430 28
46. Superior & Southeastern.....	46,142 78	24,952 92	6,212 02	
47. Bayfield, Superior & Minneap.				
Totals.....	\$247,069,462 54	\$52,378,211 38	\$18,483,218 97	\$130,478,168 49

¹ Wisconsin proportion divided on *miles owned* basis.

² Estimated.

³ Wisconsin proportion of operating expenses divided on *train mileage* basis.

⁴ Based on cost of operation alone.

⁵ Deficit.

of each railroad, total gross receipts, total net earnings, the total interest bearing in this department by the companies named below as of the year ending December 31, 1905, 1898.

Interest accrued upon indebtedness of railroads in Wisconsin, year ending Dec. 31, 1905	Amount of interest paid upon such indebtedness in Wisconsin, year ending Dec. 31, 1905	Total no. of miles of operated railroad in Wis., Dec. 31, 1905	Average amount earned per mile in Wis., year ending Dec. 31, 1905.	Rate of taxation of each railroad, year ending Dec. 31, 1905.	Amount of tax or license fee for year ending Dec. 31, 1905.	No.
86,720 00	\$5,040 00	15.16	\$2,113 75	3 per cent.	\$961 34	1
30,600 00	20,400 00	34.00	1,863 66	\$5 per mile & 2½ per cent.	479 09	2
322 00	322 00	21.00	323 80	\$5 per mile	105 00	3
83,152 97	364 51	9.86	352 33	\$5 per mile	49 30	4
1,461,018 48	1,152,295 65	1,725.42	9,088 73	4 per cent.	627,275 13	5
11,903,195 90	1,916,854 59	1,798.14	9,322 70	4 per cent.	670,540 93	6
1709,038 36	1710,524 16	758.28	7,367 98	4 per cent.	223,479 82	7
.....	2197,080 22	222.57	12,019 99	4 per cent.	107,011 56	8
8,741 14	8,689 56	18.60	4,876 85	4 per cent.	3,628 23	9
.....	.....	3.25	1,610 45	\$5 per mile & 2½ per cent	25 22	10
86,256 95	86,256 95	91.31	1,201 80	\$5 per mile	456 55	11
.....	.....	25.00	409 22	\$5 per mile	125 00	12
3,125 00	201 91	5.50	2,167 46	3 per cent.	357 63	13
.....	.....	11.00	903 88	\$5 per mile	55 00	14
3,000 00	3,000 00	8.18	1,747 19	\$5 per mile & 2½ per cent	91 45	15
156,112 12	156,112 12	114.21	2,705 53	3½ per cent.	10,814 97	16
.....	.....	13.50	1,644 00	\$5 per mile & 2½ per cent	116 10	17
.....	11,125 66	33.00	939 67	\$5 per mile	165 00	18
.....	.....	39.16	28,967 98	4 per cent.	45,375 44	19
.....	.....	225.00	2,593 42	3½ per cent.	20,423 20	20
.....	.....	33.50	1,626 64	\$5 per mile & 2½ per cent.	249 07	21
.....	.....	11.00	2,062 73	3 per cent.	680 70	22
800 00	800 00	4.60	2,362 64	3 per cent.	326 04	23
.....	.....	4.70	1,378 01	\$5 per mile	23 50	24
20,400 00	20,400 00	36.70	3,007 85	4 per cent.	4,415 52	25
.....	.....	20.50	783 42	\$5 per mile	102 50	26
11,700 00	11,700 00	16.33	888 39	\$5 per mile	81 65	27
5,900 00	.....	29.36	914 37	\$5 per mile	146 80	28
20,625 31	20,141 79	43.77	1,315 28	\$5 per mile	218 85	29
16,000 00	.....	40.50	1,385 36	\$5 per mile	202 50	30
385,073 16	385,073 16	355.66	5,350 92	4 per cent.	76,124 42	31
.....	.....	145.42	3,888 45	4 per cent.	22,618 18	32
1,833 33	9,166 67	8.00	2,468 58	3 per cent.	592 46	33
.....	.....	4.55	2,474 93	3 per cent.	337 83	34
.....	.....	28.00	501 82	\$5 per mile	518 54	35
25,094 11	33,059 72	66.32	1,930 08	Tax com. assessment	3,840 09	36
.....	10,065 98	.54	24,758 76	2 per cent.	267 39	37
32,380 00	5,105 32	91.89	1,923 47	\$5 per mile & 2½ per cent	1,432 26	38
.....	.....	6.00	573 32	\$5 per mile	30 00	39
1,013,687 65	1,012,125 18	841.29	6,938 00	4 per cent.	233,475 08	40
.....	.....	51.97	1,387 36	\$5 per mile	259 85	41
14,258 34	10,508 34	30.60	947 00	\$5 per mile	153 00	42
.....	.....	42.23	964 12	\$5 per mile	211 15	43
2,716 04	2,716 04	13.00	1,330 70	\$5 per mile	65 00	44
307 19	307 19	15.50	547 53	\$5 per mile	77 50	45
.....	.....	15.87	1,572 33	\$5 per mile & 2½ per cent	108 05	46
.....	.....	6.00	.....	\$5 per mile	30 00	47
\$6,002,057 05	\$5,789,436 72	7,135 94	\$7,340 06		\$2,058,124 04	

¹ Wisconsin proportion divided on miles owned basis.

² Estimated.

ITEMIZED STATEMENT OF EARNINGS OF WISCONSIN ROADS

As Reported to the Railroad Commission for the Year Ending December 31, 1905, Chargeable to Wisconsin.

Name of Company.	Gross freight receipts.	Gross passenger receipts.	Gross mail receipts.	Gross express receipts.	Gross receipts extra baggage and storage.
1. Abbotsford & Northeastern.....	\$26,968 80	\$2,926 36	\$650 98	\$60 00	\$2 65
2. Ahnapee & Western.....	30,141 77	27,727 03	3,043 73	2,092 97	358 03
3. Big Falls Railway Co.....	6,225 30	291 50	285 12		
4. Bayfield Transfer.....	2,376 50	155 05	42 43		
5. Chicago, Milwaukee & St. Paul.....	11,128,647 94	3,248,429 41	630,196 90	325,927 39	53,047 40
6. Chicago & Northwestern.....	12,280,805 89	3,734,476 91	326,643 65	290,083 33	70,370 49
7. Chicago, St. Paul, Minneapolis & Omaha.....	3,898,164 51	1,449,549 03	94,419 92	109,614 08	26,161 68
8. Chicago, Burlington & Quincy.....	2,149,930 80	451,858 10	36,107 04	14,086 80	8,078 69
9. Chicago, Lake Shore & Eastern.....	48,590 49				
10. Chicago & Lake Superior.....	2,984 38	1,732 75	160 00	315 17	41 65
11. Illinois Central.....	55,323 83	35,888 93	6,548 50	9,776 37	818 83
12. Chippewa River & Northern.....	9,881 70	348 85			
13. Chicago, Harvard & Geneva Lake.....	5,123 62	6,556 72	240 72		
14. Chippewa Valley & Northern.....	9,942 72				
15. Drummond & Southwestern.....	14,292 09				
16. Duluth, South Shore & Atlantic.....	180,592 64	105,269 30	9,893 38	3,804 25	740 60
17. Duluth, Superior & Western Terminal Co.....					
18. Dunbar & Wausaukee.....	20,883 42	810 52			
19. Fairchild & Northeastern.....	25,856 53	3,544 63	1,415 35	89 28	103 35
20. Great Northern.....	1,009,209 89	84,245 15	4,250 72	4,280 27	1,065 84
21. Green Bay & Western.....	436,137 00	120,973 76	17,676 84	6,098 23	2,227 10
22. Glenwood & Northern.....					
23. Hawthorne, Nebagamon & Superior.....	47,685 15	195 50			
24. Hazelhurst & Southeastern.....	22,165 42	340 45		184 23	
25. Holmes & Son Railway.....					
26. Iola & Northern.....	4,664 56	1,532 04	225 28	54 77	
27. Kewaunee, Green Bay & Western.....	80,450 93	24,964 58	3,366 64	1,014 71	572 25
28. John R. Davis Lumber Co., Logging Ry.....	1,606 02				
29. Lake Superior Terminal & Transfer Ry. Co.....					
30. Mattoon Railway Co.....					219 60
31. Marinette, Tomahawk & Western.....	24,725 48	1,350 91			
32. Minneapolis, St. Paul & Ashland.....	51,390 02	5,232 45	748 80	175 32	
33. Minneapolis, St. Paul & Sault Ste. Marie.....	55,080 32	1,026 90			
	1,488,867 28	310,972 51	48,176 34	30,412 47	3,671 65

34. Northern Pacific	378,231 42	159,986 83	6,708 15	15,450 52	2,167 94
35. Northwestern Coal Ry. Co.	19,748 64				
36. Oshkosh Transportation Co., operated by C. & N. W.	11,261 00				
37. Robbins Railway Co.	25,251 12				
38. Stanley, Merrill & Phillips	119,199 53	6,383 46		37 59	
39. West Range (not operated)					
40. Winona Bridge Ry. Co.					
41. Wisconsin & Michigan	153,452 19	21,335 01	1,480 20	389 28	90 97
42. Whitcomb & Morris	3,439 36				
43. Wisconsin Central	4,420,000 51	1,164,450 46	107,412 29	102,268 33	13,374 46
44. Wisconsin Western	47,366 21	13,844 91	3,352 74	5,962 92	375 22
45. Hillsboro & Northeastern	7,092 58	3,115 39	215 40	439 80	
46. La Crosse & Southeastern	13,585 19	26,034 57	45 05	1,249 96	
47. Laona & Northern	16,977 21	322 80			
48. Marathon County Ry.	8,486 70				
49. Mineral Point & Northern	24,760 66	3,925 58		225 84	18 00
50. Superior & Southeastern	24,952 92				
Total	\$38,392,488 24	\$11,019,798 35	\$1,303,006 17	\$924,103 88	183,504 40

ITEMIZED STATEMENT OF EARNINGS OF WISCONSIN ROADS.—Continued.

As Reported to the Railroad Commission for the Year Ending December 31, 1905, Chargeable to Wisconsin.

Name of Company.	Gross receipts, other items.	Gross receipts, stock yards.	Gross receipts, elevators.	Gross receipts, store houses.	Net receipts, land department.
1. Abbotsford & Northeastern	\$81 61	\$1,354 20			
2. Ahnapee & Western					
3. Big Falls Railway Co.					
4. Bayfield Transfer					
5. Chicago, Milwaukee & St. Paul	*309,296 82	†22,418 11	†12,672 32		\$680 15
6. Chicago & Northwestern	61,143 09				
7. Chicago, St. Paul, Minneapolis & Omaha	13,492 29				
8. Chicago, Burlington & Quincy	15,046 89				
9. Chicago, Lake Shore & Eastern					
10. Chicago & Lake Superior					
11. Illinois Central	1,380 02				
12. Chippewa River & Northern					
13. Chicago, Harvard & Geneva Lake					
14. Chippewa Valley & Northern					
15. Drummond & Southwestern					
16. Duluth, South Shore & Atlantic	7,391 54				
17. Duluth, Superior & Western Terminal Co.					
18. Dunbar & Wausaukee	500 00				
19. Fairchild & Northeastern					
20. Great Northern	6,967 72				
21. Green Bay & Western	407 00				
22. Glenwood & Northern					
23. Hawthorne, Nebagamon & Superior					
24. Hazelhurst & Southeastern					
25. Holmes & Son Railway					
26. Iola & Northern					
27. Kewaunee, Green Bay & Western	19 00				
28. John R. Davis Lumber Co., Logging Ry.					
29. Lake Superior Terminal & Transfer Ry. Co.	1,316 18				
30. Mattoon Railway Co.	769 63				
31. Marinette, Tomahawk & Western	23 20				
32. Minneapolis, St. Paul & Ashland					
33. Minneapolis, St. Paul & Sault Ste. Marie	19,027 06				

† Not included in gross earnings subject to taxation, being assessed locally.

* Including rents, not taxable, \$13,667.54.

34. Northern Pacific	2,909 70			
35. Northwestern Coal Ry. Co.....				
36. Oshkosh Transportation Co., operated by C. & N. W.				
37. Robbins Railway Co.....				
38. Stanley, Merrill & Phillips	640 91			
39. West Range, (not operated)				
40. Winona Bridge Ry. Co.....	13,369 73			
41. Wisconsin & Michigan				
42. Whitcomb & Morris				
43. Wisconsin Central	14,368 01			110,498 64
44. Wisconsin Western	1,527 18			
45. Hillsboro & N. E.....		5 00		
46. La Crosse & S. E.....				
47. Laona & Northern				
48. Marathon County Ry.....				
49. Mineral Point & Nor.....	47 96			
50. Superior & S. E.....				
Total	\$474,725 54	\$23,772 31	\$12,672 32	\$111,173 79

ITEMIZED EARNINGS, WISCONSIN, 1905.—Continued.

Name of Company.	Gross amount received or charged for switching.	Gross amount expended for switching.	Gross amount received or charged for car mileage.	Gross amount expended for car mileage.	Gross amount received or charged for rentals of yards, tracks and terminals.	Gross amount of interest or dividends received on bonds owned.
1. Abbotsford & Northeastern						
2. Ahnapee & Western						
3. Big Falls Railway Co.						
4. Bayfield Transfer					\$374 00	
5. Chicago, Milwaukee & St. Paul					*106,844 17	1,530 79
6. Chicago & Northwestern	\$174,228 52	\$231,874 09	\$297,693 24	\$327,098 14		
7. Chicago, St. Paul, Minneapolis & Omaha	28,612 49	1,426 87	227,768 95	188,380 65	7,448 02	
8. Chicago, Burlington & Quincy	180 70	2,073 00		20,742 28		
9. Chicago, Lake Shore & Eastern	40,095 00		2,024 02			
10. Chicago & Lake Superior						
11. Illinois Central	506 00					
12. Chippewa River & Northern						
13. Chicago, Harvard & Geneva Lake						
14. Chippewa Valley & Northern						
15. Drummond & Southwestern						
16. Duluth, South Shore & Atlantic		2,055 74		3,894 42		
17. Duluth, Superior & Western Terminal Co.						
18. Dunbar & Wausaukee						
19. Fairchild & Northeastern	373 00	24 00	10 82	201 10		
20. Great Northern	19,535 74	22,854 27	1,042 89	103 86	314 65	
21. Green Bay & Western						
22. Glenwood & Northern						
23. Hawthorne, Nebagamon & Superior	1,752 00			253 02		
24. Hazelhurst & Southeastern						
25. Holmes & Son Railway						
26. Iola & Northern						
27. Kewaunee, Green Bay & Western						
28. John R. Davis Lumber Co., Logging Ry.						
29. Lake Superior Terminal & Transfer Ry. Co.	12,971 72					
30. Mattoon Railway Co.						

31. Marinette, Tomahawk & Western		58 38		126 01			
32. Minneapolis, St. Paul & Ashland		1,181 00					
33. Minneapolis, St. Paul & Sault Ste. Marie.....							
34. Northern Pacific							
35. Northwestern Coal Ry. Co.							
36. Oshkosh Transportation Co., operated by C. & N. W.							
37. Robbins Railway Co.							
38. Stanley, Merrill & Phillips	1,741 50	246 00					
39. West Range, (not operated)							
40. Winona Bridge Ry. Co.							
41. Wisconsin & Michigan	11,019 42	8,265 08	9,737 23				
42. Whitcomb & Morris							
43. Wisconsin Central	693 11	6,010 26	232,347 40	222,867 70	5,523 29		2,656 37
44. Wisconsin Western				2,993 51	*259 92		
45. Hillsboro & N. E.							
46. La Crosse & S. E.							
47. Laona & Northern							
48. Marathon County Ry.							
49. Mineral Pt. & Nor.							
50. Superior & S. E.							
Total	\$291,704 20	\$276,068 69	\$770,624 55	\$766,660 69	\$*95,306 13		\$4,187 16

* Paid in excess of receipts.

ITEMIZED EARNINGS, WISCONSIN, 1905.—Continued.

Name of Company.	Gross amount of interest on stock owned.	Gross amount of interest on deposits.	Gross amount of miscellaneous income.	Gross amount of interest and exchange received from loans and discounts	Repayments, overcharge to shippers and other deductions from freight earnings.	Tickets redeemed and other deductions from passenger earnings.
1. Abbotsford & Northeastern.....		\$26,968 80				
2. Ahnapee & Western					\$502 42	\$63 81
3. Big Falls Railway Co.....						
4. Bayfield Transfer						
5. Chicago, Milwaukee & St. Paul	\$18,250 46	\$43,139 24	\$4,419 76			
6. Chicago & Northwestern					69,515 49	7,891 26
7. Chicago, St. Paul, Minneapolis & Omaha						
8. Chicago, Burlington & Quincy						
9. Chicago, Lake Shore & Eastern						
10. Chicago & Lake Superior					3,706 86	1,275 84
11. Illinois Central						
12. Chippewa River & Northern						
13. Chicago, Harvard & Geneva Lake.....		10,247 23				
14. Chippewa Valley & Northern						
15. Drummond & Southwestern						
16. Duluth, South Shore & Atlantic		1,228 40	79 00		3,387 20	172 92
17. Duluth, Superior & Western Terminal Co.....						
18. Dunbar & Wausaukee					137 58	
19. Fairchild & Northeastern						
20. Great Northern			3,463 12			
21. Green Bay & Western						
22. Glenwood & Northern						
23. Hawthorne, Nebagamon & Superior						
24. Hazelhurst & Southeastern					199 51	
25. Holmes & Son Railway						
26. Iola & Northern						
27. Kewaunee, Green Bay & Western						
28. John R. Davis Lumber Co., Logging Ry.....						
29. Lake Superior Terminal & Transfer Ry. Co.....						
30. Mattoon Railway Co.....						
31. Marinette, Tomahawk & Western						

32. Minneapolis, St. Paul & Ashland							
33. Minneapolis, St. Paul & Sault Ste. Marie				812 36			
34. Northern Pacific					2,775 26		307 00
35. Northwestern Coal Ry. Co.							
36. Oshkosh Transportation Co.							
37. Robbins Railway Co.							
38. Stanley, Merrill & Phillips					316 80		
39. West Range, (not operated)							
40. Winona Bridge Ry. Co.							
41. Wisconsin & Michigan							
42. Whitcomb & Morris							
43. Wisconsin Central	18,472 06	3,255 40	34,966 00		95,419 66		4,256 17
44. Wisconsin Western							
45. Hillsboro & N. E.							
46. La Crosse & S. E.							
47. Laona & Northern					374 71		
48. Marathon County Ry.							
49. Mineral Point & Nor.					64 16		
50. Superior & S. E.							
Total	\$18,250 46	\$62,839 70	\$11,217 28	\$35,812 05	\$176,399 65		\$13,962 03

ITEMIZED STATEMENT OF EARNINGS OF WISCONSIN ROADS AS REPORTED TO RAILROAD COMMISSION FOR YEAR
ENDING DECEMBER 31, 1905, CHARGEABLE TO WHOLE LINE.

Name of Company.	Gross freight receipts.	Gross passenger receipts.	Gross mail receipts.	Gross express receipts.	Gross receipts, extra baggage and storage.
1. Abbotsford & Northeastern.....	\$26,968 80	\$2,926 36	\$650 98	\$60 00	\$2 65
2. Ahnapee & Western.....	30,141 77	27,727 03	3,043 73	2,092 97	358 03
3. Big Falls Railway Co.....	6,223 30	291 50	285 12		
4. Bayfield Transfer.....	2,376 50	155 05	42 43		
5. Chicago, Milwaukee & St. Paul.....	37,729,083 43	10,571,620 91	1,659,932 77	1,062,940 48	188,925 14
6. Chicago & Northwestern.....	42,229,491 18	13,706,071 67	1,465,860 63	1,098,747 29	218,205 17
7. Chicago, St. Paul, Minneapolis & Omaha.....	8,639,875 90	3,263,354 64	268,591 62	226,220 29	58,990 63
8. Chicago, Burlington & Quincy.....	47,617,639 76	15,199,267 91	2,303,930 86	1,348,596 82	240,262 41
9. Chicago, Lake Shore & Eastern.....	3,934,385 66				
10. Chicago & Lake Superior.....	2,984 38	1,732 75	160 00	315 17	41 65
11. Illinois Central.....	32,932,547 26	9,614,433,57	906,288 71	1,160,761 21	166,108 88
12. Chippewa River & Northern.....	9,881 70	348 85			
13. Chicago, Harvard & Geneva Lake.....	10,247 23	13,113 45	481 41		
14. Chippewa Valley & Northern.....	9,942 72				
15. Drummond & Southwestern.....	14,292 09				
16. Duluth, South Shore & Atlantic.....	1,863,167 53	900,869 16	60,800 07	44,171 46	10,924 95
17. Duluth, Superior & Western Terminal Co.....					
18. Dunbar & Wausaukee.....	20,883 42	810 52			
19. Fairchild & Northeastern.....	25,856 53	3,544 63	1,415 35	89 28	103 35
20. Great Northern.....	32,002,325 92	8,008,178 94	980,420 54	508,827 17	105,397 15
21. Green Bay & Western.....	437,502 06	122,349 45	17,795 47	6,139 15	2,227 10
22. Glenwood & Northern.....					
23. Hawthorne, Nebagamon & Superior.....	47,665 15	195 50			
24. Hazelhurst & Southeastern.....	22,165 42	340 45		184 23	
25. Holmes & Son Railway.....					
26. Iola & Northern.....	4,664 56	1,532 04	225 28	54 77	
27. Kewaunee, Green Bay & Western.....	80,450 93	24,964 58	3,366 64	1,014 71	572 25
28. John R. Davis Lumber Co., Logging R. R.....	1,606 02				
29. Lake Superior Terminal & Transfer Ry. Co.....					219 60
30. Mattoon Railway Co.....	24,725 48	1,350 91			
31. Marinette, Tomahawk & Western.....	51,390 02	5,232 45	748 80	175 32	
32. Minneapolis, St. Paul & Ashland.....	55,080 32	1,026 90			
33. Minneapolis, St. Paul & Sault Ste. Marie.....	7,432,638 67	2,155,385 39	235,715 79	150,388 55	24,469 77
34. Northern Pacific.....	39,837,795 28	13,043,713 70	911,259 51	889,602 79	181,633 69
35. Northwestern Coal Ry. Co.....	19,748 64				

36. Oshkosh Transportation Co.....	11,261 00				
37. Robbins Railway Co.....	25,251 12				
38. Stanley, Merrill & Phillips.....	119,199 53	6,383 46		37 59	
39. West Range (not operated).....					
40. Winona Bridge Ry. Co.....					
41. Wisconsin & Michigan.....	207,784 48	37,577 58	2,588 16	600 00	117 00
42. Whitcomb & Morris.....	3,439 36				
43. Wisconsin Central.....	5,235,756 44	1,444,682 46	127,651 18	124,691 21	16,546 36
44. Wisconsin Western.....	47,366 21	13,844 91	3,052 74	5,962 92	373 23
45. Hillsboro & Northeastern.....	7,092 58	3,115 39	215 40	439 80	
46. La Crosse & Southeastern.....	13,585 19	26,034 57	45 05	1,249 96	
47. Laona & Northern.....	16,977 21	322 80			
48. Marathon County Ry.....	8,486 70				
49. Mineral Point & Northern.....	24,760 66	3,925 58		225 84	18 00
50. Superior & Southeastern.....	24,952 92				
Total	\$260,919,661 03	\$78,206,474 99	\$8,954,568 29	\$6,633,598 98	\$1,215,497 00

32—R. R.

ITEMIZED STATEMENT OF EARNINGS—Continued.

As reported to the railroad commission for the year ending Dec. 31, 1905, charged to whole line—Continued.

Name of Company.	Gross receipts, other items.	Gross receipts, stock yards.	Gross receipts, elevators.	Gross receipts, store houses.	Net receipts, land department.
1. Abbotsford & Northeastern.....	\$81 61	\$1,354 20			
2. Ahnapee & Western.....					
3. Big Falls Railway Co.....					
4. Bayfield Transfer.....					
5. Chicago, Milwaukee & St. Paul.....	1,046,012 09	22,418 11	\$28,683 49		\$2,748 07
6. Chicago & Northwestern.....	348,180 32				
7. Chicago, St. Paul, Minneapolis & Omaha.....	48,354 28				78,658 01
8. Chicago, Burlington & Quincy.....	1,781,100 09				18,874 45
9. Chicago, Lake Shore & Eastern.....					
10. Chicago & Lake Superior.....					
11. Illinois Central.....	4,177,079 62				1,303 26
12. Chippewa River & Northern.....					
13. Chicago, Harvard & Geneva Lake.....					
14. Chippewa Valley & Northern.....					
15. Drummond & Southwestern.....					
16. Duluth, South Shore & Atlantic.....	52,507 00				
17. Duluth, Superior & Western Terminal Co.....					
18. Dunbar & Wausaukee.....	500 00				
19. Fairchild & Northeastern.....					
20. Great Northern.....	451,653 26		253,403 22		
21. Green Bay & Western.....	407 00				
22. Glenwood & Northern.....					
23. Hawthorne, Nebagamon & Superior.....					
24. Hazelhurst & Southeastern.....					
25. Holmes & Son Railway.....					
26. Iola & Northern.....					
27. Kewaunee, Green Bay & Western.....	19 00				
28. Davis Lumber Co., Logging R. R.....					
29. Lake Superior Terminal & Transfer Ry. Co.....	1,316 18				
30. Mattoon Railway Co.....	769 63				
31. Marinette, Tomahawk & Western.....	23 20				
32. Minneapolis, St. Paul & Ashland.....					
33. Minneapolis, St. Paul & Sault Ste. Marie.....	168,351 51				
34. Northern Pacific.....	865,324 67				

35. Northwestern Coal Ry. Co.....				
36. Oshkosh Transportation Co., operated by C. & N. W.....				
37. Robbins Railway Co.....				
38. Stanley, Merrill & Phillips.....				
39. West Range, (not operated).....	640 91			
40. Winona Bridge Ry Co.....	25,501 63			
41. Wisconsin & Michigan.....				
42. Whitcomb & Morris.....				
43. Wisconsin Central.....	23,370 82			
44. Wisconsin Western.....	1,527 18			110,493 64
45. Hillsboro & N. E.....				
46. La Crosse & S. E.....		5 00		
47. Laona & Northern.....				
48. Marathon County Ry.....				
49. Mineral Point & Nor.....				
50. Superior & S. E.....	47 96			
Total.....	\$8,992,768 06	\$23,777 31	\$282,086 71	\$212,077 43

ITEMIZED EARNINGS, WHOLE LINE, 1905—Continued.

Name of Company.	Gross amount received or charged for switching.	Gross amount expended for switching.	Gross amount received or charged for car mileage.	Gross amount expended for car mileage.	Gross amount received or charged for rentals of yards, tracks and terminals.	Gross amount of interest or dividends received on bonds owned.
1. Abbotsford & Northeastern						
2. Ahnapee & Western						
3. Big Falls Railway Co.						
4. Bayfield Transfer					874 00	
5. Chicago, Milwaukee & St. Paul	\$708,933 42	\$936,865 04	\$1,202,801 00	\$1,321,608 66	*431,693 65	\$6,185 00
6. Chicago & Northwestern					41,136 45	1,553 17
7. Chicago, St. Paul, Minneapolis & Omaha	100,925 50	42,336 44	513,340 03	424,567 65		
8. Chicago, Burlington & Quincy	941,066 52	577,072 93		522,722 50		
9. Chicago, Lake Shore & Eastern	354,942 75		246,973 28			
10. Chicago & Lake Superior		117,805 30	1,768,782 02	1,504,030 14	355,164 74	1,571,687 10
11. Illinois Central	393,288 11					
12. Chippewa River & Northern						
13. Chicago, Harvard & Geneva Lake						
14. Chippewa Valley & Northern						
15. Drummond & Southwestern				26,279 90	6,239 77	
16. Duluth, South Shore & Atlantic	13,872 33					
17. Duluth, Superior & Western Terminal Co.						
18. Dunbar & Wausaukee		24 00	10 82	201 10		
19. Fairchild & Northeastern	373 00		28,412 57		173,991 81	395,924 74
20. Great Northern	414,423 95	118,960 61				
21. Green Bay & Western						
22. Glenwood & Northern				253 02		
23. Hawthorne, Nebagamon & Superior	1,752 00					
24. Hazelhurst & Southeastern						
25. Holmes & Son Railway						
26. Iola & Northern						
27. Kewaunee, Green Bay & Western						
28. John R. Davis Lumber Co., Logging R. R.						
29. Lake Superior Terminal & Transfer Ry. Co.	12,971 72					
30. Mattoon Railway Co.				126 01		
31. Marinette, Tomahawk & Western	58 38					
32. Minneapolis, St. Paul & Ashland		13,815 94				
33. Minneapolis, St. Paul & Sault Ste. Marie						405,385 00
34. Northern Pacific						

35. Northwestern Coal Ry. Co						
36. Oshkosh Transportation Co., operated by C. & N. W.						
37. Robbins Railway Co.	1,741 50	246 00				
38. Stanley, Merrill & Phillips						
39. West Range, (not operated)						
40. Winona Bridge Ry. Co.						
41. Wisconsin & Michigan	14,310 93	11,311 61	11,874 67			
42. Whitcomb & Morris						
43. Wisconsin Central	816 00	7,075 89	273,542 97	262,382 50	20,297 88	2,973 33
44. Wisconsin Western (successor to Kickapoo V. & N.)				2,993 51	*259 92	
45. Laona & Northern						
46. Mineral Point & Northern						
Total	\$2,954,417 73	\$1,825,602 14	\$4,046,737 36	\$4,065,164 99	\$165,801 08	\$2,383,708 34

* Payments in excess of receipts.

ITEMIZED EARNINGS, WHOLE LINE, 1905; (Continued).

Name of Company.	Gross amount of interest or dividend on stock owned.	Gross amount of interest on deposits.	Gross amount of miscellaneous income.	Gross amount of interest and exchange received from loans and discounts.	Repayments, overcharge to shippers and other deductions from freight earnings.	Tickets redeemed and other deductions from freight earnings.
1. Abbotsford & Northeastern						
2. Ahnapee & Western					\$502 42	\$63 81
3. Big Falls Railway Co.						
4. Bayfield Transfer						
5. Chicago, Milwaukee & St. Paul	\$73,839 24	\$174,299 97	\$17,857 61			
6. Chicago & Northwestern						
7. Chicago, St. Paul, Minneapolis & Omaha	79,940 24			\$32 37	146,509 99	20,270 98
8. Chicago, Burlington & Quincy						
9. Chicago, Lake Shore & Eastern			31,058 93			
10. Chicago & Lake Superior						
11. Illinois Central	245,930 32		108,333 84	258,418 73	1,864,166 14	172,636 08
12. Chippewa River & Northern						
13. Chicago, Harvard & Geneva Lake						
14. Chippewa Valley & Northern						
15. Drummond & Southwestern						
16. Duluth, South Shore & Atlantic		6,517 24				
17. Duluth, Superior & Western Terminal Co.			8,875 84		27,484 71	1,197 37
18. Dunbar & Wausaukee						
19. Fairchild & Northeastern						
20. Great Northern	975,255 25	178,789 96	483,657 80			
21. Green Bay & Western						
22. Glenwood & Northern						
23. Hawthorne, Nebagamon & Superior						
24. Hazelhurst & Southeastern					199 51	
25. Holmes & Son Railway						
26. Iola & Northern						
27. Kewaunee, Green Bay & Western						
28. John R. Davis Lumber Co., Logging R. R.						
29. Lake Superior Terminal and Transfer Ry. Co.						
30. Mattoon Railway Co.						
31. Marinette, Tomahawk & Western						
32. Minneapolis, St. Paul & Ashland						

33. Minneapolis, St. Paul & Sault Ste. Marie			28,827 61			
34. Northern Pacific	577,925 00	361,361 89	1,571,908 72		295,231 44	46,831 15
35. Northwestern Coal Ry. Co						
36. Oshkosh Transportation Co., operated by C. & N. W.						
37. Robbins Railway Co.					316 80	
38. Stanley, Merrill & Phillips						
39. West Range, (not operated)						
40. Winona Bridge Ry. Co.						
41. Wisconsin & Michigan						
42. Whitcomb & Morris						
43. Wisconsin Central		20,676 14	3,255 40	39,138 90	117,564 05	5,013 04
44. Wisconsin Western					374 71	
45. Laona & Northern					64 16	
46. Mineral Point & Northern						
Total	\$1,952,790 05	\$741,645 20	\$2,253,775 25	\$297,590 00	\$2,452,414 38	\$246,062 43

SUMMARY OF EARNINGS OF
As Reported to the Railroad Commission for Year

Name of Company.	Passenger.	
	Wisconsin.	Whole line.
1. Abbotsford & Northeastern	\$2,926 36	\$2,926 36
2. Ahnapee & Western	27,727 03	27,727 03
3. Big Falls Railway Co.	291 50	291 50
4. Bayfield Transfer	155 05	155 05
5. Chicago, Milwaukee & St. Paul	3,248,429 41	10,571,620 91
6. Chicago, Milwaukee & St. Paul	3,734,476 91	13,706,071 67
7. Chicago, St. Paul, Minneapolis & Omaha	1,441,657 77	3,243,083 66
8. Chicago, Burlington & Quincy	451,858 10	15,199,267 91
9. Chicago, Lake Shore & Eastern		
10. Chicago & Lake Superior	1,732 75	1,732 75
11. Illinois Central	35,888 93	9,614,483 57
12. Chippewa River & Northern	348 85	348 85
13. Chicago, Harvard & Geneva Lake	6,556 73	13,113 45
14. Chippewa Valley & Northern		
15. Drummond & Southwestern		
16. Duluth, South Shore & Atlantic	106,009 90	911,794 11
17. Duluth, Superior & Western Terminal Co.		
18. Dumbar & Wausaukee	810 52	810 52
19. Fairchild & Northeastern	3,647 98	3,647 98
20. Great Northern	84,245 15	8,008,178 94
21. Green Bay & Western	120,973 76	122,349 45
22. Glenwood & Northern		
23. Hawthorne, Nebagamon & Superior	195 50	195 50
24. Hazelhurst & Southeastern	340 45	340 45
25. Holmes & Son Railway		
26. Iola & Northern	1,532 04	1,532 04
27. Kewaunee, Green Bay & Western	24,964 58	24,964 58
28. John R. Davis Lumber Co., Logging R. R.		
29. Lake Superior Terminal & Transfer Co.		
30. Mattoon Railway Co.	1,350 91	1,350 91
31. Marinette, Tomahawk & Western	5,232 45	5,232 45
32. Minneapolis, St. Paul & Ashland	1,026 90	1,026 90
33. Minneapolis, St. Paul & Sault Ste. Marie	310,972 51	2,155,385 39
34. Northern Pacific	162,154 77	13,225,347 39
35. Northwestern Coal Ry. Co		
36. Oshkosh Transportation Co.		
37. Robbins Railway Co.		
38. Stanley, Merrill & Phillips		
39. West Range, (not operated)	6,383 46	6,383 46
40. Winona Bridge Ry. Co.		
41. Wisconsin & Michigan		
42. Whitcomb & Morris	21,335 01	37,577 58
43. Wisconsin Central		
44. Wisconsin Western	1,177,824 92	1,461,228 82
45. Hillsboro & Northeastern	13,844 91	13,844 91
46. La Crosse & Southeastern	3,115 39	3,115 39
47. Laona & Northern	26,034 57	26,034 57
48. Marathon County Ry	322 80	322 80
49. Mineral Point & Northern		
50. Superior & Southeastern	3,925 58	3,925 58
Total	\$11,028,293 45	\$78,595,412 43

WISCONSIN ROADS.

Ending December 31, 1905. Wisconsin and Whole Line.

Freight.		Mails, Express and Transportation and Car Companies and all other sources.		Total.		No.
Wisconsin.	Whole line.	Wisconsin	Whole line	Wisconsin	Whole line.	
\$26,968 80	\$26,968 80	\$2,149 44	\$2,149 44	\$32,044 60	\$32,044 60	1
30,141 77	30,141 47	5,494 73	5,494 73	63,363 53	63,363 53	2
6,223 30	6,223 30	285 12	285 12	6,799 92	6,799 92	3
2,376 50	2,376 50	916 43	916 43	3,447 98	3,447 98	4
11,128,647 94	37,729,083 43	1,304,800 97	4,008,912 08	15,681,878 32	52,309,616 42	5
12,280,805 89	42,229,491 18	748,240 56	3,130,993 46	16,763,523 36	59,066,556 31	6
3,828,649 02	8,493,365 91	316,688 76	867,804 94	5,586,995 55	12,604,254 51	7
2,149,930 80	47,617,639 76	73,500 12	6,297,295 43	2,675,289 02	69,114,203 10	8
48,590 49	3,934,385 66	42,119 02	632,974 96	90,709 51	4,567,360 62	9
2,984 38	2,984 38	516 82	516 82	5,233 95	5,233 95	10
55,323 83	32,932,547 26	18,523 72	6,410,238 42	109,736 48	48,957,269 25	11
9,881 70	9,881 70	.....	.....	10,230 55	10,230 55	12
5,123 62	10,247 23	240 72	481 41	11,921 07	23,842 09	13
9,942 72	9,942 72	.....	.....	9,942 72	9,942 72	14
14,292 09	14,292 09	.....	.....	14,292 09	14,292 09	15
180,592 64	1,863,167 53	22,396 37	179,110 88	308,999 11	2,954,072 52	16
.....	.....	.....	.....	.....	.....	17
21,383 42	21,383 42	.....	.....	22,193 94	22,193 94	18
25,856 53	25,856 53	1,504 63	1,504 63	31,009 14	31,009 14	19
1,009,209 89	32,002,325 92	40,930 95	4,958,742 42	1,134,385 99	44,969,247 28	20
436,137 00	437,502 06	26,409 17	26,568 72	583,519 93	586,420 23	21
.....	.....	.....	.....	.....	.....	22
47,665 15	47,665 15	1,752 00	1,752 00	49,612 65	49,612 65	23
22,165 42	22,165 42	184 23	184 23	22,690 10	22,690 10	24
.....	.....	.....	.....	.....	.....	25
4,664 56	4,664 56	80 05	280 05	6,476 65	6,476 65	26
80,450 93	80,450 93	4,972 60	4,972 60	110,388 11	110,388 11	27
1,606 02	1,606 02	.....	.....	1 066 02	1,606 02	28
12,971 72	12,971 72	1,535 78	1,535 78	14,507 50	14,507 50	29
24,725 48	24,725 48	769 63	769 63	26,846 02	26,846 02	30
51,390 02	51,390 02	947 32	947 32	57,569 79	57,569 79	31
55,080 32	55,080 32	.....	.....	56,107 22	56,107 22	32
1,488,857 28	7,432,638 67	103,280 88	621,569 17	1,903,110 67	10,209,593 23	33
378,231 42	39,887,795 28	25,068 37	2,666,186 97	565,454 56	55,779,329 64	34
19,748 64	19,748 64	.....	.....	19,748 64	19,748 64	35
11,261 00	11,261 00	.....	.....	11,261 00	11,261 00	36
25,251 12	25,251 12	.....	.....	25,251 12	25,251 12	37
119,199 53	119,199 53	2,420 00	2,420 00	128,002 99	128,002 99	38
.....	.....	.....	.....	.....	.....	39
153,452 19	207,784 48	13,369 73	25,501 63	13,369 73	25,501 63	40
3,439 36	3,439 36	1,960 45	3,305 16	176,747 65	248,667 22	41
4,420,000 51	5,235,756 44	239,051 62	307,171 56	3,438 36	3,439 36	42
47,366 21	47,366 21	10,916 06	10,916 06	5,836,877 05	7,004,156 82	43
7,092 58	7,092 58	660 20	660 20	72,127 18	72,127 18	44
13,585 19	13,585 19	1,295 01	1,295 01	10,865 17	10,868 17	45
16,977 21	16,977 21	.....	.....	40,914 77	40,914 77	46
8,486 70	8,486 70	.....	.....	17,300 01	17,300 01	47
24,760 66	24,760 66	291 80	291 80	8,486 70	8,486 70	48
24,952 92	24,952 92	.....	.....	28,973 04	28,973 04	49
.....	.....	.....	.....	24,952 92	24,952 92	50
38,336,444 47	260,786,622 76	3,013,473 46	30,173,749 06	52,378,211 38	369,355,784 25	

TOTAL AMOUNT PAID BY WISCONSIN ROADS AS REPORTED TO THE
1905, CHARGEABLE

Name of Company.	Construc- tion.	Equipment.	Operation.
1. Abbotsford & Northeastern			\$18,160 47
2. Ahnapee & Western	18,736 05	7,300 00	40,987 14
3. Big Falls Railway Co.			6,863 17
4. Bayfield Transfer	18 43		6,108 42
5. Chicago, Milwaukee & St. Paul	\$407,751 02	\$222,418 78	\$9,107,025 31
6. Chicago & Northwestern, ¹	\$1,617,375 66		9,174,525 04
7. Chicago, St. Paul, Minneapolis & Omaha	319,295 22	\$217,392, 45	\$3,610,261 60
8. Chicago, Burlington & Quincy	90,432 22	7,350 04	1,767,606 43
9. Chicago, Lake Shore & Eastern	1,637 35	22,993 26	63,563 18
10. Chicago & Lake Superior			2,461 83
11. Illinois Central	13,304 87		155,554 42
12. Chippewa River & Northern			3,514 55
13. Chicago, Harvard & Geneva Lake	1,657 15	776 79	10,656 43
14. Chippewa Valley & Northern	15,999 37	4,400 00	7,483 81
15. Drummond & Southwestern		4,145 69	16,039 49
16. Duluth, South Shore & Atlantic	6	6	287,471 29
17. Dunbar & Wausaukee			
18. Fairchild & Northeastern	20,196 54	1,249 99	11,125 66
19. Great Northern			494,799 89
20. Green Bay & Western			372,029 18
21. Hawthorne, Nebagamon & Superior			53,213 17
22. Hazelhurst & Southeastern			11,049 87
23. Iola & Northern			5,077 73
24. Kewaunee, Green Bay & Western			73,267 83
25. Davis Lumber Co., Logging R. R.	3,108 66	538 68	18,706 28
26. Lake Superior Terminal & Transfer			76,040 48
27. Mattoon Railway Co.	3,937 69	1,039 98	8,146 67
28. Marinette, Tomahawk & Western			54,523 05
29. Minneapolis, St. Paul & Ashland			73,677 45
29. Minneapolis, St. Paul & Sault Ste. Marie	4,714 97	285,965 20	967,851 91
30. Northern Pacific			472,982 59
31. Northwestern Coal Ry Co.			17,738 84
32. Oshkosh Transportation Co., operated by C. & N. W.	591 26		2,830 61
33. Robbins Railway Co.	9,060 00		25,097 78
34. Stanley, Merrill & Phillips	218,438 63	4,950 00	105,217 77
35. West Range, (not operated)			
36. Winona Bridge Ry. Co.			3,645 80
37. Wisconsin & Michigan	531,999 30	83,511 11	149,209 55
38. Whitcomb & Morris	350 00	25 00	3,750 00
39. Wisconsin Central	457,456 51	328,509 23	3,766,618 26
40. Wisconsin Western			39,470 02
41. Hillsboro & Northeastern		600 00	5,218 63
42. La Crosse & Southeastern	729,812 26	41,529 82	23,077 41
43. Laona & Northern	5,966 92		9,457 11
44. Marathon County Ry.	3,277 42		8,353 52
45. Mineral Point & Northern	\$955,047 81		62,264 17
46. Superior & Southeastern	1,498 66	30 00	18,740 90
Total	\$5,431 663 00	\$1,234,726 02	\$31,211,469 76

¹ Proportional.² Including \$450,434.44 "Additional Taxes State of Wisconsin."³ Miles of road basis.⁴ Revenue train mileage basis.⁵ Including equipment.⁶ Not given.⁷ Including \$13,824.00 "Additional Taxes."

RAILROAD COMMISSION FOR THE YEAR ENDING DECEMBER 31, TO WISCONSIN.

Taxes.	Interest.	Rentals.	Dividends.	All other purposes.	Total amount paid during year ending Dec. 31, 1905—Wisconsin.	No.
\$434 62	\$6,720 00				\$25,315 09	1
2,019 25	20,400 00				89,442 44	2
248 00	322 00				7,433 17	3
215 67	364 51				6,707 03	4
21,066,194 75	31,461,018 48		\$31,857,920 87	\$19,930 20	14,142,259 41	5
530,519 80	1,916,854 59	\$10,190 73	1,227,920 89	53,476 24	14,530,832 95	6
334,799 99	3709,038 36		3967,155 73		6,157,943 35	7
119,238 12	197,080 22		206,332 40	24,980 95	2,413,070 43	8
4,058 15	8,741 14	100,000 00		7,577 03	208,570 11	9
34 33		234 45		405 00	3,135 61	10
25,423 18	86,256 95				280,539 42	11
	452 78				3,967 33	12
428 89	201 96	344 36		11,169 90	25,235 48	13
562 61	1,550 63				29,996 42	14
1,067 15	3,000 00				24,252 33	15
16,408 92	156,112 12	13,312 52			473,304 85	16
				13,528 63	13,528 63	17
15 00					32,587 19	18
65,412 10					560,211 99	19
18,923 86		3,554 08	155,000 00		549,507 12	20
789 08					54,002 25	21
281 82					11,831 69	22
84 54					5,162 27	23
3,921 25	20,400 00	108 00			97,697 08	24
404 77				102 50	22,860 89	25
433 50	11,700 00				83,173 98	26
660 15	5,900 00			408 47	20,092 96	27
1,680 94	20,624 31				76,833 30	28
228 75					73,906 20	29
76,124 42	385,073 16		201,092 12	65,931 71	1,986,753 49	29
22,618 18					495,600 77	30
958 68	11,000 00				29,697 52	31
845 45			7,000 00		11,267 32	32
518 54					34,676 32	33
1,723 92	33,063 08	1,605 00			364,998 40	34
						35
3,275 64	10,065 98				16,987 42	36
2,508 16	32,380 00	7,686 39		67,437 03	874,731 54	37
112 73					4,237 73	38
240,175 27	1,013,687 65	318,277 46		20,093 31	6,144,817 69	39
714,092 95					53,562 97	40
84 54	800 00			4,000 00	10,703 17	41
		1,500 00			795,919 49	42
253 63	2,716 04				18,393 70	43
338 18	307 19				12,276 31	44
153 00	10,508 34				1,027,973 32	45
					20,269 56	46
\$2,558,272 48	\$6,126,339 49	\$456,812 99	\$4,622,472 01	\$289,040 97	\$51,930,797 69	

TOTAL AMOUNTS PAID

As reported to the Railroad Commission for year ending

Name of Company.	Construc- tion.	Equip- ment.	Operation.
1. Abbotsford & Northern			18,160 47
2. Ahnapee & Western.....	18,736 05	7,800 00	40,987 14
3. Big Falls Railway Co.....			6,863 17
4. Bayfield Transfer	18 43		6,108 42
5. Chicago, Milwaukee & St. Paul.....	1,647,478 85	898,661 74	32,723,770 43
6. Chicago & Northwestern	26,820,192 12		38,186,886 15
7. Chicago, St. Paul, Minneapolis, & Omaha	580,029 85	479,985 58	7,659,502 12
8. Chicago, Burlington & Quincy	4,971,593 45	276,317 29	42,621,008 14
9. Chicago, Lake Shore & Eastern	170,869 57	41,249,467 66	2,129,138 51
10. Chicago & Lake Superior			2,461 83
11. Illinois Central.....	1,833,333 93	1,738,649 85	33,644,522 76
12. Chippewa River & Northern.....			3,514 55
13. Chicago, Harvard & Geneva Lake	3,314 30	1,553,58	21,312 87
14. Chippewa Valley & Northern	15,999,37	4,400 00	7,483 81
15. Drummond & Southwestern		4,145 69	16,039 49
16. Duluth, South Shore & Atlantic.....	131,256 36	87,373 35	1,939,881 86
17. Duluth, Superior & Western Terminal			
18. Dunbar & Wausaukee			
19. Fairchild & Northeastern	20,196 54	1,249 99	11,125 66
20. Great Northern.....		1,558,740 59	19,295,953 24
21. Green Bay & Western.....			372,029 18
22. Glenwood & Northern.....			
23. Hawthorne, Nebagamon & Superior.....			53,213 17
24. Hazelhurst & Southeastern			11,049 87
25. Holmes & Son Railway.....			
26. Iola & Northern.....			5,077 73
27. Kewaunee, Green Bay & Western			73,267 83
28. Davis Lumber Co. Logging R. R....	3,108 66	538 68	18,706 28
29. Lake Superior Terminal & Transfer			76,040 48
30. Mattoon Railway Co.....	3,937 69	1,039 98	8,146 67
31. Marinette, Tomahawk & Western			54,528 05
32. Minneapolis, St. Paul & Ashland....			73,677 45
33. Minneapolis, St. Paul & Sault Ste. Marie	4,626,054 11	1,350,139 22	5,008,169 48
34. Northern Pacific.....	1,099,155 84	2,244,592 03	29,100,261 64
35. Northwestern Coal Ry. Co.....			17,738 84
36. Oshkosh Transportation Co., operated by C. & N. W.	591 26		2,830 61
37. Robbins Railway Co.....	9,060 00		25,097 73
38. Stanley, Merrill & Phillips	218,438 63	4,950 00	105,217 77
39. West Range (not operated).....			
40. Winona Bridge Ry. Co.....			3,645 80
41. Wisconsin & Michigan.....	827,251 06	145,591 20	196,424 00
42. Whitcomb & Morris.....	350 00	25 00	3,750 00
43. Wisconsin Central.....	512,039 97	367,706 77	4,434,445 75
44. Wisconsin Western			39,470 02
45. Hillsboro & Northeastern		600 00	5,218 63
46. La Crosse & Southeastern	729,812 26	41,529 82	23,077 41
47. Laona & Northern.....	5,966 92		9,457 11
48. Marathon Co. Ry.....	3,277 42		8,353 52
49. Mineral Point & Nor.....	295,047 81		62,264 17
50. Superior & Southeastern.....	1,498 66	30 00	18,740 90
Total	\$25,208,609 11	\$7,974,652 70	\$218,147,710 76

¹ Including \$450,434.44 "additional taxes State of Wisconsin."² Including equipment.³ Including \$13,824 00 "additional taxes."⁴ Credit.

REPORT OF THE RAILROAD COMMISSION.

509

BY WISCONSIN ROADS

December 31, 1905. Chargeable to Whole Line.

Taxes.	Interest.	Rentals.	Dividends.	All other purposes.	Total amount paid during year ending Dec. 31, 1905. Whole line.	No.
\$434 62	\$6,720 00				\$25,315 09	1
2,019 25	20,400 00				89,442 44	2
248 00	322 00				7,433 17	3
215 67	364 51				6,707 03	4
12,093,696 87	5,903,105 00		\$7,506,751 00	\$50,526 00	50,853,989 91	5
2,208,168 74	8,086,042 72	42,972 54	5,177,929 00	225,500 00	60,744,691 27	6
629,711 32	1,534,454 97	128,242 15	2,086,861 00	400,000 00	13,498,786 99	7
1,924,691 84	7,409,030 99		7,758,737 00	939,133 50	65,900,602 21	8
19,313 64	215,865 60	500,000 00	2,400,000 00	378,848 47	4,564,559 13	9
34 33		234 45		405 00	3,135 61	10
2,074,338 63	4,680,500 00	2,694,067 88	6,652,800 00		53,318,213 05	11
	452 78				3,967 33	12
595 34	403 83	688 72		22,339 79	50,208 43	13
562 61	1,550 63				29,996 42	14
1,067 15	3,000 00				24,252 33	15
151,850 70	859,700 00	41,231 04			3,211,293 31	16
						17
				13,528 63	13,528 63	18
15 00					32,587 19	19
1,420,454 21	334,125 00	4,081,693 23	8,702,790 25	7,079,007 40	42,475,763 92	20
18,923 86		3,554 08	155,000 00		649,507 12	21
						22
789 03					54,002 25	23
281 83					11,331 69	24
						25
84 54					5,162 27	26
3,921 25	20,400 00	108 00			97,697 08	27
404 77				102 50	22,860 89	28
433 50	11,700 00				88,173 98	29
660 15	5,900 00			408 47	20,092 96	30
1,680 94	20,624 31				76,833 30	31
228 75					73,906 20	32
						33
535,590 74	1,698,953 58	96,487 60	1,033,699 00	496,688 89	14,859,782 62	33
1,784,742 00	6,968,655 00	160,469 30	10,850,000 00	3,060,323 96	55,268,199 77	34
958 68	11,000 00				29,697 52	35
						36
845 45			7,000 00		11,267 32	36
518 54					34,676 32	37
1,723 92	33,063 08	1,605 00			364,998 40	38
						39
3,275 64	10,065 98				16,987 42	40
11,801 75	56,450 48	11,233 58		142,929 00	1,391,681 08	41
112 73					4,237 73	42
271,037 01	1,134,640 35	374,708 57		22,490 83	7,117,090 23	43
*14,062 95					53,562 97	44
84 54	800 00			4,000 00	10,703 17	45
		1,000 00			795,919 45	46
253 67	2,716 04				18,393 70	47
338 11	307 15				12,276 31	48
153 01	10,508 31				1,027,973 32	49
					20,269 59	50
\$13,180,355 34	\$39,083,813 37	\$3,138,796 14	\$52,336,567 27	\$12,803,222 51	\$376,891,737 18	

CAPITAL STOCK

Capital Stock of and Dividends Declared by the Several Railway Companies operating
Whole

Name of Company.	Number of shares authorized.	Par value of shares.
1. Abbotsford & Northeastern	1 200	\$100 00
2. Ahnapée & Western.....	5,000	100 00
3. Big Falls Railway Co.....	10	100 00
4. Bayfield Transfer	3,000	100 00
5. Chicago, Milwaukee & St. Paul	(*)	100 00
6. Chicago & Northwestern.....	1,000,000	100 00
7. Chicago, St. Paul, Minneapolis & Omaha	500 000	100 00
8. Chicago, Burlington & Quincy	1,108,391	100 00
9. Chicago, Lake Shore & Eastern	1,000	100 00
10. Chicago & Lake Superior.....	10,000	100 00
11. Illinois Central.....	950,400	100 00
12. Chippewa River & Northern.....	250	100 00
13. Chicago, Harvard & Geneva Lake	1,500	100 00
14. Chippewa Valley & Northern	150	1,000 00
15. Drummond & Southwestern	100	100 00
16. Duluth, South Shore & Atlantic	220,000	100 00
17. Duluth, Superior & Western Terminal Co	20,000	100 00
18. Fairchild & Northeastern	2,500	100 00
19. Great Northern	1,250,000	100 00
20. Green Bay & Western	25,000	100 00
21. Hawthorne, Nebagamon & Superior	500	100 00
22. Hazelhurst & Southeastern.....	4,000	25 00
23. Iola & Northern.....	17,000	100 00
24. Kewaunee, & Green Bay & Western	6,800	100 00
25. Lake Superior Terminal & Transfer Ry. Co.....	12,000	100 00
26. Mattoon Railway Co.....	100	100 00
27. Marinette, Tomahawk & Western	10,000	100 00
28. Minneapolis, St. Paul & Ashland.....	100,000	25 00
29. Minneapolis, St. Paul & Sault Ste. Marie.....	210,000	100 00
30. Northern Pacific	1,550,000	100 00
31. Northwestern Coal Ry. Co	10,000	100 00
32. Oshkosh Transp. Co., operated by C. & N. W.....	700	100 09
33. Stanley, Merrill & Phillips	1,000	100 00
34. Winona Bridge Ry. Co	4,000	100 00
35. Wisconsin & Michigan	9,515	100 00
36. Whitcomb & Morris.....	100	100 00
37. Wisconsin Central	300,000	100 00
38. Wisconsin Western .....	.....	100 00
39. Bayfield, Lake Shore & Western	50,000	100 00
40. Eastern Ry. Co. of Minnesota	160,000	100 00
41. Hillsboro & Northeastern	500	100 00
42. Superior & Southeastern	500	100 00
43. Mineral Point & Northern.....	5,500	100 00
Total.....	7,577,316	.....

†Including stocks of proprietary companies.

*Not given.

AND DIVIDENDS, 1905.

in Wisconsin as Reported to the R. R. Commission for the Year Ending June 30, 1905—
Line.

Total par value authorized.	Total amount issued and outstanding.	Dividends Declared During Year.		No.
		Rate.	Amount.	
\$120,000 00	\$120,000 00			1
500,000 00	439,500 00			2
1,000 00	1,000 00			3
3,000,000 00	1,675,000 00			4
(*)	107,511,300 00	7 per cent.	\$7,473,396 00	5
100,000,000 00	†75,503,430 53	7 and 8 per cent	5,174,924 00	6
50,000,000 00	34,050,125 62	7 per cent.	2,086,861 00	7
110,839,100 00	110,839,100 00	7 per cent.	7,758,737 00	8
100,000 00	100,000 00			9
1,000,000 00	18,000 00			10
95,040,000 00	95,040,000 00	7 per cent.	6,652,800 00	11
25,000 00	(*)			12
150,000 00	(*)			13
150,000 00	58,000 00			14
10,000 00	10,000 00			15
22,000,000 00	22,000,000 00			16
2,000,000 00	2,000,000 00	7 per cent.	140,000 00	17
	500 00			18
125,000,000 00	124,365,625 00		8,693,860 00	19
2,500,000 00	2,500,000 00	5 per cent.	125,000 00	20
50,000 00	(*)			21
100,000 00	100,000 00			22
1,700,000 00	71,400 00			23
680,000 00	664,950 00			24
1,200,000 00	119,400 00			25
4,000 00	4,000 00			26
1,000,000 00	161,500 00			27
2,500,000 00	198,100 00			28
21,000,000 00	21,000,000 00	{ 4 per ct. on com. }	1,038,699 00	29
155,000,000 00	155,000,000 00	{ & 7p. c. on pfd. }		30
1,000,000 00	1,000,000 00	7 per cent.	10,850,000 00	31
70,000 00	70,000 00	10 per cent.	7,000 00	32
100,000 00	100,000 00			33
400,000 00	400,000 00			34
951,500 00	951,500 00			35
10,000 00	10,000 00			36
30,000,000 00	30,000,000 00			37
	521,400 00			38
5,000,000 00	85,000 00			39
16,000,000 00	16,000,000 00	6 per cent.	960,000 00	40
50,000 00	29,000 00			41
50,000 00	(*)			42
550,000 00	94,000 00			43
‡\$749,850,600 00	\$802,810,832 15		\$50,961,277 00	

*Not given.

†Including stock of proprietary companies.

‡C., M. & St P. Ry. not reporting.

CAPITAL STOCK AND
Capital Stock of and Dividends Declared by Railroads in Wisconsin

Name of Company.	Number of Shares Authorized.		Par value of shares.	Total Par Value Authorized.	
	Common.	Preferred.		Common	Preferred.
1. Abbotsford & Northeastern ...	1,200		\$100 00	\$120,000 00	
2. Ahnapee & Western	5,000		100 00	500,000 00	
4. Big Falls Ry. Co.	10		100 00	1,000 00	
5. Bayfield Transfer					
6. Chicago, Milwaukee & St. Paul, ¹					
7. Chicago & Northwestern, ⁴	5240,153	3	100 00	524,015,303 23	3
8. Chicago, St. Paul, Minneapolis & Omaha, ⁴					
9. Chicago, Burlington & Quincy, ³					
10. Chicago, Lake Shore & Eastern	1,000		100 00	100,000 00	
11. Chi., Harv. & Geneva Lake....	1,300		100 00	130,000 00	
12. Illinois Central, ³					
13. Chippewa River & Northern..	250		100 00	25,000 00	
14. Drummond & Southwestern...	100		100 00	10,000 00	
15. Duluth, South Shore & Atlantic					
16. Duluth, Superior & Western Terminal Co.		20,000	100 00		\$2,000,000 00
17. Dunbar & Wausaukee.....					
18. Eastern Railway Co. of Minnesota					
19. Fairchild & Northeastern					
20. Green Bay & Western.....	25,000		100 00	2,500,000 00	
21. Hawthorne, Nebagamon & Superior	500		100 00	50,000 00	
22. Hazelhurst & Southeastern....		4,000	25 00		100,000 00
23. Holmes & Son Ry.					
24. Iola & Northern	17,000		100 00	1,700,000 00	
25. Great Northern ³					
26. Kewaunee, Green Bay & Western	4,800	2,000	100 00	480,000 00	200,000 00
27. John R. Davis Lumber Co., R. R.					
28. Lake Superior Terminal & Transfer Ry. Co.	12,000		100 00	1,200,000 00	
29. Mattoon Ry. Co.	100		100 00	10,000 00	
32. Marinette, Tomahawk and Western	10,000		100 00	1,000,000 00	
34. Minneapolis, St. Paul & Ashland					
35. Minneapolis, St. Paul & Sault Ste. Marie	23,380	11,690	100 00	2,338,000 00	1,169,000 00
36. Northern Pacific, ³					
37. Northwestern Coal Ry Co.	10,000		100 00	1,000,000 00	
38. Oshkosh Transportation Co., operated by C. & N. W.	700		100 00	70,000 00	
39. Robbins Ry. Co.	300		100 00	30,000 00	
40. Stanley, Merrill & Phillips ...	1,000		100 00	100,000 00	
44. Winona Bridge Ry. Co., ³					
45. Wisconsin & Michigan	4,655		100 00	465,550 00	
46. Whitcomb & Morris	100		100 00	10,000 00	
47. Wisconsin Central.....	158538 $\frac{3}{4}$	113241 $\frac{3}{4}$	100 00	15,853,833 33	11,324,166 67
48. Wisconsin Western.....	3		100 00	300 00	
49. Chippewa Valley & Northern..	150		1,000 00	150,000 00	
50. LaCrosse & S. E.	10,000		100 00	1,000 00	
51. Superior & S. E.	500		100 00	50,000 00	
52. Roddis Lumber & Veneer Co.					
53. Mineral Point & Nor.	5,500		100 00	550,000 00	
54. Hillsboro & Northeastern.....	500		100 00	50,000 00	
Total (33 roads reporting.)..	533736 $\frac{3}{4}$	150931 $\frac{3}{4}$		\$53,508,686 56	\$14,784,166 67

¹ Road mileage basis.² Includes \$583,571.87 capital stock of proprietary companies.³ Not given.⁴ Proportional.⁵ Common and preferred stock not given separately.

DIVIDENDS, 1906, WISCONSIN.

as reported to the Railroad Commission for the Year Ending June 30, 1906.

Amount Issued and Outstanding.			Dividends Declared During Year.				No.
			Common.		Preferred.		
Common.	Preferred.	Total.	Rate.	Amount.	Rate.	Amount.	
			\$120,000 00		\$120,000 00		
439,500 00		439,500 00				2	
1,000 00		1,000 00				4	
						5	
14,807,421 01	\$12,210,026 96	26,517,447 97	7	\$1,001,519 47	7	\$851,525 39	6
24,578,630 33		24,578,630 33	7	1,572,465 35			7
9,948,250 74	5,878,248 11	15,826,498 85	7	603,721 75	7	366,251 25	8
							9
100,000 00		100,000 00					10
130,000 00		130,000 00					11
							12
25,000 00		25,000 00					13
10,000 00		10,000 00					14
							15
	2,000,000 00	2,000,000 00			7	140,000 00	16
							17
							18
2,500,000 00		2,500,000 00	5	125,000 00			19
							20
50,000 00		50,000 00					21
	100,000 00	100,000 00			15	15,000 00	22
							23
71,400 00		71,400 00					24
							25
465,750 00	199,200 00	664,950 00					26
							27
154,200 00		154,200 00					28
4,000 00		4,000 00					29
161,500 00		161,500 00					32
							34
2,338,000 00	1,169,000 00	3,507,000 00	4	92,520 00	7	80,942 73	35
1,000,000 00		1,000,000 00					36
							37
70,000 00		70,000 00	10	7,000 00			38
30,000 00		30,000 00					39
100,000 00		100,000 00					40
							44
465,550 00		465,550 00					45
10,000 00		10,000 00					46
15,853,833 33	11,324,166 67	27,178,000 00					47
521,400 00		521,400 00					48
58,000 00		58,000 00					49
1,000,000 00		1,000,000 00					50
50,000 00		50,000 00					51
							52
532,600 00		532,600 00					53
29,000 00		29,000 00					54
\$75,125,035 41	\$32,880,641 74	\$108,005,677 15		\$3,402,226 57		\$1,453,719 37	

CAPITAL STOCK AND DIVIDENDS DECLARED BY WISCONSIN RAIL
ENDING JUNE

Name of Company .	No. of Shares Authorized.		Par value of shares.	Total Par Value Authorized.	
	Common	Preferred.		Common.	Preferred.
1. Abbotsford & Northeastern.	1,200		\$100 00	\$120,000 00	
2. Ahnapee & Western	5,000		100 00	500,000 00	
3. Big Falls Railway Co.	10		100 00	1,000 00	
4. Bayfield Transfer					
5. Chicago, Milwaukee & St. Paul			100 00 ²		²
6. Chicago & Northwestern.	1,000,000		100 00	100,000,000 00	
7. Chicago, St. Paul, Minneapolis & Omaha	300,000	200,000	100 00	30,000,000 00	\$20,000,000 00
8. Chicago, Burlington & Quincy	1,108,391		100 00	110,839,100 00	
9. Chicago, Lake Shore & Eastern	6,500		100 00	650,000 00	
10. Chicago & Lake Superior					
11. Illinois Central	950,400		100 00	95,040,000 00	
12. Chippewa River & Northern	250		100 00	25,000 00	
13. Chicago, Harvard & Geneva Lake	1,500		100 00	150,000 00	
14. Chippewa Valley & Northern	150		1,000 00	150,000 00	
15. Drummond & Southwestern.	100		100 00	10,000 00	
16. Duluth, South Shore & Atlantic	120,000	100,000	100 00	12,000,000 00	10,000,000 00
17. Duluth, Superior & Western Terminal Co.		20,000	100 00		2,000,000 00
18. Dunbar & Wausaukee					
19. Fairchild & Northeastern					
20. Great Northern	1,500,000		100 00	150,000,000 00	
21. Green Bay & Western	25,000		100 00	2,500,000 00	
22. Glenwood & Northern					
23. Hawthorne, Nebagamon & Superior	500		100 00	50,000 00	
24. Hazelhurst & Southeastern		4,000	25 00		100,000 00
25. Holmes & Son Railway					
26. Iola & Northern	17,000		100 00	1,700,000 00	
27. Kewaunee, Green Bay & Western	4,800	2,000	100 00	480,000 00	200,000 00
28. Lake Shore & Eastern, operated by John R. Davis Lumber Co.					
29. Lake Superior Terminal & Transfer Ry. Co.	12,000		100 00	1,200,000 00	
30. Mattoon Railway Co.	100		100 00	10,000 00	
31. Marinette, Tomahawk & Western	10,000		100 00	1,000,000 00	
32. Minneapolis, St. Paul & Ashland					
33. Minneapolis, St. Paul & Sault Ste. Marie	140,000	70,000	100 00	14,000,000 00	7,000,000 00
34. Northern Pacific	1,550,000		100 00	155,000,000 00	
35. Northwestern Coal Ry. Co.	10,000		100 00	1,000,000 00	
36. Oshkosh Transportation Co., operated by C. & N. W.	700		100 00	70,000 00	
37. Robbins Railway Co.	300		100 00	30,000 00	
38. Stanley, Merrill & Phillips.	1,000		100 00	100,000 00	
39. Winona Bridge Ry. Co.	4,000		100 00	400,000 00	
40. Wisconsin & Michigan	9,515		100 00	951,500 00	
41. Whitcomb & Morris	100		100 00	10,000 00	
42. Wisconsin Central	175,000	125,000	100 00	17,500,000 00	12,500,000 00
43. Wisconsin Western.	²		100 00		²
44. La Crosse & Southeastern.	10,000		100 00	1,000,000 00	
45. Superior & Southeastern.	500		100 00	50,000 00	
46. Mineral Point & Northern.	5,500		100 00	550,000 00	
47. Hillsboro & Northeastern.	500		100 00	50,000 00	
Total	6,970,016	515,000		\$697,136,600 00	\$51,800,000 00

² Common and preferred not given separately in report.² Not given.

ROADS AS REPORTED TO THE RAILROAD COMMISSION FOR YEAR
30, 1906. WHOLE LINE.

Amount Issued and Outstanding.			Dividends Declared During Year.				No.
Common.	Preferred.	Total.	Common.		Preferred.		
			Rate.	Amount.	Rate.	Amount.	
\$120,000 00		\$120,000 00					1
439,500 00		439,500 00					2
1,000 00		1,000 00					3
							4
58,188,900 00	49,654,400 00	107,838,300 00	7	\$4,072,873 00	7	\$3,462,893 00	5
179,946,745 97	22,398,954 56	102,345,700 53	7	4,692,313 50	8	1,791,600 00	6
21,403,293 33	12,646,833 29	34,050,126 62	7	1,298,885 00	7	787,976 00	7
110,839,100 00		110,839,100 00	7	7,758,737 00			8
650,000 00		650,000 00					9
							10
95,040,000 00		95,040,000 00	7	6,652,800 00			11
25,000 00		25,000 00					12
150,000 00		150,000 00					13
58,000 00		58,000 00					14
10,000 00		10,000 00					15
12,000,000 00	10,000,000 00	22,000,000 00					16
	2,000,000 00	2,000 000 00			7	140,000 00	17
							18
							19
149,546,050 00		149,546,050 00	7	9,148,520 50			20
2,500,000 00		2,500,000 00	5	125,000 00			21
							22
50,000 00		50,000 00					23
	100,000 00	100,000 00			15	15,000 00	24
							25
71,400 00		71,400 00					26
465,750 00	199,200 00	664,950 00					27
							28
154,200 00		154,200 00					29
4,000 00		4,000 00					30
161,500 00		161,500 00					31
							32
14,000,000 00	7,000,000 00	21,000,000 00	4	554,012 00	7	434,687 00	33
155,000,000 00		155,000,000 00	7	10,850,000 00	7		34
1,000,000 00		1,000,000 00					35
70,000 00		70,000 00	10	7,000 00			36
30,000 00		30,000 00					37
100,000 00		100,000 00					38
400,000 00		400,000 00					39
951,500 00		951,500 00					40
10,000 00		10,000 00					41
17,500,000 00	12,500,000 00	30,000,000 00					42
521,400 00		521,400 00					43
1,000,000 00		1,000,000 00					44
50,000 00		50,000 00					45
532,600 00		532,600 00					46
29,000 00		29,000 00					47
\$723,013,439 30	\$116,499,387 85	\$839,513,327 15		\$45,160,141 50		\$6,682,156 00	

¹ Includes \$2,430,000.00, proprietary companies.

² Includes \$426,000.00, stock script.

FUNDED DEBT AND INTEREST

A Recapitulation of the Funded Debt, and Interest Accrued and Paid of Roads

Name of Company.	Mortgage Bonds.		Miscellaneous Obligations.	
	Amount issued.	Amount out-standing.	Amount issued.	Amount out-standing.
1. Abbotsford & Northeastern	\$112,000 00	\$112,000 00		
2. Ahnapee & Western	612,000 00	612,000 00		
3. Bayfield Transfer	1,500,000 00	1,500,000 00		
4. Chicago, Mil. & St. Paul		122,176,500 00		
5. Chicago & Northwestern	106,734,000 00	105,624,000 00	\$61,632,000 00	\$57,090,000 00
6. Chi., St. P., Minn & O	20,556,800 00	29,226,800 00		
7. Chi., Burlington & Quincy	175,566,300 00	152,140,100 00	18,372,000 00	18,372,000 00
8. Chi., Lake Shore & Eastern	3,230,000 00	3,230,000 00		
9. Illinois Central	79,372,275 00	79,372,275 00	48,266,000 00	48,266,000 00
10. Drummond & South West'n	50,000 00	50,000 00		
11. Duluth, South Shore & At.	20,507,000 00	20,600,000 00	338,205 39	241,312 80
12. Duluth, Sup. & W. Ter. Co.	500,000 00	500,000 00		
13. Eastern R'y Co. of Minn	9,700,000 00	9,700,000 00		29,373 74
14. Green Bay & Western	7,600,000 00	7,600,000 00		
15. Kewaunee, Green Bay & W'n	408,000 00	408,000 00	52,635 48	42,548 67
16. Lake Superior Terminal & Transfer R'y Co.	195,000 00	195,000 00		
17. Minneapolis, St. Paul & Ashland	320,000 00	3 0,000 00		
18. Minneapolis, St. Paul & Sauli Ste. Marie	50,062,000 00	44,295,000 00	317,399 40	66,974 85
19. Northern Pacific		185,371,500 00		107,715,949 36
20. Northwestern Coal	1,000,000 00	220,000 00		
21. Winona Bridge R'y Co.	384,000 00	384,000 00		
22. Wisconsin & Michigan	1,751,000 00	1,751,000 00		
23. Wisconsin Central	27,328,500 00	26,212,000 00	1,501,175 00	1,376,175 00
24. Chicago, Harvard & Geneva Lake	150,000 00	125,000 00		
25. Great Northern			114,901,600 00	114,901,600 00
26. Mineral Point & Northern	420,000 00	420,000 00		
27. Stanley, Merrill & Phillips	300,000 00	300,000 00		
Total (27 roads reporting).	*	\$791,845,175 00	*	\$348,101,934 42

*Totals omitted on account of the incompleteness of reports.

WHOLE LINE, 1905.

Reporting to the Railroad Commission for the Year Ending June 30, 1905, Whole Line.

Income Bonds.		Total Funded Debt.		Interest.		No.
Amount issued.	Amount outstanding.	Amount issued.	Amount outstanding.	Total amount accrued during year.	Total amount paid during year.	
		\$112,000 00	\$112,000 00	\$6,720 00	\$9,840 00	1
		612,000 00	612,000 00	30,600 00	20,400 00	2
		1,500,000 00	1,500,000 00	75,000 00	None	3
			122,176,500 00	5,962,045 00	6,028,533 25	4
\$500,000 00	\$500,000 00	168,916,000 00	163,214,000 00	8,060,714 77	8,060,538 38	5
		30,556,800 00	29,226,800 00	1,527,615 38	1,530,528 13	6
		193,938,300 00	170,512,100 00	7,376,229 08	7,431,003 99	7
		3,230,000 00	3,230,000 00	168,700 00	168,700 00	8
		127,638,275 00	127,638,275 00	4,636,720 00	4,420,114 21	9
		50,000 00	50,000,000 00	3,000 00	3,000 00	10
3,000,000 00	3,000,000 00	23,845,205 39	23,241,312 80	859,700 00	859,700 00	11
		500,000 00	500,000 00	20,000 00	20,000 00	12
		9,700,000 00	9,729,373 74	475,000 00	433,375 00	13
		7,600,000 00	7,600,000 00	30,000 00	30,000 00	14
		460,635 48	450,548 67	21,531 81	21,531 81	15
		195,000 00	195,000 00	11,700 00	11,700 00	16
		320,000 00	320,000 00	16,000 00	None	17
		50,379,599 40	44,361,974 85	1,706,826 67	1,637,480 00	18
			293,087,449 36	6,947,583 33	6,919,367 00	19
		1,000,000 00	220,000 00	11,000 00	11,000 00	20
		384,000 00	384,000 00	19,200 00	19,200 00	21
		1,751,000 00	1,751,000 00	47,500 00	None	22
		28,826,675 00	27,588,175 00	1,127,238 60	1,125,703 48	23
		150,000 00	125,000 00	6,250 00	None	24
		114,901,600 00	114,901,600 00	364,500 00	363,613 05	25
		420,000 00	420,000,000 00	35,000 00	None	26
		300,000 00	300,000,000 00	15,000 00	15,000 00	27
\$3,500,000 00	\$3,500,000 00	*	\$1,143,447,109 42	\$89,490,324 64	\$39,140,331 30	

*Totals omitted on account of the incompleteness of reports.

FUNDED DEBT AND INTEREST,

A Recapitulation of the Funded Debt, and Interest Accrued and Paid of Roads

Name of Company.	Mortgage Bonds.		Miscellaneous Obligations.	
	Amount issued.	Amount outstanding.	Amount issued.	Amount outstanding.
1. Abbotsford & Northeastern	\$112,000 00	\$112,000 00		
2. Ahnapec & Western	612,000 00	612,000 00		
3. Chicago, Mil. & St. Paul		121,849,500 00		
4. Chicago & Northwestern	111,495,000 00	106,626,000 00	\$61,632,000 00	\$57,088,000 00
5. Chicago, St. Paul, Minneapolis & Omaha	30,963,800 00	29,376,800 00		
6. Chicago, Burl. & Quincy	168,022,000 00	155,800,000 00	18,372,000 00	18,372,000 00
7. Chicago, L. S. & Eastern	3,230,000 00	3,230,000 00		
8. Illinois Central	80,394,275 00	80,394,275 00	48,266,000 00	48,266,000 00
9. Drummond & Southwestern	50,000 00	50,000 00		
10. Duluth, So. Shore & Atl.	20,507,000 00	20,003,000 00	427,133 19	406,493 19
11. Duluth, Superior & Western Terminal Co.	500,000 00	500,000 00		
12. Eastern Railway Co. of Minnesota	9,700,000 00	9,700,000 00		
13. Green Bay & Western	7,600,000 00	7,600,000 00		
14. Kewaunee, Green Bay & Western	408,000 00	408,000 00	52,635 48	28,792 80
15. Minneapolis, St. Paul & Sault Ste. Marie	55,895,000 00	50,115,000 00	317,399 40	40,184 91
16. Northern Pacific		185,275,500 00		107,682,912 68
17. Northwestern Coal R'y Co.	1,000,000 00	220,000 00		
18. Winona Bridge R'y Co.	384,000 00	384,000 00		
19. Wisconsin Central	2,401,000 00	2,401,000 00		
20. Wisconsin Central	31,313,500 00	30,191,000 00	1,001,175 00	755,485 00
21. Chicago, Harvard & G. L.	125,000 00	125,000 00		
22. Great Northern			107,612,600 00	107,612,600 00
23. Mineral Point & Northern	550,000 00	550,000 00		
24. Stanley, Merrill & Phillips	500,000 00	500,000 00		
Total	\$523,762,575 00	\$807,020,075 00	\$237,680,943 07	\$30,252,468 58
Number of roads reporting	22	24	22	24

WHOLE LINE, 1906.

Reporting to the Railroad Commission for the Year Ending June 30, 1906.

Income Bonds.		Total Funded Debt.		Interest.		No.
Amount issued.	Amount outstanding.	Amount issued.	Amount outstanding.	Total amount accrued during year.	Total amount paid during year.	
		\$112,000 00	\$112,000 00	\$6,720 00	\$8,220 00	1
		612,000 00	612,000 00	30,600 00	22,000 00	2
			121,849,500 00	5,913,850 00	5,907,301 25	3
\$560,000 00	\$500,000 00	173,627,000 00	164,214,000 00	7,882,107 49	7,945,483 00	4
		30,963,800 00	29,376,800 00	1,542,668 50	1,545,891 00	5
		186,384,000 00	174,172,000 00	7,345,053 53	7,353,951 33	6
		3,230,000 00	3,230,000 00	168,700 00	168,700 00	7
		128,600,275 00	128,660,275 00	4,689,522 50	4,708,661 25	8
		50,000 00	50,000 00	3,000 00	3,000 00	9
3,000,000 00	3,000,000 00	23,934,133 19	23,406,493 19	859,700 00	859,700 00	10
		500,000 00	500,000 00	20,000 00	20,000 00	11
		9,700,000 00	9,700,000 00	435,000 00	436,000 00	12
		7,600,000 00	7,600,000 00	30,000 00	30,000 00	13
		460,635 48	436,792 80	22,215 87	22,215 87	14
		56,212,399 40	50,155,184 91	1,947,440 00	1,830,795 00	15
			293,958,412 68	6,986,140 00	6,976,663 75	16
		1,000,000 00	220,000 00	11,000 00	11,000 00	17
		384,000 00	84,000 00	19,200 00	19,200 00	18
		2,401,000 00	2,401,000 00	100,716 63	None.	19
		32,314,675 00	30,946,485 00	1,161,467 31	1,159,858 11	20
		125,000 00	125,000 00	6,250 00	None.	21
		107,612,600 00	107,612,600 00	151,875 00	195,602 85	22
		550,000 00	550,000 00	22,008 34	21,758 24	23
		500,000 00	500,000 00	21,666 67	21,666 67	24
\$3,500,000 00	\$3,500,000 00	\$766,493,518 07	\$1,150,772,543 58	\$39,376,701 84	\$39,248,668 42	
22	24	22	24	24	24	

FUNDED DEBT AND INTEREST,

A Recapitulation of the Funded Debt, and Interest Accrued and paid, of Roads

Name of Company.	Mortgage Bonds.		Miscellaneous Obligations	
	Amount issued.	Amount outstanding.	Amount issued.	Amount outstanding.
1. Abbotsford & Northeastern..	\$112,000 00	\$112,000 00		
2. Ahnapee & Western.....	612,000 00	612,000 00		
3. Chicago, Milwaukee & St. P.....		29,962,792 05		
4. Chicago & Northwestern.....	26,775,862 34	25,606,557 22	*\$14,801,111 68	\$13,709,856 31
5. Chicago, St. Paul, Minneapolis & Omaha.....	14,391,974 24	13,654,336 64		
6. Chi., Burlington & Quincy.....				
7. Chicago, Lake Shore & East.....	130,000 00	130,000 00		
8. Illinois Central.....	1,725,19 00	1,725,139 00		
9. Drummond & South Western.....	50,000 00	50,000 00		
10. Duluth, Superior & Western Terminal Co.....	500,000 00	500,000 00		
11. Green Bay & Western.....	7,600,000 00	7,600,000 00		
12. Kewaunee, Green Bay & Western.....	408,000 00	408,000 00	52,635 48	28,792 80
13. Minneapolis, St. Paul & Sault Ste. Marie.....	12,338,035 00	11,380,767 00	53,005,70	6,710,88
14. Northern Pacific.....				
15. Northwestern Coal Ry. Co.†.....	1,000,000 00	220,000 00		
16. Winona Bridge Ry. Co.†.....				
17. Wisconsin & Michigan.....	1,254,590 00	1,254,590 00		
18. Wisconsin Central.....	28,114,465 50	27,089,623 00	914,072 78	689,757 81
19. Chicago, Har. & Geneva Lake.....	\$62,500 00	62,500 00		
20. Great Northern.....				
21. Mineral Point & Northern.....	550,000 00	550,000 00		
22. Stanley, Merrill & Phillips.....	500,000 00	500,000 00		
Total.....	\$96,124,566 08	\$121,418,304 91	\$15,820,825 64	\$14,435,117 80

*Includes \$8,076,826 78 debenture bonds.

†Cannot divide between states.

‡Not given for Wisconsin

\$ Divided on mileage basis.

WISCONSIN, 1906.

Reporting to the Railroad Commission for the year Ending June 30, 1906.

Income Bonds.		Total Funded Debt.		Interest.		No.
Amount issued.	Amount outstanding.	Amount issued.	Amount outstanding.	Total amount accrued during year.	Total amount paid during year.	
		\$112,000 00	\$112,000 00	\$6,720 00	\$8,220 00	1
		612,000 00	612,000 00	30,600 00	22,000 00	2
			29,962,792 05	1,454,215 72	1,452,605 38	3
\$120,076 52	\$120,076 52	41,697,050 54	39,436,490 05	1,911,552 47	1,927,164 69	4
		14,391,974 24	13,654,336 64	717,556 19	718,530 13	5
						6
		130,000 00	130,000 00	7,800 00	7,800 00	7
		1,725,139 00	1,725,139 00	86,256 95	86,256 95	8
		50,000 00	50,000 00	3,000 00	3,000 00	9
		500,000 00	500,000 00	20,000 00	20,000 00	10
		7,600,000 00	7,600,000 00	30,000 00	30,000 00	11
		460,635 48	436,792 80	22,215 87	22,215 87	12
		12,391,040 70	11,387,477 88	443,272 88	424,276 84	13
						14
		1,000,000 00	220,000 00	11,000 00	11,000 00	15
						16
		1,254,590 00	1,254,590 00	52,208 28		17
		29,028,538 28	27,779,380 81	1,040,741 73	1,021,012 53	18
		62,500 00	62,500 00	3,125 00		19
						20
		550,000 00	550,000 00	22,008 34	21,758 34	21
		500,000 00	500,000 00	21,666 67	21,666 67	22
\$120,076 82	\$120,076 52	\$112,065,468 24	\$135,973,499 23	\$5,883,940 10	\$5,797,507 40	

CURRENT ASSETS AND

Current assets and liabilities of railroads doing business in Wisconsin as re-
Whole

Name of Company.	Cash and Current Assets Available		
	Cash.	Bills re- ceivable.	Due from agents, con- ductors and paymas- ters.
1. Abbotsford & Northeastern.....	\$1,725 02		\$105 28
2. Ahnapee & Western	1,812 40		30 00
3. Bayfield Transfer	73 39		
4. Chicago, Milwaukee & St. Paul	8,495,204 78		977,070 57
5. Chicago & Northwestern	6,602,023 17	366,232 72	2,480,704 89
6. Chicago, St. Paul, Minneapolis & Omaha	966,537 48	4,533 23	219,771 83
7. Chicago, Burlington & Quincy	9,297,517 28	794,681 76	4,227 94
8. Chicago, Lake Shore & Eastern	13,076 58		42,802 02
9. Illinois Central	9,947,040 71	64,635 52	1,291,440 24
10. Drummond & Southwestern			
11. Duluth, South Shore & Atlantic	57,319 61		81,905 86
12. Duluth, Superior & Western Terminal.	10,809 99		
13. Great Northern	6,965,478 82	2,481,916 24	1,593,653 95
14. Green Bay & Western	39,058 54		5,283 20
15. Hawthorne, Nebagamon & Superior			
16. Hazelhurst & Southeastern	273 70		
17. Iola & Northern	2,006 15		126 82
18. Kewaunee, Green Bay & Western	16,238 31		6,370 41
19. Lake Superior Terminal & Transfer	22,492 27		200 00
20. Marinette, Tomahawk & Western	6,166 91		1,266 10
21. Minneapolis, St. Paul & Sault Ste Marie	2,615,773 93	239 75	325,975 47
22. Northern Pacific	17,738,324 84	30,229 06	380,304 20
23. Oshkosh Transportation Co., operated by C. & N. W.	3,738 27		
24. Stanley, Merrill & Phillips	875 37		2,333 62
25. Wisconsin & Michigan			12,286 28
26. Wisconsin Central	1,201,955 63		335,763 13
27. Eastern Ry Co. of Minnesota		331,190 73	
28. Mineral Point & Northern	3,059 60		268 83
Total	\$64,008,582 69	\$4,073,659 01	\$7,761,890 64

* Due from U. S. Government.

LIABILITIES, 1905.

reported to the Railroad Commission of Wisconsin, for year ending June 30, 1905.
line.

for Payment of Liabilities.

Net traffic balances due from other companies.	Due from solvent companies and individuals.	Other cash assets (exclusive of materials and supplies).	Balance—current liabilities.	Total.	Material and supplies on hand.	No.
	\$613 53			\$2,443 85		1
	197 76		\$24,168 78	26,208 94	\$900 00	2
	4,092 55		780,719 80	784,835 68		3
\$296,559 91	370,467 54	\$415,228 76		10,554,531 56	2,742,295 76	4
141,134 53		406,305 38		9,996,400 69	3,320,956 94	5
	179,136 14		1,572,659 77	2,942,638 45	879,678 35	6
2,382,838 19	513,149 09	33,721 00		13,026,135 20	4,810,454 64	7
	1,915,167 58			1,971,046 18	40,429 11	8
2,979,793 42		195,047 89		14,477,957 78	2,412,510 51	9
	23 35		154,913 16	154,936 51	744 48	10
143,424 35	210,081 34		3,504,494 63	3,997,225 79	247,443 24	11
	589,020 22			599,830 21		12
	3,047,036 25			14,068,065 26	3,271,341 67	13
6,631 76	16,307 71	158,535 21		225,816 42	23,499 95	14
			84,005 15	84,005 15	1,000 00	15
	6,555 76			6,829 46		16
3,325 40	59 39	781 21		6,293 97		17
	7,944 17	47,606 06	31,370 54	109,529 40		18
	189 06			22,881 31	1,331 95	19
	2,532 73		414,151 21	424,116 95	19,683 34	20
	266,307 85	88,651 31	3,280 35	3,300,318 66	1,558,817 51	21
380,750 48	2,369,048 41			21,398,656 99	2,948,911 95	22
				3,738 27		23
1,734 60	2,611 02		197,881 61	205,436 22		24
4,680 92	85,707 01	414,932 58	963,971 82	1,481,623 61		25
	533,320 91	40,775 58		2,112,315 25	668,596 25	26
	721 51		232,657 14	564,569 38		27
132 41	3,060 03	30,000 00		36,520 87	829 40	28
\$6,341,005 97	\$10,623,940 91	\$1,831,634 93	\$7,964,273 94	102,604,983 16	\$23,449,425 00	

ASSETS AND

Current Assets and Liabilities of Railroads Doing business in Wisconsin as reported

Name of Company.	Current Liabilities accrued to			
	Loans and bills payable.	Audited vouchers and accounts.	Wages and salaries.	Net traffic balances due other companies.
1. Abbotsford & Northeastern.....			\$2 50	\$2 74
2. Ahnapee & Western.....	\$22,426 39		1,673 10	2,109 45
3. Bayfield Transfer.....	149,013 32	\$654 79		
4. Chicago, Milwaukee & St. Paul.....		1,219,863 92	2,079,109 77	
5. Chicago & Northwestern.....		2,652,036 29	2,133,490 94	730,421 44
6. Chicago, St. Paul, Minneapolis & Omaha.....		515,581 32	435,985 1	48,320 73
7. Chicago, Burlington & Quincy.....		2,651,245 21	2,132,206 34	
8. Chicago, Lake Shore & Eastern.....		186,848 61	95,800 57	180,945 76
9. Illinois Central.....		3,684,310 83	1,967,612 92	478,656 90
10. Drummond & Southwestern.....	154,936 51			
11. Duluth South Shore & Atlantic.....	3,001,115 18	520,097 43	161,326 22	
12. Duluth, Superior & Western Terminal Co.....		1,927 45	80 50	
13. Great Northern.....	1,030,000 00	1,467,624 45	1,381,949 24	263,181 72
14. Green Bay & Western.....		43,707 12	16,300 09	
15. Hawthorne, Nebagamon & Superior.....				1 29
16. Hazelhurst & Southeastern.....				
17. Iola & Northern.....		1 70	264 60	
18. Kewaunee, Green Bay & Western.....	42,548 67	4,621 71	2,188 05	2,475 26
19. Lake Superior Terminal & Transfer Ry. Co.....		5,124 81	6 40	
20. Marinette, Tomahawk & Western.....	407,758 93	980 14	2,686 97	9,829 62
21. Minneapolis, St. Paul & Sault Ste. Marie.....		1,702,647 60	389,101 10	
22. Northern Pacific.....		3,341,015 14	1,802,403 76	
23. Oshkosh Transportation Co. operated by C & N. W.....				
24. Stanley, Merrill & Phillips.....	198,665 76		6,770 46	
25. Wisconsin & Michigan.....	873,437 91	87,483 25	22,660 92	
26. Wisconsin Central.....	500,000 00	432,057 05	266,215 28	39,122 07
27. Eastern Ry. of Minn.....		555,804 93	2,864 45	
28. Mineral Point and Northern.....		10,247 06	4,690 82	
Total.....	\$6,379,902 67	\$19,083,870 81	\$12,905,390 13	\$1,755,066 98

LIABILITIES, 1905.—Continued.

of the Railroad Com. of Wisconsin for year ending June 30, 1905.—Whole Line.

and including June 30, 1905.

Dividends not called for.	Matured interest coupons including coupons due July 1st.	Rental due July 1st.	Miscellaneous.	Balance cash assets.	Total.	No.
.....	\$1,500 00	.....	.....	\$938 59	\$2,443 83	1
.....	635,192 92	.....	\$24 65	.....	26,208 94	2
.....	.....	.....	.....	.....	784,885 68	3
\$38,431 00	2,723,336 25	.....	.....	4,493,790 62	10,554,531 56	4
3,799 25	302,881 02	\$6,000 00	2,168,722 00	1,999,049 75	9,996,400 69	5
1,045,139 00	80,276 25	23,864 55	793,471 47	.....	2,942,638 45	6
6,151 25	2,318,912 25	.....	105,781 77	5,811,838 44	13,026,135 26	7
.....	.....	704,122 48	467,059 12	336,269 64	1,971,046 18	8
27,312 30	1,145,951 25	200,000 00	.....	6,974,123 58	14,477,957 78	9
.....	.....	.....	.....	.....	154,936 51	10
.....	.....	.....	314,686 96	.....	3,997,225 79	11
.....	10,000 00	.....	.....	587,822 26	599,830 21	12
536,060 00	13,352 85	1,270 292 18	.....	8,125,624 82	14,088,085 26	13
.....	.....	.....	115,018 05	50,791 16	225,816 42	14
.....	.....	.....	84,003 86	.....	84,005 15	15
.....	.....	.....	.....	6,829 46	6,829 46	16
.....	.....	.....	.....	6,032 67	6,298 97	17
.....	800 00	.....	56,895 80	.....	109,529 49	18
.....	.....	.....	15,810 62	1,939 50	22,881 33	19
.....	.....	.....	2,861 29	.....	424,116 95	20
2,531 00	813,600 00	.....	32,438 96	.....	3,300,318 66	21
2,714,519 00	1,137,088 03	.....	5,530,236 20	6,873,394 89	21,398,656 99	22
.....	.....	.....	.....	3,738 27	3,738 27	23
.....	.....	.....	.....	.....	205,436 22	24
.....	430,775 00	.....	67,271 53	.....	1,481,628 61	25
530,105 00	.....	.....	39,879 07	304,936 78	2,112,315 25	26
.....	5,900 00	.....	.....	.....	564,589 38	27
.....	.....	.....	.....	21,582 99	36,520 87	28
\$4,904,047 80	\$9,619,565 79	\$2,204,279 21	\$10,154,161 35	\$35,598,703 42	\$102,604,988 46	

CURRENT ASSETS

Current Assets and Liabilities of Railroads doing Business in Wisconsin as
Whole

Cash and Current Assets			
Name of Company.	Cash.	Bills re- ceivable.	Due from agents, con- ductors and paymasters.
1. Abbotsford & Northeastern	\$2,193 98		\$144 12
2. Ahnapee & Western	2,124 80		40 00
3. Big Falls Railway Co.			
4. Chicago, Milwaukee & St. Paul	5,276,888 11		1,383,438 91
5. Chicago & Northwestern	16,835,918 59	\$286,184 06	2,510,308 05
6. Chicago, St. Paul, Minneapolis & Omaha	1,045,743 03		206,615 24
7. Chicago, Burlington & Quincy	14,423,240 45	795,655 26	3,387 50
8. Chicago, Lake Shore & Eastern	70,621 12		37,827 58
9. Illinois Central	1,591,523 80	80,786 83	1,658,740 40
10. Chicago, Harvard & Geneva Lake			
11. Drummond & Southwestern			
12. Duluth, South Shore & Atlantic	43,097 29		90,145 19
13. Duluth, Superior & Western Terminal	3,569 25		
14. Great Northern	13,811,405 39	3,576,596 44	2,262,934 70
15. Green Bay & Western	44,757 43		6,994 46
16. Hawthorne, Nebagamon & Superior			
17. Hazelhurst & Southeastern	2,217 73		
18. Iola & Northern	1,406 18		1,153 96
19. Kewaunee, Green Bay & Western	15,229 66		1,046 69
20. John R. Davis Lumber Co., Logging Ry.			
21. Lake Superior Terminal & Transfer Ry.	11,901 05		200 00
22. Marinette, Tomahawk & Western	5,636 99		1,695 84
23. Minneapolis, St. Paul & Sault Ste. Marie	3,176,580 36	7,974 90	495,608 98
24. Northern Pacific	21,978,646 07	42,427 64	561,876 73
25. Northwestern Coal Ry. Co.	507 50		
26. Oshkosh Transportation Co., operated by C. & N. W.	4,299 50		
27. Stanley, Merrill & Phillips	4,448 30		1,804 05
28. Winona Bridge Ry. Co.	20,410 49		
29. Wisconsin & Michigan			30,277 40
30. Wisconsin Central	2,045,692 58	199,000 00	382,525 40
31. Wisconsin Western			
32. Mineral Point & Northern	2,549 51		542 82
33. Eastern Railway Co. of Minnesota		217,067 20	
Total	\$80,420,609 16	\$5,205,692 33	\$9,637,312 02

AND LIABILITIES, 1906.

Reported to the Railroad Commission for the Year Ending June 30, 1906.
Line.

available for Payment of Liabilities.

Net traffic balance due from other companies.	Due from solvent companies and individuals.	Other cash assets, (excluding material and supplcs.)	Balance—Current liabilities.	Total assets.	Material and supplies. on hand.	No.
	\$2,552 67			\$4,890 75		1
	437 30		31 443 01	34,045 11	\$900 00	2
	1,755 06			1,755 66		3
\$194,560 56	9,785,104 36	\$628,512 63		17,268,504 60	4,943,872 35	4
	167,051 47	432,451 66		20,231,913 83	3,747,246 75	5
	74,795 89		1,983,509 24	3,310,663 40	943,251 70	6
242,546 88	3,407,445 33	33,372 13		18,905,647 55	4,984,451 36	7
	2,564,228 67			2,672,677 37	118,919 31	8
	3,208,008 80	803,633 74	1,600,302 96	8,937,996 53	2,932,656 73	9
			35,721 46	65,721 46		10
	6,610 00		161,403 62	168,013 62	496 12	11
	247,943 39		4,252,581 75	4,633,767 63	356,804 85	12
	356,029 85			359,599 10		13
	3,566,239 64			23,217,176 17	3,830,559 15	14
21,671 24	12,717 55	86,228 41		172,369 09	8,737 38	15
			64,422 52	64,422 52	1,000 00	16
	3,190 01			5,407 74		17
	61 80	6,006 24		3,628 18		18
151 85	8,296 72	40,309 27	13,340 63	78,374 82		19
					772 65	20
	128 00	5,853 36		18,087 41		21
	2,161 13		421,530 94	431,024 90	12,269 20	22
184,479 47	373,715 56			4,238,359 27	1,309,306 90	23
120,134 27	3,943,682 44	5,601,023 45		32,247,790 60	3,465,330 80	24
32,043 20				32,550 70		25
			30,110 48	4,299 50		26
				36,362 83	6,407 22	27
2,221 55				22,632 07		28
3,957 05	11,361 62	651,415 06	833,819 21	1,530,830 34	47,709 17	29
	209,518 24	11,604 97		2,848,341 19	636,157 77	30
	86,139 59			86,139 59		31
100 00	1,816 96	223 26	34,742 96	39,975 51	344 74	32
	23 17		242,824 60	459,914 97		33
\$801,866 13	\$28,036,015 20	\$8,300,639 18	\$9,705,753 38	142,107,883 40	\$7,347,194 15	

CURRENT ASSETS AND

Name of Company.	Current Liabilities Accrued to			
	Loans and bills payable.	Audited vouchers and accounts.	Wages and salaries.	Net traffic balance due other companies.
1. Abbotsford & Northeastern		\$86 60	\$2 50	\$7 01
2. Ahnapee & Western	\$28,349 16		2,810 16	2,885 79
3. Big Falls Railway Co.				
4. Chicago, Milwaukee & St. Paul	6,850,000 00	2,587,963 00	2,437,507 81	
5. Chicago & Northwestern		1,418,716 81	2,350,944 38	619,441 94
6. Chicago, St. Paul, Minneapolis & Omaha		674,353 05	469,854 39	130,935 10
7. Chicago, Burlington & Quincy		3,726,192 62	2,445,607 29	
8. Chicago, Lake Shore & Eastern		209,829 90	115,463 19	258,608 31
9. Illinois Central	1,399,500 00	3,533,451 46	2,103,041 99	540,131 28
10. Chi., Harvard & G. Lake	29,610 47	4,021 02		
11. Drummond & Southwestern	168,013 62			
12. Duluth, South Shore & Atlantic				
13. Duluth, Superior & Western Terminal Co.	3,922,907 76	514,102 53	162,483 24	34,274 09
14. Great Northern		56,199 73	65 95	
15. Green Bay & Western		2,752,845 97	1,907,808 71	224,031 60
16. Hawthorne, Nebagamon & Superior		16,858 49	17,224 50	
17. Hazelhurst & Southeastern				
18. Iola & Northern		10 30	235 25	733 86
19. Kewaunee, Green Bay & Western	28,792 80	389 51	5,113 07	
20. Lake Superior Terminal & Transfer Ry. Co.		5,978 04	6 40	
21. Marinette, Tomahawk & Western	416,258 92	935 87	1,903 87	8,796 65
22. Minneapolis, St. Paul & Sault Ste. Marie		1,101,533 48	479,783 41	
23. Northern Pacific		4,353,448 91	2,165,332 32	
24. Northwestern Coal Ry. Co.		1,640 84		
25. Oshkosh Transportation Co. operated by C. & N. W.				
26. Stanley, Merrill & Phillips	27,031 14		6,312 97	3,018 72
27. Winona Bridge Ry. Co.		1,352 41		
28. Wisconsin & Michigan	195,516 24	55,679 36	21,194 86	
29. Wisconsin Central	1,199,000 00	471,570 91	286,332 48	53,923 98
30. Wisconsin Western				
31. Mineral Point & Northern	29,758 34	6,568 66	3,596 21	52 33
32. Eastern Ry. of Minnesota		453,160 30	1,854 37	
Total	\$14,294,738 46	\$21,926,889 57	\$14,984,479 32	\$1,876,930 66

LIABILITIES, 1906—Continued.

and Including June 30, 1906.							No.
Dividends not called for.	Matured Interest coupons unpaid (including coupons due July 1).	Rentals due July 1.	Miscellaneous.	Balance cash assets.	Total.		
.....	.....	.....	.....	\$4,794 64	\$4,890 75	1
.....	.....	.....	.....	.....	34,045 11	2
.....	.....	.....	.....	1,755 06	1,755 06	3
\$42,451 50	\$2,729,885 00	.....	.....	2,620,697 29	17,268,504 60	4
2,455 75	295,160 52	\$6,000 00	\$3,106,403 50	12,432,790 93	20,231,913 83	5	
1,046,346 50	78,008 75	13,346 31	897,819 30	.....	3,310,663 40	6
4,249 00	2,411,460 00	.....	124,791 07	10,193,347 57	18,905,647 55	7
.....	.....	704,122 48	737,893 78	646,669 71	2,672,677 37	8
26,281 80	1,135,590 00	200,000 00	.....	.....	8,937,996 53	9
.....	.....	.....	2,089 97	.....	35,721 46	10
.....	.....	.....	.....	.....	168,013 62	11
.....	.....	.....	.....	.....	4,633,767 62	12
.....	10,000 00	.....	.....	313,333 92	350,599 10	13
913 50	.....	1,269,289 18	.....	17,062,287 21	23,217,176 17	14
.....	.....	.....	58,201 10	80,085 00	172,369 09	15
.....	.....	.....	64,422 52	.....	64,422 52	16
.....	.....	.....	5,407 74	.....	5,407 74	17
.....	.....	.....	.....	7,648 77	8,628 18	18
.....	750 00	.....	43,329 44	.....	78,374 82	19
5,940 00	.....	.....	3,410 05	2,752 92	18,087 41	20
.....	.....	.....	3,129 58	.....	431,024 90	21
9,427 50	930,245 00	.....	205,026 98	1,512,342 90	4,238,359 27	22
2,714,519 00	1,147,014 25	.....	7,941,762 98	13,925,713 14	32,247,790 60	23
.....	.....	.....	.....	30,909 86	32,550 70	24
.....	.....	.....	.....	4,299 50	4,299 50	25
.....	.....	.....	.....	.....	36,362 83	26
.....	6,525 00	.....	.....	14,754 66	22,632 07	27
.....	507,325 00	.....	.....	751,114 85	1,530,856 34	28
.....	528,605 00	.....	2,543 30	306,335 52	2,848,341 19	29
.....	.....	.....	.....	86,139 59	86,139 59	30
.....	.....	.....	.....	.....	39,975 51	31
.....	4,900 00	.....	.....	.....	459,914 97	32
\$3,852,584 55	\$9,785,468 52	\$2,192,757 97	\$13,196,231 31	\$59,997,803 04	142,107,883 40		

*Includes \$3,077,243 50 dividends, declared payable July 2, 1906.

PERMANENT

Permanent improvement of roads doing business in Wisconsin as reported to

Name of Company.	Expenditures During Year for Construction.		
	Included in operating expenses.	Not included in operating expenses.	Total construction.
1. Ahnapee & Western.....	\$18,736 05		\$18,736 05
2. Chicago, Milwaukee & St. Paul.....	619,960 23	\$1,492,161 67	2,112,121 95
3. Chicago & Northwestern.....	237,179 70	5,602,956 80	5,840,136 50
4. Chicago, St. Paul, Minn. & Omaha.....			1,824,719 60
5. Chicago, Burlington & Quincy.....			6,233,493 94
6. Chicago, Lake Shore & Eastern.....		127,626 32	127,626 32
7. Illinois Central.....		780,063 42	780,063 42
8. Chippewa River & Northern.....		9,061 25	9,061 25
9. Chicago, Harvard & Geneva Lake.....		6,694 93	6,694 93
10. Chippewa Valley & Northern.....		4,860 02	4,860 02
11. Drummond & Southwestern.....			
12. Duluth, South Shore & Atlantic.....	8,551 20	33,543 22	42,094 42
13. Duluth, Superior & West. Terminal Co.			20,249 25
14. Great Northern.....			1,087,610 70
15. Green Bay & Western.....	9,000 00		9,000 00
16. Hawthorne, Nebagamon & Superior.....	5,656 33	1,078 61	6,734 93
17. Kewaunee, Green Bay & Western.....	6,000 00		6,000 00
18. Marinette, Tomahawk & Western.....		32,899 97	32,899 97
19. Minneapolis, St. P. & Sault Ste. Marie		1,581,328 09	1,581,328 09
20. Northern Pacific.....		1,668,521 43	1,668,521 43
21. Northwestern Coal.....	2,653 43		2,653 43
22. Robbins Railway Co.....	12,000 00		12,000 00
23. Stanley, Merrill & Phillips.....		145,821 57	145,821 57
24. Wisconsin & Michigan.....			110,034 41
25. Wisconsin Central.....		422,548 96	422,548 96
26. Eastern Ry. Co. of Minnesota.....			289,599 97
27. Hillsboro & Northeastern.....	4,106 42	100 00	4,206 42
28. Rhoddis Lumber & Veneer Co.....			
29. Superior & Southeastern.....		11,377 88	11,377 88
Totals (29 roads reporting.).....	2	2	\$22,290,126 59

¹ Cr.² Totals omitted on account of the incompleteness of reports.

IMPROVEMENTS, 1905.

the Railroad Commission for year ending June 30, 1905—Whole Line.

Expenditures During Year for Equipment.			Grand total construction and equipment	Credits—Property and material sold.	Difference or net addition to property.	No.
Included in operating expenses.	Not included in operating expenses.	Total equipment.				
\$7,300 00		\$7,300 00	\$26,036 05		\$26,036 05	1
	\$864,221 41	864,221 41	2,976,343 36		2,976,343 36	2
742,139 36	23,683 57	765,822 93	6,605,959 43		6,605,959 43	3
		170,729 69	1,995,449 29	\$14,206 70	1,981,242 59	4
		390,019 15	6,623,513 09		6,623,513 09	5
	18,483 49	18,483 49	146,109 81	2,049,543 15	1,903,433 34	6
	3,962,700 80	3,962,700 80	4,742,764 22		4,742,764 22	7
			9,061 25		9,061 25	8
	2,132 39	2,132 39	8,827 32		8,827 32	9
			4,860 02		4,860 02	10
	63 30	63 30	63 30		63 30	11
		15,674 03	57,768 45	2,250 00	55,518 45	12
			20,249 25		20,249 25	13
		30,361 72	1,117,972 42		1,117,972 42	14
			9,000 00		9,000 00	15
15,729 69	152 67	15,882 36	22,617 29		22,617 29	16
		59,700 00	65,700 00		65,700 00	17
	3,454 30	3,554 30	36,354 27	8,758 07	27,596 20	18
	1,504,493 56	1,504,493 56	3,085,821 65		3,085,821 65	19
		17,076 22	282,523 75		282,523 75	20
			2,653 43		2,653 43	21
			12,000 00		12,000 00	22
	450 00	450 00	146,271 57		146,271 57	23
		74,365 87	64,331 46		64,331 46	24
	63,784 43	63,784 43	491,533 39	128,495 28	362,338 11	25
		7,076 22	282,523 75		282,523 75	26
		1	4,206 4		4,206 4	27
500 00		500 00	500 00		500 00	28
	727 19	727 19	12,105 07		12,105 07	29
2	2	10,698,269 7	532,928,236 3	\$1,709 28	\$29,906,577 06	....

PERMANENT

Permanent Improvements of Roads doing Business in Wisconsin as Reported to

Name of Company.	Expenditures During the Year for Construction.		
	Included in operating expenses.	Not included in operating expenses.	Total construction.
1. Bayfield Transfer		\$205 48	\$205 48
2. Chicago, Milwaukee & St. Paul.....			5,123,975 83
3. Chicago & Northwestern	\$108,901 11	9,717,817 89	9,826,719 00
4. Chicago, St. Paul, Minneapolis & Omaha			587,188 08
5. Chicago, Burlington & Quincy			6,428,715 92
6. Chicago, Lake Shore & Eastern		255,922 80	255,922 80
7. Illinois Central			1,071,927 21
8. Chippewa Valley & Northern		38,063 59	38,063 59
9. Drummond & Southwestern			
10. Duluth, South Shore & Atlantic	1,237 50	352,165 04	353,402 54
11. Duluth, Superior & Western Terminal			369,252 63
12. Fairchild & Northeastern			17,816 98
13. Great Northern			2,774,603 62
14. Green Bay & Western	31,000 00		31,000 00
15. Hawthorne, Nebagamon & Superior.....	3,356 78		3,356 78
16. Hazelhurst & Southeastern			
17. Kewaunee, Green Bay & Western.....	12,000 00	19,151 56	31,151 56
18. Lake Superior Terminal & Transfer Ry.		34,545 85	34,545 85
19. Marinette, Tomahawk & Western		136 96	136 96
20. Minneapolis, St. Paul & Sault Ste. Marie		186,919 49	186,919 49
21. Northern Pacific		2,097,743 26	2,097,743 26
22. Northwestern Coal	5,294 34		5,294 34
23. Stanley, Merrill & Phillips		10,584 05	10,584 05
24. Wisconsin & Michigan			451,111 43
25. Wisconsin Central		372,190 71	372,190 71
26. La Crosse & S. E.			199,860 68
27. Superior & S. E.			2,119 26
28. Mineral Point & Northern		13,644 20	13,644 20
29. Hillsboro & North Eastern	3,442 79		3,442 79
Total (29 roads reporting)	2	2	3,290,893 04

¹ Cr.² Totals omitted on account of the incompleteness of reports.

IMPROVEMENTS, 1906.

the Railroad Commission for Year Ending June 30, 1906. Whole Line.

Expenditures During the Year for Equipment.			Grand total construction and equipment.	Credits—property and material sold, and deductions.	Difference or net addition to property.	No.
Included in operating expenses.	Not included in operating expenses.	Total equipment.				
	\$4,719 10	\$4,719 10	\$4,924 58	\$4 05	\$4,920 53	1
		3,098,677 49	8,222,653 32		8,222,653 32	2
1,570,157 43	1,800,153 86	3,370,311 29	13,197,030 29	6,284,337 35	6,912,692 94	3
		600,951 60	1,188,137 68	7,696 46	1,180,441 22	4
		3,386,050 10	9,814,766 02		9,814,766 02	5
	82,067 40	82,067 40	337,990 20		337,990 20	6
		1,734,681 61	2,806,608 82		2,806,608 82	7
	9,077 87	9,077 87	47,141 46		47,141 46	8
	4,322 25	4,322 25	4,322 25		4,322 25	9
		293,476 53	646,879 07	25 00	646,854 07	10
		15,777 70	369,252 63		369,252 63	11
			12,039 28		12,039 28	12
			2,774,603 62		2,774,603 62	13
	26,700 00	26,700 00	57,700 00		57,700 00	14
16,580 35		16,580 35	19,937 13		19,937 13	15
		529 40	529 40		529 40	16
			31,151 56		31,151 56	17
			34,545 85		34,545 85	18
			136 90	1,043 00	Cr. 905 04	19
	1,881,790 86	1,881,790 86	2,068,710 35		2,068,710 35	20
	516,309 76	516,309 76	2,614,053 02	1,814,730 36	799,322 66	21
			5,294 34		5,294 34	22
	6,743 70	6,743 70	17,327 75	80 47	17,247 28	23
		131,232 44	582,343 87		582,343 87	24
	61,230 27	61,230 27	433,420 98	162,461 51	270,959 47	25
		11,834 60	211,695 28		211,695 28	26
		0,953 50	12,072 53		12,072 56	27
	2,493 53	2,493 53	16,137 73		16,137 73	28
			3,442 79		3,442 79	29
2	2	\$15,293,955 75	\$45,534,849 79	\$8,270,379 20	\$37,261,470 59	

COST OF ROAD AND EQUIPMENT OF ROADS DOING BUSINESS IN WIS-
YEARS ENDING JUNE 30, 1904

Name of Company.	Cost of Road to June 30, 1904.		
	Construc- tion.	Equip- ment.	Total.
1. Abbotsford & Northeastern	\$327,600 00	\$4,000 00	\$232,000 00
2. Ahnapee & Western	486,784 08	29,227 91	516,011 99
3. Big Falls Railway Co.			5,500 00
4. Bayfield Transfer	3,407,764 69	8,769 71	3,416,534 37
5. Chicago, Milwaukee & St. Paul			223,417,034 42
6. Chicago & Northwestern			
7. Chicago, St. Paul, Minneapolis & Omaha			59,573,399 89
8. Chicago, Burlington & Quincy			321,317,010 48
9. Chicago, Lake Shore & Eastern	2,610,803 81	3,715,569 62	6,326,373 43
10. Chicago & Lake Superior			58,483 77
11. Illinois Central			102,835,596 52
12. Chippewa River & Northern	15,650 00	2,350 00	18,000 00
13. Chippewa Valley & Northern	81,763 88	3,973 00	85,741 88
14. Drummond & Southwestern	147,103 19	52,244 61	199,347 80
15. Duluth, South Shore & Atlantic	42,797,130 10	2,673,640 65	45,470,770 75
16. Duluth, Superior & Western Terminal	2,370,847 44	21,426 30	2,392,273 74
17. Dunbar & Wausaukee	71,033 02	9,100 00	80,133 02
18. Fairchild & Northeastern	218,241 56	30,526 24	248,767 80
19. Great Northern		14,259,002 87	
20. Green Bay & Western	10,177,487 50		10,177,487 50
21. Hawthorne, Nebagamon & Superior	91,974 87		91,974 87
22. Hazelhurst & Southeastern	86,314 16	22,320 75	108,634 91
23. Iola & Northern	65,000 00	6,332 06	71,332 06
24. Kewaunee, Green Bay & Western			1,076,025 00
25. Lake Superior Terminal & Transfer Ry.	259,980 12	54,073 46	314,053 58
26. Mattoon Railway Co.			49,200 00
27. Marinette, Tomahawk & Western	478,146 21	29,137 79	507,284 00
28. Minneapolis, St. Paul & Sault Ste. Marie	48,650,479 03	7,496,944 55	56,147,423 58
29. Northern Pacific	290,358,604 81	28,778,580 71	319,137,185 52
30. Northwestern Coal	215,965 31	17,050 68	233,015 99
31. Oshkosh Transportation Co., operated by C. & N. W.			70,000 00
32. Stanley, Merrill & Phillips	319,751 95	114,254 23	434,006 18
33. Winona Bridge Ry. Co.			789,304 66
34. Wisconsin & Michigan	3,264,205 29	265,315 76	3,529,521 05
35. Whitcomb & Morris	7,559 40	3,275 00	10,834 40
36. Wisconsin Central	49,030,278 20	4,112,735 78	53,143,013 98
37. Mineral Point & Northern			
38. Eastern Ry. Co. of Minnesota	22,375,217 98	4,687,391 92	27,062,609 90
39. La Crosse & Southeastern			
40. Roddis Lumber & Veneer Co.		8,892 00	8,892 00
41. Superior & Southeastern			
Total	2	2	2
No. of railroads reporting			

¹Credits.²Totals omitted on account of the incompleteness of reports.³Written of cost of road and equipment, \$4,735,000 00.

CONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR THE AND 1905. WHOLE LINE.

Net Additions During the Year.			Cost of Road to June 30. 1905.			No.
Construction.	Equip-ment.	Total.	Construc-tion.	Equip-ment.	Total.	
			\$227,600 00	\$4,400 00	\$232,000 00	1
\$18,736 05	\$7,500 00	\$26,036 05	505,520 13	36,527 91	542,048 04	2
					5,500 00	3
1,492,161 67	864,221 41	356,383 08	3,407,764 66	8,769 71	3,416,534 37	4
5,840,133 50	765,822 93	36,605,959 43			242,431,436 52	5
					225,287,993 85	6
1,810,512 90	170,729 65	1,981,242 55			61,554,642 48	7
6,233,493 94	390,013 15	6,623,513 09			327,940,523 57	8
38,193 79	12,044,933 45	12,006,737 70	2,648,999 60	1,670,636 13	4,319,635 73	9
					58,483 77	10
780,063 42	3,982,700 80	4,742,764 22			107,578,300 74	11
					18,000 00	12
4,860 02		4,860 02	86,633 90	3,973 00	90,601 90	13
		63 30	147,103 19	52,307 91	199,411 10	14
40,294 42	15,224 03	15,518 45	42,837 424 52	2,688,864 68	45,526,289 20	15
20,249 25		20,249 25	2,391,096 69	21,426 30	2,412,522 99	16
			71,033 02	9,100 00	80,133 02	17
			218,241 56	30,526 24	248,767 80	18
	497,102 36	497,102 36		14,756,105 23		19
			10,097,337 50		10,097,337 50	20
11,499 78		11,499 78	90,475 09		90,475 09	21
			86,314 16	22,320 75	108,634 91	22
			65,000 00	6,332 06	71,332 06	23
	59,700 00	59,700 00			1,135,725 00	24
			259,980 12	54,073 46	314,053 58	25
					49,200 00	26
32,811 19	25,214 99	27,599 20	510,957 40	23,922 80	534,880 20	27
1,581,328 09	1,504,493 56	3,085,821 65	50,231,807 12	9,001,438 11	59,233,245 23	28
790,065 35	2,749,369 32	3,539,434 67	291,148,670 16	31,527,950 03	322,676,620 19	29
3,847 96		3,847 96	219,813 27	17,050 68	236,863 95	30
					70,000 00	31
145,821 57	450 00	146,271 57	465,573 52	114,704 23	580,277 75	32
					789,304 66	33
10,034 41	74,365 87	64,331 46	3,254,170 88	339,631 63	3,593,852 51	34
230 00		230 00	7,789 40	3,275 00	11,064 41	35
121,159 19		121,159 19	48,909,119 01	4,112,735 73	53,021,854 79	36
					945,731 29	37
289,599 97	17,076 22	289,529 75	22,664,817 95	4,689,815 70	27,345,133 65	38
			525,113 74	27,173 62	552,287 36	39
	500 00	500 00		9,392 00	9,392 00	40
			44,644 12	2,061 57	46,705 69	41
\$18,989,714 71	\$9,034,837 72	\$27,964,552 45	2	2	1,503456906 90	....
24	24	24			40	....

COST OF ROAD

Of Railroads doing Business in Wisconsin as Reported to the Railroad

Name of Company.	Net additions during the year.			Total
	Construc- tion.	Equipment.	Total.	Construc- tion.
1. Abbotsford & Northeastern.....				\$227,600 00
2. Ahnapee & Western.....				505,520 13
3. Big Falls Railway Co.....				
4. Chicago, Milwaukee & St Paul.....	\$5,123,975 83	\$3,098,677 49	\$8,222,653 32	
5. Chicago & Northwestern....	9,826,719 00	3,370,311 29	13,197,030 29	
6. Chicago, St. Paul, Minne- apolis & Omaha.....	579,489 62	600,951 60	1,180,441 22	
7. Chicago, Burlington & Quincy.....	6,428,715 92	3,386,050 10	9,814,766 02	
8. Chicago, Lake Shore and Eastern.....	62,128 92	4,805 98	66,934 90	2,711,128 52
9. Chicago & Lake Superior.....				58,483 77
10. Illinois Central.....	1,071,927 21	1,734,681 61	2,806,608 82	
11. Chippewa Valley & North- ern.....	38,063 59	9,077 87	47,141 46	124,687 49
12. Drummond & Southwestern..		4,322 25	4,322 25	147,103 19
13. Duluth, South Shore and Atlantic.....	353,377 54	293,476 53	646,854 07	43,190,802 06
14. Duluth, Superior & Western Terminal Co.....	369,252 63		369,252 63	2,760,349 32
15. Dunbar & Wausaukee.....				40,000 00
16. Fairchild & Northeastern..	17,816 98	25,777 70	43,594 68	236,058 54
17. Great Northern.....	*	*	*	*
18. Green Bay & Western.....		26,700 00	26,700 00	
19. Hawthorne, Nebagamon & Superior.....	2,802 09	28,985 40	31,787 49	87,673 00
20. Hazelhurst & Southeastern..		529 40	529 40	80,912 63
21. Iola & Northern.....				65,000 00
22. Kewaunee, Green Bay & Western.....				
23. Lake Superior Terminal and Transfer.....	34,545 85		34,545 85	294,525 97
24. Marinette, Tomahawk and Western.....	136 96	21,043 00	21,180 96	511,094 36
25. Minneapolis, St. Paul & Sault Ste. Marie.....	186,919 49	1,881,790 86	2,068,710 35	50,418,726 61
26. Northern Pacific.....	283,012 90	516,309 76	799,322 66	291,431,683 06
27. Northwestern Coal Ry. Co.....				219,813 27
28. Oshkosh Transportation Co.....				70,000 00
29. Robbins Railway Co.....				25,118 31
30. Stanley, Merrill & Phillips	10,503 58	6,743 70	17,247 28	476,077 10
31. Winona Bridge Ry. Co.....				789,304 66
32. Wisconsin & Michigan.....	451,111 43	131,232 44	582,343 87	3,705,282 31
33. Whitcomb & Morris.....				8,039 40
34. Wisconsin Central.....	2162,461 51		2162,461 51	48,746,657 56
35. Wisconsin Western.....				
36. Mineral Point & Northern..	16,137 73		16,137 73	
37. Eastern Ry. Co. of Minne- sota.....	251,547 25	85,170 01	336,717 26	22,916,365 20
38. La Crosse & Southeastern..	199,860 68	11,834 60	211,695 28	724,974 42
39. Roodis Lum. & Veneer Co.....	3,739 11		3,739 11	
40. Superior & Southeastern.....				48,045 03
	\$25,171,936 92	\$15,146,859 39	\$40,318,846 31	Reports too

*Not given.

¹ Including equipment.² Credit.³ Includes 6,284,337.35 Credits.

AND EQUIPMENT

Commission for the Year Ending June 30, 1906, for Whole Line.

cost to June 32, 1906.		Cost of road per mile June 30, 1906.			Mileage upon which based.	No.
Equipment.	Total.	Construc-tion.	Equipment.	Total.		
\$4,400 00	\$332,000 00	\$15,013 19	\$290 23	\$15,303 42	15 16	1
36,527 91	542,048 04	14,853 75	1,074 35	15,928 10	34 00	2
4,500 00	4,500 00	.....	214,28	214 28	21 00	3
.....	250,654,089 84	.....	.....	35,657 51	7,029 49	4
.....	232,200,686 79	.....	.....	31,569 12	7,355 31	5
.....	61,235,083 70	.....	.....	37,614 15	1,627 98	6
.....	337,755,289 59	.....	.....	39,858 16	8,473 93	7
1,675,442 11	4,386,570 63	13,410 81	8,287 70	21,698 51	202 16	8
.....	58,483 77	.....	.....	19,494 59	3 00	9
.....	107,578,360 74	.....	.....	51,316 25	4,423 87	10
13,055 87	137,743 36	10,620 74	1,112 00	11,732 74	11 74	11
56,630 16	203,733 35	17,983 28	6,923 00	24,906 28	8 18	12
2,982,341 21	46,173,143 27	74,077 35	5,115 07	79,192 42	583 05	13
21,426 30	-2,781,775 62	445,217 63	3,455 85	448,673 48	6 20	14
7,700 00	47,700 00	2,962 96	570 37	3,533 33	18 50	15
24,748 54	260,807 08	6,212 02	651 29	6,863 31	33 00	16
18,179,564 19	18,179,564 19	*	*	*	5,183 11	17
.....	10,094,037 50	.....	.....	44,862 38	225 00	18
51,211 29	138,884 29	2,617 10	1,528 69	4,145 79	33 50	19
22,850 15	103,762 78	7,355 69	2,077 29	9,432 98	11 00	20
6,332 06	71,332 06	.....	.....	15,177 04	4 70	21
.....	1,130,725 00	.....	.....	30,810 00	36 70	22
54,073 46	348,599 43	16,820 44	3,088 15	19,908 59	17 51	23
22,879 80	533,974 16	11,676 82	522 73	12,199 55	43 77	24
10,883,228 97	61,301,955 58	32,619 97	5,068 18	37,718 15	1,625 26	25
32,044,259 79	323,475,942 95	*	*	*	.....	26
17,050 68	236,863 95	27,476 66	2,131 33	29,607 99	8 00	27
.....	70,000 00	.....	.....	15,384 61	4 55	28
19,881 69	45,000 00	837 27	662 73	1,500 00	30 00	29
121,447 93	597,525 03	10,588 34	2,232 82	12,821 16	56 30	30
.....	789,304 66	789,304 66	.....	766,315 20	1 05	31
470,914 07	4,176,136 38	48,302 47	3,810 56	52,122 03	81 26	32
3,275 00	11,314 40	.....	.....	1,339 90	6 00	33
4,112,735 78	52,859,393 28	49,614 41	4,188 95	53,800 36	982 51	34
.....	521,400 00	.....	.....	10,033 06	51 97	35
.....	961,919 02	.....	.....	36,436 33	26 40	36
4,765,485 71	27,681,850 91	.....	.....	55,202 51	501 46	37
39,038 22	13,121 11	.....	.....	1,312 11	10 00	39
.....	763,982 64	.....	.....	16,684 51	45 79	38
12,014 87	60,059 90	.....	.....	3,784 44	7 78	40
incomplete.	1,548,418,724 76	Reports to	incomplete	\$31,389 43	438,827 43	

* Omitting Northern Pacific Railway.

INCOME ACCOUNT

Income Account of Railroads Doing Business in Wisconsin as

Name of Company.	Gross earnings from operation.	Less operating expenses.	Income from operation.	Deficit.
1. Abbotsford & Northeastern...	\$28,536 17	\$18,415 88	\$10,120 29	
2. Alnapee & Western.....	62,734 46	40,964 23	21,770 23	
3. Big Falls Railway Co.....	7,325 92	6,143 41	1,182 51	
4. Bayfield Transfer.....	1,477 40		1,477 40	
5. Chicago, Milwaukee & St. P. ¹	15,388,999 15	8,658,866 42	6,730,132 73	
6. Chicago & Northwestern ²	13,384,124 43	8,778,145 12	4,605,979 31	
7. Chicago, St. P. M. & O.....	5,355,221 10	3,465,953 55	1,889,267 55	
8. Chicago, Burlington & Quincy	Not given	separately	for Wis.	
9. Chicago, Lake Shore & East.	92,584 18	62,195 01	30,389 14	
10. Chicago & Lake Superior.....	3,083 91	4,752 73		1,668 82
11. Illinois Central.....	102,767 95	160,625 73		57,857 77
12. Chippewa River & Northern...	13,495 96	18,840 15		5,344 19
13. Chippewa Valley & Northern	10,932 60	7,334 08	3,598 52	
14. Drummond & Southwestern...	14,768 22	14,232 50	535 72	
15. Duluth, S. S. & Atlantic.....	276,056 06	288,026 60		11,970 54
16. Duluth, Superior & Western Terminal Co.....	160,000 00		160,000 00	
17. Dunbar & Wausaukee.....	24,710 27	14,400 41	10,309 86	
18. Fairchild & Northeastern.....	35,799 79	24,557 76	11,242 03	
19. Great Northern.....	1,106,674 05	550,779 75	555,894 30	
20. Green Bay & Western.....	600,007 78	357,017 66	242,990 12	
21. Hawthorne, Nebagamon & S.	48,197 59	55,330 94		7,133 35
22. Hazelhurst & Southeastern...	23,402 41	15,481 97	7,920 47	
23. Iola & Northern.....	7,442 54	5,595 06	1,847 48	
24. Kewaunee, Green Bay & West.	116,497 43	62,229 27	54,268 16	
25. Lake Superior Terminal & Transfer.....	11,127 53	69,589 32		58,461 79
26. Marinette, Tomahawk & West	51,210 25	45,695 91	4,514 34	
27. Minneapolis, St. Paul & A.....	64,898 67	84,416 22		19,517 56
28. Minneapolis, St. P. & S. S. M.	1,882,880 97	982,324 55	920,556 42	
29. Northern Pacific.....	565,638 93	475,805 34	89,833 59	No further
30. Northwestern Coal.....	15,900 85	17,047 24		1,146 39
31. Robb's Railway Co.....	19,203 82	18,543 55	660 27	
32. Stanley, Merrill & Phillips.....	133,045 39	82,009 91	51,035 48	
33. Wisconsin & Michigan.....	181,685 59	127,982 80	53,722 79	
34. Whiteomb & Morris.....	3,080 61	4,175 00		1,094 39
35. Wisconsin Central ³	35,562,851 54	3,716,904 72	1,845,946 82	
36. Wisconsin Western.....	69,510 41	36,466 79	33,103 62	
37. Bayfield, Lake Shore & West	9,798 37	17,283 72		7,485 35
38. La Crosse & Southeastern.....	7,526 12	10,442 72		2,916 60
39. Mineral Point & Northern.....	11,605 88	27,572 96		15,967 08
Total.....	\$45,454,804 34	\$28,307,067 02	\$17,358,301 15	\$190,563 83
No. of railroads included.....	38	38	38	38

¹ Road mileage basis except taxes.² Proportional except for taxes.³ Actual.

WISCONSIN, 1905.

Reported to the R. R. Commission for the Year Ending June 30, 1905 - Wisconsin.

Income From Other Sources.				Total income.	Deficit.	No.
Interest on bonds owned.	Dividends on stocks owned.	Miscellaneous income less expense.	Total income from other sources.			
				\$10,120 29		1
				21,770 2		2
				1,182 51		3
				1,477 40		4
	\$1,450 76	\$4,328 55	\$51,850 96	\$57,630 27	6,787,763 01	5
	684 76	368,771 68	55,608 29	425,064 73	5,031,044 04	6
			71,197 72	71,197 72	1,963,465 27	7
						8
				30,389 14		9
					1,668 82	10
					57,857 77	11
					5,344 19	12
					3,598 52	13
					535 72	14
		1,353 34	1,353 34		10,617 20	15
						16
				160,030 00		17
				10,309 86		18
				11,242 03		19
		2,774 84	2,774 84	58,569 14		20
				242 930 12	7,133 35	21
						22
				7,920 47		23
				1,847 48		24
				54,268 16		25
					58,161 79	26
				4,514 34		27
					19,517 56	28
		12,895 63	12,895 63	933,452 05		29
report.					1,146 39	30
					660 27	31
					51,035 48	32
					53,722 79	33
					1,094 39	34
	2,620 64		38,110 76	40,731 40	1,886,678 22	35
					33,103 62	36
						37
					7,485 35	38
					2,916 60	39
					1,967 08	39
						39
	\$1,756 16	\$373,100, 23	\$611,647 93	\$17,858 730 15	\$189,210 49	
	37	37		37	37	
			37			

³ Actual.

INCOME ACCOUNT

Deductions from Income.

Name of Company.	Interest on funded debt accrued.	Interest on interest bearing liabilities accrued not otherwise provided for.	Rentals including tracks, yards and terminals.	Taxes.
1. Abbotsford & Northeastern...	\$6,720 00			\$201 77
2. Ahuapee & Western.....	30,600 00			2,041 97
3. Big Falls Railway Co.....	322 00			228 81
4. Bayfield Transfer.....	75,000 00	\$8,298 46		45 15
5. Chicago, Milwaukee & St. P.	1,488,722 64			608,392 95
6. Chicago & Northwestern.....	1,935,331 90	218 02	\$9,014 56	525,801 00
7. Chi., St. P., Minneap. & O.	705,452 78	2,969 26		301,450 91
8. Chicago, Lake Shore & East'n	7,800 00			4,094 44
9. Chicago & Lake Superior.....				
10. Illinois Central.....	86,256 95			534 72
11. Chippewa River & Northern...				346 13
12. Chippewa Valley & Northern...		1,550 63		313 84
13. Drummond & Southwestern...	3,000 00			612 12
14. Duluth, So. Shore & Atlantic..	155,098 47	23 21		16,091 74
15. Duluth, Superior & Western Terminal Co.....	20,000 00			
16. Dunbar & Wausaukee.....				
17. Fairchild & Northeastern.....				1,115 43
18. Great Northern.....				38,159 97
19. Green Bay & Western.....	30,000 00			19,605 43
20. Hawthorne, Nebagamon & Su.				805 93
21. Hazelhurst & Southeastern...				301 74
22. Iola & Northern.....				83 31
23. Kewaunee, Green Bay & West.	20,400 00			4,187 28
24. Lake Superior Term. & Trans- fer Ry. Co.....	11,700 00			433 50
25. Marinette, Tomahawk & West.		22,952 52		1,680 94
26. Minneap., St. P. & Ashland...	16,000 00			228 75
27. Minneap., St. P. & S't St Mar	447,622 11			75,315 23
28. Northw. Coal Ry. Co.....	11,000 00			949 65
29. Robbins Railway Co.....				503 37
30. Stanley, Merrill & Phillips....	15,000 00	9,985 57		4,688 19
31. Wisconsin & Michigan.....	27,284 05	7,682 92		2,508 16
32. Whitcomb & Morris.....				
33. Wisconsin Central.....	1,007,074 96	1,432 73		231,998 76
34. Wisconsin Western.....				257 62
35. Bayfield, Lake Shore & W.				
36. La Crosse & Southeastern.....				
37. Mineral Point & Northern.....	3,500 00			146 04
Total.....	\$6,103,885 86	\$5,113 32	\$9,014 53	\$1,843,124 85
No. of Roads Reporting.....	36	36	36	37

WISCONSIN, 1905—Continued.

Other deductions.	Total deductions from income.	Net income.	Deficit.	Other payments from net income.		No.
				Dividends, common stock.	Dividends, preferred stock.	
	\$6,921 77	\$3,198 52				1
	32,641 97		\$10,871 74			2
	550 81	\$631 70				3
\$1,213 63	84,557 24		83,079 84			4
	2,097,115 59	4,690,647 41		\$1,016,996 39	\$849,110 59	5
1,163,852 45	3,634,217 93	1,396,826 11		812,316 90	430,153 00	6
186,925 30	1,196,798 25	763,667 02		609,825 09	363,887 32	7
100,379 09	112,273 53		81,884 39			8
			1,668 82			9
	86,791 67		144,649 44			10
	346 13		5,690 32			11
	1,864 47	1,731 05				12
	3,612 12		3,076 40			13
	171,213 42		181,830 62			14
	20,000 00	140,000 00		140 000 00		15
		10,309 86				16
	1,115 43	10,126 60				17
	Incomplete	No further	report.			18
	49,605 43	193,384 69		125 000 00		19
	805 93		7,999 28			20
	301 74	7,618 73				21
	83 31	1,764 17				22
	24,587 28	29,680 88				23
			70,595 29			24
	12,133 50		20,119 12			25
	24,633 46		35,746 31			26
	16,228 75			108,586 35	94,998 65	27
	522,937 34	410,514 71				28
	11,949 65		13,096 04			29
	503 37	156 90				30
	29,673 76	21,361 72				31
2,191 18	39,494 31	14,228 48				32
			1,094 39			33
330,867 95	1,571,374 40	315,303 82				34
	257 62	32,846 00				35
			7,485 35			36
			2,916 60			37
	3,646 04		19,613 12			37
\$1,785,257 60	\$9,758,236 22	\$8,044,001 37	\$391,357 07	\$2,812,724 73	\$1,738,149 56	
36	36	36	36	34	34	

INCOME ACCOUNT,

Name of Company.	Other payments from net income—Continued.		Surplus from operation of year ending June 30, 1905.	Deficit from operation of year ending June 30, 1905.
	All other	Total.		
1. Abbotsford & Northeastern.....			\$3,198 52	
2. Ahnapee & Western.....				\$10,871 74
3. Big Falls Railway Co.....			631 70	
4. Bayfield Transfer.....				83,079 84
5. Chicago, Milwaukee & St. P.....	\$1,866,106 98		2,824,540 43	
6. Chicago & Northwestern.....	1,242,469 90		154,356 21	
7. Chicago St. Paul, Minneapolis & Omaha.....		973,712 41		210,045 39
8. Chicago & Lake Superior.....				1,668 82
9. Chippewa River & Northern.....				5,690 32
10. Chippewa Valley & Northern.....			1,734 05	
11. Drummond & Southwestern.....				3,076 40
12. Duluth, South Shore & Atlantic.....				181,830 62
13. Duluth, Superior & Western Terminal Co.....		140,000 00		
14. Dunbar & Wausaukee.....			10,309 86	
15. Fairchild & Northeastern.....	\$11,125 66	11,125 66		999 06
16. Green Bay & Western.....		12,500 00	68,384 69	
17. Hawthorne, Negagamong & Superior.....				7,939 28
18. Hazelhurst & Southeastern.....			7,618 73	
19. Iota & Northern.....			1,764 17	
20. Kewaunee, Green Bay & West.....			29,680 88	
21. Lake Superior Terminal & Transfer Ry. Co.....				70,595 29
22. Marinette, Tomahawk & West.....				20,119 12
23. Minneapolis, St. Paul & Ashland.....				35,746 31
24. Minneapolis, St. Paul & Sault Ste. Marie.....	20,694 79	224,279 79	18,234 92	
25. Northwestern Coal Ry. Co.....				13,096 04
26. Robbins Railway Co.....			156 90	
27. Stanley, Merrill & Phillips.....			21,361 72	
28. Wisconsin & Michigan.....			14,228 48	
29. Whitcomb & Morris.....				1,094 29
30. Wisconsin Central.....			315,303 82	
31. Wisconsin Western.....			32,846 00	
32. Bayfield, Lake Shore & West.....				7,485 35
33. La Crosse & Southeastern.....				2,916 60
34. Mineral Point & Northern.....				19,613 12
Total.....	\$31,820 45	\$4,470,194 74	\$3,672,351 08	\$675,867 69
No. of railroads reporting.....	34	34	31	34

WISCONSIN, 1905—Continued.

Surplus on June 30, 1904.	Deficit on June 30, 1904.	Additions for year.	Deductions for year.	Surplus on June 30, 1905.	Deficit on June 30 1905.	No.
	\$3,909 93				\$741 41	1
	82,349 50				93,221 24	2
\$1,135 86				\$1,767 56		3
	457,643 63	\$638 04			540,085 43	4
	(*)			(*)		5
2,640,385 24				2,794,741 45		6
				(*)		7
	1,256 74				2,925 56	8
					5,690 32	9
	11,681 18			1,734 05		10
					14,757 58	11
	1,372,228 04				1,554,058 66	12
35,066 49		1,279 03		36,345 52		13
				10,309 86		14
137,923 92			40,000 00	166,208 61	999 06	15
						16
24,605 91				16,666 63		17
7,845 64				15,464 37		18
4,200 56				5,964 73		19
31,267 25			25,000 00	35,948 13		20
					70,505 29	21
	968 55				21,087 67	22
					25,746 31	23
						24
	27,886 51	3,847 96			37,134 59	25
				156 90		26
	2,761 61			18,600 11		27
				14,228 48		28
					1,094 39	29
25,766 24			439,664 68		98,594 62	30
25,767 86				58,613 86		31
					7,485 35	32
					2,916 60	33
					19,613 12	34
\$2,933,964 97	\$1,960,715 69	\$5,765 03	\$504,664 68	\$3,176,850 26	\$2,506,747 20	
31	31	31	31	31	31	

*Not reported.

INCOME ACCOUNT,

Income Account of Railroads Doing Business in Wisconsin as Reported

Name of Company.	Gross earnings from operations.	Less operating expenses.	Income from operation.	Deficit.
1. Abbotsford & Northeastern ..	\$34,312 34	\$22,513 18	\$11,799 16	
2. Ahnapee & Western	67,772 24	42,216 32	25,555 92	
3. Big Falls Railway Co	8,587 05	8,372 01	215 04	
4. Bayfield Transfer	8,046 77	15,238 14		\$7,191 37
5. Chicago, Milwaukee & St. P. ..	16,409,416 84	9,577,482 94	6,831,933 90	
6. Chicago & Northwestern	15,395,421 54	9,674,282 95	5,721,138 61	
7. Chicago, St. P., Minneapolis & Omaha	5,923,069 65	3,792,642 30	2,130,427 35	
8. Chicago, Lake Shore & Eastern ..	82,567 92	60,809 91	21,758 01	
9. Chicago & Lake Superior	6,849 43	4,849 26	2,000 17	
10. Illinois Central	124,851 28	147,415 71		22,564 43
11. Chippewa River & Northern	11,343 86	11,793 59		449 73
12. Chicago, Harvard & Geneva L. ..	13,244 67	12,888 63	356 04	
13. Chippewa Valley & Northern	11,135 34	9,915 22	1,220 12	
14. Drummond & Southwestern	27,068 40	25,678 02	1,390 38	
15. Duluth, S. Shore & Atlantic	353,644 64	306,616 40	47,028 24	
16. Duluth, Superior & Western Terminal	*160,000 00		*160,000 00	
17. Dunbar & Wausaukee	25,509 68	14,348 50	11,161 18	
18. Fairchild & Northeastern	22,204 66	16,674 10	5,530 56	
19. Great Northern	1,281,666 60	612,872 45	668,794 15	
20. Green Bay & Western	609,370 52	392,713 61	216,656 91	
21. Hawthorne, Nebag. & Sup.	60,969 14	51,969 21	8,999 93	
22. Hazelhurst & Southeastern	16,032 49	6,677 85	9,354 64	
23. Iola & Northern	6,702 83	4,947 45	1,755 38	
24. Kewaunee, Green B. & Western ..	126,726 89	85,908 90	40,817 99	
25. Lake Superior Terminal & Transfer Ry. Co.	16,566 52	86,213 95		69,647 43
26. Marinette, Tomahawk & Western	60,028 20	53,825 25	6,202 95	
27. Minneapolis, St. Paul & Sault Ste. Marie	2,015,095 67	1,036,407 60	978,688 07	
28. Northern Pacific	595,408 26	515,430 18	79,978 08	
29. Northwestern Coal Ry. Co.	20,700 08	20,405 56	294 52	
30. Robbins Railway Co	23,110 85	24,983 06		1,872 21
31. Stanley, Merrill & Phillips	140,341 29	113,440 23	26,901 06	
32. Wisconsin & Michigan	246,828 77	141,626 18	105,202 59	
33. Whitcomb & Morris	3,496 05	3,745 00		248 95
34. Wisconsin Central	5,913,149 14	3,870,845 69	2,042,303 45	
35. Wisconsin Western	73,701 81	42,615 52	31,086 29	
36. La Crosse & Southeastern	67,742 81	28,082 95	39,659 86	
37. Superior & Southeastern	28,891 80	16,152 83	12,738 97	
38. Roddis Lumber & Veneer Co.	6,174 39	6,174 39		
39. Mineral Point & Northern	46,732 82	60,523 00		13,790 18
Total (39 roads reporting) ..	\$50,044,483 24	\$30,919,298 02	\$19,246,949 52	\$115,764 30

* Income from lease of road.

WISCONSIN, 1906.

to the Railroad Commission for Year Ending June 30, 1906.

Income from Other Sources.				Total income.	Deficit.	No.
Interest on bonds owned.	Dividends on stocks owned.	Miscellaneous income including rentals of tracks, yards and terminals.	Total income other sources.			
				\$11,799 16		1
				25,555 92		2
				215 04		3
		\$419 00	\$419 00		\$6,772 37	4
\$1,389 33	\$5,493 47	56,647 72	63,530 52	6,895,464 42		5
483 52	430,818 57	40,860 62	472,162 71	6,193,301 32		6
		76,142 84	76,142 84	2,206,570 19		7
				21,758 01		8
				2,000 17		9
					22,534 43	10
					449 73	11
				356 64		12
				1,220 12		13
				1,390 38		14
		1,110 96	1,110 96	48,139 20		15
				160,000 00		16
				11,161 18		17
				5,530 56		18
		4,027 80	4,027 80	672,821 95		19
				216,676 91		20
				8,999 93		21
				9,354 61		22
				1,755 38		23
				40,817 99		24
					69,647 43	25
				6,202 95		26
		9,577 45	9,577 45	988,265 52		27
				79,978 08		28
				294 52		29
					1,872 21	30
				26,901 06		31
				105,202 59		32
					248 95	33
2,751 67		78,255 91	81,007 58	2,123,311 03		34
				31,086 29		35
				39,659 86		36
				12,738 97		37
						38
					13,790 18	39
\$4,624 52	\$436,312 04	\$267,042 30	\$707,978 86	\$19,948,509 38	\$115,345 30	

INCOME ACCOUNT,

Name of Company.	Deductions			
	Interest on funded debt accrued.	Interest on interest bearing current liabilities <i>accrued</i> , not otherwise provided for.	Rentals, including tracks, yard and terminals.	Taxes.
1. Abbotsford & Northeastern		\$6,720 00		\$1,223 01
2. Ahnapee & Western	\$30,400 00			2,229 65
3. Big Falls Railway Co.	300 00			427 54
4. Bayfield transfer	75,000 00	8,293 06	\$63 83	213 76
5. Chicago, Milwaukee & St. Paul	1,454,215 72			1,083,804 42
6. Chicago & Northwestern	1,911,552 47	31,245 58	12,673 31	588,633 89
7. Chicago, St. Paul, Minneapolis & Omaha	717,556 19	3,798 01		367,356 48
8. Chicago, Lake Shore & Eastern	7,800 00	811 15		4,097 48
9. Chicago & Lake Superior			28 20	87 38
10. Illinois Central	86,256 95			36,905 98
11. Chippewa River & Northern				377 77
12. Chicago, Harvard & Geneva Lake	3,125 00			695 89
13. Chippewa Valley & Northern				374 71
14. Drummond & Southwestern	3,000 00			756 85
15. Duluth, South Shore & Atlantic	157,296 97	3,61 07		15,941 55
16. Duluth, Superior & Western Terminal	20,000 00			
17. Dunbar & Wausaukee				
18. Fairchild & Northeastern			15 00	1,239 99
19. Great Northern				81,002 03
20. Green Bay & Western	30,000 00			20,425 64
21. Hawthorne, Nebagamon & Superior				1,204 79
22. Hazehurst & Southeastern				643 69
23. Iola & Northern				139 28
24. Kewaunee, Green Bay & Western	20,400 00			4,253 95
25. Lake Superior Terminal & Transfer Ry. Co.	11,700 00			634 13
26. Marinette, Tomahawk & Western		21,058 42		763 94
27. Minneapolis, St. Paul & Sault Ste. Marie	443,272 88			110,000 00
28. Northern Pacific				
29. Northwestern Coal Ry. Co.	11,000 00			966 71
30. Robbins Railway Co.				523 56
31. Stanley, Merrill & Phillips	21,666 67	16,308 53		654 46
32. Wisconsin & Michigan	52,208 28		7,762 00	3,300 19
33. Whitcomb & Morris				
34. Wisconsin Central	1,019,529 71	49,557 23		251,916 25
35. Wisconsin Western				275 91
36. La Crosse & Southeastern	37,500 00			1,928 40
37. Mineral Point & Northern	22,008 34	401 36		3,016 20
38. Superior & S. E.				
Total	\$6,135,989 18	\$144,808 41	\$20,542 37	\$2,586,015 48

WISCONSIN, 1906—Continued.

from Income.		Net income.	Deficit.	Other payments from net income.		No.
Other deductions.	Total deductions.			Div dends, common stock.	Dividends, preferred stocks.	
\$0 10	\$7,943 11	\$3,856 05				1
	32,829 65		\$7,273 73			2
	727 51		512 50			3
1 97	83,572 62		90,344 99			4
624,700 78	3,162,720 92	3,732,743 50		\$1,001,519 47	\$851,525 39	5
1,511,904 10	4,059,079 38	2,134,291 94		1,137,970 21	434,495 14	6
280,910 38	1,369,621 06	836,949 13		603,721 75	366,251 25	7
115,032 03	127,740 66		105,982 65			8
	115 58	1,884 59				9
13,967 85	157,130 78		159,695 21			10
	377 77		827 50			11
	3,820 89		3,464 85			12
	374 71	845 41				13
	3,756 85		2,366 47			14
	176,853 59		125,714 39			15
	20,000 00	140,000 00		140,000 00		16
		11,161 18				17
	1,254 99	4,275 57				18
	81,002 03	591,819 92				19
	50,425 64	166,231 27		125,000 00		20
	1,204 79	7,795 14				21
4 80	648 49	8,706 15		15,000 00		22
	139 28	1,616 10				23
	24,653 95	16,164 04				24
	12,334 13		81,981 56			25
80 50	21,902 86		15,699 91			26
	553,272 88	434,992 64		92,520 00	80,942 73	27
		79,978 08				28
	11,966 71		11,672 19			29
	523 56		2,395 77			30
	38,629 66		11,728 60			31
2,276 35	65,546 82	39,655 77				32
			248 95			33
344,063 48	1,665,066 67	458,244 36				34
3,284 65	3,560 56	27,525 73				35
	39,428 40	231 46				36
	25,425 90		39,216 08			37
		12,738 97				38
\$2,896,226 99	\$11,783,582 43	\$8,711,707 00	\$662,125 35	\$3,115,731 43	\$1,733,214 51	

INCOME ACCOUNT,

Name of Company.	Other Payments from Net Income.		Surplus from operations of year ending June 30, 1906.	Deficit from operations of year ending June 30, 1906.
	All other.	Total.		
1. Abbotsford & Northeastern			\$3,856 05	
2. Ahnapee & Western				\$7,273 73
3. Big Falls Railway Co.				512 50
4. Bayfield Transfer				90,344 99
5. Chicago, Milw. & St. Paul.		\$1,853,044 86	\$1,879,698 64	
6. Chicago & Northwestern		1,572,465 35	561,826 59	
7. Chi., St. P., Minneap. & Omaha		969,973 00		133,023 87
8. Chi., Lake Shore & Eastern				105,982 65
9. Chicago & Lake Superior			1,884 59	
10. Illinois Central				159,695 21
11. Chippewa River & Northern				827 50
12. Chi., Harvard & Geneva Lake				3,464 85
13. Chippewa Valley & Northern			845 41	
14. Drummond & Southwestern				2,366 47
15. Duluth, So. Shore & Atlantic				128,714 39
16. Duluth, Superior & Western Terminal		140,000 00		
17. Dunbar & Wausaukee			11,161 18	
18. Fairchild & Northeastern	11,673 42	11,673 42		7,397 85
19. Great Northern			591,812 92	
20. Green Bay & Western		125,000 00	41,231 27	
21. Hawthorne, Nebagam'n & Sup.			7,795 14	
22. Hazelhurst & Southeastern		15,000 00		6,293 85
23. Iola & Northern			1,616 10	
24. Kewaunee, Gr. Bay & Western			16,164 04	
25. Lake Superior Term. & Transfer				81,981 56
26. Marinette, Tomahawk & W'n.				16,699 91
27. Minneapolis, St. Paul & Sault Ste. Marie	16,880 66	190,343 39	244,649 25	
28. Northern Pacific			79,978 08	
29. Northwestern Coal R'y				11,672 19
30. Robbins Railway Co.				2,395 77
31. Stanley, Merrill & Phillips				11,728 60
32. Wisconsin & Michigan			39,655 77	
33. Whitcomb & Morris				248 95
34. Wisconsin Central			458,244 36	
35. Wisconsin Western			27,525 73	
36. Mineral Point & Northern				39,216 08
37. La Crosse & Southeastern			231 46	
38. Superior & Southeastern			12,738 97	
Totals	\$28,554 08	\$4,877,500 02	\$3,980,915 55	\$808,840 92

WISCONSIN, 1906—Continued.

Surplus on June 30, 1905.	Deficit on June 30, 1905.	Additions for year.	Deductions for year.	Surplus on June 30, 1906.	Deficit on June 30, 1906.	No.
	\$741 41			\$3,114 64		1
	93,221 24				\$100,494 97	2
\$1,767 56				1,255 06		3
	540,085 43				630,420 42	4
2,824,540 43				4,704,239 07		5
2,822,952 72				3,384,779 31		6
	210,015 39				343,069 26	7
					105,982 65	8
	2,925 56				1,040 97	9
					159,695 21	10
	6,044 52				87 50	11
1,734 05				2,579 46	9,509 37	12
	14,757 58				17,124 05	13
	1,554,058 66				1,682,773 05	14
						15
36,345 52			\$1,608 29	34,737 23		16
10,309 86				21,471 04		17
	939 06				8,396 91	18
				591,812 92		19
166,308 61			30,000 00	177,539 88		20
16,665 63				24,461 77		21
15,464 37				9,170 52		22
5,964 73				7,580 83		23
35,948 13			5,000 00	47,112 17		24
					81,981 56	25
	21,087 67				36,787 58	26
						27
186,234 92				430,884 17		28
				79,978 08		29
	37,154 59				48,806 78	30
		2,964 27			2,395 77	31
18,609 11				9,844 78		32
14,228 48				53,884 25		33
					248 95	34
	98,591 62		384,595 83		24,946 09	35
58,613 86				86,139 59		36
	19,613 12				58,829 20	37
	2,916 60				2,685 14	38
				42,738 97		
\$6,215,688 98	\$2,602,225 45	\$2,964 27	\$421,204 12	\$9,683,323 74	\$3,316,025 43	

INCOME ACCOUNT, 1905.

Income Account of Roads doing Business in Wisconsin as Reported

Name of Company.	Gross earnings from operations.	Less operating expenses.	Income from operation.	Deficit.
1. Abbotsford & Northeastern.	\$28,536 17	\$18,415 88	\$10,120 29	
2. Alnapee & Western	62,734 46	40,964 23	21,770 23	
3. Big Falls Railway Co.	7,325 92	6,143 41	1,182 51	
4. Bayfield Transfer. ¹	1,477 40		1,477 40	
5. Chi., Milwaukee & St. Paul	49,884,113 65	30,661,705 27	19,222,405 38	
6. Chicago & Northwestern ..	55,745,275 17	36,561,234 83	19,184,040 34	
7. Chi., St. P., Mpls. & O...	11,997,876 75	7,329,146 87	4,668,729 88	
8. C., B. & Q.	65,162,858 02	41,479,169 43	23,683,688 59	
9. Chi., L. S. & Eastern	4,325,692 69	1,846,436 80	2,477,255 89	
10. Chi., & Lake Superior	3,083 91	4,752 73		\$1,668 82
11. Illinois Central	49,630,886 16	33,206,494 16	16,424,392 00	
12. Chip'wa River & Northern.	13,495 96	18,840 15		5,344 19
13. Chi., Harv. & Geneva Lake.	24,154 93	23,579 60	575 33	
14. Chip'wa Valley & Northern	10,932 60	7,334 08	3,598 52	
15. Drummond & Southwestern	14,768 22	14,232 50	535 72	
16. Duluth, S. S. & Atlantic ..	2,706,936 02	1,852,705 09	854,230 93	
17. Duluth, S. & W. T. Co. . ¹	160,000 00		160,000 00	
18. Dunbar & Wausaukee	24,710 27	14,400 41	10,309 86	
19. Fairchild & Northeastern ..	35,799 79	24,557 76	11,242 03	
20. Great Northern	39,577,726 70	19,154,402 66	20,423,324 04	
21. Green Bay & Western	600,007 78	357,017 66	242,990 12	
22. Hawth'ne, Nebag'n & Sup'r.	48,197 59	55,330 94		7,133 35
23. Hazelhurst & Southeastern.	23,402 44	15,481 97	7,920 47	
24. Iola & Northern	7,442 54	5,595 06	1,847 48	
25. Kewaunee, G. B. & W.	116,497 43	62,229 27	54,268 16	
26. Lake Sup'r T. & T. Ry. Co. ²	11,127 53	69,529 32		58,461 79
27. Marinette, Tomah'k & W. .	51,210 25	46,695 91	4,514 34	
28. Mpls., St. P. & Ashland ..	64,898 67	84,416 23		19,517 56
29. Mpls., St. P. & S. Ste. M.	8,797,885 19	4,676,815 51	4,121,069 68	
30. Northern Pacific	50,771,070 95	26,881,943 77	23,889,127 18	
31. Northwestern Coal Ry. Co.	15,900 85	17,047 24		1,146 39
32. Robbins Railway Co.	19,203 82	18,543 55	660 27	
33. Stanley, Merrill & Phillips	133,045 39	32,009 91	51,035 48	
34. Winona Bridge Ry. Co.	25,034 83	7,084 12	17,950 71	
35. Wisconsin & Michigan	247,476 62	174,312 49	73,164 13	
36. Whitcomb & Morris	3,080 61	4,175 00		1,094 39
37. Wisconsin Central	6,648,285 46	4,374,336 07	2,273,949 39	
38. Wisconsin Western	69,510 41	36,406 79	33,103 62	
39. Bayfield L. S. & Western ..	9,798 37	17,283 72		7,485 35
40. La Crosse & Southeastern..	7,526 12	10,442 72		2,916 60
41. Mineral Point & Northern.	11,605 88	27,572 96		15,967 08
Total	347,098,593 52	209,288,849 07	137,809,743 97	\$120,735 52

¹ Roads not making operating reports.² Switching road.

WHOLE LINE.

to the Railroad Commission for the Year Ending June 30, 1905.

Income From Other Sources.				Total income.	Deficit.	No.
Interest on bonds owned.	Dividends on stocks owned.	Miscellaneous income, less expense.	Total.			
				\$10,120 29		1
				21,770 23		2
				1,182 51		3
				1,477 40		4
\$5,810 00	\$17,335 00	\$207,652 99	\$230,797 99	19,453,203 37		5
2,852 08	1,535,945 00	231,610 20	1,770,407 28	20,954,447 62		6
6,330 00	79,940 24	74,534 26	160,804 50	4,829,534 38		7
87,700 05	9,200 00	205,305 95	302,206 00	23,985,894 59		8
				2,477,255 89		9
					\$1,668 82	10
	246,602 26	2,683,288 81	2,929,891 07	19,354,283 07		11
					5,344 19	12
				575 33		13
				3,598 52		14
				535 72		15
		15,774 13	15,774 13	870,005 06		16
				160,000 00		17
				10,309 86		18
					11,242 03	19
392,226 60	973,325 00	793,403 48	2,158,955 08	22,582,279 12		20
				242,990 12		21
					7,133 35	22
				7,920 47		23
				1,847 48		24
				54,268 16		25
					58,461 79	26
				4,514 34		27
					19,517 56	28
485 75	5,600 00	60,249 83	66,335 58	4,187,405 26		29
296,240 00	277,500 00	1,113,517 30	1,687,257 30	25,576,384 48		30
					1,146 39	31
				660 27		32
				51,035 45		33
				17,950 71		34
				73,164 13		35
					1,094 39	36
2,933 33		42,502 01	45,435 34	2,319,384 73		37
				33,103 62		38
					7,485 35	39
					2,916 60	40
					15,967 08	41
\$794,577 81	\$3,145,447 50	\$5,427,838 96	\$9,367,864 27	147,298,344 24	\$120,735 52	

INCOME ACCOUNT, 1905.

Name of Company.	Deductions from Income.			Taxes.
	Interest on funded debt accrued.	Interest on interest bearing current liabilities accrued, not otherwise provided for	Rentals, including tracks, yards and terminals.	
1. Abbotsford & Northeastern	\$6,720 00			\$201 77
2. Ahnapee & Western	30,600 00			2,041 97
3. Big Falls Railway Co.	322 00			228 81
4. Bayfield Transfer	75,000 00	\$8,298 46		45 15
5. Chi., Milwaukee & St. Paul	5,962,045 00			1,632,332 58
6. Chicago & Northwestern	8,060,714 77	908 04	\$37,545 92	2,189,976 74
7. Chi., St. P., Mpls. & O.	1,527,615 38	6,429 75		578,387 02
8. Chicago, Burl. & Quincy	7,376,229 08			1,840,627 35
9. Chicago, L. S. & Eastern	168,700 00	21,123 67		19,712 89
10. Chicago & Lake Superior				
11. Illinois Central	4,636,720 00	164,695 24	2,386,389 30	2,027,448 11
12. Chip'wa River & Northern				346 13
13. Chi., Harv. & Geneva Lake	6,250 00			253 09
14. Chip'wa Valley & Northern		1,550 63		313 84
15. Drummond & Southwestern	3,000 00			612 12
16. Duluth, S. S. & Atlantic	859,700 00	123 78		216,733 73
17. Duluth, Sup'r & W. T. Co.	20,000 00			
18. Dunbar & Wausaukee				
19. Fairchild & Northeastern				1,115 43
20. Great Northern	364,500 00		4,001,554 76	1,384,988 26
21. Green Bay & Western	30,000 00			19,605 43
22. Hawth'ne, Nebag'n & Sup'r				805 93
23. Hazellhurst & Southeastern				301 74
24. Iola & Northern				83 31
25. Kewaunee, G. B. & W.	20,400 00			4,187 28
26. Lake Sup'r T. & T. Ry. Co.	11,700 00			433 50
27. Marinette, Tomahawk & W.		22,952 52		1,683 91
28. Mpls., St. Paul & Ashland	16,000 00			228 75
29. Mpls., St. P. & S. Ste. M.	1,706,826 67			417,163 68
30. Northern Pacific	6,947,983 33		160,469 30	1,601,000 60
31. Northwestern Coal Ry. Co.	11,000 00			949 65
32. Robbins Railway Co.				503 37
33. Stanley, Merrill & Phillips	15,000 00	9,985 37		4,688 19
34. Winona Bridge Ry. Co.	19,200 00			703 29
35. Wisconsin & Michigan	47,550 00	13,905 73		7,324 51
36. Whitcomb & Morris				
37. Wisconsin Central	1,127,238 69	1,603 69		264,351 24
38. Wisconsin Western				257 62
39. Bayfield, L. S. & Western				
40. La Crosse & Southeastern				
41. Mineral Point & Northern	3,500 00			146 04
Total	\$39,054,514 87	\$251,577 08	\$6,585,979 28	\$12,219,842 46

WHOLE LINE—Continued.

Other deductions.	Total.	Net income.	Deficit.	Other Payments from income.		No.
				Dividends, common stock.	Dividends, preferred stock.	
	\$6,921 77	\$3,198 52				1
	32,641 97		\$10,871 74			2
	550 81	631 70				3
\$1,213 63	84,557 24		83,079 84			4
	7,594,377 58	11,858,825 79		\$4,072,873 00	\$3,400,523 00	5
4,847,479 99	15,136 625 46	5,817,822 16		3,383,324 00	1,791,000 00	6
404,775 44	2,517,207 59	2,312,326 79		1,298,885 00	787,976 00	7
939,133 50	10,155,989 93	13,829,904 66		7,758,737 00		8
769,175 95	978,712 51	1,498,543 38		2,400,000 00		9
			1,668 82			10
3,442,970 42	12,658,223 07	6,696,060 00		6,652,800 00		11
	346 13		5,690 32			12
	6,503 09		5,927 76			13
	1,864 47	1,734 07				14
	3,612 12		3,076 40			15
	1,076,557 51		206,552 45			16
	20,000 00	140,000 00		140,000 00		17
		10,309 86				18
	1,115 43	10,126 60				19
3,000,000 00	8,751,043 02	13,831,236 10		8,693,890 00		20
	49,605 43	193,384 69		125,000 00		21
	805 93		7,939 28			22
	301 74	7,618 73				23
	83 31	1,764 17				24
	24,587 28	29,680 88				25
	12,133 50		70,595 29			26
	24,333 46		20,119 12			27
	16,228 75		35,746 31			28
	2,123,900 35	2,063,414 91		554,012 00	484,687 00	29
3,000,000 00	11,709,452 63	13,866,931 85		10,850,000 00		30
	11,949 67		13,093 04			31
	503 37	156 90				32
	29,673 76	21,361 72				33
	19,966 29		2,015 58			34
3,654 64	72,434 88	729 25				35
			1,094 39			36
370,346 93	1,763,540 46	555,844 27				37
	257 62	32,846 00				38
			7,435 35			39
			2,913 60			40
	3,646 04		19,613 12			41
\$16,778,750 50	\$74,890,644 15	\$72,784,452 98	\$497,488 41	\$45,929,491 00	\$3,464,786 00	

INCOME ACCOUNT, 1905.

Name of Company.	Other Payments From Net Income—Continued.		Surplus From Oper- ations of Year Ending June 30, 1905.	Deficit From Operations of Year End- ing June 30, 1905.
	All Other Deductions.	Total.		
1. Abbotsford & Northeastern			\$3,198 52	
2. Ahnapee & Western				\$10,871 74
3. Big Falls Railway Co.			631 70	
4. Bayfield Transfer				83,079 84
5. Chi., Milwaukee & St. Paul		\$7,473,396 00	4,385,429 79	
6. Chicago & Northwestern		5,174,924 00	642,898 16	
7. Chi., St. P., Mpls. & O.		2,086,861 00	225,465 79	
8. Chicago, Burl. & Quincy		7,758,737 00	6,071,167 66	
9. Chicago, L. S. & Eastern		2,400,000 00		901,456 62
10. Chicago & Lake Superior				1,668 82
11. Illinois Central		6,652,800 00	43,260 00	
12. Chip'wa River & Northern				5,690 32
13. Chi., Harv. & Lake Geneva				5,927 76
14. Chip'wa Valley & Northern			1,734 05	
15. Drummond & Southwestern				3,076 40
16. Duluth, S. S. & Atlantic				206,552 45
17. Duluth, Sup'r & W. T. Co.		140,000 00		
18. Dunbar & Wausaukee			10,309 86	
19. Fairchild & Northeastern	\$11,125 66	11,125 66		999 06
20. Great Northern		8,693,860 00	5,137,376 10	
21. Green Bay & Western		125,000 00	68,384 69	
22. Hawth'ne, Nebag'n & Sup'r				7,939 28
23. Hazelhurst & Southeastern			7,618 73	
24. Iola & Northern			1,764 17	
25. Kewaunee, G. B. & W.			29,680 88	
26. Lake Sup'r T. & T. Ry. Co.				70,595 29
27. Marinette, Tomah'k & W.				20,119 12
28. Mpls., St. P. & Ashland				35,746 31
29. Mpls., St. P. & S. Ste. M.		1,038,699 00	1,024,715 91	
30. Northern Pacific		10,850,000 00	3,016,931 85	
31. Northwestern Coal Ry Co.				13,096 04
32. Robbins Railway Co.			156 90	
33. Stanley, Merrill & Phillips			21,361 72	
34. Winona Bridge Ry. Co.				2,015 58
35. Wisconsin & Michigan			729 25	
36. Whitcomb & Morris				1,094 39
37. Wisconsin Central			555,844 27	
38. Wisconsin Western			32,846 00	
39. Bayfield, L. S. & Western				7,485 35
40. La Crosse & Southeastern				2,916 60
41. Mineral Point & Northern				19,613 12
Total	\$11,125 66	\$52,405,402 66	\$21,281,506 00	\$1,399,944 09

WHOLE LINE—Continued.

Surplus on June 30, 1904.	Deficit on June 30, 1904.	Additions for Year.	Deductions for Year.	Surplus on June 30, 1905.	Deficit on June 30, 1905.	No.
.....	\$3,939 93	.....	.....	.....	\$741 41	1
.....	82,349 50	.....	.....	.....	93,221 24	2
\$1,135 86	.....	.....	.....	\$1,767 56	.....	3
.....	457,643 63	\$638 04	.....	.....	540,085 43	4
26,799,571 80	.....	.....	.....	31,185,001 59	.....	5
10,997,282 85	.....	.....	.....	11,640,181 01	.....	6
3,899,602 17	.....	.....	\$1,500,000 00	2,625,067 96	.....	7
30,590,860 60	.....	.....	.....	36,661,968 26	.....	8
1,773,524 32	.....	.....	5,733 14	866,334 56	.....	9
.....	1,256 74	.....	.....	.....	2,925 56	10
4,386,727 04	.....	.....	.....	4,429,987 04	.....	11
.....	6,161 27	.....	.....	.....	5,690 32	12
.....	11,681 18	.....	.....	1,734 05	14,757 58	13
.....	2,253,867 77	.....	.....	.....	12,089 03	14
35,066 49	.....	1,279 03	.....	.....	.....	15
.....	.....	.....	.....	36,345 52	2,400,420 22	16
.....	.....	.....	.....	10,309 86	.....	17
.....	.....	.....	.....	.....	999 06	18
14,507,460 76	.....	.....	500,000 00	19,144,836 86	.....	19
137,923 92	.....	.....	40,000 00	166,308 61	.....	20
24,605 91	.....	.....	.....	16,666 63	.....	21
7,845 64	.....	.....	.....	15,464 37	.....	22
4,200 56	.....	.....	.....	5,964 73	.....	23
31,267 25	.....	.....	25,000 00	35,948 13	.....	24
.....	.....	.....	.....	.....	70,595 29	25
.....	968 55	.....	.....	.....	21,087 67	26
.....	.....	.....	386,549 07	4,234,122 46	35,746 31	27
3,595,955 62	.....	259,309 73	.....	14,381,219 29	.....	28
11,104,977 71	27,886 51	3,847 96	.....	.....	37,134 59	29
.....	2,761 61	.....	.....	.....	.....	30
.....	.....	.....	.....	156 90	.....	31
22,125 67	.....	.....	.....	18,600 11	.....	32
.....	.....	.....	.....	20,110 09	.....	33
.....	.....	.....	.....	729 25	.....	34
.....	.....	.....	.....	.....	1,004 39	35
433,046 00	.....	.....	489,247 30	499,642 97	.....	36
25,767 86	.....	.....	.....	58,613 86	.....	37
.....	.....	.....	.....	.....	7,485 35	38
.....	.....	.....	.....	.....	2,916 00	39
.....	.....	.....	.....	.....	19,613 12	40
.....	.....	.....	.....	.....	.....	41
108,378,888 03	2,848,516 69	265,074 76	2,946,429 51	126,057,081 67	3,326,603 17	

INCOME ACCOUNT,

Income account of roads doing business in Wisconsin as reported to

Name of Company.	Gross earnings from operation.	Less operating expenses.	Income from operation.	Deficit.
1. Abbotsford & Northeastern.	\$34,312 34	\$22,513 18	\$11,799 16	
2. Ahnapee & Western.....	67,772 24	42,216 32	25,555 92	
3. Big Falls Railway Co.....	8,587 05	8,372 01	215 04	
4. Bayfield Transfer	8,046 77	15,233 14		7,191 37
5. Chicago, Mil. & St. P.	55,423,052 99	34,713,602 53	20,709,450 64	
6. Chicago & Northwestern.....	63,481,577 98	39,890,999 09	23,590,578 89	
7. Chicago, St. P., M. & O.....	13,007,017 47	7,901,338 13	5,105,679 34	
8. Chicago, Burl. & Quincy..	73,413,385 88	50,655,161 43	22,758,224 45	
9. Chicago, Lake Shore & Eastern	4,311,336 90	2,384,835 40	1,926,501 50	
10. Chicago & Lake Superior....	6,849 43	4,849 26	2,000 17	
11. Illinois Central	51,734,291 56	34,400,363 07	17,333,928 49	
12. Chippewa River & Northern	11,343 86	11,793 59		449 73
13. Chi., Harvard & G. Lake ..	26,489 35	25,777 26	712 09	
14. Chip. Valley & Northern....	11,135 34	9,915 23	1,220 12	
15. Drummond & Southwestern.	27,068 40	25,678 02	1,390 38	
16. Duluth, S. S. & Atlantic...	3,057,808 73	2,057,459 76	1,000,348 97	
17. Duluth, Sup. & W. T. Co...	160,000 00		160,000 00	
18. Dunbar & Wausaukee.....	25,509 68	14,348 50	11,161 18	
19. Fairchild & Northeastern...	22,204 06	16,674 10	5,530 56	
20. Great Northern	46,494,226 57	23,133,081 11	23,361,145 46	
21. Green Bay & Western.....	609,370 52	392,713 61	216,656 91	
22. Hawthorne, Nebag. & Sup.	60,969 14	51,969 21	8,999 93	
23. Hazelhurst & Southeastern.	16,032 49	6,677 85	9,354 64	
24. Iola & Northern.....	6,702 83	4,947 45	1,755 38	
25. Kewaunee, G. B. & W.....	126,726 89	85,908 90	40,817 99	
26. Lake Sup. T. & T. Ry. Co...	16,566 52	86,213 95		69,647 43
27. Marinette, Tomahawk & W.	60,028 20	53,825 25	6,202 95	
28. Mpolis, St. P. & S. Ste. M.	11,588,262 23	5,905,867 78	5,682,394 45	
29. Northern Pacific	61,132,655 47	31,029,612 10	30,103,043 37	
30. Northwestern Coal Ry. Co...	20,700 08	20,405 56	294 52	
31. Robbins Railway Co.....	23,110 85	24,983 06		1,872 21
32. Stanley, Merrill & Phillips.	140,341 29	113,440 23	26,901 06	
33. Winona Bridge Ry. Co.....	26,907 29	3,407 65	23,499 64	
34. Wisconsin & Michigan.....	324,289 24	192,082 36	132,206 88	
35. Whitcomb & Morris.....	3,496 05	3,745 00		248 95
36. Wisconsin Central	7,151,339 79	4,580,288 18	2,571,051 61	
37. Wisconsin Western	73,701 81	42,615 52	31,086 29	
38. La Crosse & Southeastern...	67,742 81	28,082 95	39,659 86	
39. Superior & Southeastern...	28,891 80	16,152 83	12,738 97	
40. Roddis Lbr. & Veneer Co...	6,174 39	6,174 39		
41. Mineral Point & Northern...	46,732 82	60,523 00		13,790 18
42. Eastern Ry. Co. of Minn....	11,395,000 00		11,395,000 00	
Total	394,257,759 71	233,043,852 95	156,307,106 63	\$33,199 87

¹Income from lease of road.

WHOLE LINE, 1906.

the Railroad Commission for the year ending June 30, 1906—Whole Line.

Income from Other Sources.				Total income.	Deficit.	No.
Interest on bonds owned.	Dividends on stocks owned.	Miscellaneous—less expenses, including rentals, tracks, yards and terminals.	Total income other sources.			
				\$11,799 16		1
				25,555 02		2
				215 04		3
		\$419 00	\$419 00		\$6,772 37	4
\$5,650 00	\$22,340 24	230,368 02	258,359 16	20,967,809 62		5
1,998 75	1,776,440 00	168,484 95	1,946,918 70	25,537,497 59		6
6,410 00	98,580 00	92,544 30	197,534 30	5,303,213 64		7
79,610 22	5,400 00	325,672 32	410,682 54	23,168,906 99		8
		661 18	661 18	1,927,162 68		9
				2,000 17		10
2,291,882 25	146,412 50	833,333 07	3,271,627 82	20,605,556 31	449 73	11
				712 09		12
				1,220 12		13
				1,390 88		14
		14,536 15	14,536 15	1,014,885 12		15
				1160,000 00		16
				11,161 18		17
				5,530 56		18
397,405 55	965,246 50	604,973 63	1,967,625 68	25,328,771 14		19
				216,656 91		20
				8,999 93		21
				9,354 64		22
				1,755 38		23
				40,817 99		24
					69,647 43	25
				6,202 95		26
1,615 00	4,000 00	57,350 22	62,965 22	5,745,359 67		27
69,375 00	208,060 00	1,363,670 73	1,731,105 78	31,834,149 15		28
				294 52		29
					1,872 21	30
				26,901 06		31
				23,499 64		32
				132,206 88		33
					248 95	34
3,080 00		87,074 97	90,154 97	2,661,206 58		35
				31,086 29		36
				39,659 86		37
				12,738 97		38
					13,790 18	39
		17,958 91	17,958 91	1,412,958 91		40
\$2,857,021 77	\$3,316,479 24	\$3,797,048 40	\$9,970,549 41	166,277,237 04	\$92,780 87	41
						42

INCOME ACCOUNT, WHOLE

Name of Company.	Deductions			
	Interest on funded debt accrued.	Interest on interest bearing liabilities accrued not otherwise provided for.	Rentals, including tracks, yards and terminals.	Taxes.
1. Abbotsford & Northeastern.....		\$6,720 00		\$1,223 01
2. Ahnapee & Western	\$30,600 00			2,229 65
3. Big Falls Railway Co.....	300 00			427 54
4. Bayfield Transfer	75,000 00	8,293 06	\$63 83	213 76
5. Chicago, Mil. & St. Paul....	5,913,850 00			2,372,730 66
6. Chicago & Northwestern....	7,882,107 49	141,208 43	52,257 32	2,427,176 68
7. Chicago, St. Paul, M. & O..	1,543,795 59	8,171 27		652,595 29
8. C., B. & Q.....	7,345,053 53			2,018,494 16
9. Chi., Lake Shore & Eastern	207,617 52	42,328 33		20,224 29
10. Chicago & Lake Superior....			28 20	87 38
11. Illinois Central	4,689,522 50	14,638 71	2,904,062 73	2,134,993 24
12. Chippewa River & Northern				377 77
13. Chi., Harvard & G. Lake	6,250 00			872 14
14. Chippewa Valley & Northern				374 71
15. Drummond & Southwestern	3,000 00			756 85
16. Duluth, S. S. & Atlantic....	859,700 00	19,016 67		292,471 22
17. Duluth, Sup. & W. Ter. Co.	20,000 00			
18. Dunbar & Wausaukee.....				
19. Fairchild & Northeastern....			15 00	1,239 99
20. Great Northern	151,875 00		4,107,094 96	1,605,801 09
21. Green Bay & Western.....	30,000 00			20,425 64
22. Hawthorne, Nebag. & Sup.				1,204 79
23. Hazelhurst & Southeastern.				643 69
24. Iola & Northern.....				139 28
25. Kewaunee, Green Bay & W.	20,400 00			4,253 95
26. Lake Sup. T. & T. Ry. Co..	11,700 00			634 13
27. Marinette, Tomahawk & W.		21,058 42		763 94
28. Mpolis, St. P. & S. Ste. M.	1,863,684 45			613,989 10
29. Northern Pacific	6,936,140 00		160,469 30	2,213,040 00
30. Northwestern Coal Ry. Co..	11,000 00			966 71
31. Robbins Railway Co.....				523 56
32. Stanley, Merrill & Phillips.	21,666 67	16,308 53		654 46
33. Winona Bridge Ry. Co.....	19,200 00			4,350 41
34. Wisconsin & Michigan.....	100,716 63	586 79		15,936 65
35. Whitcomb & Morris.....				
36. Wisconsin Central	1,138,233 98	54,279 55		289,678 75
37. Wisconsin Western				275 91
38. La Crosse & Southeastern..	37,500 00			1,928 40
39. Mineral Point & Northern..	22,008 34	401 36		3,016 20
40. Superior & S. E.....				
41. Eastern Ry. Co. of Minn...	435,000 00			
Total	\$39,425,921 70	\$333,011 12	\$7,223,991 39	\$14,704,715 00

LINE, 1906—Continued.

from Income.		Net income.	Deficit.	Other payments from net income.		No.
Other deductions.	Total.			Dividends, common stock.	Dividends, preferred stock.	
\$0.10	\$7,943 11	\$3,856 05				1
	32,829 65		\$7,273 73			2
	727 54		512 50			3
1 97	83,572 62		90,344 99			4
2,540,466 79	10,827,047 45	10,140,762 17		\$4,072,873 00	\$3,462,893 00	5
6,234,194 88	16,736,944 80	8,800,552 79		4,692,313 50	1,791,600 00	6
604,368 29	2,808,930 44	2,494,283 20		1,298,885 00	787,976 00	7
952,439 97	10,315,987 66	12,852,919 33		7,758,737 00		8
1,212,169 87	1,482,340 01	444,822 67				9
	115 58	1,884 59				10
4,164,739 08	13,907,956 31	6,697,600 00		6,652,800 00		11
	377 77		827 50			12
	7,122 14		6,410 05			13
	374 71	845 41				14
	3,756 89		2,366 47			15
	1,171,187 89		156,302 77			16
	20,000 00	140,000 00		140,000 00		17
		11,161 18				18
	1,254 99	4,275 57				19
5,130,910 28	10,995,681 33	14,333,039 81		9,148,520 00		20
	50,425 64	166,231 27		125,000 00		21
	1,204 79	7,795 14				22
4 80	648 49	8,706 15		15,000 00		23
	139 28	1,616 10				24
	24,653 95	16,164 04				25
	12,334 13		81,981 56			26
80 50	21,902 86		15,699 91			27
	2,477,673 55	3,267,686 12		554,012 00	484,687 00	28
6,081,980 16	15,441,629 46	16,392,519 69		10,850,000 00		29
	11,966 71		11,672 19			30
	523 56		2,395 77			31
	38,629 66		11,728 60			32
	23,550 41		50 77			33
2,276 35	119,516 42	12,690 46				34
			248 95			35
376,826 30	1,859,018 59	802,188 00				36
3,284 65	3,560 56	27,525 73				37
	39,428 40	231 46				38
	25,425 90		39,216 08			39
		12,738 97				40
	435,000 00	977,958 91		960,000 00		41
\$27,303,743 99	\$88,991,383 20	\$77,620,104 81	\$427,081 84	\$46,263,140 50	\$6,527,156 00	....

INCOME ACCOUNT,

Name of Company.	Other Payments from Net Income—Continued.		Surplus from operations of year ending June 30, 1906.	Deficit from operations of year ending June 30, 1906.
	All other.	Total.		
1. Abbotsford & Northeastern.....			\$3,856 05	
2. Ahnapee & Western.....				\$7,273 73
3. Big Falls Railway Co.....				512 50
4. Bayfield Transfer.....				90,344 99
5. Chicago, Milwaukee & St. Paul.....				
6. Chicago & Northwestern.....		\$7,535,766 00	2,604,996 17	
7. Chicago, St. Paul, Minnea- polis & Omaha.....		6,483,913 50	2,316,639 29	
8. Chicago, Burlington & Quincy.....		2,086,861 00	407,422 20	
9. Chicago, Lake Shore & Eastern.....		7,758,737 00	5,094,182 33	
10. Chicago & Lake Superior.....			444,822 67	
11. Illinois Central.....		6,652,800 00	1,884 59	
12. Chippewa River & Northern.....			44,800 00	
13. Chicago, Harvard & G. Lake.....				827 50
14. Chippewa Valley & Northern.....			845 41	6,410 05
15. Drummond & Southwestern.....				2,363 47
16. Duluth, South Shore & At- lantic.....				156,302 77
17. Duluth, Superior & West- ern Terminal Co.....		140,000 00		
18. Dunbar & Wausaukee.....			11,161 18	
19. Fairchild & Northeastern.....	\$11,673 42	11,673 42		7,397 85
20. Great Northern.....		9,148,520 00	5,184,569 31	
21. Green Bay & Western.....		125,000 00	41,231 27	
22. Hawthorne, Nebagamon & Superior.....			7,795 14	
23. Hazelhurst & Southeastern.....		15,000 00		6,293 85
24. Iola & Northern.....			1,616 10	
25. Kewaunee, Green Bay & Western.....			16,164 04	
26. Lake Superior Terminal & Transfer Ry Co.....				81,981 56
27. Marinette, Tomahawk & Western.....				15,699 91
28. Minneapolis, St. Paul & Sault Ste. Marie.....		1,038,699 00	2,228,987 12	
29. Northern Pacific.....		10,850,000 00	5,542,519 69	
30. Northwestern Coal Ry. Co.....				11,672 19
31. Robbins Railway Co.....				2,395 77
32. Stanley, Merrill & Phillips.....				11,728 60
33. Winona Bridge Ry Co.....				50 77
34. Wisconsin & Michigan.....			12,690 46	
35. Whitcomb & Morris.....				248 95
36. Wisconsin Central.....			802,188 00	
37. Wisconsin Western.....			27,525 73	
38. Mineral Point & Northern.....			231 46	39,216 08
39. La Crosse & Southeastern.....			12,738 97	
40. Superior & Southeastern.....			17,958 91	
41. Eastern Ry. of Minn.....		960,000 00		
Total.....	\$11,673 42	\$52,806,969 92	\$24,826,826 50	\$440,723 54

WHOLE LINE, 1906.—Continued.

Surplus on June 30, 1905.	Deficit on June 30, 1905.	Additions for year.	Deductions for year.	Surplus on June 30, 1906.	Deficit on June 30, 1906.	No.
.....	\$741 41	.....	.....	\$3,114 64	.....	1
.....	93,221 24	.....	.....	.....	\$100,494 97	2
\$1,767 56	.....	.....	.....	1,255 06	.....	3
.....	540,085 43	.....	.....	.....	630,430 42	4
31,185,001 59	.....	.....	.....	33,789,997 76	.....	5
11,640,181 01	.....	.....	.....	13,956,820 30	.....	6
2,625,067 96	.....	.....	.....	3,032,490 16	.....	7
36,564,252 41	.....	.....	.....	41,658,434 74	.....	8
866,334 56	.....	\$189 77	\$4,518 04	1,306,828 96	.....	9
.....	2,925 56	.....	.....	.....	1,040 97	10
4,429,987 04	.....	.....	.....	4,474,787 04	.....	11
.....	12,089 03	.....	.....	.....	827 50	12
.....	.....	.....	.....	.....	18,499 08	13
1,734 05	.....	.....	.....	2,579 46	.....	14
.....	14,757 58	.....	.....	.....	17,124 05	15
.....	2,460,420 22	.....	33 33	.....	2,616,756 32	16
36,345 52	.....	.....	1,608 29	34,737 23	.....	17
10,309 86	.....	.....	.....	21,471 04	.....	18
.....	998 06	.....	.....	.....	8,396 91	19
19,144,836 86	.....	.....	736,240 36	23,593,165 81	.....	20
166,308 61	.....	.....	30,000 00	177,539 88	.....	21
16,666 63	.....	.....	.....	24,461 77	.....	22
15,464 37	.....	.....	.....	9,170 52	.....	23
5,964 73	.....	.....	.....	7,580 83	.....	24
35,948 13	.....	.....	5,000 00	47,112 17	.....	25
.....	.....	.....	.....	.....	81,981 54	26
.....	21,087 67	.....	.....	.....	36,787 58	27
4,234,122 46	.....	.....	1,050,000 00	5,413,109 58	.....	28
14,381,219 29	.....	13,240 42	.....	19,936,979 40	.....	29
.....	37,134 59	.....	.....	.....	48,806 78	30
.....	.....	.....	.....	.....	2,395 77	31
18,609 11	.....	2,964 27	.....	9,844 78	.....	32
20,110 09	.....	.....	.....	20,059 32	.....	33
729 25	.....	.....	.....	13,419 71	.....	34
.....	.....	.....	.....	.....	248 95	35
499,642 97	.....	.....	438,670 98	863,159 99	.....	36
58,613 86	.....	.....	.....	86,139 59	.....	37
.....	19,612 12	.....	.....	.....	58,829 20	38
.....	2,916 60	.....	.....	.....	2,685 14	39
.....	.....	.....	.....	12,738 97	.....	40
531,636 87	.....	8,344 52	.....	557,940 30	.....	41
126,490,854 79	3,205,991 51	24,738 98	2,266,071 00	149,054,988 51	3,625,305 20	.....

EARNINGS FROM OPERATION OF ROADS DOING BUSINESS IN YEAR ENDING

Name of Company.	Wisconsin.			
	Total passenger earnings.	Total freight earnings.	Total other earnings.	Total gross earnings from operation.
1. Abbotsford & Northeastern.	\$3,674 05	\$23,594 78	\$1,267 34	\$28,536 17
2. Ahnapee & Western.....	32,384 73	30,349 73		62,734 46
3. Big Falls Railway Co.....	544 22	6,781 70		7,325 92
4. Chicago, Milwaukee and St. Paul	4,323,826 16	11,006,372 25	58,800 74	15,388,999 15
5. Chicago & Northwestern.....	13,882,451 41	19,466,199 68	135,473 34	13,384,124 43
6. Chicago, St. Paul, Minneapolis & Omaha.....	1,587,812 43	3,680,430 11	86,978 56	5,355,221 10
7. Chicago, Burlington and Quincy	502,395 88	1,944,370 38	15,680 34	2,462,446 60
8. Chicago, Lake Shore and Eastern		53,011 84	39,572 34	92,584 18
9. Chicago & Lake Superior..	1,351 23	1,732 68		3,083 91
10. Illinois Central.....	47,819 57	54,127 90	820 49	102,767 96
11. Chippewa River & Northern	396 90	13,099 06		13,495 96
12. Chi., Harv. & Geneva L.....	17,297 21	14,780 25		12,077 46
13. Chippewa Valley & Northern		10,932 60		10,932 60
14. Drummond & Southwestern		14,768 22		14,768 22
15. Duluth, South Shore & Atlantic	117,923 96	157,679 53	452 54	276,056 06
16. Dunbar & Wausaukee.....	801 32	23,908 95		24,710 27
17. Fairchild & Northeastern..	4,966 01	30,632 73	201 05	35,799 79
18. Great Northern.....	96,256 28	969,810 03	40,607 74	1,106,674 05
19. Green Bay & Western.....	145,689 72	454,318 06		600,007 78
20. Glenwood & Northern.....		4,513 40		4,513 40
21. Hawthorne, Nebagamon & Superior	253 00	47,836 59	108 00	48,197 59
22. Hazelhurst & Southeastern.	644 90	22,752 74	4 80	23,402 44
23. Iola & Northern.....	1,767 68	5,674 86		7,442 54
24. Kewaunee, Green Bay and Western	30,415 05	86,082 38		116,497 43
25. John R. Davis Lumber Co. Logging R. R.		2,061 63		2,061 63
26. Lake Superior Terminal & Transfer Ry. Co.....	213 47	9,625 67	1,288 39	11,127 53
27. Mattoon Railway Co.....	1,277 88	28,905 03		30,182 91
28. Marinette, Tomahawk and Western	5,647 90	45,516 66	45 69	51,210 25
29. Minneapolis, St. Paul and Ashland	954 35	63,944 32		64,898 67
30. Minneapolis, St. Paul and Sault Ste. Marie.....	390,790 81	1,471,609 73	20,472 43	1,882,880 97
31. Northern Pacific.....	173,382 17	341,877 77	50,378 99	565,638 93
32. Northwestern Coal Ry. Co.		15,900 85		15,900 85
33. Robbins Railway Co.....		19,203 82		19,203 82
34. Stanley, Merrill & Phillips.	3,698 19	126,548 30	2,798 90	133,045 39
35. Winona Bridge Ry. Co.....			13,109 33	13,109 33
36. Wisconsin & Michigan.....	21,604 51	150,952 65	9,128 43	181,685 59
37. Whitcomb & Morris.....		3,081 61		3,081 61
38. Wisconsin Central	1,365,783 91	4,192,896 40	4,171 23	5,562,851 54
39. Wisconsin Western	23,947,83	45,562 58		69,510 41
40. Bayfield, Lake Shore and Western	1,380 67	8,417 70		9,798 37
41. Hillsboro & Northeastern..	3,745 47	7,213 01	7 00	10,965 48
42. Roddis Lumber & Veneer Co		6,139 42		6,139 42
43. Superior & Southeastern.....		19,564 66		19,564 66
Total	\$12,781,106 90	\$34,672,782 26	\$381,367 67	\$47,835,256 83

¹ Proportional.

WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR THE JUNE 30, 1905.

Wisconsin—Con.		Whole Line.				No.
Mileage upon which based.	Total passenger earnings.	Total freight earnings.	Total other earnings.	Total gross earnings from operation.	Mileage upon which based.	
15 16	\$3,674 05	\$23,594 78	\$1,267 34	\$28,536 17	15 16	1
34 00	32,384 73	30,349 73	.....	62,734 46	34 00	2
21 00	544 22	6,781 70	.....	7,325 92	21 00	3
1,716 44	13,698,137 13	36,035,506 81	150,469 71	49,884,113 65	6,897 57	4
1,778 65	16,170,525 30	39,427,002 39	147,747 48	55,745,275 17	7,408 13	5
744 05	3,630,262,68	8,138,931 60	228,682 47	11,997,876 75	1,682 22	6
222 57	19,725,280 34	43,413,938 83	2,020,638 85	65,162,858 02	8,561 64	7
18 56	.....	3,861,784 70	461,907 99	4,323,692 69	448 32	8
3 00	1,351 23	1,732 68	.....	3,083 91	3 00	9
91 31	12,994,732 20	32,748,399 32	3,887,754 64	49,630,886 16	4,373 91	10
24 00	396 90	13,099 06	.....	13,495 96	24 00	11
5 50	14,594 42	9,560 51	.....	24,154 93	11 00	12
10 00	.....	10,932 60	.....	10,932 60	10 00	13
8 18	.....	14,768 22	.....	14,768 22	8 18	14
111 20	974,108 80	1,699,531 96	33,295 26	2,706,936 02	585 81	15
13 50	801 32	23,908 95	.....	24,710 27	13 50	16
33 00	4,966 01	30,632 73	201 05	35,799 79	33 00	17
37 79	9,239,973 09	29,689,539 82	648,213 39	39,577,726 70	4,907 49	18
225 00	145,689 72	454,318 06	.....	600,007 78	225 00	19
14 00	.....	4,513 40	.....	4,513 40	14 00	20
25 00	253 00	47,836 59	108 00	48,197 59	25 00	21
11 00	644 90	22,752 77	4 80	23,402 44	11 00	22
4 70	1,767 68	5,674 89	.....	7,442 54	4 70	23
36 70	30,415 05	86,082 38	.....	116,497 43	36 70	24
20 50	.....	2,061 68	.....	2,061 63	20 50	25
16 33	218 47	9,625 67	1,288 39	11,127 53	16 33	26
29 36	1,277 88	28,905 05	.....	30,182 91	29 36	27
43 77	5,647 96	45,516 66	45 60	51,210 25	43 77	28
45 34	954 35	63,944 32	.....	64,898 67	45 34	29
355 66	2,253,885 00	6,414,952 90	129,067 26	8,797,885 19	1,773 98	30
134 56	13,076,376 62	36,399,927 75	1,294,766 58	50,771,070 95	5,314 95	31
8 00	.....	15,900 88	.....	15,900 85	8 00	32
30 00	.....	19,203 82	.....	19,203 82	30 00	33
52 36	3,698 19	126,548 30	2,798 90	133,045 39	52 36	34
54	.....	.....	25,034 83	25,034 83	1 03	35
73 98	38,047 27	194,915 66	14,513 69	247,476 62	131 00	36
6 00	.....	3,081 61	.....	3,081 61	6 00	37
841 29	1,684,409 53	4,949,697 49	14,178 44	6,648,285 46	977 04	38
61 97	23,947 83	45,562 58	.....	69,510 41	51 97	39
12 00	1,380 67	8,417 70	.....	9,798 37	12 00	40
5 00	3,745 47	7,213 01	7 00	10,965 48	5 00	41
10 00	.....	6,139 42	.....	6,139 42	10 00	42
7 79	.....	19,564 66	.....	19,564 66	7 79	43
6,948 76	\$93,764,066 95	\$244,165,353 48	\$9,061,992 19	\$346,991,412 62	43,950 75	

EARNINGS FROM OPERATION,
Summary of Earnings from Operation of roads doing Business in Wisconsin
WISCONSIN.

Name of Company.	Total passenger earnings.	Total freight earnings.	Total other earnings.	Total gross earnings from operation.
1. Abbotsford & Northeastern	\$3,598 93	\$29,274 95	\$1,438 46	\$34,312 34
2. Ahnapee & Western	34,711 42	33,060 82		67,772 24
3. Big Falls	613 89	7,973 16		8,587 05
4. Chi. Milwaukee & St. Paul	4,657,496 12	11,691,541 06	60,379 66	16,409,416 84
5. Chicago & Northwestern	4,213,597 14	11,143,967 63	37,856 77	15,395,421 54
6. Chicago, St. Paul, Minnea- polis & Omaha	1,765,576 07	4,058,431 31	99,062 27	5,923,069 65
7. Chicago, Burl. & Quincy	550,185 37	2,542,127 06	23,338 68	3,115,651 11
8. Chi., Lake Shore & Eastern		38,069 84	44,498 08	82,537 92
9. Illinois Central	58,116 64	65,876 16	858 48	124,851 28
10. Chippewa River & Northern	210 95	11,122 91		11,343 86
11. Chi. Harv. & Geneva Lake.	6,918 46	6,326 22		13,244 68
12. Chippewa Valley & Nor.		11,135 34		11,135 34
13. Drummond & Southwestern		27,068 40		27,068 40
14. Dul., S. Shore & Atlantic.	136,315 97	216,772 63	556 04	353,644 64
15. Dunbar & Wausaukee	899 56	24,610 12		25,509 68
16. Fairchild & Northeastern	5,201 03	16,757 63	246 00	22,204 66
17. Great Northern	105,243 71	1,052,393 38	124,029 51	1,281,666 60
18. Green Bay & Western	153,693 47	450,047 88	5,629 17	609,370 52
19. Hawthorne, Nebagamon & Superior	232 00	57,697 14	3,040 00	60,969 14
20. Hazelhurst & Southeastern.	319 88	15,712 61		16,032 49
21. Hillsboro & Northeastern	3,987 75	8,084 38	5 00	12,077 13
22. Iola & Northern	1,833 92	4,868 91		6,702 83
23. Kewaunee, Green Bay & W.	30,822 04	94,520 07	1,384 78	126,726 89
24. Lake Superior Terminal & Transfer	316 66		16,249 85	16,566 52
25. Mattoon Railway Co.	1,788 53	28,849 30		30,637 83
26. Marinette, Tomahawk & Western	5,860 33	54,112 87	55 00	60,028 20
27. Mpls. St. P. & S. Ste. M.	423,523 46	1,584,342 94	7,229 27	2,015,095 67
28. Northern Pacific	190,696 30	370,308 96	34,403 00	595,408 26
29. Northwestern Coal		20,700 08		20,700 08
30. Robbins Railway Co.		23,110 85		23,110 85
31. Stanley, Merrill & Phillips	8,089 19	130,244 93	2,007 17	140,341 29
32. Winona Bridge			14,106 73	14,106 73
33. Wisconsin & Michigan	24,794 49	192,629 04	29,405 24	246,828 77
34. Whitcomb & Morris		3,496 05		3,496 05
35. Wisconsin Central	1,420,399 10	4,454,323 84	38,426 20	5,913,149 14
36. Wisconsin Western	25,021 52	48,080 29		73,701 81
37. La Crosse & Southeastern.	40,623 37	27,119 44		67,742 81
38. Superior & Southeastern		28,891 80		28,891 80
39. Roddis Lumber & Veneer		6,174 39		6,174 39
40. Mineral Point & Northern.	6,933 82	39,642 26	156 74	46,732 82
Total	\$13,877,621 09	\$38,020,076 65	\$544,362 11	\$53,042,059 85

¹ Tolls.

WISCONSIN AND WHOLE LINE, 1906.

as reported to the Railroad Commission for the Year ending June 30, 1906.

WHOLE LINE.

Mileage upon which based.	Total passenger earnings.	Total freight earnings.	Total other earnings.	Total gross earnings from operation.	Mileage upon which based.	No.
15.16	\$3,598 93	\$29,274 95	\$1,438 46	\$34,312 34	15.16	1
34.	34,711 42	33,060 82		67,772 24	34.	2
21.	613 89	7,973 16		8,587 05	21.	3
1,731.75	15,036,880 47	40,230,718 98	155,453 54	55,423,052 99	7,043.54	4
1,801.01	17,374,372 93	45,951,106 19	156,093 86	63,481,577 98	7,428.77	5
753.70	4,004,792 62	8,763,964 12	238,260 73	13,007,017 47	1,603.27	6
222.57	20,458,341 11	50,792,774 36	2,162,270 41	73,413,385 88	8,473.93	7
19.88		3,662,127 44	649,209 46	4,311,336 90	499.11	8
91.31	12,625,392 20	34,788,467 49	4,320,431 87	51,734,291 56	4,423.87	9
21.	210 95	11,132 91		11,343 83	21.	10
5.50	13,836 91	12,652 44		26,489 35	11.	11
11.74		11,135 34		11,135 34	11.74	12
8.18		27,068 40		27,068 40	8.18	13
114.21	1,088,642 50	1,944,134 78	25,041 45	3,057,808 73	592.69	14
13.50	899 56	24,610 12		25,509 68	13.50	15
37.	5,201 03	16,757 63	246 00	22,204 66	37.	16
37.69	10,861,646 81	34,941,237 26	691,312 50	46,494,216 57	5,183.11	17
225.	153,693 47	450,047 88	5,629 17	606,370 52	2.5.	18
33.50	232 00	57,697 14	3,040 00	60,969 14	33.50	19
11.00	319 88	15,712 61		16,032 49	11.	20
5.00	3,987 75	8,084 37	5 00	12,077 13	5.	21
4.70	1,833 92	4,868 91		6,702 83	4.70	22
36.70	30,832 04	94,520 07	1,384 78	126,726 89	36.70	23
17.51	316 66		16,249 86	16,536 52	17.51	24
29.36	1,788 53	28,849 30		30,637 83	29.36	25
43.77	5,860 33	54,112 87	55 00	60,028 20	43.77	26
355.66	3,005,990 72	8,497,251 32	85,020 19	11,588,262 23	2,070.39	27
134.56	16,244,695 19	43,616,181 18	1,271,779 10	61,132,655 47	5,401.14	28
8.		20,700 08		20,700 08	8.	29
30.		23,110 85		23,110 85	30.	30
56.30	8,089 19	130,244 93	2,007 17	140,341 29	56.30	31
.54			126,907 29	26,907 29	1.03	32
73.78	42,303 41	252,580 59	29,405 24	324,289 24	133.29	33
6.		3,496 05		3,496 05	6.00	34
841.29	1,763,040 36	5,330,726 24	57,573 19	7,151,339 79	977.04	35
51.97	25,021 53	48,680 29		73,701 81	51.81	36
43.99	40,623 37	27,119 44		67,742 81	43.99	37
15.87		28,891 80		28,891 80	15.87	38
12.50		6,174 39		6,174 39	12.50	39
30.60	6,933 82	39,642 26	156 74	46,732 82	30.60	40
7,006.90	\$102,844,693 49	\$279,986,905 97	\$9,898,976 01	\$392,730,578 47	44,695.37	....

EARNINGS FROM OPERATION OF ROADS DOING BUSINESS IN WISCONSIN
ENDING JUNE 30,

Passenger

Name of Company.	Passenger revenue.	Less Repayments.		
		Tickets redeemed.	Excess fares refunded.	Other re- payments.
1. Abbotsford & Northeastern	\$2,891 71			
2. Ahnapee & Western	28,766 59	\$3 80		
3. Big Falls	328 77			
4. Chi., Milwaukee & St. Paul	11,123,545 22			
5. Chicago & Northwestern	15,283,105 09	45,237 96	\$796,452 06	
6. Chicago, St. Paul, Minnea- polis & Omaha	3,445,141 09	12,997 60	7,915 42	\$1,523 39
7. Chi., Burlington & Quincy	16,211,665 44			
8. Chi., Harv. & Geneva Lake	13,399 95			
9. Illinois Central	10,177,073 09		173,031 82	
10. Chippewa River & Northern	210 95			
11. Dul., S. Shore & Atlantic	928,837 78	1,736 33		
12. Dunbar & Wausaukee	899 56			
13. Fairchild & North Eastern	3,616 42			
14. Green Bay & Western	126,584 91			
15. Hawthorne, Nebagamon & Superior	232 00			
16. Hazelhurst & South Eastern	153 45			
17. Hillsboro & Northeastern	3,241 43			
18. Iola & Northern	1,550 51			
19. Great Northern	8,814,807 05			35,941 50
20. Kewaunee, Green Bay & W.	25,892 85			
21. La Crosse & Southeastern	37,619 62			
22. Lake Superior Terminal & Transfer				
23. Mattoon Railway Co.	1,347 37			
24. Mineral Point & Northern	6,113 95			
25. Marinette, Tomahawk & W.	4,526 21			
26. Mpls. St. P. & S. Ste. M.	2,427,538 94			
27. Northern Pacific	13,871,990 59	46,594 09		34,056 93
28. Stanley, Merrill & Phillips	8,022 58			
29. Wisconsin & Michigan	38,893 82			
30. Wisconsin Central	1,425,356 94	12,922 80		
31. Wisconsin Western	14,307 27			
Totals	\$84,027,661 15	\$119,492 58	\$977,399 30	\$71,521 82

SIN AS REPORTED TO THE RAILROAD COMMISSION FOR THE YEAR 1906, WHOLE LINE.

Earnings.

Total deductions.	Total passenger revenue.	Mail.	Express.	Extra baggage and storage.	Other items.	No.
.....	\$2,891 71	\$644 57	\$60 00	\$2 65	.....	1
\$3 80	28,762 79	3,043 73	2,333 78	671 12	.....	2
.....	328 77	.....	285 12	.....	.....	3
.....	1,133,545 23	1,666,037 02	1,092,329 00	191,970 74	\$962,998 49	4
841,600 02	14,441,415 07	1,466,047 97	1,193,392 04	223,413 34	45,104 51	5
.....	3,422,704 68	270,590 38	247,033 96	60,563 60	3,900 00	6
22,436 41	16,211,665 44	2,319,000 01	1,440,392 60	245,713 39	241,569 67	7
.....	13,399 95	436 96	.....	.....	.....	8
173,031 82	10,004,041 27	910,018 62	1,354,231 17	167,314 05	189,787 09	9
.....	210 95	.....	.....	.....	.....	10
1,736 33	927,101 45	59,698 70	45,763 29	11,590 39	44,488 67	11
.....	899 56	.....	.....	.....	.....	12
.....	3,616 42	1,392 33	91 38	100 90	.....	13
.....	126,584 91	17,813 89	6,251 94	2,548 87	493 88	14
.....	232 00	.....	.....	.....	.....	15
.....	153 45	.....	166 43	.....	.....	16
.....	3,241 43	215 00	407 50	123 82	.....	17
.....	1,550 51	225 28	58 13	.....	.....	18
35,941 50	8,778,865 55	983,490 70	554,154 26	109,339 34	435,796 96	19
.....	25,892 85	3,366 64	1,014 71	547 84	.....	20
.....	37,619 62	682 69	1,999 92	.....	321 14	21
.....	.....	.....	.....	243 05	73 61	22
.....	1,347 37	441 16	.....	.....	.....	23
.....	6,113 95	.....	794 72	25 15	.....	24
.....	4,526 21	1,066 33	200 00	67 79	.....	25
.....	2,427,538 94	242,243 60	175,445 43	26,046 66	134,716 09	26
80,651 02	13,791,339 57	910,208 70	966,265 10	189,001 67	337,880 15	27
.....	8,022 58	.....	65 41	1 20	.....	28
.....	38,893 82	2,697 80	616 31	95 48	.....	29
12,922 80	1,412,434 14	127,679 31	133,281 53	16,477 95	73,167 43	30
.....	14,307 27	3,047 31	5,962 92	418 77	1,285 25	31
\$1,168,413 70	\$32,850,247 45	\$3,990,088 68	\$7,227,496 65	\$1,246,277 77	\$2,521,582 94	....

EARNINGS FROM OPERATION,
Freight

Name of Company.	Total passenger ear. ing.	Freight revenue	Less Repay	
			Over-charge to shippers.	Other repayments.
1. Abbottsford & Northeastern	\$3,598 93	\$39,374 95		
2. Ahnapee & Western	34,711 42	33,481 66	\$420 84	
3. Big Falls	613 89	7,973 16		
4. Chi., Mil. & St. Paul	15,036,880 47	40,187,710 03		
5. Chicago & Northwestern	17,374,372 93	46,353,992 16	515,414 21	\$35,725 37
6. Chicago, St. Paul, Minneapolis & Omaha	4,004,792 62	8,996,086 96	187,058 59	55,862 43
7. Chi., Burl. & Quincy	20,458,341 11	59,714,275 74		
8. Chi., L. Shore & Eastern		3,665,393 08	3,265 64	
9. Chi., Harv. & Geneva L.	13,836 91	12,652 44		
10. Illinois Central	12,625,392 20	36,375,213 84	1,738,089 45	
11. Chipewa R. & Northern	210 95	11,132 91		
12. Drummond & Southwestern		27,068 40		
13. Duluth, South Shore & Atlantic	1,088,642 50	1,959,772 50	29,532 45	
14. Chippewa Valley & Nor.		11,135 34		
15. Dunbar & Wausaukee	899 56	24,610 12		
16. Fairchild & N. Eastern	5,201 03	16,848 37	90 74	
17. Green Bay & Western	153,693 47	450,047 88		
18. Hawthorne, Nebagamon & Superior	232 00	57,697 14		
19. Hazellhurst & Southeastern	319 88	15,956 58	243 97	
20. Hillsboro & Northeastern	3,987 75	8,084 38		
21. Iola & Northern	1,833 92	4,868 91		
22. Great Northern	10,861,646 81	25,049,227 21		150,492 27
23. Kewaunee, Green Bay & Western	30,822 04	94,520 07		
24. La Crosse & Southeastern	40,623 37	27,119 44		
25. Lake Superior Terminal & Transfer	316 66			
26. Mattoon Railway Co.	1,788 53	28,849 30		
27. Mineral Point & Nor.	6,993 82	39,735 35	93 09	
28. Marinette, Tomahawk & Western	5,860 33	54,314 38	201 51	
29. Mpls. St. P. & S. Ste. M.	3,005,990 72	8,468,674 49		
30. Northern Pacific	16,244,605 19	43,714,599 26	282,817 65	
31. Northwestern Coal		20,700 08		
32. Robbins		23,110 85		
33. Roddis Lumber & Veneer Co.		6,174 39		
34. Stanley, Merrill & Phillips	8,089 19	130,501 32	256 39	
35. Superior & Southeastern		28,891 80		
36. Wisconsin & Michigan	42,303 41	252,580 59		
37. Whitcomb & Morris		3,496 05		
38. Wisconsin Central	1,763,040 46	5,426,666 46	109,429 82	
39. Wisconsin Western	25,021 52	48,620 29		
Total	\$102,844,603 49	\$282,381,118 18	\$2,866,914 35	\$242,080 07

WHOLE LINE, 1906—Continued.

Earnings.

ments.	Total freight revenue.	Stock yards	Elevators.	Other items.	Total freight earnings.	No.
Total deductions.						
	\$29,274 95				\$29,274 95	1
\$420 84	33,060 82				33,060 82	2
	7,973 16				7,973 16	3
	40,187,710 03	\$9,496 64	\$33,512 31		40,230 718 98	4
551,139 58	45,802,852 58			\$148,253 61	45,951,106 19	5
242,921 02	8,753,165 94			10,798 18	8,763,964 12	6
	50,714,275 74	78,498 62			50,792,774 36	7
8,205 64	3,662,127 44				3,662,127 44	8
	12,652 44				12,652 44	9
1,738,089 45	34,637,124 39			151,343 10	34,788,467 49	10
	11,132 91				11,132 91	11
	27,068 40				27,068 40	12
29,532 45	1,930,240 05			13,884 73	1,944,124 78	13
	11,135 34				11,135 34	14
	24,610 12				24,610 12	15
90 74	16,737 63				16,737 63	16
	450,047 88				450,047 88	17
	57,697 14				57,697 14	18
243 97	15,712 61				15,712 61	19
	8,084 38				8,084 38	20
	4,868 91				4,868 91	21
150,492 27	34,893,734 94			42,532 32	34,941,267 26	22
	94,520 07				94,520 07	23
	27,119 44				27,119 44	24
						25
	28,849 30				28,849 30	26
93 09	39,642 26				39,642 26	27
201 51	54,112 87				54,112 87	28
	8,468,674 79			28,576 53	8,497,251 32	29
282,817 65	43,431,781 61			184,399 57	43,616,181 18	30
	20,700 08				20,700 08	31
	23,110 85				23,110 85	32
	6,174 39				6,174 39	33
256 39	130,244 93				130,244 93	34
	28,891 80				28,891 80	35
	252,580 59				252,580 59	36
	3,496 05				3,496 05	37
109,429 82	5,317,236 64			13,489 60	5,330,726 24	38
	48,680 29				48,680 29	39
\$3,108,994 42	\$279,272,123 76	\$87,995 26	\$33,512 31	\$593,277 64	\$279,986,908 97	....

EARNINGS FROM OPERATION.

Other

Name of Company.	Total pas- senger and freight earn- ings.	Other Earnings		
		Car mileage— Balance.	Switching charges— Balance.	Telegraph Companies.
1. Abbotsford & Northeastern	\$32,873 88			\$78 56
2. Ahnapee & Western	67,772 24			
3. Big Falls	8,587 05			
4. Chi., Mil. & St. Paul	55,267,599 45			27,164 75
5. Chicago & Northwestern	63,325,479 12			
6. Chicago, St. Paul, Minne- apolis & Omaha	12,768,756 74	\$115,211 19	\$57,562 68	
7. Chi., Burl. & Quincy	71,251,115 47		970,539 72	180,804 76
8. Chi., L. Shore & Eastern	3,662,127 44	257,602 02	346,167 07	
9. Chi., Harv. & Geneva L.	26,489 35			
10. Illinois Central	47,413,859 69	97,886 40	287,786 72	7,538 23
11. Chippewa River & Nor. western	11,343 86			
12. Drummond & Southwest- ern	27,068 40			
13. Duluth, South Shore & Atlantic	3,032,767 28			601 60
14. Chippewa Valley & Nor. western	11,135 34			
15. Dunbar & Wausaukee	25,509 68			
16. Fairchild & North Eastern	21,958 66		246 00	
17. Green Bay & Western	603,741 35	567 64	5,061 53	
18. Hawthorne Nebagamon & Superior	57,929 14		3,040 00	
19. Hazelhurst South East- ern	16,032 49			
20. Hillsboro & Northeastern	12,072 13			
21. Iola & Northern	6,702 83			
22. Great Northern	45,802,914 07	415,038 01		9,574 92
23. Kewaunee, Green Bay & Western	125,342 11	1,370 78		
24. La Crosse & Southeastern	67,742 81			
25. Lake Superior Terminal & Transfer	316 66	437 94	15,057 52	
26. Mattoon	30,637 83			
27. Mineral Point & Nor. western	46,576 08	75 59		81 15
28. Marinette Tomahawk & Western	59,973 20			
29. Mpls. St. P. & S. Ste. M.	11,503,242 04	736 46		67,747 31
30. Northern Pacific	59,860,876 37		359,465 12	72,557 98
31. Northwestern Coal	20,700 08			
32. Robbins	23,110 85			
33. Roddis Lumber & Veneer Co.	6,174 39			
34. Stanley, Merrill & Phil- lips	188,334 12		1,984 00	23 17
35. Superior & Southeastern	28,891 80			
36. Winona Bridge				
37. Wisconsin & Michigan	294,884 00	10,112 65		
38. Whitcomb & Morris	3,496 05			
39. Wisconsin Central	7,093,766 60	37,811 66		
40. Wisconsin Western	73,701 81			
Total	\$382,831,602 46	\$936,850 34	\$2,046,910 36	\$366,262 43

WHOLE LINE, 1903—Continued.

Earnings, Etc.

From Operation.				Total gross earnings from operation.	Mileage upon which based.	No.
Rentals from tracks, yards and terminals.	Rents not otherwise provided for.	Other sources.	Total other earnings.			
\$1,359 90			\$1,438 46	\$34,312 34	15.16	1
				67,772 24	34.00	2
				8,587 05	21.00	3
	\$128,283 79		155,453 54	55,423,052 99	7,043.54	4
51,170 37	84,955 99	\$19,972 50	156,098 86	63,481,577 98	7,428.77	5
44,357 55	18,008 22	3,126 09	238,200 73	13,007,017 47	1,693.27	6
	681,808 89	329,117 04	2,162,270 41	73,413,885 88	8,473.93	7
		45,440 37	649,209 46	4,311,336 90	499.11	8
				26,489 30	11.00	9
371,577 00	635,286 37	2,920,357 15	4,320,431 87	51,734,291 56	4,423.87	10
				11,343 86	21.00	11
				27,068 40	8.18	12
6,084 41	2,590 16	15,675 28	25,041 45	3,057,808 73	592.69	13
				11,135 34	11.74	14
				25,509 68	13.50	15
			246 00	22,204 66	37.00	16
			5,629 17	609,370 52	225.00	17
			3,040 00	60,969 14	33.50	18
				16,032 49	11.00	19
		5 00	5 00	12,077 13	5.00	20
				6,702 83	4.70	21
181,483 59	53,192 86	32,023 12	691,312 50	46,494,226 57	5,183.11	22
		14 00	1,384 78	126,726 89	36.70	23
				67,742 81	43.99	24
	754 40		16,249 86	16,566 52	17.51	25
				30,637 83	29.36	26
			156 74	46,732 82	30.60	27
	55 00		55 00	60,028 20	43.77	28
	13,063 78	3,472 64	85,020 19	11,588,262 23	2,020.39	29
344,098 77	292,965 74	202,691 49	1,271,779 10	61,132,655 47	5,401.14	30
				20,700 08	3.00	31
				23,110 85	30.00	32
				6,174 39	12.50	33
			2,007 17	140,341 29	56.30	34
				28,891 80	15.87	35
		126,907 29	26,907 29	26,907 29	1.03	35
		19,292 59	29,405 24	324,289 24	123.29	37
				3,496 05	6.00	38
12,532 99	7,228 54		57,573 19	7,151,339 79	977.04	39
				73,701 81	51.81	40
\$1,012,664 58	\$1,918,193 74	\$3,618,094 56	\$9,898,976 01	\$392,730,578 47	44,695.37	....

¹ Tolls.

OPERATING EXPENSES OF ROADS DOING BUSINESS IN WISCONSIN, AS
JUNE 30, 1905—

Maintenance of

Name of Company.	Repairs of roadway.	Renewals of rails.	Renewals of ties.	Repairs of bridges and culverts.
1. Abbotsford & Northeastern.....	\$4,277 57	\$665 03	\$1,411 07	\$344 92
2. Annapee & Western.....	9,173 26		1,153 21	2,137 83
3. Bayfield, Lake Shore & Western.....	5,918 35		661 80	136 81
4. Chicago, Milwaukee & St. Paul, ²	817,825 99	103,424 70	136,741 05	180,156 68
5. Chicago & Northwestern, ³	942,801 54	120,932 36	325,115 91	172,988 62
6. Chi., Burl. & Quincy, ¹				
7. Chicago, L. S. & Eastern.....	6,797 72	1,351 37	3,488 50	249 13
8. Illinois Central.....	26,421 35		11,495 35	7,717 15
9. Chippewa Riv. & Northern.....	6,936 14		1,211 42	913 69
10. Drummond & So. Western.....	3,847 13		538 90	
11. Duluth, S. S. & Atlantic.....	46,203 14		8,610 52	4,448 86
12. Hillsboro & Northeastern.....	1,440 10		113 22	
13. Fairchild & Northeastern.....	5,890 23		3,888 41	332 95
14. Green Bay & Western.....	52,429 25	9,000 00	29,278 54	3,174 82
15. Hawth., Nebag. & Sup.....	3,359 15	165 87	441 13	791 36
16. Hazelhurst & S. Eastern.....	1,084 74			65 65
17. Iola & Northern.....	423 49		199 36	434 77
18. Kewaunee, G. B. & West.....	5,750 67	6,000 00	6,000 00	1,886 75
19. Lake S. T. & T. R'y Co.....	4,033 62	34 92	852 19	262 61
20. Chi., Harv. & Geneva L.....	707 28			
21. Chippewa Val. & Northern.....	312 00			
22. Marinette, T. & Western.....	16,498 79	2,911 47	2,742 52	98 25
23. Min., St. P. & Ashland.....	12,504 76			
24. M., St. P. & S. Ste. Marie.....	106,816 42		33,812 95	24,785 47
25. Northern Pacific.....	81,216 91	11,606 50	16,339 45	21,548 43
26. Northwestern Coal R'y Co.....	1,676 89	200 00	645 91	976 54
27. Roddis Lumber & V'r Co.....				
28. Stanley, Merrill & Phillips.....	13,984 94	1,651 36	3,515 47	3,344 04
29. Winona Bridge R'y Co.....	141 27		88 02	3,289 99
30. Wisconsin & Michigan.....	14,716 02		570 07	145 17
31. Whitcomb & Morris.....	1,940 00	200 00		
32. Wisconsin Central.....	323,331 38	62,203 03	142,238 72	95,258 47
33. Wisconsin Western.....	6,683 85	2 55	2,328 36	1,292 52
34. La Crosse & Southeastern.....	2,891 37			
35. Mineral Point & Northern.....	10,257 29		3 75	385 40
36. Robbins Railroad Co.....				
Total.....	\$2,541,292 61	\$314,532 42	\$733,485 80	\$527,216 93

¹ Not reported.² Revenue train mileage basis.³ Proportional.⁴ Credit.

REPORTED TO THE RAILROAD COMMISSION FOR THE YEAR ENDING WISCONSIN.

Way and Structure.

Repairs of fences, road crossings, signs and cattle guards.	Repairs of buildings.	Repairs of docks and wharves.	Repairs of telegraph.	Other expenses.	Total.	No.
\$35 38	\$64 47		\$9 44		\$6,807 88	1
	307 67				12,771 97	2
			101 77		6,818 73	3
50,687 25	196,028 32	\$9,285 73	12,221 95	\$175,768 50	1,682,139 95	4
52,098 65	145,448 86	11,021 58	7,182 66	2,241 51	1,780,438 29	5
	988 08				12,875 40	7
5,363 22	5,512 31		345 21	428 48	57,283 07	8
					9,061 25	9
				70 47	4,456 50	10
690 32	2,804 67	2,988 38	391 85	8 73	66,146 47	11
	42 25				1,595 57	12
158 09	8 75				10,278 43	13
492 08	7,616 89	2 70	735 51		102,729 74	14
	898 81				5,656 32	15
	52 63				1,203 02	16
	54 57				1,162 19	17
35 74	326 99	82 05			23,082 20	18
305 27	1,556 45				7,045 06	19
	86 76		169 14	269 58	1,232 76	20
				79 29	391 29	21
	459 71		18 79		16,906 59	22
			40 45	11,720 21	24,265 42	23
1,355 85	13,051 35		2,460 03	153 14	182,435 21	24
1,469 60	7,290 79	319 14	1,414 85		141,205 52	25
	467 81				3,967 15	26
				374 08	374 08	27
1,905 23	893 48		582 62		25,877 24	28
	6 51				3,525 79	29
70 06	1,614 60		445 50	67 50	17,628 92	30
					2,140 00	31
12,521 07	55,632 81	21,223 01	4,204 35	29,689 83	746,293 77	32
1,606 21	860 20				12,773 09	33
					2,891 37	34
741 87	922 71		173 71	17 15	12,501 88	35
				10,892 75	10,892 75	36
\$129,536 54	\$442,999 0	\$45,522 56	\$30,497 81	\$231,771 72	\$4,996,855 47	....

OPERATING EXPENSES,

Name of Company.	Maintenance of Equipment.			
	Repairs and renewals of locomotives.	Repairs and renewals of passenger cars.	Repairs and renewals of freight cars.	Repairs and renewals of ferry-boats, tugs, floats, etc.
1. Abbotsford & Northeastern.....	\$151 29		\$106 07	
2. Ahnapee & Western	2,052 48	\$450 00	1,060 83	
3. Bayfield Lake Shore & Western	168 83	3 97	281 74	
4. Chicago, Milwaukee & St. Paul	541,708 33	197,980 12	595,848 84	
5. Chicago & Northwestern	640,375 31	129,169 51	621,706 35	\$425 10
6. Chicago, Lake Shore & Eastern	2,186 96		4,314 53	
7. Illinois Central	9,408 42	2,210 35	7,338 32	
8. Chippewa River & Northern				
9. Drummond & South Western	1,785 99		1,535 69	
10. Duluth, South Shore & Atlantic	11,649 64	5,236 74	12,920 87	
11. Dunbar & Wausaukee				
12. Hillsboro & Northeastern	219 20		116 88	
13. Fairchild & North Eastern	1,287 23		630 25	
14. Green Bay & Western	15,400 36	6,029 30	22,271 24	
15. Hawthorne, Nebagamon & Superior	7,400 84		8,228 85	
16. Hazelhurst & Southeastern	863 25	10 95	1,188 44	
17. Iola & Northern	88 51	180 73		
18. Kewaunee, Green Bay & Western	1,225 56	1,002 98	1,076 78	
19. Lake Superior Terminal & Transfer Ry. Co.	5,518 63		1,848 50	
20. Chi., Harvard & G. Lake		615 79	300 52	
21. Chippewa Valley & Northern			478 35	
22. Marinette, Tomahawk & Western	3,299 65	601 88	3,061 62	
23. Great Northern				
24. Minneapolis, St. Paul & Ashland	6,961 67		7,821 02	
25. Minneapolis, St. Paul & Sault Ste. Marie	77,301 70	18,949 62	110,306 61	
26. Northern Pacific	49,236 62	5,131 73	18,844 62	
27. Northwestern Coal Ry. Co.	1,799 65			
28. Roddis Lumber & Veneer Co.				
29. Stanley Merrill & Phillips	6,901 36	373 27	3,423 90	
30. Wisconsin & Michigan	6,209 02	1,523 52	5,401 89	
31. Whitcomb & Morris	220 00		50 00	
32. Wisconsin Central	246,707 19	74,102 65	289,998 91	
33. Wisconsin Western	293 73	570 67	1,173 05	
34. La Crosse & Southeastern	1,000 00			
35. Mineral Point & Northern	126 90	19 71	20 64	
36. Robbins Railroad Co.				
Total	\$1,641,548 32	\$444,163 49	\$1,721,405 31	\$425 10

WISCONSIN, 1905.—Continued.

Maintenance of Equipment.			Conducting Transportation.			No.
Shop machinery, tools, etc.	Other expenses.	Total.	Wages of enginemen, firemen and roundhousemen.	Fuel for locomotives.	Water supply for locomotives.	
	\$14 39	\$271 75	\$2,141 15	\$1,931 35	\$12 95	1
\$11 50		3,574 81	2,738 49	5,779 62		2
127 41		581 95	2,780 88	2,135 58	85 25	3
33,408 46	94,334 09	1,463,279 84	923,631 83	1,197,786 34	49,424 14	4
39,745 41	104,380 46	1,535,803 14	968,825 02	1,212,122 23	60,186 82	5
85 84	969 72	7,557 05	9,349 25	9,556 45	148 84	6
1,605 42	3,162 23	23,724 74	14,864 85	11,449 16	1,206 77	7
	578 24	578 24		4,586 73		8
	890 34	4,212 02	1,730 99	2,398 79		9
999 83	3,663 08	34,470 76	30,214 35	41,722 70	1,653 69	10
			2,460 00	1,986 00		11
	50 00	386 08	731 50	1,416 18	100 00	12
		1,967 48	2,889 47	4,423 47		13
1,577 37	12,580 10	57,858 37	34,965 22	60,436 69	1,681 45	14
	100 00	15,729 69	7,984 23	14,020 04		15
		2,062 64	4,070 77	5,097 27		16
		269 24	966 17	1,123 00		17
	600 00	3,905 32	4,019 77	7,752 00		18
93 81		7,460 94	9,833 08	11,475 40	317 27	19
57 74	299 09	1,273 14	1,285 62	3,380 37	269 11	20
137 14		615 49	4,589 39	1,862 91		21
321 13		7,284 28	4,844 13	7,333 14	636 14	22
						23
		14,732 69	8,180 35	20,162 32	745 37	24
4,942 49	6,193 14	217,693 56	104,648 57	113,543 75	8,289 26	25
2,544 47	619 90	76,377 34	37,488 11	60,603 51	2,864 41	26
		1,799 65	1,959 71	1,361 26	174 01	27
			2,173 67	2,192 61		28
171 89	1,268 15	12,138 57	11,470 27	11,272 73	472 81	29
1,201 36	3,691 71	18,027 50	11,471 25	19,852 96	1,115 29	30
30 00		300 00	1,200 00	225 00		31
19,753 31	27,183 79	657,744 85	364,819 31	488,261 72	23,829 43	32
	63 39	2,100 84	3,331 42	4,207 85	55 50	33
		1,000 00	900 00	2,172 00		34
		167 25	1,038 97	2,418 17	148 50	35
			4,160 00	3,490 80		36
\$106,813 58	\$260,642 42	\$4,174,998 22	\$2,587,818 79	\$3,340,045 10	\$153,417 01	....

OPERATING EXPENSES,

Conducting

Name of Company.	Conducting Transportation—Continued.			
	All other supplies for locomotives.	Wages of other trainmen.	All other train supplies.	Wages of switchmen, flagmen and watchmen.
1. Abbotsford & Northeastern.	\$64 78	\$1,013 72	\$18 44	.....
2. Ahnapee & Western	428 44	2,117 05	297 29	..... \$424 14
3. Bayfield, L. Shore & West.	59 35	1,016 00	.....	.....
4. Chicago, Mil. & St. P.....	48,515 21	654,753 26	146,137 75	390,340 08
5. Chicago & Northwestern ...	51,738 27	715,564 07	134,912 01	377,030 71
6. Chicago, L. Shore & Eastern	350 17	.....	158 00	16,233 30
7. Illinois Central	677 10	13,300 97	3,223 79	543 16
8. Drummond & S. Western..	87 38	540 93	63 46	.....
9. Duluth, S. S. & Atlantic....	1,316 16	22,187 15	4,742 39	9,037 99
10. Dunbar & Wausaukee	500 00	1,608 00	.....	.....
11. Hillsboro & Northeastern .....	.....	512 66	.....	.....
12. Fairchild & Northeastern .....	.....	1,435 05	.....	547 50
13. Green Bay & Western.....	1,435 34	23,369 46	1,779 99	8,044 42
14. Hawthorne, Nebagamon & Superior	707 67	7,215 82	115 89	.....
15. Hazelhurst & S. Eastern.....	.....	1,778 92	290 08	.....
16. Iola & Northern	53 12	888 26	36 39	511 65
17. Kewaunee, Green Bay & W.	136 33	3,781 20	426 58	963 15
18. Lake Sup. T. & T. Ry. Co.	729 72	15,273 18	.....	3,967 00
19. Chicago, Harvard & G. Lake .....	.....	2,273 41	.....	.....
20. Marinette, Tomahawk & W.	463 84	2,389 80	39 03	.....
21. Mpls., St. P. & Ashland....	.....	7,276 61	2,517 43	.....
22. Mpls., St. P. & S. Ste. M.	7,288 73	94,259 15	15,025 93	4,124 73
23. Northern Pacific	2,493 18	26,743 91	4,595 85	9,387 96
24. Northwestern Coal Ry. Co.	163 08	.....	.....	3,957 02
25. Roddis Lumber & Veener Co. ....	.....	899 06	.....	.....
26. Stanley, Merrill & Phillips.	680 81	7,034 68	1,197 38	.....
27. Wisconsin & Michigan	1,117 94	11,590 69	1,942 63	946 87
28. Whitcomb & Morris	50 00	.....	.....	.....
29. Wisconsin Central	17,017 53	268,894 18	51,207 34	131,962 76
30. Wisconsin Western	103 00	4,039 08	363 82	.....
31. La Crosse & Southeastern	144 76	780 00	.....	270 00
32. Mineral Point & Northern..	53 55	1,186 98	311 25	.....
Total	\$136,375 46	\$1,893,728 25	\$369,402 72	\$958,292 44

WISCONSIN, 1905.

Transportation.—Continued.

Conducting Transportation—Continued.

Expense of telegraph, including train dispatchers and operators.	Wages of station agents, clerks and laborers.	Station supplies.	Switching charges—Balance.	Car milenge—Balance.	Loss and damage.	No.
\$0.60	\$730 00	\$93 07	.....	.....	\$26 23	1
240 61	2,980 00	415 76	.....	\$696 48	1,942 50	2
75 85	742 92	.....	.....	.....	.....	3
101,831 78	723,055 12	53,241 99	\$71,190 83	27,616 02	135,393 13	4
157,772 08	614,292 76	54,839 57	103,624 97	101,719 34	100,771 89	5
.....	3,273 35	28 76	.....	.....	.....	6
4,178 32	9,659 57	1,563 45	.....	2,097 40	2,201 44	7
.....	.....	.....	.....	.....	.....	8
5,860 72	20,776 30	1,543 49	1,523 75	1,835 87	914 10	9
.....	6,873 36	.....	.....	.....	.....	10
.....	976 33	.....	.....	.....	.....	11
.....	694 16	61 02	.....	202 95	25 15	12
2,801 47	22,776 78	2,019 39	.....	979 59	1,379 78	13
.....	2,055 33	74 61	.....	336 45	32 00	14
.....	579 86	.....	.....	.....	.....	15
16 50	392 45	28 09	.....	.....	.....	16
377 91	4,809 57	93 01	1,738 83	248 92	755 41	17
836 25	3,990 00	810 52	.....	.....	319 28	18
.....	209 16	.....	.....	.....	50 80	19
.....	1,576 92	.....	100 33	102 10	52 94	20
.....	.....	.....	.....	.....	.....	21
18,611 72	37,029 86	4,917 34	200 43	.....	13,269 28	22
9,780 09	28,139 39	2,225 67	.....	.....	2,900 22	23
.....	414 58	73 35	.....	.....	.....	24
.....	.....	.....	.....	.....	.....	25
19 61	1,498 19	109 72	.....	1 08	27 49	26
1,299 62	8,691 63	608 00	8,460 26	1,202 69	400 92	27
.....	.....	.....	.....	.....	.....	28
87,576 23	282,356 97	23,092 62	5,033 15	19,633 32	43,809 53	29
42 26	4,553 30	233 63	.....	3,495 87	208 51	30
.....	514 59	.....	.....	.....	.....	31
155 15	1,173 70	355 28	.....	273 18	44 56	32
\$391,477 37	\$1,784,826 15	\$146,433 34	\$191,872 55	\$160,501 26	\$304,615 16	....

OPERATING EXPENSES,
Conducting Transportation—Continued.

Name of Company.	Conducting Transportation—Continued.			
	Injuries to persons.	Barges, floats, tugs, ferryboats, expenses of, including wages, fuel and supplies.	Other expenses.	Total.
1. Abbotsford & Northeastern	\$1,964 65		\$2,019 71	\$10,021 65
2. Ahnapee & Western			4,088 90	23,150 28
3. Bayfield, L. S. & Western			1,054 42	7,950 25
4. Chi., Milwaukee & St. Paul	89,720 94		549,762 80	5,162,401 22
5. Chicago & Northwestern	127,468 29	\$985 93	171,198 57	4,953,053 13
6. Chi., Lake Shore & Eastern			802 79	39,900 91
7. Illinois Central	2,332 74		4,342 21	71,730 93
8. Chip'wa River & Northern			4,613 93	9,200 66
9. Drummond & Southwestern			1 78	5,323 33
10. Duluth, S. S. & Atlantic	902 35		6,391 55	150,622 56
11. Dunbar & Wausaukee			973 05	14,400 41
12. Hillsboro & Northeastern			658 05	4,394 72
13. Fairchild & Northeastern	5 00			10,283 77
14. Green Bay & Western	425 10		3,584 55	165,679 23
15. Hawth'ne, Nebag'n & Sup'r				32,542 04
16. Hazelhurst & Southeastern			1 86	11,818 96
17. Iola & Northern				4,015 63
18. Kewaunee, Green Bay & W.	50 00		2,028 27	27,180 95
19. Lake Sup'r T. & T. Ry. Co.	577 75			48,129 45
20. Chi., Harv. & Geneva Lake	42 67			7,511 14
21. Chip'wa Valley & Northern				6,452 30
22. Marinette, Tomah'k & W.				17,538 37
23. Mpls, St. P. & Ashland			655 99	39,538 07
24. Mpls., St. P. & S. Ste. M.	33,046 39		24,861 43	479,121 57
25. Northern Pacific	5,643 80		8,116 06	200,982 16
26. Northwestern Coal Ry Co.		11 35		8,114 36
27. Roddis Lumber & V. Co.			500 00	5,765 34
28. Stanley, Merrill & Phillips	6 50		2,222 29	36,013 56
29. Winona Bridge Ry. Co.				
30. Wisconsin & Michigan	15 05		6,221 79	74,937 59
31. Whitcomb & Morris				1,535 00
32. Wisconsin Central	26,663 66		106,734 23	1,940,951 98
33. Wisconsin Western			888 02	21,532 26
34. La Crosse & Southeastern				4,781 35
35. Mineral Point & Northern	72 50		2,208 76	9,445 55
36. Robbins Railroad Co.				7,650 80
Total	\$288,937 39	\$997 28	\$903,931 01	\$13,612,671 28

WISCONSIN, 1905.—Continued.

General Expenses.

General Expenses.						No.
Salaries of officers.	Salaries of clerks.	General office expenses and supplies.	Agencies, including salaries and rent.	Advertis- ing.	Commis- sions.	
\$720 00		\$15 52				1
600 00	\$1,155 00	112 13				2
	312 50					3
94,514 44	112,751 63	9,594 65				4
41,481 23	81,008 57	22,937 92	\$122,819 36	\$55,106 18	\$2,816 02	5
422 27	466 90	279 91				6
2,115 17	2,600 09	662 61				7
	200 00	34 45				8
3,403 79	4,714 04	667 22	4,895 20	744 00	3,477 82	9
						10
						11
1,899 96						12
11,400 00	5,945 37	557 29	336 24	176 95		13
						14
						15
						16
						17
3,800 00	1,370 00			31 35		18
2,160 00	2,521 69	24 60				19
600 00	369 12	49 35		78 62		20
						21
1,800 00	1,155 00					22
						23
8,464 99	12,995 50	4,272 93	28,729 46	5,202 78		24
4,073 29	4,727 09	798 24	5,531 36	2,433 77		25
1,500 00						26
						27
3,000 00	2,400 00	183 90				28
	157 28					29
1,269 99	2,622 83	1,584 39	705 87	822 33	579 17	30
200 00						31
47,076 77	56,552 04	23,190 36	122,235 75	14,455 22		32
						33
1,170 00		600 00				34
1,949 98	457 50	463 34				35
						36
\$233,626 88	\$294,485 27	\$66,028 81	\$285,253 24	\$79,051 20	\$6,873 01	

OPERATING EXPENSES,

Name of Company.	General Expenses—Continued.			
	Insurance.	Expense of fast freight lines.	Expense of traffic associations	Expense of stock yards and elevators.
1. Abbotsford & Northeastern.....				
2. Ahnapee & Western.....	\$142 82			
3. Bayfield, L. S. & Western.....				
4. C., M. & St. P.....	41,737 61			
5. Chicago & Northwestern.....	4,908 12		\$31,041 37	
6. Chicago, L. S. & Eastern.....	146 60			
7. Illinois Central.....	827 28			
8. Drummond & Southwestern.....				
9. Duluth, S. S. & Atlantic.....	1,300 44			
10. Fairchild & Northeastern.....				
11. Green Bay & Western.....	2,669 72			
12. Hawthorne, Nebag. & Sup.....	1,337 40			
13. Hazelhurst & Southeastern.....	41 80			
14. Iola & Northern.....	27 00			
15. Kewaunee, G. B. & Western.....	345 66			
16. Lake Sup. T. & T. Ry. Co.....	303 45			
17. Chi. Harvard & G. Lake.....	244 00			
18. Marinette, Tomahawk & W.....	785 20			
19. Mpolis, St. P. & Ashland.....				
20. Mpolis, St. P. & S. Ste. M.....	7,650 94			
21. Northern Pacific.....	2,536 80			
22. Northwestern Coal Ry. Co.....	528 54			
23. Stanley, Merrill & Phillips.....	2,021 98			
24. Winona Bridge Ry. Co.....	19 67			
25. Wisconsin & Michigan.....	1,988 05			
26. Whitcomb & Morris.....				
27. Wisconsin Central.....	27,942 43			
28. La Crosse & Southeastern.....				
29. Mineral Point & Northern.....	388 71			
Total	\$97,894 22		\$21,041 37	

WISCONSIN, 1905.—Continued.

General Expenses—Continued.

Rentals of tracks, yards and terminals.	Rentals not otherwise provided for	Legal expenses.	Stationery and printing.	Other general expenses.	Total.	No.
\$494 21		\$3 00	\$81 87		\$1,314 60	1
		257 22	200 00		2,467 17	2
1,500 00	\$5 00		74 19	\$41 10	1,932 79	3
		16,892 53	17,502 12	58,052 41	351,045 42	4
34,619 67	5,280 58	33,245 96	8,000 52	75,586 06	508,851 56	5
		332 28	113 70	100 01	1,861 68	6
		622 06	266 05	793 70	7,886 99	7
				6 20	240 65	8
12,978 05	362 91	1,148 77	2,409 80	684 77	36,736 81	9
15 00			61 02	52 10	2,028 08	10
3,506 74	21 56	439 90	2,701 99	2,984 56	30,750 32	11
			65 49		1,402 89	12
			55 75	300 00	397 55	13
			58 50	62 50	148 00	14
	108 00		289 91	2,115 88	8,060 80	15
	439 01	862 45	516 17	126 50	6,953 87	16
324 26			63 52		1,728 87	17
			219 02	1,007 45	4,966 67	18
				5,830 05	5,830 05	19
		5,132 43	8,764 88	1,857 21	83,074 21	20
27,965 09	373 33	3,738 65	2,577 32	2,573 38	57,238 32	21
		101 25	27 25	1,009 04	3,166 08	22
			374 66		7,980 54	23
			11 26		188 21	24
6,301 83	604 71	287 80	546 76	55 06	17,368 79	25
				200 00	200 00	26
	10,656 44	27,681 55	13,183 27	28,940 29	371,914 12	27
					1,770 00	28
			154 00	2,044 75	5,458 28	29
\$87,704 85	\$17,866 54	\$90,645 89	\$58,310 92	\$184,223 02	\$1,523,013 32	

OPERATING EXPENSES,
Recapitulation

Name of Company.	Maintenance of Way and structure.	Maintenance of equip ment.
1. Abbotsford & Northeastern	\$6,807 88	\$271 75
2. Alnapee & Western	12,771 97	3,574 81
3. Bayfield Lake Shore & Western	6,818 73	581 95
4. Chicago, Milwaukee & St. Paul ²	1,632,139 95	1,463,279 83
5. Chicago & Northwestern	1,780,438 29	1,535,802 14
6. Chicago, St. Paul, Minneapolis & Omaha ²	676,045 80	514,616 29
7. Chicago, Burlington & Quincy ³		
8. Chicago, Lake Shore & Eastern	12,875 40	7,557 05
9. Illinois Central ²	57,283 07	28,724 74
10. Chippewa River & Northern	9,061 25	578 24
11. Drummond & Southwestern	4,456 50	4,212 02
12. Duluth, South Shore & Atlantic	66,146 47	34,470 76
13. Dunbar & Wausaukee		
14. Hillsboro & Northeastern	1,595 57	386 08
15. Fairchild & Northeastern	10,278 43	1,967 48
16. Green Bay & Western	102,729 74	57,858 37
17. Hawthorne, Nebagamon & Superior	5,656 32	15,729 69
18. Hazelhurst & Southeastern	1,203 02	2,062 64
19. Iola & Northern	1,162 19	269 24
20. Kewaunee, Green Bay & Western	23,082 20	3,905 32
21. Lake Superior Terminal & Transfer Ry. Co	7,045 06	7,360 94
22. Chicago, Harvard & Geneva Lake	1,232 76	1,273 14
23. Chippewa Valley & Northern	391,28	615 49
24. Marinette, Tomahawk & Western	16,906 59	7,284 28
25. Great Northern	174,218 79	73,970 64
26. Minneapolis, St. Paul & Ashland	24,265 42	14,782 09
27. Minneapolis, St. Paul & Sault Ste. Marie	182,435 21	217,693 56
28. Northern Pacific	141,205 52	76,377 34
29. Northwestern Coal Ry. Co	3,967 15	1,799 65
30. Roddis Lumber & Veneer Co.	374 08	
31. Stanley, Merrill & Phillips	25,877 24	12,138 57
32. Winona Bridge Ry. Co.	3,525 78	
33. Wisconsin & Michigan	17,628 98	18,027 50
34. Whitcomb & Morris	2,140 07	300 00
35. Wisconsin Central	746,293 77	657,744 85
36. Wisconsin Western	12,773 67	2,103 84
37. La Crosse & Southeastern	2,801 27	1,000 00
38. Mineral Point & Northern	12,501 87	167 25
39. Robbins Railroad Co.	10,892 77	
Total	\$5,847,120 00	\$4,793,605 14

¹ Excluding taxes.² Proportioned on train mileage basis.³ Not reported.

WISCONSIN, 1905—Continued.
of Expenses.

Conducting transportation.	General expenses.	Grand total.	Percentage of operating expenses to earnings.	Mileage upon which based.	No.
\$10,021 65	\$1,314 60	\$18,415 83	64.54	15.16	1
22,150 28	2,467 17	40,964 23	65.30	34.00	2
7,950 25	1,932 79	17,283 72	176.30	14.00	3
5,162,401 22	351,045 42	8,658,806 42	156.27	1,725.23	4
4,953,053 13	508,851 56	8,778,145 12	65.59	1,778.65	5
1,954,315 91	290,975 55	3,465,953 55	64.72	744.05	6
.....	.....	.....	.....	.....	7
39,900 91	1,861 68	62,195 04	67.18	18.56	8
71,730 93	7,886 99	160,625 73	156.30	91.31	9
9,200 66	.....	18,840 15	139.69	24.00	10
5,323 33	240 65	14,232 50	96.40	8.18	11
150,622 56	36,786 81	258,026 60	104.34	111.20	12
14,400 41	.....	14,400 41	58.28	13.50	13
4,394 72	.....	6,376 37	40.08	5.00	14
10,283 77	2,028 08	24,557 76	68.00	33.00	15
165,679 23*	30,750 32	357,017 66	59.50	225.00	16
32,542 04	1,402 89	55,330 94	114.00	25.00	17
11,818 76	397 55	15,481 97	66.17	11.00	18
4,015 63	148 00	5,595 06	75.18	4.70	19
27,180 95	8,060 80	62,229 27	53.42	36.70	20
48,129 45	6,953 87	69,589 32	.....	16.33	21
7,511 14	1,728 87	11,745 91	92.22	5.50	22
6,452 30	.....	7,458 08	68.29	10.00	23
17,538 37	4,966 67	46,695 91	91.18	43.77	24
290,291 86	12,278 46	550,779 75	49.77	37.79	25
39,538 07	5,830 05	84,416 23	130.08	45.75	26
479,121 57	83,074 21	962,324 55	51.11	355.66	27
200,982 16	57,238 32	475,803 34	84.12	134.56	28
8,114 36	3,166 08	17,047 24	107.21	8.00	29
5,765 34	.....	6,139 42	100.00	10.00	30
36,013 56	7,980 54	82,009 91	61.64	52.36	31
.....	188 21	3,714 00	28.33	.54	32
74,937 59	17,368 79	127,962 80	70.43	73.98	33
1,535 00	200 00	4,175 00	135.30	6.00	34
1,940,951 98	371,914 12	3,716,904 72	66.82	841.29	35
21,432 26	.....	36,406 79	52.38	51 97	36
4,781 35	1,770 00	10,442 72	138.75	30.56	37
9,445 55	5,458 28	27,572 96	237.60	30.60	38
7,650 80	.....	18,543 55	96.56	30.00	39
.....
\$15,857,279 05	\$1,826,267 33	\$28,324,271 58	59.21	6,702.90	.....

OPERATING EXPENSES OF ROADS

As reported to the railroad commission for year

Name of Company.	Maintenance of Way and Structures.			
	Repairs of roadway.	Renewals of rails.	Renewals of ties.	Repairs of bridges and culverts.
1. Abbotsford & Northeastern.....	\$5,632 59	\$481 15	\$1,488 90	\$2,267 92
2. Ahnapee & Western.....	8,736 25		1,960 00	1,520 50
3. C., M. & St. P.....	909,781 47	148,910 20	156,596 57	178,108 60
4. Chicago & Northwestern.....	968,490 74	74,832 67	208,208 50	151,409 10
5. C., St. P., M. & O ¹				67 55
6. Chicago, L. S. & Eastern.....	5,849 63	585 62	1,501 30	
7. Illinois Central.....	23,343 60	222 89	5,489 13	5,835 53
8. Chippewa River & Northern.....	4,505 73		103 79	
9. Chi., Harvard & G. Lake.....	644 74			
10. Chip. Valley & Northern.....	498 28			
11. Drummond & Southwestern.....	9,680 99		1,096 53	26 72
12. Duluth, S. S. & Atlantic.....	52,889 28		5,128 48	3,947 86
13. Fairchild & Northeastern.....	5,462 28			497 88
14. Great Northern ¹				
15. Green Bay & Western.....	54,746 60	31,000 00	23,591 60	4,694 43
16. Hawthorne, Nebag. & Sup.....	3,065 15	92 81	144 66	24 16
17. Hazelhurst & Southeastern.....	252 07			144 16
18. Hillsboro & Northeastern.....	1,354 16		96 08	
19. Iola & Northern.....	322 11			
20. Kewaunee, Green Bay & W.....	22,071 52	12,000 00	1,000 00	2,147 95
21. Lake Sup. T. & T. Ry. Co.....	7,775 52	132 17	1,794 68	
22. Marinette, Tomahawk & W.....	10,813 71	5,664 18	5,828 04	610 40
23. Mpolis, St. P. & S. Ste. M.....	111,572 92	2,138 02	31,548 08	38,735 08
24. Northern Pacific.....	86,932 19	2,911 14	14,467 13	33,356 37
25. Northwestern Coal Ry. Co.....	4,834 34		462 52	460 00
26. Robbins Railway Co.....				
27. Stanley, Merrill & Phillips.....	18,327 18		4,233 23	3,740 60
28. Winona Bridge Ry. Co.....	78 97		67 55	1,455 82
29. Wisconsin & Michigan.....	12,849 04		1,597 34	320 10
30. Whitcomb & Morris.....	1,560 00		200 00	
31. Wisconsin Central.....	330,520 74	49,616 40	105,903 61	80,127 96
32. Wisconsin Western.....	7,874 21	150 00	3,963 42	3,105 72
33. La Crosse & Southeastern.....	7,561 82			
34. Superior & Southeastern.....				
35. Roddis Lbr. & Vener Co.....				
36. Mineral Point & Northern.....	20,321 86			307 98
Total.....	\$2,698,348 59	\$328,737 25	\$576,476 14	\$512,912 34

¹Not given in detail; see recapitulation for totals.

DOING BUSINESS IN WISCONSIN

ending June 30, 1906, for Wisconsin.

Maintenance of Right of Way and Structures—Continued.						
Repairs of fences, road crossings, signs and cattle guards.	Repairs of buildings.	Repairs of docks and wharves.	Repairs of telegraph.	Other expenses.	Total.	No.
\$35 08	\$274 09		\$5 40	\$3 50	\$10,188 56	1
620 00	864 00				13,700 75	2
56,625 62	174,128 55	\$5,136 33	13,066 32	614,376 31	2,256,729 97	3
59,390 08	175,115 33	13,731 45	8,266 96	2,990 81	1,653,435 66	4
	1,006 87			2 38	9,012 35	5
2,975 43	5,437 16		232 59	436 27	43,972 60	7
13 06					4,637 58	8
	108 15		688 49		1,441 88	9
				91 64	589 02	10
				98 78	10,902 92	11
961 93	3,678 29	2,249 11	547 09	1 91	69,403 95	12
		96 75		64 76	6,121 67	13
						14
723 99	7,401 34		751 58		122,909 54	15
	30 00				3,356 78	16
	7 07				403 30	17
	167 08				1,617 22	18
	4 31				326 42	19
215 19	493 65	500 78			38,429 09	20
511 11	684 79				10,598 27	21
42 37	392 85				23,351 55	22
2,573 41	11,435 21		2,659 81	138 08	209,900 56	23
1,304 90	6,068 47		1,494 74		146,564 94	24
	265 90				6,022 76	25
				7,238 60	7,233 60	26
525 23	3,487 83		544 88		30,858 95	27
	7 25				1,609 59	28
19 61	1,814 15	101 76	498 00	32 70	17,232 70	29
					1,760 00	30
16,361 05	70,277 53	42,157 03	4,606 63	30,585 29	730,156 29	31
927 25	1,803 85				17,824 45	32
					7,561 82	33
				3,955 71	3,955 71	34
				675 28	675 28	35
691 88	3,179 58		63 96	7 97	24,573 23	36
\$135,517 19	\$468,163 30	\$63,973 21	\$33,426 45	\$660,699 99	\$5,478,254 46	....

OPERATING EXPENSES,
Maintenance of Equipment.

Name of Company.	Maintenance of Equipment.			
	Repairs and renewals of locomotives.	Repairs and renewals of passenger cars.	Repairs and renewals of freight cars.	Repairs and renewals of ferryboats, tugs, floats and barges.
1. Abbotsford & Northeastern.	\$1,436 68		\$189 90	
2. Ahnapee & Western	1,353 75	\$1,945 20	910 00	
3. Chi., Milwaukee & St. Paul	528,455 40	190,011 00	674,769 20	
4. Chicago & Northwestern ...	761,635 39	136,915 84	1,113,879 27	\$497 34
5. Chi., St. P., Mpls. & O ¹				
6. Chi., L. S. & Eastern	1,914 43		4,564 97	
7. Illinois Central	8,831 31	2,706 73	8,451 39	
8. Chip'wa River & Northern.	963 74			
9. Chi., Harv. & Geneva Lake		568 26		
10. Chip'wa Valley & Northern.			1,465 05	
11. Drummond & Southwestern	1,006 19		1,999 85	
12. Duluth, S. S. & Atlantic ..	12,631 35	5,247 78	15,907 72	
13. Dunbar & Wausaukee				7 25
14. Fairchild & Northeastern...	1,537 29			
15. Great Northern ¹				
16. Green Bay & Western	13,484 07	7,818 33	21,067 38	
17. Hawth'ne, Nebag'n & Sup'r	9,773 33		6,769 53	
18. Hazelhurst & Southeastern.	556 85		577 96	
19. Hillsboro & Northeastern ..	845 93	1,169 53		
20. Iola & Northern	223 00	28 49		
21. Kewaunee, Green Bay & W.	5,079 59	676 87	1,512 23	
22. Lake Sup'r T. & T. Ry. Co.	5,445 26	3 86	1,577 17	
23. Marinette, Tomah'k & W.	2,806 61	434 73	1,825 29	
24. Mpls., St. P. & S. Ste M.	76,314 96	18,169 10	125,507 44	
25. Northern Pacific	51,441 88	6,979 15	22,744 95	
26. Northwestern Coal Ry. Co.	1,784 11			
27. Robbins Railway Co.				
28. Stanley, Merrill & Phillips	7,492 22	415 28	13,197 94	
29. Wisconsin & Michigan	7,604 29	1,167 66	6,513 81	
30. Whitcomb & Morris	150 00		50 00	
31. Wisconsin Central	262,347 05	71,468 83	299,762 95	
32. Wisconsin Western	1,030 72	681 53	1,583 98	
33. La Crosse & Southeastern.				
34. Superior & Southeastern ..				
35. Roddis Lumber & V. Co.				
36. Mineral Point & Northern.	6,609 10	268 17	209 58	
Total	\$1,772,759 50	\$446,680 68	\$2,325,044 81	\$497 34

¹ Operating expenses for Wisconsin not given in detail. See Recapitulation for totals.

WISCONSIN, 1906—Continued.

Conducting Transportation.

Maintenance of Equipment.			Conducting Transportation.			No.
Shop, machinery, tools, etc.	Other expenses.	Total	Wages of enginemen, firemen and roundhouse-men.	Fuel for locomotives.	Water supply for locomotives.	
	\$25 52	\$1,652 10	\$2,191 85	\$2,644 15	\$27 65	1
\$64 80		4,273 75	2,428 32	5,529 68		2
40,675 03	110,500 31	1,544,500 94	966,410 53	1,242,040 35	51,359 15	3
44,720 00	124,458 91	2,182,106 75	1,066,421 14	11,235 97	1,331 98	7
						5
68 93	279 58	6,827 91	10,376 95	10,415 25	134 26	6
1,704 12	3,314 60	25,008 16	14,538 29	11,235 97	1,331 98	7
		963 74	3,594 38	2,607 89		8
326 38	267 04	1,161 68	1,361 75	3,096 15		9
428 15		1,893 24	4,972 46	2,459 60		10
	2,021 72	5,027 71	3,055 44	4,584 51		11
1,111 06	3,631 63	38,529 54	33,053 23	47,412 03	1,811 14	12
			2,228 00	2,256 00		13
	64 75	1,609 28	1,835 83	2,371 09		14
						15
2,570 95	13,672 11	58,612 84	35,355 69	70,261 35	1,762 49	16
	37 49	16,580 35	8,512 83	12,048 27	102 60	17
		1,139 15	1,406 21	2,041 36		18
		2,015 46	740 60	1,772 04	108 00	19
		256 49	967 45	1,254 00		20
	600 00	7,868 69	3,995 85	8,287 00		21
178 48		7,204 77	12,971 55	13,985 82	432 86	22
326 04		5,392 67	4,599 06	7,475 26	108 76	23
6,733 23	6,829 21	233,553 94	114,350 87	116,789 86	8,845 86	24
1,458 33	334 81	82,959 12	43,509 09	74,663 02	3,212 15	25
		1,784 11	2,258 55	2,023 16	284 41	26
	1,547 66	1,547 66	8,052 00	4,701 51		27
213 39	2,172 33	23,491 16	10,002 98	19,689 90	667 31	28
1,076 01	3,615 64	19,977 41	12,727 05	24,552 58	993 20	29
50 00		250 00	1,260 00	225 00		30
20,717 80	26,050 45	680,347 08	382,585 54	548,008 29	23,358 30	31
		3,296 23	3,237 55	4,304 00	202 75	32
	2,416 50	2,416 50	2,273 31	5,098 60		33
	1,413 69	1,413 69				34
			2,195 87	1,707 85		35
		7,148 94	3,701 04	6,987 64	104 52	36
\$122,412 75	\$303,406 04	\$4,970,801 12	\$2,767,171 66	\$3,562,940 07	\$159,442 71	

OPERATING EXPENSES,
Conducting

Name of Company.	Conducting Transportation—Continued.			
	All other supplies for locomotives	Wages of other trainmen.	All other train supplies.	Wages of switchmen, flagmen and watchmen.
1. Abbotsford & Northeastern.	\$82 86	\$1,341 24	\$0.24	.....
2. Ahnapee & Western	520 00	1,980 00	302 44	\$547 50
3. Chicago, Milwaukee & St. P.	50,621 34	672,371 67	153,171 85	431,961 90
4. Chicago & Northwestern....	60,268 69	780,960 85	146,223 25	411,812 93
5. Chicago, St. Paul, Minneapolis & Omaha,* .....	.....	.....	.....	.....
6. Chicago, L. Shore & Eastern	359 99	.....	168 92	18,013 55
7. Illinois Central	645 27	10,927 17	2,212 27	641 58
8. Chicago, Harvard & Geneva Lake.	248 06	2,697 84	.....	.....
9. Drummond & Southwestern	436 67	1,315 00	124 04	.....
10. Duluth, S. S. & Atlantic....	1,598 62	24,077 95	4,799 57	9,358 22
11. Dunbar & Wausaukee	500 00	1,585 00	.....	.....
12. Fairchild & Northeastern ..	13 79	1,423 90	.....	495 75
13. Great Northern,* .....	.....	.....	.....	.....
14. Green Bay & Western	1,485 54	23,532 68	1,974 73	8,134 36
15. Hawthorne, Nebagamon & Superior	741 80	7,348 23	128 19	.....
16. Hazelhurst & Southeastern ..	123 01	671 71	22 09	.....
17. Hillsboro & Northeastern ...	51 57	773 50	.....	.....
18. Iola & Northern	42 30	911 97	57 12	497 25
19. Kewaunee, Green Bay & Western	130 57	3,869 18	471 29	1,023 00
20. Lake S., T. & T., Ry. Co..	944 85	20,042 13	.....	4,349 47
21. Marinette, Tomahawk & Western	284 99	1,972 70	374 42	.....
22. Mpls., St. P. & S. Ste. M..	8,654 15	94,398 37	17,674 69	4,460 71
23. Northern Pacific	3,030 76	23,735 86	4,232 69	10,290 92
24. Northwestern Coal Ry. Co..	187 74	.....	.....	4,903 81
25. Stanley, Merrill & Phillips	646 12	8,785 82	1,292 74	3,310 63
26. Wisconsin & Michigan	883 96	13,600 63	1,803 40	1,187 32
27. Whitcomb & Morris	50 00	.....	.....	.....
28. Wisconsin Central	19,927 69	283,816 92	57,377 84	141,427 42
29. Wisconsin Western	133 83	4,245 74	298 61	.....
30. La Crosse & Southeastern...	293 60	1,701 72	.....	538 49
31. Roddis Lumber & Veneer Co. ....	.....	1,095 39	.....	.....
32. Mineral Point & Northern..	458 50	2,825 54	198 71	.....
Total	\$153,366 27	\$1,992,009 31	\$392,909 11	\$1,052,954 81

* Operating expenses for Wisconsin not given in detail; see recapitulation for totals.

WISCONSIN, 1906.—Continued.

Transportation.—Continued.

Conducting Transportation—Continued.

Expenses of telegraph, including train dispatchers and operators.	Wages of station agents, clerks and laborers.	Station supplies.	Switching charges—Balance.	Car mileage—Balance.	Loss and damage.	No.
.....	\$720 00	\$138 62	.....	\$1,805 75	\$75 56	1
.....	2,995 00	516 20	.....	420 80	233 55	2
\$105,494 90	771,783 16	52,470 63	\$75,404 51	61,386 88	128,846 08	3
175,650 66	674,153 20	59,929 66	122,889 19	9,674 33	112,191 73	4
.....	3,758 83	58 03	.....	.....	.....	5
4,736 27	10,429 02	1,086 85	.....	2,921 38	1,952 37	6
.....	127 50	294 38	.....	.....	.....	7
.....	.....	.....	.....	.....	.....	8
6,160 39	20,861 70	1,478 54	2,796 65	3,136 72	1,126 12	9
.....	6,744 00	.....	.....	.....	.....	10
.....	740 00	153 06	.....	23,846	6 53	11
.....	.....	.....	.....	.....	.....	12
2,951 55	22,876 99	2,256 09	.....	.....	2,086 66	13
.....	1,076 16	27 80	.....	249 51	1,002 50	14
.....	628 01	.....	.....	.....	.....	15
.....	805 49	.....	.....	.....	.....	16
36 00	391 30	21 00	.....	.....	.....	17
.....	.....	.....	.....	.....	.....	18
368 50	5,046 95	89 98	2,024 77	.....	760 80	19
866 14	4,437 48	1,700 09	.....	.....	276 93	20
.....	1,416 83	.....	180 07	252 41	72 67	21
20,298 06	39,311 94	5,204 12	.....	6,397 22	50,964 78	22
10,229 59	29,971 11	2,211 84	.....	2,752 79	2,780 60	23
.....	533 39	58 37	.....	.....	.....	24
56 76	2,037 53	222 47	.....	.....	233 35	25
1,514 77	9,093 60	788 92	11,195 98	.....	454 37	26
.....	.....	.....	.....	.....	.....	27
96,041 64	311,606 95	24,095 13	3,881 67	.....	44,032 51	28
74 56	4,542 21	255 12	508 68	2,642 32	435 74	29
.....	1,821 56	.....	.....	.....	.....	30
.....	.....	.....	.....	.....	.....	31
369 63	2,695 66	341 16	.....	.....	352 80	32
\$424,849 42	\$1,931,105 57	\$153,398 06	\$218,881 52	\$91,878 57	\$347,885 65	....

OPERATING EXPENSES,
Conducting

Name of Company.	Conducting transportation—Continued.			
	Injuries to persons.	Barges, floats, tugs, ferry-boats, expense of, including wages, fuel and supplies.	Other expenses.	Total.
1. Abbotsford & Northeastern.....	\$16 25		\$241 07	\$0,285 24
2. Ahnapee & Western.....			3,967 25	19,440 74
3. Chicago, Milwaukee & St. Paul.....	108,290 51		563,445 65	5,435,059 11
4. Chicago & Northwestern.....	146,919 49	\$1,128 07	89,870 59	5,323,069 99
5. Chicago, Lake Shore and Eastern.....			782 78	44,068 56
6. Illinois Central.....	476 97		6,628 88	69,764 27
7. Chippewa River & Northern.....				6,202 27
8. Chicago, Harvard & Geneva Lake.....	278 06			8,103 74
9. Chippewa Valley & Northern.....				7,432 06
10. Drummond & Southwestern.....				9,516 26
11. Duluth, South Shore & Atlantic.....	589 25			164,778 88
12. Dunbar & Wausaukee.....			6,518 75	14,348 50
13. Fairchild & Northeastern.....			1,035 50	7,397 92
14. ¹ Great Northern.....			119 51	
15. Green Bay & Western.....	3,559 44		3,290 09	179,527 66
16. Hawthorne, Nebagamon and Superior.....				31,237 89
17. Hazelhurst & Southeastern.....			10 26	4,902 65
18. Hillsboro & Northeastern.....			686 96	4,938 16
19. Iola & Northern.....				4,178 39
20. Kewaunee, Green Bay and Western.....	5 00		4,436 26	30,509 15
21. Lake Superior Terminal and Transfer Ry. Co.....	988 30			60,995 62
22. Marinette, Tomahawk and Western.....				16,737 17
23. Minneapolis, St. Paul and Sault Ste. Marie.....	12,577 00		34,492 35	534,919 98
24. Northern Pacific.....	2,556 31		10,143 25	223,319 98
25. Northwestern Coal Ry. Co.....				10,249 83
26. Robbins Railway Co.....			2,055 90	14,899 41
27. Stanley, Merrill & Phillips.....			3,786 20	50,731 81
28. Winona Bridge Ry. Co.....				
29. Wisconsin & Michigan.....	173 27		5,979 05	84,948 10
30. Whitcomb & Morris.....				1,535 00
31. Wisconsin Central.....	35,103 49		118,088 23	2,089,351 62
32. Wisconsin Western.....	37 68		576 05	21,494 84
33. La Crosse & Southeastern.....				11,727 28
34. Superior & Southeastern.....			7,463 76	7,463 76
35. Roddis Lumber & Veneer Co.....			500 00	5,499 11
36. Mineral Point & Northern..	26 00		4,740 57	22,801 77
Total.....	\$311,597 02	\$1,128 07	\$968,858 91	\$14,530,376 72

¹ Operating expenses for Wisconsin not given in detail. See recapitulation for totals.

WISCONSIN, 1906—Continued.

Transportation—Continued.

General Expenses.						No.
Salaries of officers.	Salaries of clerks.	General office expenses and supplies.	Agencies, including salaries and rent.	Advertising.	Commissions.	
\$775 00		\$18 34				1
600 00	1,360 00	629 42				2
87,778 98	117,013 59	10,042 78				3
53,685 36	91,286 66	32,904 03	123,834 97	61,144 35	3,183 88	4
265 08	235 75	128 28				5
2,338 15	2,805 31	705 29				6
600 00	410 01	70 97		26 87		7
						8
	200 00	23 40				9
3,590 79	4,582 70	606 54	4,044 68	759 81	1,960 03	10
						11
1,212 46						12
						13
11,400 00	5,792 67	321 28	302 45	262 25		14
					20 00	15
						16
						17
3,800 00	1,380 00	7 81		32 85		18
						19
2,160 00	2,628 42					20
						21
1,800 00	941 50					22
9,240 06	11,411 70	4,250 63	20,274 56	6,666 84		23
3,338 24	4,732 64	821 54	6,415 47	2,186 91		24
1,500 00						25
						26
3,000 00	1,200 00	441 41				27
	157 28					28
1,909 65	2,711 75	1,226 76	725 51	343 58	611 76	29
200 00						30
49,632 62	58,155 80	17,082 68	128,086 64	14,154 77		31
						32
2,627 35		750 00				33
						34
3,699 96	1,122 50	182 51				35
						36
\$245,153 70	\$308,128 28	\$70,213 67	\$283,684 28	\$85,598 23	\$5,755 67	

OPERATING EXPENSES,

General

Name of Company.	Insurance.	Expense of fast freight lines.	Expense of traffic associations.	Expense of stock yards and elevators.
1. Abbotsford & Northeastern.....				
2. Ahnapee & Western	\$172 30			
3. Chicago, Milwaukee & St. Paul	41,306 77			
4. Chicago & Northwestern....	3,799 68		\$19,589 97	
5. ¹ Chicago, St. Paul, Minneapolis & Omaha.....				
6. Chicago, Lake Shore and Eastern	64 78			
6a Illinois Central	827 28			
6b Chi., Harvard & Geneva L.	254 77			
7. Drummond & Southwestern				
8. Duluth, South Shore & Atlantic	1,347 32			
9. Fairchild & Northeastern....				
10. ¹ Great Northern.....				
11. Green Bay & Western.....	2,574 72			
12. Hawthorne, Nebagamon and Superior	736 00			
13. Hazelhurst & Southeastern....	77 10			
14. Iola & Northern.....	27 00			
15. Kewaunee, Green Bay and Western	651 35			
16. Lake Superior Terminal & Transfer Ry. Co.....	29 54		31 34	
17. Marinette, Tomahawk and Western	922 74			
18. Minneapolis, St. Paul and Sault Ste. Marie.....	7,747 80			
19. Northern Pacific.....	2,216 42			
20. Northwestern Coal Ry. Co....	560 38			
21. Stanley, Merrill & Phillips	2,470 18			
22. Winona Bridge Ry. Co.....	19 66			
23. Wisconsin & Michigan.....	2,467 97			
24. Whitcomb & Morris.....				
25. Wisconsin Central.....	27,888 45			
26. La Crosse & Southeastern....				
27. Superior & Southeastern....				
28. Mineral Point & Northern..	75 00			
Total	\$96,237 21		\$19,621 31	

¹ Operating expenses for Wisconsin not given in detail. See recapitulation for totals.

WISCONSIN, 1906—Continued.

Expenses—Continued.

Rentals of tracks, yards and terminals.	Rentals not otherwise provided for.	Legal expenses.	Stationery and printing.	Other general expenses.	Total.	No.
\$564 57			\$2 40	\$26 97	1,387 28	1
		950 00	439 60	649 76	4,801 08	2
		18,751 70	18,137 46	48,161 64	341,192 92	3
35,055 31	4,757 73	26,048 96	9,151 39	51,198 24	515,640 53	4
						5
		94 37	40 89	71 94	901 09	6
		847 11	286 76	860 78	8,670 68	6a
242 00		33 12	22 12	521 94	2,181 80	6b
		7 68			231 08	7
13,072 47	351 64	796 64	2,603 39	188 02	33,904 03	8
15 00			253 01	64 75	1,545 22	9
3,518 52	31 56	1,314 60	2,611 30	3,534 22	31,663 57	10
		29 50	8 69		794 19	12
			49 37	106 28	232 75	13
			61 40	87 75	176 15	14
	108 00	5 00	277 01	2,839 95	9,101 97	15
	191 00	1,370 10	460 91	243 98	7,115 29	16
			468 86	4,210 76	8,343 86	17
		4,472 74	1,413 53	1,655 26	67,133 12	18
35,216 44	376 00	3,113 45	2,749 66	1,419 37	62,586 14	19
		50 40	37 42	200 66	2,348 86	20
		210 00	515 77	520 95	8,358 31	21
7,762 00	575 11	508 22	625 66		176 94	22
					19,467 97	23
					200 00	24
	10,346 10	32,085 97	13,725 56	19,832 11	370,990 70	25
3,000 00					6,377 35	26
				3,319 67	3,319 67	27
		200 00	376 86	342 23	5,999 06	28
\$98,446 31	\$16,737 14	\$90,889 56	\$54,319 02	\$140,057 23	\$1,514,841 61	

OPERATING EXPENSES,

Recapitulation

Name of Company.	Maintenance of way and structures.	Maintenance of equipment.
1. Abbotsford & Northeastern	\$10,188 56	\$1,652 10
2. Ahnapee & Western	13,700 75	4,273 75
3. Chicago, Milwaukee, & St. Paul	2,256,729 97	1,544,500 94
4. Chicago & Northwestern	1,653,435 66	2,182,106 75
5. Chicago, St. Paul, Minneapolis & Omaha....	763,390 67	583,942 99
6. Chicago, Lake Shore & Eastern	9,012 35	6,827 91
7. Illinois Central	43,972 00	25,008 16
8. Chippewa River & Northern.....	4*027 58	963 74
9. Chicago, Harvard & Geneva Lake.....	1,441 38	1,161 68
10. Chippewa Valley & Northern.....	589 92	1,893 24
11. Drummond & Southwestern	10,902 92	5,027 76
12. Duluth, South Shore & Atlantic	69,403 95	38,529 54
13. Dunbar & Wausaukee		
14. Fairchild & Northeastern	6,121 67	1,609 29
15. Great Northern	196,508 57	87,652 52
16. Green Bay & Western	122,909 54	58,612 84
17. Hawthorne, Nebagamon & Superior	3,356 78	16,580 85
18. Hazelhurst & Southeastern	403 30	1,139 15
19. Hillsboro & Northeastern	1,617 32	2,015 46
20. Iola & Northern	326 42	256 49
21. Kewaunee, Green Bay & Western	38,429 09	7,868 69
22. Lake Superior Terminal & Transfer.....	10,898 27	7,204 77
23. Marinette, Tomahawk & Western	23,351 55	5,392 67
24. Minneapolis, St. Paul & Sault Ste. Marie....	200,800 56	233,553 94
25. Northern Pacific	146,564 94	82,959 12
26. Northwestern Coal Ry. Co.....	6,022 76	1,784 11
27. Robbins Railway Co.	7,238 60	1,547 66
28. Stanley, Merrill & Phillips	30,858 95	23,491 16
29. Winona Bridge Ry. Co.....	1,609 59	
30. Wisconsin & Michigan	17,232 70	19,977 41
31. Whitcomb & Morris	1,760 00	250 00
32. Wisconsin Central	730,156 29	680 247 08
33. Wisconsin Western	17,824 45	3,296 23
34. La Crosse & Southeastern	7,561 82	2,416 50
35. Superior & Southeastern	3,955 71	1,413 69
36. Roddis Lumber & Vencer Co.	695 28	
37. Mineral Point & Northern	24,573 23	7,148 94
Total	\$*6,443,153 70	\$*5,642,296 63

*Includes totals of Omaha and Great Northern not reported in itemized tables.

WISCONSIN, 1906.—Continued.

of Expenses.

Conducting transportation.	General expenses.	Grand total expenses.	Percentage of operating expenses to earnings.	Mileage upon which based.	No.
\$9,285 24	\$1,387 28	\$22,513 18	65 61	15 46	1
19,440 74	4,801 08	42,216 32	62 30	34 00	2
5,435,059 11	341,192 92	9,577,482 94	58 37	1,727 11	3
5,323,099 99	515,640 53	9,674,282 93	62 84	1,801 61	4
2,325,165 33	115,143 31	3,792,642 30	64 08	743 70	5
44,068 56	901 09	60,809 91	73 64	19 33	6
69,764 27	8,670 68	147,415 71	118 07	91 31	7
6,202 27	.....	11,793 59	103 99	21 00	8
8,103 74	2,181 80	12,888 60	97 04	5 50	9
7,432 06	.....	9,915 22	89 04	15 53	10
9,516 26	231 08	25,673 02	94 88	8 18	11
164,778 88	33,904 03	306,616 40	86 70	114 21	12
14,348 50	.....	14,348 50	56 25	13 50	13
7,397 92	1,545 22	16,674 10	75 40	33 00	14
315,948 34	12,763 02	612,872 45	47 82	37 69	15
179,527 66	31,663 57	392,713 61	64 45	225 00	16
31,237 89	794 19	51,969 21	85 14	33 50	17
4,992 65	232 75	6,677 85	41 65	11 00	18
4,938 16	.....	8,570 94	71 00	5 00	19
4,178 39	176 15	4,937 45	73 81	4 70	20
30,509 15	9,101 97	85,908 90	67 79	36 70	21
60,995 62	7,115 29	89,213 95	520 40	17 51	22
16,737 17	8,343 86	53,325 25	89 66	43 77	23
534,919 98	67,133 12	1,036,407 60	51 43	356 66	24
223,319 98	62,586 14	515,430 18	86 57	134 56	25
10,249 83	2,348 86	20,405 56	985 77	8 00	26
14,809 41	.....	23,595 67	102 10	30 00	27
50,731 81	8,358 31	113,440 23	80 83	56 30	28
.....	176 94	1,786 53	12 66	54	29
84,948 10	19,467 97	141,626 18	57 37	73 78	30
1,535 00	200 00	3,745 00	107 12	6 00	31
2,080,351 62	370,990 70	3,870,845 69	65 46	841 29	32
21,494 84	.....	42,615 52	57 82	51 97	33
11,727 28	6,377 35	28,082 95	41 45	43 99	34
7,463 76	3,319 67	16,152 83	56 00	15 87	35
5,499 11	.....	6,194 39	100 00	10 00	36
22,801 77	5,999 06	60,523 00	129 51	30 06	37
*\$17,171,490 39	*\$1,642,747 94	*\$30,899,688 66	58 25	7,270 88	....

of operating expenses.

OPERATING EXPENSES FOR ROADS DOING BUSINESS IN WISCONSIN, AS RE-
WHOLE

Maintenance of Way

Name of Company.	Repairs of roadway.	Renewals of rails,	Renewals of ties.	Repairs of bridges and culverts.
1. Abbotsford & Northeastern ...	\$4,277 57	\$665 03	\$1,411 07	\$344 92
2. Ahnapee & Western	9,173 26		1,153 21	2,137 83
3. Chicago, Milwaukee & St Paul	2,895,984 39	366,234 05	484,210 52	637,948 58
4. Chicago & Northwestern	3,926,796 32	503,714 38	1,354,117 43	720,502 75
5. Chi., St. P., Minneap.&Omaha	731,245 92	124,669 85	254,210 96	166,058 87
6. Chicago, Burlington & Quincy	4,100,323 05	443,341 74	1,436,989 33	1,492,547 66
7. Chi., Lake Shore & Eastern...	56,287 68	16,818 84	26,292 98	10,500 16
8. Illinois Central	3,140,633 97	457,143 71	786,626 30	708,588 87
9. Chippewa River & Northern ..	6,936 14		1,211 42	913 69
10. Chi., Harvard & Geneva Lake.	1,414 57			
11. Chippewa Valley & Northern ..	312 00			
12. Drummond & Southwestern ..	3,847 13		338 90	
13. Duluth, South Shore & Atlac	290,684 03	25,056 93	45,545 14	29,323 14
14. Fairchild & Northeastern	5,890 23		3,888 41	332 95
15. Great Northern	3,527,009 34	96,608 13	408,031 23	553,128 49
16. Green Bay & Western	52,429 25	9,000 00	29,278 54	3,174 82
17. Hawthorne, Nebagamon & Sup.	3,359 15	165 87	441 13	791 36
18. Hazelhurst & Southeastern ...	1,084 74			65 65
19. Iola & Northern	1,423 49		199 36	484 77
20. Kewaunee, Green Bay & Wes'n	8,750 67	6,000 00	6,000 00	1,886 75
21. Lake Superior Terminal & Transfer Ry. Co.	4,033 62	34 92	852 19	262 61
22. Marinette, Tomahawk & Wes'n	16,498 79	*2,911 47	2,742 52	98 25
23. Minneapolis, St. P. & Ashland	12,504 76			
24. Minneapolis, St. Paul & Sault Ste Marie	412,834 83		100,233 49	110,838 01
25. Northern Pacific	4,260,166 20	162,405 94	570,621 51	1,284,413 18
26. Northwestern Coal Ry. Co.	1,676 89	200 00	645 91	976 54
27. Robbins Railway Co.				
28. Stanley, Merrill & Phillips ...	13,984 94	1,651 36	3,515 47	3,344 04
29. Winona Bridge Ry. Co	269 48		167 89	6,275 35
30. Wisconsin & Michigan	20,046 34		776 56	197 75
31. Whitecomb & Morris	1,940 00	200 00		
32. Wisconsin Central	383,423 84	66,047 32	162,101 29	112,951 39
33. Wisconsin Western	6,683 85	2 55	2,323 36	1,292 32
34. Bayfield, Lake Shore & W.	5,918 35		661 80	136 81
35. Hillsboro & Northeastern	1,440 10		113 22	
36. Roddis Lumber & Veneer Co.				
37. Mineral Point & Northern	10,257 29		3 75	385 40
38. La Crosse & Southeastern	2,891 37			
Total	\$23,921,433 55	\$2,277,049 15	\$5,684,909 89	\$5,849,903 11

*Credit.

PORTED TO THE RAILROAD COMMISSION FOR YEAR D
LINE.

and Structures.

Repairs of fences, road-crossings, signs and cattle guards.	Repairs of buildings.	Repairs of docks and wharves.	Repairs of telegraph.	Other expenses.	Total.	No.
\$35 38	\$64 47		\$9 44		\$6,807 88	1
	307 67				12,771 97	2
179,487 42	691,151 27	\$32,881 50	43,278 81	\$622,409 70	5,956,586 24	3
216,992 41	605,798 83	48,404 22	29,916 01	9,335 94	7,415,578 29	4
36,777 53	96,049 96	1,425 66	18,198 52	937 27	1,429,574 54	5
147,821 71	675,184 97	11,180 73	141,198 22	4,196 52	8,454,782 94	6
724 23	12,806 07		1,349 11	344 16	125,123 23	7
193,468 84	589,577 01	16,497 07	56,568 21	123,724 50	6,072,828 48	8
					9,061 25	9
	86 76		338 27	539 17	2,378 77	10
				79 29	391 29	11
				70 47	4,453 50	12
4,550 03	18,486 08	19,696 95	2,582 77	57 56	435,982 63	13
158 09	8 75				10,278 43	14
47,304 65	304,840 76	26,915 30	31,698 79	4,998 58	5,000,545 27	15
492 03	7,616 89	2 70	755 51		102,729 74	16
	898 81				5,656 32	17
	52 63				1,203 02	18
	54 57				1,162 19	19
35 74	326 99	82 05			23,082 20	20
305 27	1,556 45				7,045 06	21
	459 71		18 79		16,906 59	22
			40 45	11,720 21	24,265 42	23
13,807 32	79,078 40	9,156 43	16,729 95	1,014 77	743,693 20	24
148,835 55	693,050 99	48,546 39	67,582 76		7,235,622 52	25
	467 81				3,967 15	26
				10,892 75	10,892 75	27
1,905 33	893 48		582 62		25,877 24	28
	12 40				6,725 12	29
95 44	2,199 43		606 86	91 95	24,014 33	30
					2,140 00	31
14,704 55	65,374 49	21,223 01	4,993 58	35,383 08	866,202 55	32
1,606 21	860 20				12,773 69	33
			101 77		6,818 73	34
	42 25				1,595 57	35
				374 08	374 08	36
741 87	922 71		173 71	17 15	12,501 88	36
					2,891 37	37
\$1,009,849 61	\$3,851,229 81	\$236,012 01	\$416,704 15	\$826,187 15	\$44,073,278 43	

OPERATING EXPENSES

Name of Company.	Maintenance of			
	Repairs and renewals of locomotives.	Repairs and renewals of passenger cars.	Repairs and renewals of freight cars.	Repairs and renewals of ferry boats, tugs, floats, etc.
1. Abbotsford & Northeastern....	\$151 29		\$106 07	
2. Ahnapee & Western.....	2,052 48	450 00	1,060 83	
3. Chicago, Milwaukee & St. P.....	1,918,230 63	701,062 75	2,109,946 50	
4. Chicago & Northwestern.....	2,667,182 15	537,994 85	2,589,425 39	1,770 58
5. Chicago, St. Paul, Minneapolis & Omaha.....	449,712 06	96,167 30	432,196 40	
6. Chicago, Burlington & Quincy.....	3,316,126 71	689,640 70	5,268,625 70	
7. Chi., Lake Shore & Eastern.....	125,745 48		317,731 78	
8. Illinois Central.....	2,560,422 58	610,583 96	3,810,283 80	24,247 69
9. Chippewa River & Northern.....				
10. Chi., Harvard & Geneva Lake.....		1,231 58		
11. Chippewa Valley & Northern.....			478 35	
12. Drummond & Southwestern.....	1,785 99		1,535 69	
13. Duluth, South Shore & Atlantic.....	76,784 72	34,516 24	85,163 67	
14. Dunbar & Wausaukee.....				
15. Fairchild & Northeastern.....	1,287 23		680 25	
16. Great Northern.....	1,595,649 63	374,550 78	1,267,266 47	
17. Green Bay & Western.....	15,400 36	6,029 30	22,271 24	
18. Hawthorne, Nebagamon & Superior.....	7,400 84		8,228 85	
19. Hazelhurst & Southeastern.....	863 25	10 95	1,188 44	
20. Iola & Northern.....	88 51	180 73		
21. Kewaunee, Green Bay & W.....	1,225 56	1,002 98	1,076 78	
22. Lake Superior Terminal & Transfer R'y Co.....	5,518 63		1,848 50	
23. Marinette, Tomahawk & W.....	3,299 65	601 88	3,061 62	
24. Minneapolis, St. P. & Ashland.....	6,961 67		7,821 02	
25. Minneapolis, St. Paul & Sault Ste. Marie.....	339,528 88	114,657 14	377,570 74	
26. Northern Pacific.....	2,472,480 54	375,801 83	2,161,416 98	29,616 51
27. Northwestern Coal R'y Co.....	1,799 65			
28. Robbins Railway Co.....				
29. Stanley, Merrill & Phillips.....	6,901 36	373 27	3,423 90	
30. Wisconsin & Michigan.....	8,458 07	2,075 36	7,358 52	
31. Whitcomb & Morris.....	220 00		50 00	
32. Wisconsin Central.....	291,161 83	86,924 69	343,102 39	
33. Wisconsin Western.....	293 73	570 67	1,173 05	
34. Bayfield, Lake Shore & West'n.....	168 83	3 97	281 74	
35. Hillsboro & Northeastern.....	219 20		116 88	
36. Roddis Lumber & Veneer Co.....				
37. La Crosse & Southeastern.....	1,000 00			
38. Mineral Point & Northern.....	126 90	19 71	20 64	
Total.....	\$15,878,248 14	\$3,634,450 64	\$18,824,511 99	\$55,631 78

WHOLE LINE, 1905—Continued.

Equipment.			Conducting Transportation.			No.
Shop machinery, tools, etc.	Other expenses.	Total.	Wages of engineers, firemen and round-housemen.	Fuel for locomotives.	Water supply for locomotives.	
	\$14 39	\$271 75	\$2,141 15	\$1,931 35	\$12 95	1
\$11 50		3,574 81	2,739 49	5,779 62		2
118,301 91	334,044 20	5,181,585 79	3,270,650 97	4,241,453 06	175,014 65	3
165,540 81	434,747 70	6,396,661 48	4,035,184 94	5,018,525 03	250,679 87	4
30,713 71	142,862 06	1,151,652 13	777,285 86	1,261,927 94	52,139 36	5
386,760 30	427,404 20	10,088,557 61	3,522,121 51	4,494,962 80	247,775 40	6
14,559 28	24,400 81	482,437 35	232,461 50	173,613 44	3,595 27	7
275,546 95	521,725 43	7,804,810 21	3,474,344 74	3,359,669 75	197,915 04	8
	578 24	578 24		4,586 73		9
115 48	1,199 23	2,546 29	2,571 25	6,760 75		10
137 14		615 49	4,589 39	1,832 91		11
	890 34	4,212 02	1,730 99	2,898 79		12
6,590 07	24,147 91	227,202 61	199,147 89	275,001 37	10,890 76	13
			2,460 00	1,986 00		14
		1,967 48	2,889 47	4,423 47		15
65,118 74	223,678 12	3,526,263 74	1,511,200 73	3,138,461 44	88,364 09	16
1,577 37	12,580 10	57,858 37	34,965 22	60,436 69	1,681 45	17
	100 00	15,729 69	7,984 23	14,020 04		18
		2,062 64	4,070 77	5,097 27		19
		269 24	966 17	1,123 00		20
	600 00	3,905 32	4,019 77	7,752 00		21
93 81		7,460 94	9,833 08	11,475 40	317 27	22
321 13		7,284 28	4,844 13	7,333 14	636 14	23
		14,782 09	8,180 35	20,162 32	745 37	24
22,090 33	27,855 04	881,702 13	431,135 27	787,595 79	28,925 06	25
122,434 03	14,270 48	5,176,020 37	2,495,815 37	3,617,085 49	146,788 80	26
		4,799 65	1,959 71	1,361 26	174 01	27
			4,160 00	3,490 80		28
171 89	1,268 15	12,138 57	11,470 27	11,272 73	472 81	29
1,636 51	5,028 89	24,557 28	15,626 28	27,043 94	1,519 26	30
30 00		300 00	1,260 00	225 00		31
23,310 68	32,150 70	776,650 29	432,031 94	576,682 04	28,057 00	32
	63 39	2,100 81	3,331 42	4,207 85	55 50	33
		581 95	2,780 88	2,135 58	85 25	34
127 41		386 08	731 50	1,418 18	100 00	35
	50 00		2,173 67	2,192 61		36
		1,000 00	900 00	2,172 00		37
		167 25	1,038 97	2,418 17	148 50	38
\$1,235,189 05	\$2,231,659 98	\$41,859,694 55	\$20,520,798 88	\$27,190,543 75	\$1,226,102 81	

OPERATING EXPENSES—

Name of Company.	Conducting Trans-			
	All other supplies for locomotives.	Wages of other trainmen.	All other train supplies.	Wages of switchmen, flagmen and watchmen.
1. Abbotsford & Northeastern...	\$64 78	\$1,018 72	\$18 44	.....
2. Ahnapee & Western	428 44	2,117 05	297 29	\$424 14
3. Chicago, Milwaukee & St. Pau	171,796 07	2,318,531 37	517,484 96	1,382,224 09
4. Chicago & Northwestern	2,154,491 43	2,980,345 56	561,912 51	1,570,344 10
5. Chicago, St. Paul, Minneapolis & Omaha	37,642 1-	597,471 36	121,095 89	226,182 70
6. Chicago, Burlington & Quincy	223,152 63	2,289,667 56	592,879 33	1,458,732 96
7. Chicago, Lake Shore & Eastern	10,539 07	45,394 31	5,940 29	269,889 73
8. Illinois Central	225,707 23	2,216,001 2-	653, 03 55	1,394,968 38
9. Chic., Harvard & Geneva Lake	538 23	4,516 84	.....	.....
10. Drummond & Southwestern ..	87 38	510 93	63 46	.....
11. Duluth, S. Shore & Atlantic ..	8,675 0-	146,239 30	31,257 9-	59,570 90
12. Dunbar & Wausaukee	500 00	1,608 00	.....	.....
13. Fairchild & Northeastern .....	.....	1,435 05	.....	547 50
14. Great Northern	115,212 32	1,000,325 05	281,544 32	480,353 27
15. Green Bay & Western	1,435 34	23,369 46	1,779 99	8,044 42
16. Hawthorne, Nebagamon & Superior	707 67	7,215 82	115 89	.....
17. Hazelhurst & Southeastern .....	.....	1,778 92	290 08	.....
18. Iola & Northern	51 12	888 26	36 34	511 65
19. Kewaunee, G. Bay & Western ..	133 33	3,781 20	426 58	963 15
20. Lake Superior Terminal & Transfer Ry. Co	729 72	15,273 18	.....	3,967 00
21. Marinette, Tomahawk & West-ern	463 84	2,389 80	£9 03	.....
22. Minneapolis, St. Paul & Ash-land .....	.....	7,276 61	2,517 43	.....
23. Minneapolis, St. Paul & Sault Ste. Marie	28,688 45	379,263 42	66,612 26	64,111 98
24. Northern Pacific	128,401 16	1,732,978 07	331,681 31	693,808 40
25. Northwestern Coal R. Co	163 05	.....	.....	3,977 02
26. Stanley, Merrill & Phillips	680 8-	7,034 68	1,197 38	.....
27. Wisconsin & Michigan	1,522 87	15,788 99	2,646 28	1,289 83
28. Whitecomb & Morris	50 00	.....	.....	.....
29. Wisconsin Central	20,118 64	317,510 46	60,464 42	156,133 10
30. Wisconsin Western	103 00	4,039 08	363 82	.....
31. Bayfield, Lake Shore & West-ern	59 35	1,016 00	.....	.....
32. Hillsboro & Northeastern .....	.....	512 66	.....	.....
33. Roddis Lbr. & Veneer Co .....	.....	899 06	.....	.....
34. La Crosse & Southeastern	144 76	780 00	.....	270 00
35. Mineral Point & Northern	53 55	1,186 98	311 25	.....
Total	\$1,198,346 43	\$14,208,225 05	\$3,234,480 10	\$7,776,294 32

WHOLE LINE—1905—Continued.

portation—Continued.						
Expenses of telegraph, including train dispatchers and operators.	Wages of station agents, clerks and laborers.	Station supplies.	Switching charges (balance).	Car mileage. (Balance).	Loss and damage.	No.
\$0 60	\$70 00	\$93 07			\$26 23	1
240 61	298 00	415 76		\$896 48	1,942 50	2
360,594 12	2,560,393 47	188,533 97	252,092 17	97,799 41	479,437 42	3
657,127 88	2,558,547 19	228,408 44	431,601 08	423,664 09	4,9,717 92	4
176,400 34	472,907 48	48,169 69			115,248 62	5
777,758 02	2,393,647 52	281,674 91	529 433 31	381,492 88	520,128 49	6
5,590 14	69,157 92	3,043 78			4,181 46	7
576,800 56	2,273,893 82	193,460 34			907,676 16	8
	418 33				101 60	9
38,629 20	136,949 11	10,173 41	10,043 29	12,100 58	6,025 00	10
	6,863 36				202 95	11
	694 16	61 02			25 15	12
3 9,212 71	889,034 70	69,085 79	105,823 02		268,985 23	13
2,801 47	22,776 78	2,019 39		979 59	1,379 78	14
	2,055 33	74 61		336 45	32 00	15
	579 86					16
16 50	392 45	28 09				17
377 91	4,809 57	93 01	1,738 83	248 92	755 41	18
						19
836 25	3,990 00	810 52			319 28	20
	1,576 92		100 33	102 10	52 91	21
						22
87,762 45	227,317 08	21,839 67	1,181 14		61,530 68	23
557,724 53	1,448,075 46	129,799 38			375,965 66	24
	414 58	73 35				25
19 61	1,498 19	109 72		1 08	27 49	26
1,770 36	11,839 84	828 22	11,524 66	1,638 32	546 14	27
103,693 36	351,516 63	27,242 83	5,873 54	23,478 97	51,274 54	28
42 26	4,558 30	238 63		3,495 87	208 51	29
	742 92					30
75 85	976 35					31
						32
	514 39					33
155 15	1,178 70	355 28		273 18	44 56	34
						35
\$3,707,129 70	\$13,431,131 99	\$1,208,732 28	\$1,349,411 37	\$946,501 87	\$3,215,032 77	

OPERATING EXPENSES, WHOLE

Name of Company.	Conducting Transportation—Continued.			
	Injuries to persons.	Barges, floats, tugs, ferry-boats, expense of including wages, fuel and supplies.	Other expenses.	Total.
1. Abbotsford & Northeastern.....	\$1,964 65		\$2,019 71	\$10,021 65
2. Ahnapee & Western.....			4,088 90	22,150 28
3. Chicago, Milwaukee & St. P.....	317,708 70		1,946,752 11	18,280,457 54
4. Chicago & Northwestern.....	530,909 21	\$4,106 45	713,047 12	20,629,613 22
5. Chicago, St. Paul, Minneapolis & Omaha.....	61,475 68		184,672 78	4,132,619 82
6. Chicago, Burlington & Quincy.....	282,177 60		3,193,075 85	21,186,780 78
7. Chicago, L. Shore & Eastern.....	22,016 19		66,535 72	911,958 82
8. Illinois Central.....	554,634 60	18,233 66	2,178,578 68	18,224,287 72
9. Chippewa River & Northern Lake.....			4,613 93	9,200 66
10. Chicago, Harvard & Geneva Lake.....	85 35			15,022 34
11. Chippewa Valley & Northern.....				6,452 30
12. Drummond & Southwestern.....			1 78	5,323 33
13. Duluth, S. S. & Atlantic.....	5,947 53		42,127 83	992,778 98
14. Dunbar & Wausaukee.....			973 05	14,400 41
15. Fairchild & Northeastern.....	5 00			10,283 77
16. Great Northern.....	249,469 60		1,208,156 22	9,844,228 49
17. Green Bay & Western.....	425 10		3,584 55	165,679 23
18. Hawthorne, Nebagamon & Superior.....				32,542 04
19. Hazelhurst & Southeastern.....			1 86	11,818 76
20. Iola & Northern.....				4,015 63
21. Kewaunee, Green Bay & Western.....	50 00		2,028 27	27,180 95
22. Lake Superior Terminal & Transfer Ry. Co.....	577 75			48,129 45
23. Marinette, Tomahawk & Western.....				17,538 37
24. Mpls., St. P. & Ashland.....			655 99	39,538 07
25. Mpls. St. P. & S. Ste. M.....	115,092 64	64,207 07	111,532 21	2,476,894 57
26. Northern Pacific.....	351,869 34	46,348 37	493,244 69	12,549,586 03
27. Northwestern Coal Ry. Co.....		11 35		8,114 36
28. Robbins Railway Co.....				7,650 80
29. Stanley, Merrill & Phillips.....	6 50		2,222 29	36,013 56
30. Winona Bridge Ry. Co.....				
31. Wisconsin & Michigan.....	20 50		8,475 39	102,080 88
32. Whitcomb & Morris.....				1,535 00
33. Wisconsin Central.....	31,456 84		126,853 41	2,292,387 82
34. Wisconsin Western.....			883 02	21,532 26
35. Bayfield, Lake Shore & W.....			1,054 42	7,950 25
36. Hillsboro & N. E.....			658 05	4,394 72
37. Roddis Lbr. & Veneer Co.....			500 00	5,765 34
38. La Crosse & S. E.....				4,781 35
39. Mineral Point & Nor.....	72 50		2,208 76	9,445 55
Total.....	\$2,525,965 28	\$132,906 90	\$10,298,551 60	112,170,155 10

LINE, 1905.—Continued.

General Expenses.						No.
Salaries of officers.	Salaries of clerks.	General office expenses and rent.	Agencies, including salaries and rent.	Advertising.	Commissions.	
		\$15 52				1
\$720 00		112 13				2
600 00	\$1,155 00	33,975 38				3
334,682 86	399,262 25	95,537 10	\$511,546 28	\$229,518 86	\$11,728 80	4
172,770 56	337,403 10					
		14,080 30	98,774 71	16,425 43	1,089 78	5
100,199 89	73,308 18					
		84,408 75				6
372,599 82	620,449 15	6,761 18				7
10,199 96	11,277 84	92,584 69				8
240,824 48	355,489 23					9
		98 70		157 25		10
1,200 00	738 25					11
		34 45				12
	200 00	4,397 74	32,265 04	4,903 82	22,922 94	13
22,435 01	31,071 03					14
						15
1,899 96		58,020 56				16
146,016 18	277,402 50	557 29	336 24	176 95		17
11,400 00	5,945 37					
						18
						19
						20
				31 35		21
8,800 00	1,370 00					
		24 60				22
2,160 00	2,521 69					
						23
1,800 00	1,155 00					24
		19,644 26	131,770 68	24,498 93		25
38,728 76	59,398 63	45,944 86	319,539 02	108,732 56		26
231,736 26	277,114 44					27
1,500 00						28
		183 90				29
3,000 00	2,400 00					30
	300 00					31
1,730 00	3,572 85	2,158 28	961 55	1,120 19	788 95	32
200 00						33
55,625 00	66,825 48	27,371 25	144,217 10	16,942 77		34
						35
	312 50					36
						37
		600 00				38
1,170 00		463 34				39
1,949 98	457 50					
\$1,758,948 72	\$2,529,129 99	\$486,974 28	\$1,239,210 62	\$402,508 11	\$36,530 47	....

OPERATING EXPENSES,

General

Name of Company.	General Expenses.			
	Insurance.	Expense of fast freight lines.	Expense of traffic associations.	Expense of stock yards and elevators.
1. Abbotsford & Northeastern				
2. Ahnapee & Western	142 82			
3. Chicago, Milwaukee & St. Paul	147,796 08			
4. Chicago & Northwestern	20,442 48		87,637 92	
5. Chicago, St. Paul, Minneapolis & Omaha	29,085 86		23,358 84	80,586 23
6. Chicago, Burlington and Quincy	233,665 15			
7. Chicago, Lake Shore and Eastern	3,541 16			
8. Illinois Central	120,000 00			
9. Chicago, Harvard & Geneva Lake	488 00			
10. Drummond & Southwestern				
11. Duluth, S. Shore & Atlantic	8,571 45			
12. Fairchild & Northeastern				
13. Great Northern	131,332 13			
14. Green Bay Western	2,669 72			
15. Hawth'ne, Neb'g'n & Sup'r	1,337 40			
16. Hazelhurst & Southeastern	41 80			
17. Iola & Northern	27 00			
18. Kewaunee, G. B. & W.	345 66			
19. Lake Sup'r T. & T. Ry. Co.	303 45			
20. Marinette, Tomah'k & W.	785 20			
21. Mpls., St. P. & Ashland				
22. Mpls., St. P. & S. Ste. M.	31,556 90			8,511 00
23. Northern Pacific	144,093 10			
24. Northwestern Coal Ry. Co.	528 54			
25. Stanley, Merrill & Phillips	2,021 98			
26. Winona Bridge Ry. Co.	37 50			
27. Wisconsin & Michigan	2,708 14			
28. Whitcomb & Morris				
29. Wisconsin Central	33,000 00			
30. Bayfield, Lake Shore & W.				
31. Roddis Lumber & V. Co.				
32. Mineral Point & Northern	388 71			
Total	\$914,960 23		\$110,996 76	\$89,097 23

WHOLE LINE, 1905—Continued.

Expenses—Continued.

General Expenses—Continued.						No.
Rentals of tracks, yards and terminals.	Rentals not otherwise provided f r.	Legal expenses.	Stationery and printing.	Other general expenses.	Total.	
\$494 21		\$3 00	\$81 87		\$1,314 60	1
		257 22	200 00		2,467 17	2
		59,817 75	61,976 35	\$205,568 03	1,243,078 70	3
144,191 97	\$21,993 79	138,470 40	33,322 38	314,818 20	2,119,381 84	4
128,276 44	20,483 57	9,744 18	5,445 08	14,441 80	615,300 38	5
		247,090 92	80,097 35	112,736 96	1,751,048 10	6
281,526 97	421 60	8,026 37	2,746 50	2,415 82	326,917 40	7
		137,438 15	34,962 84	123,268 36	1,104,567 75	8
648 52			127 05	174 43	3,632 20	9
				6 20	240 65	10
39,813 27	2,391 98	7,571 72	15,883 42	4,513 45	196,740 87	11
15 00			61 02	52 10	2,028 08	12
		77,140 42	32,628 88	60,784 49	783,375 16	13
3,506 74	31 56	439 90	2,701 99	2,984 56	30,750 32	14
			65 49		1,402 89	15
			55 75	300 00	397 55	16
			58 50	62 50	148 00	17
	108 00		289 91	2,115 88	8,060 80	18
	439 01	862 45	516 17	126 50	6,953 87	19
			219 02	1,007 45	4,966 67	20
				5,830 05	5,830 05	21
184,491 02		23,351 69	43,324 89	9,248 81	574,525 61	22
357,195 92	4,307 82	128,448 60	135,740 35	168,061 92	1,920,714 85	23
		101 25	27 25	1,009 04	3,166 08	24
			374 66		7,980 54	25
			21 50		359 00	26
8,515 81	892 38	392 04	744 81	75 00	23,660 09	27
					200 00	28
	12,593 04	32,705 76	15,582 00	34,233 01	439,095 41	29
1,500 00	5 00		74 19	41 10	1,932 79	30
					1,770 00	31
			154 00	2,044 77	5,458 28	32
\$1,150,175 87	\$63,667 75	\$871,861 82	\$467,483 22	\$1,065,920 77	1,187,465 61	

OPERATING EXPENSES,

Recapitulation

Name of Company.	Maintenance of way and structures.	Maintenance of equipment.
1. Abbotsford & Northeastern	\$6,807 88	\$271 75
2. Ahnapee & Western	12,771 97	3,574 81
3. Chicago, Milwaukee & St. Paul	15,956,586 24	5,181,585 79
4. Chicago & Northwestern	7,415,578 29	6,396,661 48
5. Chicago, St. Paul, Minneapolis & Omaha	1,429,574 54	1,151,652 13
6. Chicago, Burlington & Quincy	8,452,782 94	10,088,557 61
7. Chicago, Lake Shore & Eastern	125,123 23	482,437 35
8. Illinois Central	6,072,828 48	7,804,810 21
9. Chippewa River & Northern	9,061 25	578 24
10. Chicago, Harvard & Lake Geneva	2,378 77	2,546 29
11. Chippewa Valley & Northern	391 29	615 49
12. Drummond & Southwestern	4,456 50	4,212 02
13. Duluth, South Shore & Atlantic	435,982 63	227,202 61
14. Dunbar & Wausaukee		
15. Fairchild & Northeastern	10,278 43	1,967 48
16. Great Northern	5,000,535 27	3,526,263 74
17. Green Bay & Western	102,729 74	57,858 37
18. Hawthorne, Nebagamon & Superior	5,656 32	15,729 69
19. Hazelhurst & Southeastern	1,203 02	2,062 64
20. Iola & Northern	1,162 19	269 24
21. Kewaunee, Green Bay & Western	23,082 20	3,905 32
22. Lake Superior Terminal & Transfer Ry. Co.	7,045 06	7,460 94
23. Marinette, Tomahawk & Western	16,906 59	7,284 28
24. Minneapolis, St. Paul & Ashland	24,265 42	14,782 69
25. Minneapolis, St. Paul & Sault Ste. Marie	743,693 20	881,702 13
26. Northern Pacific	7,235,622 52	5,176,020 37
27. Northwestern Coal Ry. Co.	3,967 15	1,799 65
28. Robbins Railway Co.	10,892 75	
29. Stanley, Merrill & Phillips	25,877 24	12,138 57
30. Winona Bridge Ry. Co.	6,725 12	
31. Wisconsin & Michigan	24,014 33	24,557 28
32. Whitcomb & Morris	2,140 00	300 00
33. Wisconsin Central	866,202 55	776,650 29
34. Wisconsin Western	12,773 69	2,100 84
35. Bayfield, Lake Shore & W	6,818 73	581 95
36. Hillsboro & Northeastern	1,595 57	386 08
37. Roddis Lumber & Veneer Co.	374 08	
38. La Crosse & Southeastern	2,891 37	1,000 00
39. Mineral Point & Northern	12,501 88	167 25
Totals	\$44,073,278 43	\$41,859,694 58

¹ Including net additions to property.

WHOLE LINE, 1905.—Continued.
of Expenses.

Conducting transportation.	General expenses.	Grand total.	Percentage of operating expenses to earnings.	Mileage upon which based.	No.
\$10,021 65	\$1,314 60	\$18,415 88	64.54	15.16	1
22,150 28	2,467 17	40,964 23	65.30	34.00	2
18,280,457 54	1,243,078 70	33,661,708 27	61.47	7,132.15	3
20,629,613 22	2,119,381 84	36,561,284 83	65.59	7,408.13	4
4,132,619 82	615,300 38	7,329,146 87	61.09	1,682.55	5
21,186,780 78	1,751,048 10	41,479,169 43	63.65	8,552.76	6
911,958 82	326,917 40	1,846,436 80	42.70	448.32	7
18,224,287 72	1,104,567 75	33,206,494 16	66.91	4,373 91	8
9,200 66	.....	18,840 15	139.69	24.00	9
15,022 34	3,632 20	23,579 60	97.68	11.00	10
6,452 30	.....	7,459 08	68.29	10.00	11
5,323 33	240 65	14,232 50	96.40	8.18	12
992,778 98	196,740 87	1,852,705 09	68.44	585.81	13
14,400 41	.....	14,400 41	58.28	13.50	14
10,283 77	2,028 08	24,557 76	68.00	33.00	15
9,844,228 49	783,375 16	19,154,402 66	48.40	4,967.49	16
165,679 23	30,750 32	357,017 66	59.50	225.00	17
32,542 04	1,402 89	55,330 94	114.00	25.00	18
11,818 76	397 55	15,481 97	66.17	11.00	19
4,015 63	148 00	5,595 06	75.18	4.70	20
.....	8,061 81	62,229 27	53.42	36.70	21
48,129 45	6,953 87	69,589 32	.....	16.33	22
17,538 37	4,936 67	46,695 91	91.18	43.77	23
39,538 07	5,830 05	84,416 23	130.08	45.75	24
2,476,304 57	574,525 61	4,676,815 51	53.16	1,773.98	25
12,549,586 03	1,920,714 85	26,881,943 77	52.95	5,314.95	26
8,114 36	3,166 08	17,047 24	107.21	8.00	27
7,650 80	.....	18,543 55	96.56	30.00	28
36,013 56	7,980 54	82,009 91	61.64	52.36	29
.....	359 00	7,084 12	28.33	1.03	30
102,080 88	23,660 00	174,312 49	70.44	131.00	31
1,535 00	200 00	4,175 00	133.30	6.00	32
2,292,337 82	439,095 41	4,374,336 07	65.80	977.04	33
21,532 26	.....	36,406 79	52.38	51.97	34
7,950 25	1,932 79	17,283 72	176.30	14.00	35
4,394 72	.....	6,376 37	40.08	5.00	36
5,765 34	.....	6,139 42	100.00	10.00	37
4,781 35	1,770 00	10,442 72	138.75	30.56	38
9,445 55	5,458 28	27,572 96	237.60	30.60	39
\$112,170,155 10	\$11,187,465 61	\$209,290,593 72	60.32	44,144.70	....

OPERATING EXPENSES,

Operating Expenses of Roads Doing Business in Wisconsin as Reported

Name of Company.	Maintenance of			
	Repairs of roadway.	Renewals of rails.	Renewals of ties.	Repairs of bridges and culverts.
1. Abbotsford & Northeastern	\$5,632 59	\$181 15	\$1,488 90	\$2,267 92
2. Ahnapee & Western	8,736 25		1,960 00	1,521 50
3. Chicago, Milwaukee & St. Paul	3,297,504 44	539,725 25	567,584 54	645,554 92
4. Chicago & Northwestern	3,993,480 81	308,565 52	858,528 22	624,321 25
5. Chicago, St. Paul, Minneapolis & Omaha	932,593 22	140,699 31	204,418 47	151,595 33
6. Chicago, Burlington & Quincy	5,187,798 21	904,734 50	1,364,303 69	1,548,122 94
7. Chicago, Lake Shore & Eastern	83,989 07	25,459 37	27,656 95	12,352 54
8. Illinois Central	3,669,992 13	392,847 42	743,861 60	758,900 76
9. Chippewa River & Northern	4,595 73		108 79	
10. Chicago, Harvard & Geneva L.	1,289 48			
11. Chippewa Valley & Northern	498 28			
12. Drummond & Southwestern	9,680 89		1,096 53	26 72
13. Duluth, South Shore & Atlantic	337,812 84	18,611 83	42,269 42	27,129 41
14. Dunbar & Wausaukee				497 88
15. Fairchild & Northeastern	5,462 28			566,102 14
16. Great Northern	4,087,117 60	213,635 87	319,029 51	4,694 43
17. Green Bay & Western	54,746 60	31,000 00	23,591 60	
18. Hawthorne, Nebagamon & Superior	3,065 15	92 81	144 66	24 16
19. Hazelhurst & Southeastern	232 07			144 16
20. Hillsboro & Northeastern	1,354 16		93 08	
21. Iola & Northern	322 11			
22. Kewaunee, Green Bay & Western	22,071 52	12,000 00	1,000 00	2,147 95
23. Lake Superior Terminal & Transfer Ry. Co.	7,775 52	132 17	1,794 68	
24. Marinette, Tomahawk & Western	10,813 71	5,664 18	5,828 04	610 40
25. Minneapolis, St. Paul & Sault Ste. Marie	591,900 02	3,582 63	102,863 62	123,643 27
26. Northern Pacific	4,524,224 26	147,180 20	475,253 53	1,291,289 52
27. Northwestern Coal Ry. Co.	4,831 34		462 52	460 00
28. Robbins Railway Co.				
29. Stanley, Merrill & Phillips	18,327 18		4,233 23	3,740 60
30. Winona Bridge Co.	150 64		128 84	2,776 84
31. Wisconsin & Michigan	17,426 68		2,165 41	434 14
32. Whitcomb & Morris	1,560 00		200 00	
33. Wisconsin Central	393,304 05	58,239 05	126,682 03	94,385 85
34. Wisconsin Western	7,874 21	150 00	3,963 42	3,105 72
35. La Crosse & Southeastern	7,561 82			
36. Superior & Southeastern				
37. Roddis Lumber & Veneer Co.				
38. Mineral Point & Northern	20,321 86			307 98
Total	\$27,313,979 72	\$2,802,801 26	\$4,881,015 29	\$5,866,157 34

WHOLE LINE, 1906.

to the Railroad Commission for Year Ending June 30, 1906.

Way and Structures.

Repairs of fences, road crossings, signs and cattle guards.	Repairs of buildings.	Repairs of docks and wharves.	Repairs of telegraph.	Other expenses.	Total.	No.
\$35 08	\$274 02		\$5 40	\$3 50	\$10,188 56	1
620 00	864 00				13,700 75	2
205,239 66	631,129 22	18,616 64	47,358 88	2,226,797 92	8,179,511 47	3
207,778 76	722,071 75	56,620 35	34,088 02	12,332 34	6,817,787 02	4
43,148 75	111,085 46	4,004 06	12,081 06	1,188 24	1,600,813 90	5
205,905 24	1,163,016 00	4,625 81	230,228 19	3,055 88	10,611,796 05	6
1,925 70	20,585 75		3,453 80	1,261 18	176,984 37	7
186,001 20	718,903 63	24,449 25	58,625 49	274,011 02	6,827,392 50	8
13 06					4,627 38	9
	216 30			1,376 99	2,882 77	10
				91 64	589 92	11
				98 78	10,902 92	12
6,610 32	25,276 94	15,455 70	3,759 55	13 13	476,939 14	13
		96 75		61 76	6,121 67	14
47,770 07	448,297 65	5,696 60	40,450 57	8,263 69	5,736,343 70	15
723 99	7,401 34		751 58		122,909 54	16
	30 00				3,856 78	17
	7 07				403 30	18
	167 08				1,617 32	19
	4 31				326 42	20
215 19	493 65	500 78			38,429 09	21
511 11	684 79				10,898 27	22
42 37	392 85				23,351 55	23
22,879 24	112,568 38	39,076 01	26,422 86	797 67	1,023,733 70	24
154,965 04	731,776 05	34,714 36	65,212 51		7,424,654 99	25
	265 90				6,022 73	26
				7,338 60	7,238 60	27
525 23	3,487 83		544 88		30,858 45	28
	13 83				3,070 15	29
26 59	2,460 45	138 01	675 42	44 35	23,372 05	30
					1,760 00	31
19,517 49	83,298 37	42,157 03	5,497 50	36,642 02	854,723 40	32
927 25	1,803 35				17,824 45	33
					7,561 82	34
					3,955 71	35
					875 28	36
691 88	3,179 58		63 96	7 97	24,573 23	37
						38
\$1,106,073 22	\$4,789,761 66	\$246,151 35	\$529,199 68	\$2,577,920 67	\$50,113,060 19	

OPERATING EXPENSES.

Name of Company.	Maintenance of			
	Repairs and renewals of locomotives.	Repairs and renewals of passenger cars.	Repairs and renewals of freight cars.	Repairs and renewals of ferry-boats, tugs, floats and barges.
1. Abbotsford & Northeastern ...	\$1,456 68		\$189 90	
2. Ahnapee & Western	1,353 75	\$1,945 20	910 00	
3. Chicago, Milwaukee & St. P.	1,915,387 47	688,695 17	2,445,702 05	
4. Chicago & Northwestern	3,140,532 15	564,559 63	4,592,976 80	\$2,050 73
5. Chicago, St. P., Minneap. & O.	422,334 30	104,530 57	479,203 93	
6. Chicago, Burlington & Quincy	5,113,800 83	839,504 96	7,058,363 74	
7. Chicago, Lake Shore & East'n.	118,532 68		423,384 17	
8. Illinois Central	2,318,908 98	665,682 11	3,924,296 95	6,668 35
9. Chippewa River & Northern	933 74			
10. Chi., Harvard & Geneva Lake		568 26	568 26	
11. Chippewa Valley & Northern			1,465 05	
12. Drummond & Southwestern	1,006 19		1,999 85	
13. Duluth, So. Shore & Atlantic	86,801 78	36,032 37	109,316 76	
14. Dunbar & Wausaukee				
15. Fairchild & Northeastern	1,537 29		7 23	
16. Great Northern	1,904,515 34	548,261 68	1,748,429 19	
17. Green Bay & Western	13,484 07	7,818 33	21,067 38	
18. Hawthorne, Nebasagun & Su.	9,773 33		6,769 53	
19. Hazelhurst & Southeastern	556 85	4 34	577 96	
20. Hillsboro & Northeastern	845 93	1,169 53		
21. Iola & Northern	228 00	28 49		
22. Kewaunee, Green Bay & West	5,079 59	676 87	1,512 23	
23. Lake Superior Terminal & Transfer Ry. Co.	5,445 26	3 86	1,577 17	
24. Marinette, Tomahawk & West	2,806 61	434 73	1,825 29	
25. Minneapolis, St. Paul & Sault Ste. Marie	408,362 24	134,904 94	471,469 08	
26. Northern Pacific	2,601,666 22	516,542 40	2,785,498 70	29,260 65
27. Northwestern Coal Ry. Co.	1,784 11			
28. Robbins Railway Co.				
29. Stanley, Merrill & Phillips	7,492 22	415 28	13,197 94	
30. Wisconsin & Michigan	10,313 42	1,533 70	8,834 43	
31. Whiteomb & Morris	150 00		50 00	
32. Wisconsin Central	309,647 11	84,204 49	356,377 38	
33. Wisconsin Western	1,030 72	681 53	1,583 98	
34. La Crosse & S. E. Ry. Co.				
35. Superior & Southeastern				
36. Roddis Lumber & Veneer Co.				
37. Mutual Point & Northern	6,609 10	268 17	209 58	
Total	\$18,412,415 96	\$4,198,546 61	\$24,460,970 55	\$37,979 73

WHOLE LINES, 1906—Continued.

equipment.			Conducting Transportation.			No.
Shop machinery, tools, etc.	Other expenses.	Total.	Wages of enginemen, firemen and roundhouse-men.	Fuel for locomotives.	Water supply for locomotives.	
	\$25 52	\$1,652 10	\$2,191 85	\$2,644 15	\$27 65	1
		4,273 75	2,428 32	5,529 68		2
\$64 80		5,598,037 18	3,502,756 57	4,501,777 28	186,151 32	3
147,426 71	400,825 78	8,997,712 70	4,397,287 62	5,362,122 44	266,352 75	4
184,398 75	513,194 66	1,216,547 89	823,850 22	1,310,642 72	51,947 53	5
36,050 9	174,398 13	13,961,904 74	4,059,901 94	5,149,477 00	272,776 46	6
415,313 11	534,916 10	579,122 79	300,448 59	232,241 71	7,141 76	7
20,034 22	16,571 72	7,705,028 16	3,513,245 58	3,409,628 29	208,965 33	8
319,598 02	469,873 75	963 74	3,594 38	2,607 89		9
		2,323 37	2,725 50	6,192 3		10
652 77	534 08	1,893 24	4,972 46	2,459 60		11
428 19		5,027 76	3,053 44	4,584 51		12
	2,021 72	264,772 32	227,139 49	323,812 17	12,446 03	13
7,635 10	24,956 31		2,228 00	2,256 00		14
		1,609 25	1,835 83	2,371 09		15
	64 75	4,502,644 66	1,854,928 33	3,706,906 61	116,008 91	16
55,743 15	245,695 30	58,612 84	35,355 69	70,261 35	1,782 49	17
2,570 95	13,672 11	16,580 35	8,512 83	12,048 27	102 60	18
	37 48	1,139 15	1,406 21	2,041 36		19
		2,015 46	740 60	1,772 04	108 00	20
		256 49	967 45	1,254 00		21
	600 00	7,858 69	3,995 85	8,287 00		22
		7,204 77	12,971 55	13,985 82	432 86	23
178 48		5,392 67	4,599 06	7,475 25	108 76	24
326 04						
	36,149 12	1,090,480 37	561,932 50	996,907 81	40,406 64	25
36,594 99	11,151 11	6,024,727 13	3,034,767 21	4,565,120 97	190,057 05	26
80,608 05		1,784 11	2,258 95	2,023 16	284 41	27
	1,547 66	8,052 00	8,052 00	4,701 51		28
	2,172 33	23,491 16	10,002 98	19,689 90		29
213 39	4,903 74	27,094 64	17,261 63	33,299 76	1,347 04	30
1,459 35		250 00	1,260 00	225 00		31
50 00	30,899 84	805,666 00	454,557 95	649,911 38	27,622 56	32
24,537 18		3,296 23	3,237 55	4,304 00	202 75	33
		2,416 50	2,273 31	23,098 60		34
	12,416 50	1,413 69				35
	1,413 69		2,195 87	1,707 85		36
		7,148 94	3,701 04	6,987 64	104 52	37
	62 09					
\$1,333,884 19	\$2,488,103 50	\$50,931,900 54	\$22,872,638 35	\$30,434,356 12	\$1,385,024 73	

¹ Items not given.

² Includes water supply.

OPERATING EXPENSES.

Name of Company.	Conducting Transportation—Continued.			
	All other supplies for locomotives.	Wages of other trainmen.	All other train supplies.	Wages of switchmen, flagmen and watchmen.
1. Abbotsford & Northeastern ...	\$82 86	\$1,341 24	\$0 24	.....
2. Ahnapée & Western	520 00	1,980 00	302 44	\$547 50
3. Chicago, Milw. & St. Paul	183,477 12	2,437,012 21	555,171 62	1,565,646 62
4. Chicago & Northwestern	248,512 28	3,20,218 88	602,937 85	1,698,072 04
5. Chi., St. P., Minneap. & Omaha	40,731 79	631,216 95	131,511 92	263,787 12
6. Chi., Burlington & Quincy	296,095 05	2,519,400 52	708,306 55	1,701,256 65
7. Chi., Lake Shore & Eastern	12,907 01	58,280 65	7,314 92	356,611 93
8. Illinois Central	212,669 49	2,225,494 09	675,195 36	1,476,200 18
9. Chi., Harvard & Geneva Lake	496 12	5,395 69	.....	.....
10. Drummond & Southwestern	436 67	1,315 60	124 04	.....
11. Duluth, So. Shore & Atlantic.	10,985 63	165,462 01	32,982 32	64,309 02
12. Dunbar & Wausaukee	500 00	1,585 00	.....	.....
13. Fairchild & Northeastern	13 79	1,423 90	.....	495 75
14. Great Northern	137,850 81	1,304,669 81	382,019 77	603,596 64
15. Green Bay & Western	1,485 54	23,532 68	1,974 73	8,134 36
16. Hawthorne, Nebagam'n & Sup.	741 80	7,348 23	128 19	.....
17. Hazelhurst & Southeastern	123 01	671 71	22 09	.....
18. Hillsboro & Northeastern	51 57	773 50	.....	.....
19. Iola & Northern	42 30	911 97	57 12	497 25
20. Kewaunee, Gr. Bay & Western	130 57	3,869 18	471 29	1,023 00
21. Lake Superior Term. & Trans- fer Ry. Co	944 85	20,042 13	.....	4,349 47
22. Marinette, Tomah'k & West'n	284 99	1,972 70	374 42	.....
23. Minneapolis, St. Paul & Sault St. Marie	39,310 43	480,047 35	90,877 58	85,827 35
24. Northern Pacific	161,049 51	2,084,710 70	415,742 96	888,899 50
25. Northwestern Coal Ry. Co	187 74	.....	.....	4,903 81
26. Stanley, Merrill & Phillips	646 12	8,785 82	1,292 74	3,310 63
27. Wisconsin & Michigan	1,198 87	18,446 05	2,445 88	1,610 32
28. Whitcomb & Morris	50 00	.....	.....	.....
29. Wisconsin Central	23,653 53	336,119 86	68,050 69	168,169 10
30. Wisconsin Western	133 83	4,245 74	298 61	.....
31. La Crosse & Southeastern	293 60	1,701 72	.....	538 49
32. Roddis Lumber & Veneer Co. ....	.....	1,095 39	.....	.....
33. Mineral Point & Northern	458 50	2,825 54	198 71	.....
Totals	\$1,376,065 38	\$15,571,896 82	\$3,677,892 04	\$8,897,786 73

WHOLE LINE, 1906—Continued.

Conducting Transportation—Continued.

Expenses of telegraph, including train dispatchers and operators.	Wages of station agents, clerks and laborers.	Station supplies.	Switching charges—Balance.	Car mileage—Balance.	Loss and damage.	No.
.....	\$720 00	\$138 62	.....	\$1,805 75	\$75 56	1
.....	2,995 00	516 20	.....	420 80	233 55	2
\$382,368 46	2,797,329 31	190,179 87	\$273,303 77	222,496 85	467,002 83	3
724,279 05	2,779,807 53	247,114 32	506,722 07	39,891 19	462,612 09	4
188,225 06	546,912 82	61,329 61	.....	.....	88,915 05	5
903,958 07	2,760,861 47	298,548 01	657,804 72	609,025 14	656,646 81	6
9,825 87	78,799 19	3,560 78	.....	.....	3,783 39	7
663,121 18	2,386,063 17	204,014 21	.....	.....	755,686 06	8
.....	255 00	588 77	.....	.....	.....	9
.....	.....	.....	.....	.....	.....	10
42,333 83	143,360 20	10,160 41	19,218 37	21,555 40	7,738 61	11
.....	6,744 00	.....	.....	.....	.....	12
.....	740 00	153 06	.....	238 46	6 53	13
424,040 03	1,063,387 37	86,113 24	125,815 54	42,231 28	330,409 23	14
2,451 55	22,876 99	2,256 09	.....	.....	2,086 66	15
.....	1,076 16	27 80	.....	249 51	1,002 50	16
.....	628 01	.....	.....	.....	.....	17
.....	805 49	.....	.....	.....	.....	18
36 00	391 30	21 00	.....	.....	.....	19
368 50	5,046 95	89 98	2,024 77	.....	760 80	20
.....	.....	.....	.....	.....	.....	21
866 14	4,437 48	1,700 09	.....	.....	276 93	22
.....	1,416 83	.....	180 07	252 41	72 67	23
.....	.....	.....	.....	.....	.....	24
114,774 33	281,784 47	25,475 02	.....	32,646 23	110,998 90	25
617,833 16	1,702,956 12	148,598 07	.....	228,975 77	310,646 50	26
.....	533 39	58 37	.....	.....	.....	27
56 76	2,037 53	222 47	.....	.....	231 35	28
2,054 42	12,333 32	1,069 98	15,184 70	.....	616 24	29
.....	.....	.....	.....	.....	.....	30
114,204 39	367,400 49	28,509 32	4,551 14	.....	51,940 12	31
74 56	4,542 21	255 12	508 68	2,642 52	435 74	32
.....	1,821 56	.....	.....	.....	.....	33
369 63	2,695 66	341 16	.....	.....	352 80	34
\$4,251,738 99	\$14,980,899 02	\$1,311,041 57	\$1,605,313 83	\$1,202,431 11	\$3,252,532 92	35

OPERATING EXPENSES,

Name of Company.	Conducting Transportation—Continued.			Total.
	Injuries to persons.	Barges, floats, tugs, ferryboats, expenses of including wages, fuel and supplies.	Other expenses.	
1. Abbotsford & Northeastern...	\$16 25		\$241 07	\$9,285 24
2. Ahnapee & Western			3,967 2	19,440 74
3. Chicago, Mil'kee & St. Paul	\$392,499 13	\$155,303 67	1,886,905 97	19,699,380 60
4. Chicago & Northwestern	605,808 76	4,651 50	782,913 59	21,949,303 96
5. Chicago, St. Paul, Minneapolis & Omaha	67,678 37		637,285 27	4,814,094 43
6. Chicago, Burlington & Quincy	339,334 42		3,299,120 26	24,232,513 07
7. Chicago, Lake Shore & Eastern	29,495 41		152,588 24	1,254,999 45
8. Illinois Central	590,970 41	19,950 70	2,325,037 24	18,666,241 29
9. Chippewa River & Northern				6,202 27
16. Chicago, Harvard & Geneva L.			556 10	16,207 48
11. Chippewa Valley & Northern				7,432 06
12. Drummond & Southwestern				9,516 26
13. Duluth, S. Shore & Atlantic	4,049 26		44,796 39	1,132,349 14
14. Dunbar & Wausaukee			1,0 5 50	14,348 50
15. Fairchild & Northeastern			119 51	7,597 92
16. Great Northern	332,911 42		1,480,117 98	11,991,066 97
17. Green Bay & Western	3,559 44		3,250 09	179,527 66
18. Hawthorne, Nebugamon & Superior				31,237 89
19. Hazelhurst & Southeastern			10 26	4,902 65
20. Hillsboro & Northeastern			686 96	4,938 16
21. Iola & Northern				4,178 39
22. Kewaunee, G. Bay & Western	5 00		4,436 26	30,509 15
23. Lake Superior Terminal & Transfer Ry. Co.	988 30			60,995 62
24. Marinette, Tomahawk & Western				16,737 17
25. Minneapolis, St. Paul & Sault Ste. Marie	72,635 53	74,005 12	191,819 08	3,199,418 34
26. Northern Pacific	360,112 28	50,313 09	682,038 83	15,501,821 72
27. Northwestern Coal Ry. Co.				10,249 83
28. Robbiss Railway Co.			2,055 90	14,809 41
29. Stanley, Merrill & Phillips			3,786 20	50,731 81
30. Winona Bridge Ry. Co.				
31. Wisconsin & Michigan	235 00		8,109 17	115,212 38
32. Whitcomb & Morris				1,535 00
33. Wisconsin Central	41,207 66		139,753 83	2,475,762 02
31. Wisconsin Western	37 68		576 05	21,491 84
35. La Crosse & Southeastern Ry.				11,727 28
36. Superior & Southeastern			*7,463 76	7,463 76
37. Roddis Lumber & Veneer Co.			500 00	5,499 11
38. M. neral Point & Northern	26 00		4,740 57	22,801 77
Total	\$2,841,570 32	\$304,224 08	\$11,663,951 33	125,629,363 34

*Items not given.

WHOLE LINE, 1906—Continued.

General Expenses.						
Salaries of officers.	Salaries of clerks.	General office expenses and supplies.	Agencies, including salaries and rent.	Advertising.	Commissions.	No.
\$775 00		\$18 34				1
600 00	\$1,360 00	629 42				2
318,155 06	424,115 96	36,400 07				3
221,366 56	576,411 99	135,676 70	\$510,621 88	\$252,122 98	\$13,128 42	4
100,135 72	78,508 52	13,387 38				5
404,087 27	697,680 85	93,702 11				6
14,099 94	12,539 69	6,823 47				7
259,794 72	385,642 52	95,048 49				8
1,200 00	820 02	141 94		53 75		9
	200 00	23 40				10
24,675 68	31,492 00	4,168 11	27 794 78	5,221 39	13,469 16	11
1,212 46						12
153,826 27	314,493 78	66,014 48				13
11,400 00	5,792 67	321 28	302 45	262 25		14
				20 00		15
						16
						17
3,800 00	1,380 00	7 81		32 85		18
2,160 00	2,628 42					19
1,800 00	941 50					20
52,102 78	64,714 92	23,911 62	113,997 65	36,298 49		21
216,269 56	311,839 68	55,340 43	415,951 74	115,056 10		22
1,500 00						23
3,000 00	1,200 00	441 41				24
	300 09					25
2,590 00	3,677 84	1,663 81	983 98	465 98	829 71	26
200 00						27
58 771 76	68,865 76	20,243 81	151,556 10	16,673 11		28
2,627 35		750 00				29
						30
3,699 96	1,122 50	182 51				31
						32
\$1,859,850 09	\$2,785,728 62	\$554,896 57	\$1,221,208 62	\$426,206 90	\$27,427 29	33
						34
						35
						36
						37
						38

OPERATING EXPENSES—

Name of Company.	General Expenses—Continued.			
	Insurance.	Expense of fast freight lines.	Expense of traffic associations.	Expense of stock yards and elevators.
1. Abbotsford & Northwestern.....				
2. Ahnapee & Western.....	\$172 30			
3. Chicago, Milwaukee & St. Paul.....	149,716 45			
4. Chicago & Northwestern.....	15,667 62		\$80,777 40	
5. Chi., St. Paul, Minneap. & O.....	21,758 78			
6. Chicago, Burlington & Quincy.....	246,773 89			
7. Chicago, Lake Shore & East'n.....	3,345 71			
8. Illinois Central.....	120,000 00			
9. Chicago, Harvard & Geneva L.....	509 55			
10. Drummond & Southwestern.....				
11. Duluth South Shore & Atl'c.....	9,258 69			
12. Fairchild & Northeastern.....				
13. Great Northern.....	147,766 67			
14. Green Bay & Western.....	2,574 72			
15. Hawthorne, Nebagamon & Sup.....	736 00			
16. Hazelhurst & Southeastern.....	77 10			
17. Iola & Northern.....	27 00			
18. Kewaunee, Green Bay & West'n.....	651 35			
19. Lake Superior Terminal & Transfer Ry. Co.....	29 54		31 34	
20. Marinette, Tomah'k & West'n.....	922 74			
21. Minneapolis, St. Paul & Sault Ste. Marie.....	36,357 12			\$8,632 70
22. Northern Pacific.....	141,259 28			
23. Northwestern Coal Ry. Co.....	560 38			
24. Stanley, Merrill & Phillips.....	2,470 18			
25. Winona Bridge Ry. Co.....	87 50			
26. Wisconsin & Michigan.....	3,347 21			
27. Whitcomb & Morris.....				
28. Wisconsin Central.....	33,000 00			
29. La Crosse & Southeastern Ry.....				
30. Superior & Southeastern.....				
31. Mineral Point & Northern.....	75 00			
Total.....	\$940,134 78		\$80,808 74	\$8,632 70

WHOLE LINE, 1906—Continued.

General Expenses—Continued.

Rentals of tracks, yards and terminals.	Rentals not otherwise provided for.	Legal expenses.	Stationery and printing.	Other general expenses.	Total,	No.
\$564 57			\$2 40	\$26 97	\$1,387 28	1
		\$950 00	439 60	649 76	4,801 08	2
		67,965 58	65,739 24	174,561 92	1,236,654 28	3
144,547 31	\$19,618 05	107,410 45	37,734 90	211,111 15	2,126,195 41	4
		12,214 02	5,104 62	8,772 87	239,881 91	5
		203,739 79	76,204 26	121,819 39	1,848,947 56	6
327,393 18	405 60	5,019 70	2,174 74	3,826 76	375,728 79	7
		178,964 01	37,448 57	124,602 76	1,201,501 07	8
484 00		66 25	44 25	1,043 88	4,363 64	9
		7 68			231 08	10
40,246 08	2,416 48	5,474 48	17,890 32	1,291 99	183,399 16	11
15 00			253 01	64 75	1,545 22	12
		81,689 76	46,928 20	92,306 64	903,025 78	13
3,518 52	31 56	1,314 60	2,611 30	3,534 22	31,663 57	14
		29 50	8 69		791 19	15
			49 37	106 28	232 75	16
			61 40	87 75	176 15	17
	108 00	5 00	277 01	2,839 95	9,101 97	18
	191 00	1,370 10	460 91	243 98	7,115 29	19
			468 86	4,210 76	8,343 86	20
213,218 67		25,756 64	8,070 58	9,144 16	592,205 37	21
396,945 94	3,931 79	99,643 21	173,601 54	145,608 49	2,078,447 76	22
		50 40	37 42	200 66	2,348 86	23
		210 00	515 77	520 95	8,358 31	24
					337 50	25
10,527 32	780 00	689 28	843 56		26,463 69	26
					200 00	27
	12,254 24	38,826 99	16,255 50	23,489 49	438,136 76	28
3,000 00					6,377 35	29
				3,319 67	3,319 67	30
		200 00	376 86	342 23	5,999 06	31
\$1,140,460 59	\$39,736 72	\$835,797 44	\$493,607 88	\$933,727 43	\$11,329,224 33	

OPERATING EXPENSES, WHOLE

Recapitulation

Name of Company.	Maintenance of way and structures.	Maintenance of equipment.
1. Abbotsford & Northeastern.....	\$10,188 56	\$1,652 10
2. Ahnapee & Western.....	13,700 75	4,273 75
3. Chicago, Milwaukee & St. Paul.....	8,179,511 47	5,598,037 18
4. Chicago & Northwestern.....	6,817,787 02	8,997,712 70
5. Chicago, St. Paul, Minneapolis & Omaha.....	1,600,813 90	1,216,547 89
6. Chicago, Burlington & Quincy.....	10,611,796 06	13,961,904 74
7. Chicago, Lake Shore & Eastern.....	176,984 37	579,122 79
8. Illinois Central.....	6,827,592 50	7,705,028 16
9. Chippewa River & Northern.....	4,627 58	963 74
10. Chicago, Harvard & Geneva Lake.....	2,882 77	2,323 37
11. Chippewa Valley & Northern.....	589 92	1,893 24
12. Drummond & Southwestern.....	10,902 92	5,027 76
13. Duluth, South Shore & Atlantic.....	476,939 14	264,772 32
14. Dunbar & Wausaukee.....		
15. Fairchild & Northeastern.....	6,121 67	1,609 29
16. Great Northern.....	5,736,343 70	4,502,644 66
17. Green Bay & Western.....	122,909 54	58,612 84
18. Hathorne, Nebagamon & Superior.....	3,356 78	16,580 35
19. Hazelhurst & Southeastern.....	403 30	1,139 15
20. Hillsboro & Northeastern.....	1,617 32	2,015 46
21. Iola & Northern.....	326 42	256 49
22. Kewaunee, Green Bay & Western.....	38,429 09	7,868 69
23. Lake Superior Terminal & Transfer Ry. Co..	10,898 27	7,204 77
24. Marinette, Tomahawk & Western.....	23,351 55	5,392 67
25. Minneapolis, St. Paul & Sault Ste. Marie....	1,023,733 70	1,090,480 37
26. Northern Pacific.....	7,424,615 49	6,024,727 13
27. Northwestern Coal Ry. Co.....	6,022 76	1,784 11
28. Robbins Railway Co.....	7,238 60	1,547 66
29. Stanley, Merrill & Phillips.....	30,858 95	23,491 16
30. Winona Bridge Ry. Co.....	3,070 15	
31. Wisconsin & Michigan.....	23,372 05	27,094 64
32. Whitcomb & Morris.....	1,760 00	250 00
33. Wisconsin Central.....	859,723 40	805,669 00
34. Wisconsin Western.....	17,824 45	3,296 23
35. La Crosse & Southeastern.....	7,561 82	2,416 50
36. Superior & Southeastern.....	3,955 71	1,413 69
37. Roddis Lumber & Veneer Co.....	675 28	
38. Mineral Point & Northern.....	24,573 23	7,148 94
Total	\$50,113,060 19	\$50,931,900 54

LINE, 1906.—Continued.
of Expenses.

Conducting transportation.	General expenses.	Total:	Percentage of operating expenses to earnings.	Mileage upon which based.	No.
\$9,285 24	\$1,387 28	\$22,513 18	65.61	15.16	1
19,440 74	4,801 08	42,210 32	62.30	34.00	2
19,699,380 60	1,236,654 28	34,713,583 53	62.63	7,185.40	3
21,949,303 96	2,126,195 41	39,890,999 09	62.84	7,428.77	4
4,844,094 43	239,881 91	7,901,338 13	60.75	1,693.27	5
24,232,513 07	1,848,947 56	50,655,161 43	69.00	8,608.26	6
1,252,999 45	375,728 79	2,384,835 40	55.31	499.11	7
18,666,241 29	1,201,501 07	34,400,363 02	66.49	4,423 87	8
6,202 27	.....	11,793 59	103.99	21.00	9
16,207 48	4,363 64	25,777 26	97.04	11.00	10
7,432 06	.....	9,915 22	89.04	15.53	11
9,516 26	231 08	25,678 02	94.88	8.18	12
1,132,249 14	183,399 16	2,057,459 76	67.29	592.69	13
14,348 50	.....	14,348 50	56.25	13.50	14
7,397 92	1,545 22	16,674 10	75.00	33.00	15
11,991,066 97	903,025 78	23,133,081 11	49.75	5,150.56	16
179,527 66	31,663 57	392,713 61	64.45	225.00	17
31,237 89	794 19	51,969 21	85.14	33.50	18
4,902 65	232 75	6,677 85	41.65	11.00	19
4,968 16	.....	8,570 94	71.00	5.00	20
4,178 39	176 15	4,937 45	73.81	4.70	21
30,509 15	9,101 97	85,908 90	67.79	36.70	22
60,995 62	7,115 29	86,213 95	520.46	17.50	23
16,737 17	8,343 86	53,825 25	89.66	43.77	24
3,199,448 34	592,205 37	5,905,867 78	50.96	2,020.39	25
15,501,821 72	2,078,447 76	31,029,612 10	50.76	5,401.14	26
10,249 83	2,348 86	20,405 56	985.77	8.00	27
14,809 41	.....	23,595 67	102.10	30.00	28
50,731 81	8,358 31	113,440 23	80.83	56.30	29
.....	337 50	3,407 65	12.66	1.03	30
115,212 38	26,403 69	192,082 76	59.23	123.29	31
1,535 00	200 00	3,745 00	107.12	6.00	32
2,475,762 02	439,136 76	4,580,288 18	64.15	977.04	33
21,494 84	.....	42,615 52	57.82	51.97	34
11,727 28	6,377 35	28,082 95	41.45	43.99	35
7,463 76	3,319 67	16,152 83	56.00	15.87	36
5,499 11	.....	6,174 39	100.00	10.00	37
22,801 77	5,999 06	60,523 00	129.51	30.06	38
\$125,629,363 34	\$11,348,224,37	\$238,022,548 44	60.60	44,885 56	....

CONDENSED COMPARATIVE

Of roads doing business in Wisconsin as reported to the

Name of Company.	Assets.			
	Cost of road and equipment.	Stocks, bonds and other permanent investments.	Supplies, cash and other current assets.	Profit and loss (deficit on June 30, 1906).
1. Abbotsford & N. Eastern.	\$232,000 00	.....	\$2,443 83	\$741 41
2. Ahnapee & Western	542,048 04	.....	2,940 16	93,221 24
3. Big Falls Railway Co.....	5,500 00	.....	2,267 56	.....
4. Bayfield Transfer	3,416,084 37	\$1,324,600 00	4,165 88	540,085 43
5. Chicago, Mil. & St. Paul.	242,431,439 52	11,390,994 86	17,884,873 97	.....
6. Chicago & Northwestern..	235,267,393 85	23,489,201 61	23,579,814 02	.....
7. Chicago, St. Paul, Minnea- polis & Omaha	60,054,642 48	7,167,161 64	2,249,657 01	.....
8. Chi., Burl. & Quincy	327,940,523 57	14,256,357 93	33,141,226 26	.....
9. Chi., L. Shore & Eastern.	4,319,635 73	1,440,000 00	2,011,475 37	.....
10. Illinois Central	107,578,360 74	139,088,581 75	23,890,714 02	.....
11. Chi., Har. & Geneva L.	305,411 21	.....	.....	12,089 03
12. Drummond & Southw'n.	199,411 10	.....	767 83	14,757 58
13. Dul. S. Shore & Atlantic.	45,526,289 20	881,341 90	740,174 40	2,460,420 22
14. Duluth, Superior & West- ern Terminal Co.....	2,412,522 99	.....	611,496 87	.....
15. Great Northern	63,681,459 27	208,172,667 89	17,396,153 35	.....
16. Green Bay & Western.....	10,097,337 50	94,680 00	249,316 27	.....
17. Hawthorne, Nebagamon & Superior	150,671 78	.....	.....	.....
18. Hazelhurst & Southeast'n	108,634 91	.....	6,829 46	.....
19. Iola & Northern	71,332 06	.....	6,298 97	.....
20. Kewaunee, Green Bay & Western	1,135,725 00	.....	82,702 62	.....
21. Lake Superior Terminal & Transfer Ry. Co.....	314,053 58	.....	24,213 25	.....
22. Marinette, Tomahawk & Western	534,880 20	.....	30,310 48	21,087 67
23. Mpls., St. P. & S. Ste. M.	59,233,245 23	9,005,292 66	4,855,855 82	.....
24. Northern Pacific	322,676,620 19	129,433,755 70	26,247,269 30	.....
25. Northw'n Coal Ry. Co....	236,863 95	933,029 97	17,387 98	37,134 59
26. Oshkosh Transportation Co., operated by C. & N. W.	70,000 00	.....	3,738 27	.....
27. Stanley, Merrill & Phillips	580,277 75	27,373 50	8,230 47	.....
28. Winona Bridge Ry Co.....	789,304 66	.....	15,429 73	.....
29. Wisconsin & Michigan	3,593,852 51	.....	591,005 35	.....
30. Whitcomb & Morris	11,064 40	.....	.....	.....
31. Wisconsin Central	53,184,455 97	2,948,784 80	4,134,461 54	.....
32. Wisconsin Western	521,400 00	.....	58,613 83	.....
33. Eastern Ry. of Minn.....	27,345,133 65	2,155,748 59	605,957 56	.....
Total	1,564,588,122 41	551,810,172 80	158,255,792 76	3,179,537 17

GENERAL BALANCE SHEET.

Railroad Commission for the year ending June 30, 1905.

Assets—Cont'd		Liabilities.					No.
Total assets.	Capital stock.	Unde'd debt.	Other liabilities.	Profit and loss (surplus on June 30, 1906).	Total liabilities.		
\$235,185 24	\$120,000 00	\$112,000 00	\$3,185 24		\$25,185 24	1	
638,209 44		612,000 00	26,209 44		638,209 44	2	
7,767 56	1,000 00	5,000 00		\$1,767 56	7,767 56	3	
5,284,885 68	3,000,000 00	1,500,000 00	784,885 68		5,284,885 68	4	
271,707,305 35	107,511,300 00	122,176,500 00	10,834,503 76	31,185,001 59	271,707,395 35	5	
272,157,010 08	75,303,430 53	163,214,000 00	18,583,825 83	14,855,753 72	272,157,010 08	6	
69,471,461 13	34,050,126 62	29,226,800 00	3,569,466 55	2,625,067 96	69,471,461 13	7	
375,338,107 76	110,839,100 00	170,512,100 00	80,578,844 76	13,408,063 00	375,338,107 76	8	
7,771,111 10	650,000 00	3,230,000 00	3,024,775 54	866,334 56	7,771,111 10	9	
270,557,657 11	105,040,000 00	143,872,275 00	17,215,395 07	4,429,987 04	270,557,657 11	10	
317,500 24	150,600 00	125,000 00	42,500 24		317,500 24	11	
214,936 51	10,000 00	50,000 00	154,936 51		214,936 51	12	
49,608,225 72	22,000,000 00	23,241,312 80	4,366,912 92		49,608,225 72	13	
3,024,019 56	2,000,000 00	500,000 00	487,674 34	36,345 52	3,024,019 86	14	
289,250,280 51	124,365,625 00	114,901,600 00	30,888,218 66	19,144,836 66	289,250,280 51	15	
10,441,333 87	2,500,000 00	7,600,000 00	175,025 26	166,308 61	10,441,333 87	16	
150,671 78	50,000 00		84,005 15	16,666 63	150,671 78	17	
115,464 37	100,000 00			15,464 37	115,464 37	18	
77,631 05	71,400 00		266 30	5,964 73	77,631 05	19	
1,218,427 62	664,950 00	408,000 00	109,529 49	35,948 13	1,218,427 62	20	
338,266 83	119,400 00	195,000 00	23,866 83		338,266 83	21	
586,278 35	161,500 00		424,778 35		586,278 35	22	
73,094,393 71	21,000,000 00	44,361,974 83	3,498,296 40	4,234,122 46	73,094,293 71	23	
578,357,645 19	155,000,000 00	185,475,849 36	123,500,576 54	14,381,219 29	478,357,645 19	24	
1,224,416 49	1,000,000 00	220,000 00	4,516 49		1,224,416 49	25	
73,738 27	70,000 00			3,738 27	73,738 27	26	
616,481 72	100,000 00	300,000 00	197,881 61	18,600 11	616,481 72	27	
804,734 39	400,000 00	384,000 00	624 30	20,110 09	804,734 39	28	
4,184,857 86	951,500 00	1,751,000 00	1,481,628 61	729 25	4,184,857 86	29	
11,064 40	10,000 00			1,064 40	11,064 40	30	
60,267,702 31	30,000,000 00	27,588,175 00	2,179,884 34	499,642 97	60,267,702 31	31	
580,013 86	521,400 00			58,613 86	580,013 86	32	
30,106,839 80	16,000,000 00	9,729,373 74	3,845,829 19	531,636 87	30,106,839 80	33	
\$2,277,833,625 14	\$813,960,732 15	\$1,051,291,960 75	\$306,037,944 39	\$106,542,987 85	\$2,277,833,625 14		

CONDENSED COMPARATIVE
Of roads doing business in Wisconsin as reported to the

Name of Company.	Assets.			
	Cost of road and equipment.	Stocks, bonds and other permanent improvements	Supplies, cash and other current assets.	Profit and loss. (Deficit on June 30, 1906.)
1. Abbotsford & N. Eastern.	\$232,000 00		\$4,890 75	
2. Ahnapee & Western	542,045 04		3,502 10	\$100,494 97
3. Big Falls Railway Co.....	4,500 00		1,755 06	
4. Bayfield Transfer	3,420,954 90	\$1,324,600 00	4,785 89	630,430 42
5. Chi. Mil. & St. Paul.....	250,654,089 84	8,737,725 97	26,211,730 82	
6. Chicago & Northwestern.....	232,200,686 79	30,109,827 61	38,262,641 88	
7. Chicago, St. Paul, Minneapolis & Omaha	61,235,083 70	6,873,961 64	2,270,405 86	
8. Chicago, Burlington & Quincy	337,755,289 59	13,113,986 50	41,343,267 36	
9. Chi., L. Shore & Eastern.	4,386,570 63	2,389,119 32	2,791,596 68	
10. Illinois Central	107,578,360 74	156,196,081 69	10,270,350 30	
11. Chi., Har. & Geneva L.	326,597 38		7,156 22	18,499 08
12. Drummond & Southw'n.....	203,733 35		17,124 05	
13. Dul. S. S. & Atlantic.....	46,173,143 27	887,477 76	737,990 72	2,616,756 32
17. Dul. S. & W. Terminal Co.	2,781,775 62		381,265 76	
15. Great Northern	32,099,920 40	260,821,234 17	27,115,311 25	
16. Green Bay & Western.....	10,094,037 50	94,680 00	181,106 47	
17. Hawthorne, Nebagamon & Superior	138,884 29			
18. Hazelhurst & Southeast'n	103,762 78		5,407 74	
19. Iola & Northern	71,332 06		8,628 18	
20. Kewaunee, Green Bay & Western	1,130,725 00		67,711 99	
21. L. Sup. T. & T. Ry. Co.	348,599 43		18,860 06	
22. Marinette, Tomahawk & Western	533,974 16		21,763 16	36,787 58
23. Mpls., S. P. & S. Ste. M.	61,301,955 58	12,914,700 15	5,547,666 17	
24. Northern Pacific	323,475,942 85	128,821,441 72	37,484,730 68	
25. Northwestern Coal Ry. Co.	236,863 95	906,893 58	30,909 86	48,806 78
26. Oshkosh Transportation Co., operated by C. & N. W.	70,000 00		4,299 50	
27. Stanley, Merrill & Phillips	597,525 03	35,698 40	12,659 57	
28. Winona Bridge Ry. Co.....	789,304 66		22,632 07	
29. Wisconsin & Michigan	4,176,196 38		744,720 30	
30. Whitcomb & Morris	11,314 40			
31. Wisconsin Central	53,021,994 46	6,953,485 56	4,993,437 53	
32. Wisconsin Western	521,400 00		86,139 59	
33. Eastern Ry. Co. of Minn.	27,681,850 91	2,155,748 59	490,494 53	
34. Mineral Point & Northern	961,919 02	17,400 00	5,577 29	58,929 20
Total	1,564,862,336 71	332,344,062 66	199,133,395 34	\$8,527,728 40

GENERAL BALANCE SHEET.

Railroad Commission for the year ending June 30, 1906.

Total assets.	Liabilities.					No.
	Capital stock.	Funded debt.	Other liabilities.	Profit and loss. (Surplus on June 30, 1906.)	Total liabilities.	
\$236,890 75	\$120,000 00	\$112,000 00	\$1,776 11	\$3,114 64	\$236,890 75	1
646,045 11	.....	612,000 00	34,045 11	.....	646,045 11	2
6,255 06	1,000 00	4,000 00	.....	1,255 06	6,255 06	3
5,380,771 21	3,000,000 00	1,500,000 00	880,771 21	.....	5,380,771 21	4
285,593,546 63	107,838,300 00	121,849,500 00	22,115,748 87	33,789,997 76	285,593,546 63	5
300,573,156 28	102,345,700 53	164,214,000 00	34,013,455 74	.....	300,573,156 28	6
70,379,451 20	34,050,126 62	29,376,800 00	3,920,034 42	3,032,490 16	70,379,451 20	7
392,212,543 45	110,839,100 00	174,172,000 00	107,201,443 45	.....	392,212,543 45	8
9,567,286 63	650,000 00	3,230,000 00	4,380,457 67	1,306,828 93	9,567,286 63	9
274,044,792 73	105,040,000 00	144,894,275 03	19,635,730 69	4,474,787 04	274,044,792 73	10
345,096 46	15,000 00	125,000 00	70,096 46	.....	345,096 46	11
228,013 62	10,000 00	50,000 00	168,013 62	.....	228,013 62	12
50,415,368 07	22,000,000 00	23,406,493 19	5,088,874 88	.....	50,415,368 07	13
3,163,041 38	2,000,000 00	500,000 00	628,304 15	34,737 23	3,163,041 38	14
320,036,465 82	149,546,050 00	107,612,600 00	39,284,650 01	23,593,165 81	320,036,465 82	15
10,369,823 97	2,500,000 00	7,600,000 00	92,284 09	177,539 88	10,369,823 97	16
138,884 29	50,000 00	.....	64,422 52	24,461 77	138,884 29	17
109,170 52	100,000 00	.....	.....	9,170 52	109,170 52	18
79,960 24	71,400 00	.....	979 41	7,580 83	79,960 24	19
1,198,436 99	664,950 00	408,000 00	78,374 82	47,112 17	1,198,436 99	20
367,459 49	154,200 00	195,000 00	18,259 49	.....	367,459 49	21
592,524 90	161,500 00	.....	431,024 90	.....	592,524 90	22
79,764,321 90	21,000,000 00	50,155,184 91	3,196,027 41	5,413,109 58	79,764,321 90	23
489,782,115 25	155,000,000 00	186,345,812 68	128,499,323 17	19,936,979 40	489,782,115 25	24
1,223,474 17	1,000,000 00	220,000 00	3,472 17	.....	1,223,474 17	25
74,299 50	70,000 00	.....	.....	4,299 50	74,299 50	26
645,883 00	10,000 00	500,000 00	36,362 83	9,520 17	645,883 00	27
811,936 73	400,000 00	384,000 00	7,877 41	20,059 32	811,936 73	28
4,920,916 68	951,500 00	2,401,000 00	1,554,996 97	13,419 71	4,920,916 68	29
11,314 40	10,000 00	.....	.....	1,314 40	11,314 40	30
64,968,917 55	30,000,000 00	30,946,485 00	3,159,272 56	863,159 99	64,968,917 55	31
607,539 59	521,400 00	.....	.....	86,139 59	607,539 59	32
30,328,094 03	16,000,000 00	9,700,000 00	4,070,153 73	557,940 30	30,328,094 03	33
1,043,725 51	50,000 00	450,000 00	43,725 51	.....	1,043,725 51	34
\$2,399,867,523 11	\$863,895,227 15	\$1,600,964,150 78	\$378,599,961 39	\$93,408,183 79	\$2,399,867,523 11	

EMPLOYES AND SALARIES,

Employes, and salaries paid by the several railways doing business in Wisconsin, as

Name of Company.	General Officers.				Other Officers and General Office Clerks.			
	Number.	Number days worked.	Total yearly Compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation	Average daily compensation.
			\$	\$			\$	\$
1. Abbotsford & Northeastern...					2	180	720 00	4 00
2. Ahnapee & Western.....	2	150	600 00	4 00	2	462	1,555 00	2 50
3. Chicago, Milwaukee & St. P....	12	4,226	94,514 44	22 36	170	53,872	156,302 90	2 91
4. Chicago & North Western.....					4	939	11,316 62	12 05
5. Chicago, St. P., Min & Omaha	2	730	6,999 95	9 59	7	2,555	8,794 22	3 44
6. Chicago, Burlington & Quincy	2	730	5,727 80	7 85	4	1,252	3,665 79	3 93
7. Chicago, Lake Shore & E.....	5	53	438 60	8 27	64	728	1,035 37	1 42
8. Chicago & Lake Superior.....								
9. Drummond & S. W.....					1	312	20 000	64
10. Duluth, South Shore & A.....								
11. Fairchild & Northeastern.....	5	936	1,900 00	3 04				
12. Great Northern.....						356	3,447 07	9 68
13. Green Bay & Western.....	5	1,560	11,400 00	7 31	12	2,739	7,145 37	2 61
14. Hawthorne, Neb. & Sup'r.....								
15. Hazelhurst & S. E.....								
16. Illinois Central.....					2	730	1,500 00	2 05
17. Iola & Northern.....								
18. Kewaunee, Green Bay & W....	5	1,565	3,800 00	2 43	4	1,156	1,970 00	1 70
19. Lake Superior T. & T. Ry.....	2	730	660 00	90	3	1,383	4,021 69	2 91
20. Marinette, Tomahawk & W....	1	365	1,800 00	4 93	2	625	1,155 00	1 85
21. Min., St. P. & S. S. M.....	2	692	10,461 07	15 12	36	12,068	32,059 08	2 66
22. Northern Pacific.....					1	198	398 70	2 01
23. N. W. Coal Ry. Co.....	1	150	900 00	6 00	2	336	780 00	2 30
24. Stanley, Merrill & Phillips....	6	1,872	3,800 00	2 03	1	156	500 00	3 20
25. Whitcomb & Morris.....								
26. Wisconsin Central.....	11	3,399	49,941 91	14 69	215	61,219	188,387 09	3 08
27. Chippewa Valley & Northern..								
28. Bayfield, Lake Shore & W....					1	65	312 50	4 80
Total	61	17,158	192,943 78	11 21	5 34	141,331	424,866 40	3 00

WISCONSIN, 1905.

reported to the Railroad Commission for the year ending June 30, 1905, for Wisconsin.

Station Agents.				Other Station Men.				Enginemen.				No.
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	
		\$	\$			\$	\$			\$	\$	
1	313	2,730 00	2 33					1	320	1,045 95	3 27	1
4	1,228	2,100 00	1 71					2	451	1,781 95	3 95	2
341	106,600	190,076 63	1 71	1,026	602	880 01	1 46	375	130,445	504,711 58	3 87	3
257	76,189	177,284 51	2 36	991	321,037	506,631 89	1 58	489	146,483	584,378 25	3 99	4
82	25,666	60,594 69	2 90	99	30,987	59,902 04	1 93	139	43,597	193,074 86	4 44	5
29	10,585	20,153 49	1 80	25	7,825	13,938 00	1 24	49	17,885	72,839 29	4 07	6
1	365	1,020 00	2 21	5	1,816	2,253 35	1 24	7	2,326	6,561,65	2 83	7
2	365	450 00	1 23					1	313	600 00	1 55	8
								2	366	918 61	2 51	9
7	2,201	5,020 25	2 28	13	4,507	7,940 88	1 76	11	4,352	16,481 20	3 79	10
2	626	964 04	1 54					2	722	1,610 06	2 23	11
6	2,414	6,782 93	2 81	158	18,121	34,218 26	1 89	18	2,846	11,897 93	4 18	12
30	9,143	15,996 00	1 75	18	4,844	6,780 78	1 40	17	5,160	19,435 04	3 77	13
4	1,002	2,055 33	2 05					4	1,262	3,888 97	3 08	14
2	225	477 46	2 12					3	928	2,266 00	2 44	15
15	5,475	9,700 00	1 77	2	730	1,145 00	1 57	6	1,673	7,255 46	4 34	16
1	312	720 00	2 31	1	312	31 20	10	1	312	966 17	3 10	17
3	1,033	1,860 00	1 75	8	2,360	2,949 57	1 25	3	740	2,590 59	3 50	18
2	365	1,200 00	3 29	4	1,491	2,780 00	1 86	3	1,578	5,522 89	3 50	19
2	455	936 40	2 06	1	315	502 67	1 60	2	732	2,194 56	3 00	20
41	15,047	27,283 76	1 81	21	7,700	8,527 56	1 11	38	13,727	54,985 80	4 00	21
9	3,167	8,830 46	2 79	22	9,311	16,689 78	1 79	12	5,121	23,102 44	4 51	22
				1	237	414 58	1 75	2	498	1,708 46	3 43	23
2	624	1,140 00	1 83	2	624	600 00	1 00	16	4,9 2	12,480 00	2 50	24
								1	313	720 00	2 30	25
14	43,133	95,440 02	2 21	178	91,743	155,379 43	1 69	167	53,265	205,458 04	3 86	26
								1	323	1,093 07	3 39	27
1	305	742 92	2 44					2	429	1,287 00	3 00	28
957	306,865	631,558 89	2 06	2577	785,946	1,293,433 85	1 64	1374	441,064	1740,856 42	3 94	

EMPLOYEES AND SALARIES.

Name of Company.	Firemen.				Conductors.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number o. days worked	Total yearly compensation.	Average daily compensation.
1. Abbotsford & N. E.....	1	320	615 20	1 92	1	321	617 22	1 92
2. Ahnapee & Western.....	2	451	957 54	2 12	2	351	825 14	2 35
3. Chicago, Milw. & St. Paul	362	123,302	292,744 52	2 37	261	81,762	314,526 51	3 35
4. Chicago & Northwestern.	558	167,455	413,134 57	2 47	314	91,709	369,715 80	3 43
5. Chicago, St. P., M. & O...	139	43,507	121,045 85	2 78	98	30,674	119,585 09	3 30
6. Chicago, Burlington & Q.	52	18,990	43,663 13	2 30	41	14,965	49,355 08	3 30
7. Chicago, Lake Shore & E.	5	1,476	2,841 50	1 93	...	...	...	...
8. Chicago & Lake Superior.	...	...	...	...	1	313	480 00	1 53
9. Drummond & S. W.....	2	357	596 11	1 67	...	...	...	...
10. Duluth, S. S. & A.....	11	4,371	10,154 14	2 32	9	3,499	11,460 48	2 28
11. Fairchild & N. E.....	2	708	1,295 64	1 76	1	312	898 56	2 88
12. Great Northern.....	19	2,962	7,672 50	2 59	34	7,114	24,685 44	4 77
13. Green Bay & Western....	21	6,835	15,530 18	2 27	13	4,180	11,496 93	2 75
14. Hawthorne, Neb. & Sup'r.	4	1,119	2,239 88	2 00	4	1,237	3,712 92	2 00
15. Hazelhurst & S. E.....	3	928	1,622 25	1 75	1	307	690 73	2 25
16. Illinois Central.....	6	1,671	4,247 61	2 54	5	1,941	7,176 91	3 70
17. Iola & Northern.....	1	312	540 00	1 73	...	...	...	...
18. Kewaunee, G. B. & W....	3	746	1,492 38	2 00	4	654	1,800 00	2 75
19. Lake Superior T. & T....	3	1,579	3,316 26	2 10	...	...	...	...
20. Mar., Tomahawk & W....	2	733	1,446 66	2 00	2	796	2,389 80	3 00
21. Mpls. St. P., & S. Ste. M.	38	13,727	34,376 89	2 50	32	11,075	39,728 97	3 59
22. Northern Pacific.....	12	5,121	12,882 67	2 52	7	3,501	13,061 91	3 73
23. N. W. Coal Ry.....	1	292	613 15	2 10	1	340	1,119 35	3 29
24. Stanley, Merrill & P.....	...	...	...	...	...	...	...	...
25. Whitcomb & Morris.....	1	313	540 00	1 72	...	...	...	...
26. Wisconsin Central.....	170	52,988	129,362 44	2 44	117	34,747	127,209 89	3 66
27. Chippewa Valley & Nor...	1	316	691 88	2 19	1	320	974 19	3 05
28. Bayfield, Lake Shore & W.	2	451	834 35	1 85	...	...	...	...
Total.....	1,421	451,030	1,104,457 30	2 45	949	290,118	1,101,410 92	3 79

WISCONSIN, 1905—Continued.

Other Trainmen.				Machinists.				Carpenters.				No.
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	
		\$	\$			\$	\$			\$	\$	
1	261	401 50	1 54	...	...	...	...	1	21	52 15	2 48
2	621	1,291 91	2 00	...	...	...	...	1	350	629 30	1 80
543	169,976	376,145 82	2 21	168	44,626	148,331 29	3 32	228	64,740	134,032 27	2 07	
746	211,588	504,744 67	2 39	238	65,104	162,571 01	2 50	495	133,025	274,115 76	2 06	
225	70,425	166,568 08	2 37	76	23,788	51,146 78	2 15	230	71,990	141,755 23	1 97	
67	24,455	50,773 40	2 08	52	16,276	38,232 61	2 35	76	23,788	47,574 19	2 00	
...	...	...	...	...	...	...	...	2	668	1,532 50	2 29
...	
...	316	540 93	1 71	1	312	1,515 00	4 86	1	231	475 05	2 06	
...	9,245	18,961 33	2 05	...	...	...	...	8	2,476	5,988 95	2 42
...	799	1,288 83	1 72	...	275	1,028 25	3 83	...	...	...	...
61	11,465	31,412 76	2 74	51	8,128	27,798 91	3 42	29	5,994	15,678 59	2 66	
21	6,595	11,872 53	1 80	13	4,202	11,762 54	2 80	11	3,378	7,092 40	2 10	
6	1,751	3,502 90	2 00	...	...	...	...	...	...	...	...
2	589	1,088 29	1 87	...	...	...	...	...	...	...	...
8	2,857	6,519 95	2 39	...	...	...	...	8	2,108	5,220 20	2 48
...	
...	1,101	1,981 20	1 80	...	...	...	...	...	...	...	...
4	5,101	15,273 18	2 99	1	289	997 36	3 45	...	...	...	...
10	802	1,202 91	1 50	...	...	...	...	3	919	2,054 97	2 24
3	22,740	51,128 90	2 25	...	...	...	...	19	7,327	17,232 40	2 35
64	8,141	20,171 95	2 48	...	...	...	...	11	3,581	9,204 43	2 57
16	582	1,620 47	2 78	1	173	429 22	2 54	...	...	...	...
2	3,120	5,400 00	1 73	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...
293	103,463	253,442 14	2 45	118	32,163	89,573 74	2 78	100	38,425	85,893 70	2 24	
...	
...	
2,118	655,987	1,525,633 65	2 32	720	195,336	533,386 71	2 71	1,223	358,921	748,532 09	2 08	

EMPLOYEES AND SALARIES,

Name of Company.	Other Shopmen.				Section Foremen.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & N. E.	1	292		\$	2	624	\$1,080 00	1 73
2. Ahnapee & Western	1	292	\$631 40	2 16	5	1,512	2,360 00	1 53
3. Chicago, Milwaukee & St. P.	1,310	375,784	708,363 23	1 88	289	90,424	144,017 39	1 56
4. Chicago & Northwestern ..	598	170,272	312,940 69	1 84	310	97,656	181,645 78	1 86
5. Chicago, St. P., M., & O.	110	34,430	66,822 92	1 94	123	38,499	72,958 68	1 90
6. Chicago, Burlington & Q.	133	42,568	83,577 19	1 96	45	16,425	28,893 89	1 76
7. Chicago, Lake Shore & E.	6	1,854	3,522 82	1 90	1	365	720 00	1 97
8. Chicago & Lake Superior ..	3	632	1,190 55	1 88	1	313	456 00	1 50
9. Drummond & Southwestern ..	5	1,850	3,223 78	1 74	21	7,733	12,769 80	1 65
10. Duluth, S. S., & A.	5	1,850	3,223 78	1 74	21	7,733	12,769 80	1 65
11. Fairchild & Northeastern ..	408	87,734	167,571 85	1 91	2	595	981 75	1 65
12. Great Northern	40	12,672	20,907 80	1 65	12	4,269	7,172 12	1 68
13. Green Bay & Western	5	1,610	3,866 22	2 40	38	13,240	19,860 00	1 50
14. Hawthorne, Neb., & S.	5	1,610	3,866 22	2 40	1	300	690 00	1 30
15. Hazellhurst & Southeastern ..	4	1,003	2,207 68	2 20	1	255	441 79	1 73
16. Illinois Central	2	650	1,140 00	1 75	12	4,147	6,153 24	1 48
17. Iowa & Northern	1	310	387 24	1 25	6	2,080	3,120 00	1 50
18. Kewanee, G. B., & Western ..	5	1,967	4,120 96	2 10	1	355	720 00	1 97
19. Lake Superior T. & T.	5	1,967	4,120 96	2 10	5	1,039	1,798 00	1 73
20. Marinette, Tonahawk & W.	15	6,629	10,104 54	1 69	21	7,768	13,104 54	1 69
21. M., St. P. & S. Ste M.	15	6,629	10,104 54	1 69	46	17,477	28,425 98	1 63
22. Northern Pacific	6	1,872	3,744 00	2 00	5	1,560	2,730 00	1 75
23. N. W. Coal Ry.	6	1,872	3,744 00	2 00	1	66	127 71	1 90
24. Stanley, Merrill & Phillips ..	379	113,282	196,726 29	1 74	1	300	525 00	1 75
25. Whitcomb & Morris	379	113,282	196,726 29	1 74	143	44,341	70,441 67	1 59
26. Wisconsin Central	379	113,282	196,726 29	1 74	143	44,341	70,441 67	1 59
27. Chippewa Valley & North Bayfield, Lake Shore & W.	1	320	600 00	1 87	1	320	600 00	1 87
28. Total	3,033	813,101	\$1,590,661 92	1 95	1,095	352,496	\$601,782 81	1 71

WISCONSIN, 1905.—Continued.

Other Trackmen.				Switchmen, Flagmen and Watchmen.				Telegraph Operators and Dispatchers.				No.
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	
		\$	\$			\$	\$			\$	\$	
8	1,851	\$2,499 53	1 35	1	365	\$480 00	1 31	.....	.....	.....	.....	1
12	3,909	5,863 78	1 50	1	365	424 14	1 16	.....	.....	.....	.....	2
913	285,769	387,181 42	1 35	498	156,011	368,984 75	2 37	172	53,919	\$124,253 47	2 30	3
3,223	594,700	860,309 77	1 45	582	167,768	383,555 31	2 29	214	69,173	156,936 50	2 27	4
659	206,267	289,638 8	1 40	84	26,292	74,539 32	2 84	121	37,873	81,297 63	2 15	5
477	149,301	203,034 59	1 36	10	3,650	7,337 19	2 01	27	9,855	21,401 81	2 17	6
13	4,078	5,983 20	1 47	19	5,965	16,211 90	2 72	.....	.....	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
8	2,370	3,247 84	1 26	1	108	153 27	1 42	.....	.....	.....	.....	9
61	19,615	29,166 52	1 49	2	638	952 00	1 49	9	3,355	5,810 35	1 73	10
12	3,874	5,811 00	1 50	1	365	547 00	1 50	.....	.....	.....	.....	11
407	29,026	42,087 56	1 45	12	4,633	7,227 72	1 56	28	7,146	21,293 98	2 98	12
98	22,422	28,027 65	1 25	14	4,578	7,783 50	1 70	4	1,215	2,430 00	2 00	13
5	1,445	2,529 20	1 75	3	1,003	1,855 38	1 85	.....	.....	.....	.....	14
1	184	294 72	1 60	1	90	156 14	1 73	.....	.....	.....	.....	15
48	11,051	15,084 19	1 36	.....	.....	.....	.....	2	1,396	3,045 00	2 18	16
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
18	4,284	5,569 08	1 30	1	312	51 165	1 64	.....	.....	.....	.....	18
9	2,510	3,616 88	1 44	2	626	1,001 65	1 60	1	300	600 00	2 00	19
25	7,285	10,928 07	1 50	3	2,187	3,450 10	1 57	1	365	660 00	1 81	20
234	55,890	76,804 59	1 37	.....	.....	.....	.....	29	10,424	19,540 79	1 87	21
149	27,533	38,375 05	1 39	2	610	616 13	1 01	7	2,946	5,595 37	1 90	22
4	638	937 64	1 47	.....	.....	.....	.....	.....	.....	.....	.....	23
50	15,620	23,430 00	1 50	.....	.....	.....	.....	.....	.....	.....	.....	24
1	200	450 00	1 50	.....	.....	.....	.....	.....	.....	.....	.....	25
557	134,176	176,832 64	1 32	71	24,280	29,907 16	1 23	84	31,512	62,205 79	1 97	26
4	1,025	1,348 56	1 32	.....	.....	.....	.....	.....	.....	.....	.....	27
10	2,934	5,462 57	1 86	.....	.....	.....	.....	.....	.....	.....	.....	28
7,006	1,538,257	\$2,224,504 90	1 40	1,320	403,340	\$912,491 76	2 26	729	229,479	505,070 69	2 20	.....

EMPLOYEES AND SALARIES,

Name of Company.	All Other Employees and Laborers.				General Administration.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern	1	313	\$948 48	3 03	2	180	\$720 00	4 00
2. Ahapee & Western	1,770	554,125	1,266,576 04	2 29	182	612	1,755 00	2 87
3. Chicago, Milw. & St. P.	1,179	270,432	559,465 75	2 07	2	626	2,750 00	4 39
4. Chicago & Northwestern	200	62,600	122,211 14	1 95	*			
5. C. St. P., M. & O.	100	31,300	61,879 91	1 98	6	1,982	9,383 59	4 74
6. Chicago, Burlington & Q.					70	1,146	2,253 87	1 97
8. Chicago & Lake Shore & E.								
9. Duluth, So. S. & Atlantic.	7	2,617	5,542 75	2 09				
10. Drummond & Southwest'n					6	312	200 00	1 64
11. Fairchild & Northeastern	1	63	94 50	1 50	5	936	1,900 00	3 04
12. Great Northern	197	62,026	147,000 65	2 37	1	3 6	3,447 07	3 68
13. Green Bay & Western	3	6,158	8,855 20	1 44	6	1,872	12,600 00	6 73
14. Hawthorne, Neb. & Sup.								
15. Hazelhurst & Southeast'rn	1	196	393 66	2 01				
16. Illinois Central	12	4,490	10,551 07	2 35	1	365	600 00	1 64
17. Iola & Northern	1	18	27 76	1 54				
18. Kewaunee, G. B. & W.	12	1,251	1,794 33	1 60	6	1,865	4,400 00	2 37
19. Lake Superior T. & T.	1	365	500 00	1 37	6	2,478	5,181 69	2 09
20. Mariette, Tomahawk & W					3	990	2,955 00	2 98
21. M., St. P. & S. Ste M	56	25,850	50,003 00	1 93	3	12,780	42,520 15	3 33
22. Northern Pacific	14	6,559	11,209 14	1 71	4	3,331	4,908 23	1 47
23. N. W. Coal Ry.	1	365	639 00	1 75	2	450	1,500 00	3 33
24. Stanley, Merrill & Phillips	15	4,680	7,020 00	1 50	7	2,028	4,300 00	2 12
25. Whitcomb & Morris								
26. Wisconsin Central	670	142,495	241,174 53	1 69	192	54,624	171,003 78	3 15
27. Bayfield, Lake Shore & W.					1	65	312 50	4 80
28. Chippewa Val. & Northern	1	127	207 48	1 64				
Total	4,277	\$1,176,063	\$2,496,094 41	2 12	†539	145,076	\$524,412 31	3 56

* Not reported.

† Excluding C, St. P., M. & O. Ry, not reported.

REPORT OF THE RAILROAD COMMISSION.

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WISCONSIN, 1905.—Continued.

Maintenance of Way and Structures.				Maintenance of Equipment.				Conducting Transportation.				
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average yearly compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.
11	2,496	\$3,631	68	1	45	.....	.....	5	1,900	3,889	87	2
19	8,114	9,802	56	1	60	.....	.....	15	4,069	8,260	63	2
2,426	762,634	1,220,214	56	1	60	1,488	292	4,342	1,328,218	3,256,902	23	2
4,853	1,000,348	1,675,113	84	1	67	708	198,755	4,660	1,347,152	3,299,970	32	4
631	199,947	300,129	31	1	50	.....	.....	*	.....	.....	.....	5
14	4,443	6,703	20	1	51	.....	.....	33	11,942	28,848	40	2
1	313	456	00	1	50	.....	.....	37	991	1,530	00	1
90	29,824	47,923	27	1	61	.....	.....	94	34,815	82,323	38	2
9	2,853	3,750	07	1	31	.....	.....	7	1,147	2,208	42	1
16	4,897	7,484	7	1	52	.....	.....	9	3,160	6,057	13	1
448	39,189	64,938	27	1	66	.....	.....	533	118,727	292,222	17	2
167	41,376	58,483	60	1	41	.....	.....	149	44,974	97,270	33	2
6	1,745	3,219	20	1	84	.....	.....	28	7,374	17,255	38	2
73	439	736	51	1	68	.....	.....	12	3,061	6,300	87	2
1	19,662	31,014	83	1	58	.....	.....	52	18,242	46,283	80	2
28	310	487	74	1	25	.....	.....	6	1,578	2,796	78	1
10	6,818	9,324	68	1	37	.....	.....	29	8,446	15,645	39	1
33	2,875	4,335	88	1	51	.....	.....	27	12,666	32,202	43	2
317	9,126	13,928	98	1	53	.....	.....	9	3,031	7,470	09	2
190	92,071	144,887	57	1	57	.....	.....	276	98,599	245,197	65	2
70	42,498	68,479	18	1	11	.....	.....	88	38,057	101,287	01	2
2	740	1,245	35	1	68	.....	.....	30	2,811	6,513	14	2
1,017	21,860	33,180	00	1	52	.....	.....	8	9,360	19,620	00	2
11	600	975	00	1	62	.....	.....	2	626	1,260	00	2
5	229,530	355,933	17	1	55	.....	.....	1,534	521,479	1,233,406	59	2
	3,254	6,062	57	1	85	.....	.....	7	1,586	3,880	27	2
	1,152	1,556	04	1	35	.....	.....	3	959	2,759	74	2
10,461	2,327,414	\$4,074,330	80	1	61	†3697	1,084,462	†12301	3,743,611	\$9,121,490	80	2
												43

* Not reported.

† Excluding C, St. P., M. & O., not reported.

EMPLOYEES AND SALARIES.

Name of Company.	Total, Excluding General Officers.			
	Number.	Total number of days worked.	Total daily compensation.	Average daily compensation.
Abbotsford & Northeastern	19	4,576	\$8,241 55	\$1 80
Ahnapee & Western	39	11,087	20,449 64	1 84
Chicago, Milwaukee & St. Paul	8,438	2,616,620	5,719,388 15	2 19
Chicago & Northwestern	10,228	2,546,881	5,421,854 14	2 13
Chicago, St. Paul, Minneapolis & Omaha	2,394	749,790	1,636,935 34	2 18
Chicago, Burlington & Quincy	1,192	389,840	752,047 52	1 93
Chicago, Lake Shore & Eastern	129	20,053	42,400 89	2 14
Chicago & Lake Superior	4	1,304	1,986 00	1 51
Drummond & Southwestern	22	5,487	9,339 59	1 70
Duluth, South Shore & Atlantic	189	66,489	133,472 43	2 01
Fairchild & Northeastern	31	9,275	16,422 13	1 77
Great Northern	1,441	254,134	555,978 27	2 19
Green Bay & Western	393	108,918	206,375 72	1 89
Hawthorne, Nebegamon & Superior	39	10,729	24,340 80	2 26
Hazelhurst & Southeastern	15	3,696	7,431 04	1 93
Illinois Central	130	39,272	80,106 31	2 04
Iola & Northern	7	1,888	3,184 52	1 69
Kewaukee, Green Bay & Western	73	18,579	31,668 80	1 70
Lake Superior Terminal & Transfer	50	20,275	46,839 32	2 31
Marinette, Tomahawk & Western	48	14,066	26,409 04	1 88
Minneapolis, St. Paul & Ste. Marie	659	214,354	451,174 93	2 11
Northern Pacific	302	90,340	188,701 88	2 09
Northwestern Coal Ry. Co	19	4,407	10,506 78	2 38
Stanley, Merrill & Phillips	113	35,120	60,844 00	1 86
Whitcomb & Morris	4	1,226	2,235 00	1 82
Wisconsin Central	3,387	1,004,631	2,157,376 48	2 15
Bayfield, Lake Shore & Western	19	4,905	10,255 34	2 09
Chippewa Valley & Northern	8	2,111	4,815 78	2 04
Total	20,392	8,250,353	\$17,630,881 39	\$2 13

WISCONSIN, 1905—Continued.

Name of Company.	Total, Including General Officers.			
	Number.	Total number of days worked.	Total daily compensation.	Average daily compensation.
Abbotsford & Northeastern	19	4,576	\$8,241 55	\$1 80
Ahnapee & Western	37	10,937	19,849 64	1 81
Chicago, Milwaukee & St. Paul	8,426	2,612,394	5,624,873 71	2 15
Chicago & Northwestern	10,228	2,546,881	5,421,954 14	2 13
Chicago, St. Paul, Minneapolis & Omaha	2,392	749,060	1,629,935 38	2 18
Chicago, Burlington & Quincy	1,190	389,110	746,319 72	1 92
Chicago, Lake Shore & Eastern	124	20,000	42,462 29	2 12
Chicago & Lake Superior	4	1,304	1,986 00	1 51
Drummond & Southwestern	22	5,487	9,339 59	1 70
Duluth, South Shore & Atlantic	189	66,489	133,472 43	2 01
Fairchild & Northeastern	26	8,339	14,522 13	1 55
Great Northern	1,441	254,134	555,978 27	2 19
Green Bay & Western	388	107,358	194,975 72	1 82
Hawthorne, Nebagamou & Superior	39	10,729	29,340 80	2 26
Hazellhurst & Southeastern	15	3,696	7,451 04	2 01
Illinois Central	130	39,272	80,106 31	2 04
Iola & Northern	7	1,885	3,184 52	1 69
Kewaunee, Green Bay & Western	68	17,014	27,868 80	1 64
Lake Superior Terminal & Transfer	48	19,545	46,179 32	2 36
Marinette, Tomahawk & Western	49	13,701	24,609 04	1 80
Minneapolis, St. Paul & Sault Ste. Marie	657	213,662	440,713 86	2 06
Northern Pacific	302	90,340	188,701 88	2 09
Northwestern Coal Ry. Co.	18	4,257	9,606 78	2 25
Stanley, Merrill & Phillips	107	33,248	57,044 00	1 72
Whitcomb & Morris	4	1,226	2,235 00	1 82
Wisconsin Central	3,376	1,001,232	2,107,434 57	2 10
Bayfield, Lake Shore & Western	19	4,905	10,255 34	2 09
Chippewa Valley & Northern	8	2,111	4,315 78	2 04
Total	29,331	8,232,895	\$17,437,937 61	2 11

EMPLOYEES AND SALARIES,

Employees and salaries paid by the several railways doing business in Wisconsin as

Name of Company.	General Officers.				Other Officers and General Office Clerks.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern.....	2	150	600 00	4 00	2	180	775 00	4 31
2. Ahnapee & Western.....	12	1,500	6,000 00	5 00	12	1,360	5,460 00	4 55
3. Chicago, Milwaukee & St. P.....	11	4,129	87,778 98	21 26	179	56,633	162,440 30	11 85
4. Chicago & Northwestern.....	3	365	1,460 00	4 82	3	939	11,266 62	12 00
5. Chi., St. P., Minneap. & O.....	3	1,095	10,599 97	9 68	16	5,840	15,250 11	9 61
6. Chicago, Burlington & Q.....	12	730	5,975 20	8 19	11	3,443	8,441 88	7 65
7. Chicago, Lake Shore & E.....	5	40	450 07	11 27	79	993	1,729 48	1 52
8. Chicago & Lake Superior.....	1	365	1,200 00	3 28	3	1,095	2,300 00	2 10
9. Illinois Central.....	1	183	600 00	3 28	1	182	310 01	1 70
10. Chippewa River & Northern.....	1	183	600 00	3 28	1	312	200 00	1 64
11. Chi., Harvard & Geneva Lake.....	1	183	600 00	3 28	1	312	200 00	1 64
12. Drummond & Southwestern.....	1	183	600 00	3 28	1	312	200 00	1 64
13. Duluth, So. Shore & Atlantic.....	1	183	600 00	3 28	1	312	200 00	1 64
14. Fairchild & Northeastern.....	5	936	1,925 00	2 09	1	400	3,868 52	9 68
15. Great Northern.....	5	1,560	11,400 00	7 31	12	2,831	6,992 67	5 65
16. Green Bay & Western.....	5	1,560	11,400 00	7 31	12	2,831	6,992 67	5 65
17. Hawthorne, Nebagamon & Su.....	1	183	600 00	3 28	1	312	200 00	1 64
18. Hazelhurst & Southeastern.....	1	183	600 00	3 28	1	312	200 00	1 64
19. Iola & Northern.....	1	183	600 00	3 28	1	312	200 00	1 64
20. Kewaunee, Green Bay & W.....	5	1,565	3,800 00	2 43	4	1,162	1,930 00	1 80
21. Lake Sup. Term. & Trans. Co.....	12	730	660 00	90	4	1,485	4,128 42	3 35
22. Marinette, Tomahawk & W.....	1	365	1,800 00	4 93	2	625	1,250 00	2 00
23. Minneap., St. P. & S't Ste. M.....	2	649	11,874 13	18 30	35	11,519	29,212 13	4 75
24. Northern Pacific.....	1	150	900 00	6 00	2	159	300 31	1 89
25. Northwestern Coal Ry. Co.....	1	150	900 00	6 00	2	336	780 00	3 50
26. Stanley, Merrill & Phillips.....	4	624	3,000 00	4 81	3	936	3,300 00	3 74
27. Whitcomb & Morris.....	1	200	200 00	1 00	1	200	200 00	1 00
28. Wisconsin Central.....	12	3,696	62,605 30	16 94	203	59,698	175,996 16	4 46
29. Mineral Point & Northern.....	4	1,240	5,500 00	4 44	2	620	870 00	1 43
Total (29 Roads Reporting)....	67	18,407	210,868 65	11 45	565	149,805	432,751 61	2 89

EMPLOYEES AND SALARIES,

Name of Company.	Firemen.				Conductors.			
	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & N. E.	1	331	\$634 98	1 92	1	335	\$731 58	2 18
2. Ahnappe & Western.	2	402	864 20	2 15	1	351	720 00	2 05
3. Chicago, M. & St. P.	378	127,631	304,706 39	2 39	285	89,206	312,191 48	3 84
4. Chi. & Northwestern.	566	174,967	437,737 44	2 50	344	103,290	397,962 34	3 85
5. Chicago St. P., M. & O.	150	46,950	134,697 14	2 86	105	32,865	132,751 08	4 04
6. Chicago, B. & Q.	48	17,520	37,589 39	2 15	33	12,045	39,237 70	3 26
7. Chicago, L. S. & E.	4	1,630	3,178 95	1 95	.....	.....	.....	.....
8. Chicago & Lake Superior	.....	.....	.....	.....	1	313	480 00	1 55
9. Illinois Central.	5	1,594	4,156 17	2 61	5	1,891	7,146 55	3 78
10. Chip. River Northern.	1	300	525 00	1 75	1	300	900 00	3 00
11. Chi., H. & G. L.	2	365	575 87	1 57	5	733	1,466 85	2 00
12. Drummond & S. W. ....	.....	608	1,059 60	1 74	.....	.....	.....	.....
13. Duluth, S. S. & A.	12	4,731	10,924 38	2 31	10	3,805	12,370 21	3 25
14. Fairchild & Northeastern	2	409	818 11	2 00	1	326	925 00	2 83
15. Great Northern.	24	4,012	10,510 69	2 62	37	8,687	30,145 24	3 47
16. Green Bay & Western.	21	6,789	15,566 85	2 30	13	4,263	11,723 04	2 75
17. Hawthorne, N. & S.	4	1,318	2,636 03	2 00	3	982	2,945 84	3 00
18. Hazelhurst & S. E.	3	340	596 21	1 75	1	281	633 29	2 25
19. Iola & Northern.	1	312	540 00	1 73	.....	.....	.....	.....
20. Kewaunee, G. & W.	2	718	1,650 45	2 30	2	654	1,800 00	2 75
21. L. Sup. T. & T. Ry. Co.	5	2,104	4,419 06	2 10	.....	.....	.....	.....
22. Marinette, T. & W.	2	756	1,512 00	2 00	2	720	2,160 00	3 00
23. Min'ap. St. P. & S Ste. M.	42	14,110	36,146 83	2 56	31	11,262	41,110 35	3 65
24. Northern Pacific.	15	5,858	14,991 24	2 56	7	2,973	11,319 43	3 81
25. N. W. Coal Ry. Co.	1	308	618 86	2 11	1	275	1,203 29	4 38
26. Stanley, M. & P.	18	6,590	13,935 00	2 11	.....	.....	.....	.....
27. Whitcomb & Morris.	1	313	540 00	1 70	.....	.....	.....	.....
28. Wisconsin Central.	171	55,224	133,929 43	2 43	135	36,858	134,439 00	3 65
29. Mineral Point & Northern	2	626	1,288 78	2 05	2	639	1,699 86	2 66
Total (29 roads reporting)	1,485	476,796	\$1,176,379 05	2 47	1,026	313,054	\$1,176,062 72	3 76

WISCONSIN, 1906—Continued.

Other Trainmen.				Machinists.				Carpenters.				No.
Number.	Number days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.	
1	353	\$609 66	1 72	.....	.....	.....	.....	1	52	\$107 12	2 06	1
2	702	1,260 00	1 79	.....	.....	.....	.....	1	350	700 00	2 00	2
590	184,631	405,200 3	2 20	154	52,032	\$179,071 96	3 44	263	74,182	167,334 62	2 25	3
774	240,071	560,886 31	2 34	210	70,425	200,592 94	2 85	446	137,094	299,170 60	2 18	4
227	71,051	180,388 24	2 54	80	23,040	53,346 03	2 13	257	80,441	153,581 39	1 91	5
29	10,585	25,095 72	2 37	33	10,329	27,107 09	2 62	45	14,088	32,349 85	2 30	6
.....	.....	.....	.....	.....	.....	.....	.....	2	744	1,666 80	2 24	7
8	2,916	7,261 40	2 49	.....	.....	.....	.....	11	2,070	4,781 11	2 31	8
1	300	435 00	1 45	.....	.....	.....	.....	.....	.....	.....	.....	9
4	615	1,231 00	2 00	2	200	450 00	2 25	.....	.....	.....	.....	10
3	736	1,315 60	1 79	1	312	1,591 00	5 10	.....	.....	.....	.....	11
27	9,707	20,318 87	2 09	.....	.....	.....	.....	11	3,373	7,782 95	2 31	12
1	319	564 85	1 77	.....	.....	.....	.....	.....	.....	.....	.....	13
107	13,983	38,174 21	2 73	54	15,191	52,407 46	3 55	7	6,638	17,590 81	2 65	14
20	6,384	11,809 64	1 85	16	5,016	13,542 42	2 70	13	4,020	8,039 61	2 00	15
6	1,690	3,380 06	2 00	.....	.....	.....	.....	.....	.....	.....	.....	16
2	20	38 42	1 92	.....	.....	.....	.....	.....	.....	.....	.....	17
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
4	1,118	2,069 18	1 85	.....	.....	.....	.....	.....	.....	.....	.....	19
16	6,674	20,042 13	3 00	1	306	1,055 00	3 45	.....	.....	.....	.....	20
2	720	1,080 00	1 50	.....	.....	.....	.....	.....	.....	.....	.....	21
80	26,837	60,501 71	2 25	.....	.....	.....	.....	19	6,629	15,876 91	2 40	22
18	7,409	18,773 02	2 53	.....	.....	.....	.....	3	3,518	8,981 64	2 55	23
3	657	2,325 26	3 54	.....	.....	.....	.....	.....	.....	.....	.....	24
18	5,450	10,460 00	1 92	.....	.....	.....	.....	.....	.....	.....	.....	25
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
308	111,549	271,980 58	2 44	111	32,302	90,820 79	2 81	191	43,413	96,254 05	2 22	27
2	600	1,294 99	2 12	.....	.....	.....	.....	2	411	870 00	2 12	28
2,253	705,077	\$1,646,496 33	2 33	669	211,153	619,924 69	2 94	1,275	377,867	\$817,023 58	2 16	29

EMPLOYEES AND SALARIES,

Name of Company.	Other Shopmen.				Section Foremen.			
	Number.	Number day worked.	Total yearly compensation.	Average yearly compensation.	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern	1	351	\$614 25	175	2	626	\$1,035 00	1 65
2. Ahnapee & Western	1	351	614 25	175	5	1,540	2,400 00	1 55
3. Chicago, Milwaukee & St. P.	1,287	404,551	\$777,442 55	1 92	258	90,242	146,019 48	1 62
4. Chicago & Northwestern	549	181,540	342,034 14	1 88	319	98,282	186,369 27	1 90
5. Chi., St. P., Min. & Omaha	123	38,499	73,068 04	1 90	150	40,690	77 020 62	1 29
6. Chicago, Burlington & Q.	109	34,117	65,285 15	1 91	42	15,330	27,124 42	1 77
7. Chi., Lake Shore & Eastern	5	1,625	3,034 50	1 87	1	365	720 00	1 97
8. Chicago & Lake Superior	4	1,045	2,288 75	2 19	11	3,789	5,985 00	1 58
9. Illinois Central	4	1,045	2,288 75	2 19	2	600	1,050 00	1 75
10. Chippewa River & Northern	2	577	1,087 12	1 88	1	315	573 97	1 82
11. Chi., Har. & Geneva Lake	6	2,326	3,998 27	1 72	22	7,863	13,218 85	1 68
12. Drummond & Southwestern	2	577	1,087 12	1 88	2	545	1,007 06	1 84
13. Duluth, South Shore & Atl.	40	14,278	23,539 36	1 65	13	4,808	8,029 00	1 67
14. Fairchild & Northeastern	5	1,395	3,348 86	2 40	37	13,280	19,920 00	1 50
15. Great Northern	480	109,629	223,644 11	2 04	1	275	622 50	2 30
16. Green Bay & Western	40	14,278	23,539 36	1 65	1	119	203 84	1 71
17. Hawthorne, Nebagamon & S.	5	1,395	3,348 86	2 40	1	248	309 99	1 25
18. Hazelhurst & Southeastern	3	976	1,620 00	1 66	6	2,080	3,120 00	1 50
19. Iola & Northern	5	1,985	4,246 41	2 14	1	365	793 55	2 17
20. Kewaunee, Green Bay & W.	3	976	1,620 00	1 66	5	1,560	2,700 00	1 73
21. Lake S p T. & T. Ry. Co.	5	1,985	4,246 41	2 14	50	17,820	29,550 14	1 66
22. Mariette, Tomahawk & W.	21	6,227	15,165 64	2 44	24	7,519	12,824 51	1 71
23. Min., St. P. & Sault Ste. M.	13	3,810	7,800 00	2 05	1	315	606 92	1 93
24. Northern Pacific	391	123,444	213,998 30	1 75	6	1,937	3,560 00	1 84
25. Northwestern Coal Ry. Co.	13	3,810	7,800 00	2 05	1	300	525 00	1 75
26. Stanley, Merrill & Phillips	13	3,810	7,800 00	2 05	4	1,475	3,020 00	2 05
27. Whitcomb & Morris	391	123,444	213,998 30	1 75	126	43,105	68,768 45	1 59
28. Wisconsin Central	126	43,105	68,768 45	1 59	4	1,475	3,020 00	2 05
29. Mineral Point & Northern	4	1,475	3,020 00	2 05				
Total (29 roads reporting)..	3,044	926,275	\$1,764,230 15	1 91	1,004	355,706	\$617,598 47	1 74

EMPLOYES AND SALARIES,
Distribution of

Name of Company.	Other Employees and Laborers.				General Administration.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern.....			\$	¢	2	180	\$ 775 00	3 31
2. Ahnapew & Western.....		512	720 00	2 30	4	557	1,960 00	4 46
3. Chicago, Mil. & St. Paul.....	2,056	643,444	1,430,676 37	2 22	190	60,762	250,219 28	4 12
4. Chicago & Northwestern.....	1,061	288,554	551,617 63	2 05	2	626	3,218 34	5 14
5. Chicago, St. P., Minn. & O.....	277	86,701	167,699 47	1 93				
6. Chicago, Burlington & Q.....	110	34,430	80,609 03	2 34	13	4,173	14,417 08	3 45
7. Chicago, Lake Shore & E.....					39	314	863 93	2 75
8. Chicago & Lake Superior.....		365	457 00	1 25	1	365	1,200 00	3 28
9. Illinois Central.....	22	4,244	8,801 50	2 07	1	365	600 00	1 64
10. Chippewa River & Northern.....	1	300	645 00	2 15				
11. Chic. Harvar. & Geneva L.....	8	420	698 17	1 60	2	365	1,010 01	2 79
12. Drummond & Southwestern.....					1	312	200 00	6 64
13. Duluth, South Shore & A.....	6	1,892	3,700 91	1 96				
14. Fairchild & Northeastern.....	20	3,219	4,725 19	1 46	5	936	1,925 00	2 05
15. Green Bay & Western.....	21	2,417	3,625 66	1 50	6	1,872	12,600 00	6 73
16. Great Northern.....	261	78,285	154,221 96	1 97	1	400	3,868 52	9 68
17. Hawthorne, Nebagamon & S.....								
18. Hazelhurst & Southeastern.....	1	147	342 24	2 33				
19. Iola & Northern.....	1	8	12 07	1 51				
20. Kewaunee, Green Bay & W.....	28	7,375	11,061 95	1 50	6	1,865	4,400 00	2 36
21. Lake Sup Term. & Trans.....	1	365	500 00	1 37	3	2,580	5,288 42	2 05
22. Marinette, Tomahawk & W.....					3	990	3,050 00	3 08
23. Minneapolis, St. P. & Sault Ste. Marie.....	93	27,779	50,230 59	1 81	81	27,826	69,295 01	2 49
24. Northern Pacific.....	18	5,993	10,929 61	1 82	3	1,680	3,454 81	2 06
25. Northwestern Coal Ry.....	2	428	764 74	1 79	2	450	1,500 00	3 33
26. Stanley, Merrill & Phillips.....					4	624	3,000 00	4 81
27. Whitcomb & Morris.....					1	200	200 00	1 00
28. Wisconsin Central.....	733	138,245	246,415 23	1 78	149	43,785	155,120 26	3 54
29. Mineral Point & Northern.....	3	612	1,174 49	1 92	6	1,860	6,370 00	3 12
Total.....	4,725	1,305,53	52,729,628 81	2 09	529	153,097	544,535 66	3 56
Number of roads reporting.....	29	29	29	29		28		28

EMPLOYEES AND SALARIES,

Name of Company.	Total Including General Offices.			
	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.
1. Abbottsford & Northeastern	23	5,606	\$9,848 98	\$1 76
2. Ahnapee & Western	38	10,916	19,946 07	1 83
3. Chicago, Milwaukee & St. Paul	9,162	2,885,452	6,267,697 01	2 17
4. Chicag & Northwestern	9,661	2,627,009	5,734,813 12	2 18
5. Chicago, St. Paul, Minneapolis & Omaha	2,678	839,202	1,872,510 56	2 23
6. Chicago, Burlington & Quincy	892	293,586	618,859 91	2 11
7. Chicago, Lake Shore & Eastern	142	21,486	46,454 83	2 16
8. Chicago & Lake Superior	6	2,034	3,397 00	1 67
9. Illinois Central	126	39,275	80,661 91	2 05
10. Chippewa River & Northern	15	4,500	7,940 00	1 54
11. Chicago, Harvard & Geneva Lake	38	3,646	7,198 22	1 97
12. Drummond & Southwestern	33	9,791	17,342 06	1 77
13. Duluth, South Shore & Atlantic	215	73,387	148,511 20	2 02
14. Fairchild & Northeastern	50	10,009	15,850 28	1 58
15. Great Northern	1,357	329,074	709,974 65	2 16
16. Green Bay & Western	384	106,156	209,259 53	1 97
17. Hawthorne, Nebagamon & Superior	33	9,907	22,415 84	2 26
18. Hazelhurst & Southeastern	14	1,717	3,520 08	2 05
19. Iola & Northern	71	1,816	3,077 96	1 69
20. Kewaunee, Green Bay & Western	89	25,335	42,530 11	1 68
21. Lake Superior Terminal & Transfer Ry Co	65	24,139	57,979 39	2 40
22. Marinette, Tomahawk & Western	40	11,894	23,548 14	1 99
23. Minneapolis, St. Paul & Sault Ste. Marie	747	225,790	473,938 55	2 10
24. Northern Pacific	360	90,417	198,334 72	2 19
25. Northwestern Coal Ry. Co	19	5,239	12,854 86	2 45
26. Stanley, Merril & Phillips	172	30,925	59,495 00	1 92
27. Whitcomb & Morris	5	1,426	2,435 00	1 71
28. Wisconsin Central	3,737	1,055,069	228,453 90	2 17
29. Mineral Point & Northern	86	19,891	38,940 32	1 95
Total (29 roads reporting)	30,194	8,764,654	\$18,993,885 25	\$2 17

WISCONSIN, 1906—Continued.

Name of Company.	Total Excluding General Offices.			
	Number.	Number days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern.....	23	5,606	\$9,848 98	\$1 76
2. Ahnapee & Western.....	36	10,766	19,346 07	1 80
3. Chicago, Milwaukee & St. Paul.....	9,151	2,881,303	6,179,918 06	2 14
4. Chicago & Northwestern.....	9,661	2,627,009	5,734,813 12	2 18
5. Chicago, St. Paul, Minneapolis & Omaha.....	2,675	838,107	1,861,910 59	2 22
6. Chicago, Burlington & Quincy.....	890	292,856	612,884 73	2 09
7. Chicago, Lake Shore & Eastern.....	137	21,446	46,004 76	2 15
8. Chicago & Lake Superior.....	5	1,669	2,197 00	1 40
9. Illinois Central.....	126	39,275	80,671 91	2 05
10. Chippewa River & Northern.....	15	4,500	7,940 00	1 54
11. Chicago, Harvard & Lake Geneva.....	37	3,463	6,598 22	1 90
12. Drummond & Southwestern.....	33	9,791	17,342 06	1 77
13. Duluth, South Shore & Atlantic.....	215	73,387	148,511 20	2 02
14. Fairchild & Northeastern.....	45	9,073	13,925 28	1 53
15. Great Northern.....	1,357	329,074	709,974 65	2 16
16. Green Bay & Western.....	379	104,576	197,859 53	1 89
17. Hawthorne, Nebagamon & Superior.....	33	9,907	22,415 84	2 26
18. Hazelhurst & Southeastern.....	14	1,717	3,520 08	2 05
19. Iola & Northern.....	7	1,816	3,077 96	1 69
20. Kewaunee, Green Bay & Western.....	84	23,770	38,730 11	1 63
21. Lake Superior Terminal & Transfer Ry. Co.....	63	23,409	57,319 39	2 45
22. Marinette, Tomahawk & Western.....	39	11,529	21,745 14	1 89
23. Minneapolis, St. Paul & Sault Ste. Marie.....	745	225,141	462,064 42	2 05
24. Northern Pacific.....	360	90,417	198,334 72	2 19
25. Northwestern Coal Ry. Co.....	18	5,089	11,954 86	2 35
26. Stanley, Merrill & Phillips.....	168	30,301	56,495 00	1 86
27. Whitcomb & Morris.....	4	1,226	2,235 00	1 82
28. Wisconsin Central.....	3,725	1,051,373	2,221,934 60	2 11
29. Mineral Point & Northern.....	82	18,651	33,440 32	1 79
Total (29 roads reporting).....	30,127	8,746,247	\$18,783,016 60	\$2 15

EMPLOYEES AND SALARIES,

Employees and Salaries Paid by the Several Wisconsin Railways for Whole Line as

Name of Company.	General Officers.			Other Officers and General Office Clerks.				
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern	2	150	\$600 00	\$4 00	2	180	\$720 00	\$4 00
2. Ahnapee & Western	2	150	600 00	4 00	2	462	1,155 00	2 50
3. Bayfield, Lake Shore & W	1	65	312 50	4 80	1	65	312 50	4 80
4. Chicago, Milwaukee & St. Paul	41	14,965	334,682 86	22 36	602	190,766	553,459 29	2 90
5. Chicago & Northwestern	25	7,825	253,641 05	32 41	793	240,384	660,114 48	2 74
6. Chic., St. Paul, Minneap. & O.	30	10,950	155,646 27	14 21	204	74,460	155,275 44	2 08
7. Chicago, Burlington & Quincy	162	59,130	738,687 75	12 49	1,945	608,785	1,309,928 23	2 15
8. Chicago, Lake Shore & Eastern	5	1,560	12,900 04	8 27	73	24,450	41,784 62	1 70
9. Chicago & Lake Superior	1	365	1,200 00	3 33	2	427	738 25	1 60
10. Chicago, Harvard & Geneva L.	1	365	1,200 00	3 33	2	427	738 25	1 60
11. Chippewa River & Northern	1	365	1,200 00	3 33	2	427	738 25	1 60
12. Drummond & Southwestern	1	365	1,200 00	3 33	2	427	738 25	1 60
13. Duluth, South Shore & Atlantic	19	4,530	43,347 68	9 57	63	23,020	48,179 67	2 09
14. Fairchild & Northeastern	5	936	1,900 00	3 04	1	312	200 00	64
15. Great Northern	20	6,686	144,412 15	21 60	747	262,411	662,377 84	2 55
16. Green Bay & Western	5	1,560	11,400 00	7 31	12	2,739	7,145 37	2 61
17. Hawthorne, Nebagamon & Sup.	1	365	1,200 00	3 33	2	427	738 25	1 60
18. Hazelhurst & Southeasteru	1	365	1,200 00	3 33	2	427	738 25	1 60
19. Illinois Central	57	21,148	359,281 17	16 99	1,349	500,892	1,126,572 11	2 25
20. Iola & Northern	1	365	1,200 00	3 33	2	427	738 25	1 60
21. Kewaunee, Gr. Bay & Western	5	1,565	3,800 00	2 43	4	1,156	1,970 00	1 70
22. Lake Superior Term. & Trans.	2	730	660 00	90	3	1,383	4,021 69	2 91
23. Marinette, Tomahawk & West'n	1	365	1,800 00	4 93	2	625	1,155 00	1 85
24. Minneap., St. P. & S. Ste Marie	9	3,285	49,728 08	15 14	222	75,796	188,218 26	2 41
25. Northern Pacific	42	14,370	290,111 67	20 19	848	284,878	783,528 45	2 75
26. Northwestern Coal Ry	1	150	900 00	6 00	2	336	780 00	2 30
27. Sanley, Merrill & Phillips	6	1,872	3,800 00	2 03	1	156	500 00	3 20
28. Winona Bridge Ry. Co.	1	365	1,200 00	3 33	2	427	738 25	1 60
29. Wisconsin & Michigan	7	2,191	8,122 04	3 70	6	1,925	4,772 85	2 48
30. Whitcomb & Morris	1	365	1,200 00	3 33	2	427	738 25	1 60
31. Wisconsin Central	11	4,015	59,000 00	14 60	215	72,323	222,555 62	3 07
Totals	456	158,348	\$2,475,621 36	\$15 63	7,100	2,368,244	\$5,775,764 67	2 44

REPORT OF THE RAILROAD COMMISSION,

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WHOLE LINE, 1905.

Shown by Reports Made to the Railroad Commission for Year Ending June 30, 1905.

Station Agents.				Other Station Men.				Enginemen.				No.
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	
1	313	\$730 00	2 33	.....	.....	.....	.....	1	320	\$1,015 95	3 27	1
4	1,228	2,100 00	2 17	.....	.....	.....	.....	19	451	1,781 95	3 95	2
1	305	742 92	2 44	.....	.....	.....	.....	2	429	1,287 00	3 00	3
1,206	377,478	673,075 89	1 78	3,632	1,136,816	1,801,104 43	1 58	1,328	461,917	1,787,222 32	3 87	4
1,030	321,138	720,828 70	2 24	3,478	1,005,356	1,794,829 51	1 79	1,678	516,763	2,144,914 33	4 15	5
205	64,165	148,155 05	2 31	558	174,654	316,587 27	1 81	300	93,900	413,137 94	4 40	6
1,041	379,965	722,685 05	1 90	2,831	886,103	1,556,030 02	1 75	1,299	474,135	1,802,707 12	3 80	7
7	2,421	5,439 03	2 25	39	13,947	22,403 72	1 61	106	38,555	132,407 01	3 43	8
2	365	450 00	1 23	.....	.....	.....	.....	1	313	600 00	1 35	9
1	280	418 33	1 50	.....	.....	.....	.....	2	730	1,460 00	2 00	10
.....	.....	.....	.....	.....	.....	.....	.....	1	323	1,093 67	3 39	11
.....	.....	.....	.....	.....	.....	.....	.....	2	366	918 61	2 51	12
50	16,997	37,096 75	2 18	137	45,599	77,852 63	1 71	77	30,265	113,613 31	3 75	13
2	626	964 04	1 54	.....	.....	.....	.....	2	722	1,610 06	2 23	14
510	151,987	310,939 50	2 05	1,236	267,833	456,859 84	1 71	688	195,585	819,339 10	4 19	15
30	9,140	15,996 00	1 75	18	4,844	6,780 78	1 40	17	5,160	19,435 04	3 77	16
4	1,002	2,065 33	2 05	.....	.....	.....	.....	4	1,262	3,888 97	3 08	17
2	225	477 46	2 12	.....	.....	.....	.....	.....	.....	.....	.....	18
918	331,227	600,375 30	1 81	3,510	1,141,296	1,820,186 90	1 59	982	395,648	1,715,011 68	4 33	19
1	312	720 00	2 31	1	312	31 20	1 10	1	312	966 17	3 40	20
3	1,063	1,860 00	1 75	8	2,360	2,949 57	1 25	3	740	2,300 59	3 50	21
1	365	1,200 00	3 29	4	1,491	2,780 00	1 86	3	1,578	5,522 89	3 50	22
2	455	936 40	2 06	1	315	502 67	1 60	2	732	2,194 56	3 00	23
169	63,110	117,667 85	1 86	224	69,922	97,778 19	1 40	184	61,192	242,529 26	3 96	24
488	175,586	393,551 93	2 24	1,748	561,394	1,095,347 65	1 95	882	306,799	1,406,751 20	4 59	25
.....	.....	.....	.....	1	237	414 58	1 75	2	498	1,708 46	3 43	26
2	624	1,140 00	1 83	2	624	600 00	1 00	16	4,992	12,480 00	2 50	27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
18	6,480	11,839 84	1 83	2	720	960 00	1 33	8	2,880	7,340 00	2 54	29
.....	.....	.....	.....	.....	.....	.....	.....	1	313	720 00	2 30	30
137	50,956	112,750 32	2 21	334	108,385	183,561 22	1 69	206	62,926	242,722 68	3 86	31
5,835	1,957,813	\$3,884,195 69	1 98	17,766	5,422,808	\$9,238,470 18	\$1 70	7,800	2,659,716	\$10,881,476 98	4 09	

EMPLOYEES AND SALARIES.

Name of Company.	Firemen.				Conductors.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern	1	320	\$615 20	1 92	1	321	\$617 22	1 92
2. Ahnapew & Western	2	451	957 54	2 12	2	351	825 14	2 35
3. Bayfield, Lake Shore & West'n	2	451	834 35	2 85	2	351	825 14	2 35
4. Chicago, Milwaukee & St. Paul	1,280	436,623	1,036,636 75	37 37	925	289,525	1,113,762 43	3 85
5. Chicago & Northwestern	1,955	595,639	1,471,119 44	47 1,115	3,052	1,342,197 73	4 06	
6. Chicago, St. P., Minneap. & O.	300	93,900	256,827 81	73 194	60,722	247,822 64	4 08	
7. Chicago, Burlington & Quincy	1,294	472,310	1,096,967 13	32 826	301,490	1,076,142 06	3 57	
8. Chicago, Lake Shore & Eastern	103	37,744	77,417 64	05 15	5,478	19,117 53	3 49	
9. Chicago & Lake Superior	1	313	480 00	1 53	1	313	480 00	1 53
10. Chicago, Harvard & Gen. Lake	2	674	1,011 00	1 50	3	1,125	2,250 00	2 00
11. Chippewa Valley & Northern	1	316	691 88	2 19	1	320	974 19	3 05
12. Drummond & Southwestern	2	357	596 11	1 67	2	320	974 19	3 05
13. Duluth, South Shore & Atlan'c	78	30,025	69,191 65	2 30	64	24,231	78,780 72	3 25
14. Fairchild & Northeastern	2	708	1,245 64	1 76	1	312	898 56	2 88
15. Great Northern	789	199,787	526,312 78	2 73	770	172,534	679,223 87	3 78
16. Green Bay & Western	21	6,835	15,530 18	2 27	13	4,180	11,496 93	2 75
17. Hawthorne, Nebagamon & Sup.	4	1,119	3,239 88	2 00	4	1,237	3,712 92	3 00
18. Hazelhurst & Southeastern	3	928	1,622 25	1 75	1	307	690 73	2 25
19. Illinois Central	984	395,806	1,005,229 48	2 54	677	277,412	1,002,861 10	3 69
20. Iola & Northern	1	312	510 00	1 73	1	312	510 00	1 73
21. Kewaunee, Green Bay & West'n	3	746	1,492 38	2 00	2	654	1,800 00	2 75
22. Lake Superior Term. & Trans.	3	1,579	3,316 26	2 10	2	654	1,800 00	2 75
23. Marinette, Tomahawk & West'n	2	733	1,446 66	2 00	2	796	2,389 80	2 00
24. Minneapolis, St. P. & S. Ste. M	174	61,192	151,533 41	2 48	140	46,946	169,885 38	3 62
25. Northern Pacific	882	306,709	784,450 08	2 56	606	209,683	793,125 16	3 78
26. Northwestern Coal Ry.	1	292	613 13	2 10	1	340	1,119 35	3 29
27. Stanley, Merrill & Phillips	1	313	540 00	1 72	1	340	1,119 35	3 29
28. Wisconsin & Michigan	8	2,880	3,900 00	1 35	8	2,880	6,950 00	2 41
29. Whitcomb & Morris	1	313	540 00	1 72	1	340	1,119 35	3 29
30. Wisconsin Central	210	62,598	152,825 40	2 44	137	41,049	150,282 47	3 77
Total	8,118	2,711,347	\$6,665,748 05	2 46	5,509	1,772,734	\$6,667,405 93	3 77

REPORT OF THE RAILROAD COMMISSION.

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W HOLE LINE, 1905—Continued.

Other Trainmen.				Machinists				Carpenters.				No.
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	
1	261	\$401 50	1 54					1	21	\$52 15	2 48	1
2	621	1,291 91	2 08					1	350	629 30	1 80	2
1,923	601,899	1,331,961 11	2 21	595	158,032	\$525,252 45	3 32	806	229,249	474,618 51	2 07	3
2,522	763,094	1,806,405 24	2 37	1,142	331,151	811,335 89	2 45	2,028	536,793	1,112,639 08	2 07	4
464	145,232	349,179 97	2 40	535	167,455	362,896 33	2 17	505	158,065	311,143 06	1 97	5
1,780	649,700	1,456,501 95	2 24	886	277,318	749,912 23	2 70	1,782	557,776	1,309,755 93	2 34	6
31	11,018	27,479 57	2 49	63	19,700	44,024 24	2 23	24	7,467	16,558 44	2 21	7
3	1,148	2,296 83	2 00	1	46	115 48	2 50					8
2	316	540 93	1 71	1	312	1,515 00	4 86	1	231	475 05	2 06	9
172	63,356	131,107 74	2 07	22	6,918	18,282 15	2 63	56	17,063	37,908 08	2 22	10
2	799	1,288 83	1 72	1	275	1,028 25	3 83					11
1,899	395,115	898,979 60	2 28	371	95,587	325,513 46	3 41	300	71,868	183,984 13	2 56	12
21	6,59	11,872 53	1 80	13	4,202	11,762 54	2 80	11	3,378	7,092 40	2 10	13
6	1,751	3,502 90	2 00									14
2	583	1,088 29	1 87									15
2,620	1,006,490	2,384,326 20	2 37	1,308	390,543	1,122,566 75	2 87	2,131	655,969	1,475,173 22	2 25	16
												17
4	1,101	1,981 20	1 80									18
10	5,101	15,273 18	2 99	1	289	997 36	3 45					19
3	802	1,202 91	1 50									20
304	104,288	223,692 96	2 14	158	52,050	128,099 51	2 46	3	919	2,054 97	2 24	21
1,810	626,523	1,614,312 69	2 58	744	228,638	653,631 47	2 86	1,416	95,697	216,446 27	2 26	22
2	582	1,620 47	2 78	1	173	429 22	2 54					23
10	3,120	5,400 00	1 73									24
12	4,320	6,000 00	1 38	5	1,565	4,500 00	2 87	4	1,252	3,405 00	2 72	25
388	122,228	299,409 92	2 45	130	37,993	105,820 11	2 79	113	45,395	101,472 55	2 24	26
												27
13,993	4,516,147	\$10,577,120 83	2 34	5,977	1,772,283	\$4,867,682 44	2 75	9,499	2,764,669	\$6,195,524 67	2 24	28
												29
												30

EMPLOYEES AND SALARIES.

Name of Company.	Other Shopmen.				Section Foremen.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & N. E.					2	624	\$1,080 00	1 73
2. Ahnapee & Western	1	292	\$631 40	2 16	5	1,542	2,360 00	1 53
3. Bayfield, L. S. & W.					1	320	600 00	1 87
4. Chicago, M. & St. Paul	4,641	1,330 681	2,508,368 36	1 88	1,023	320,199	509,976 58	1 59
5. Chicago & Northwestern	4,298	1,253,565	2,301,686 57	1 84	1,312	407,839	745,626 15	1 83
6. Chicago, St. P. M. & O.	277	86,701	171,041 03	1 97	281	87,953	167,258 21	1 90
7. Chicago, B. & Q.	5,886	1,842,318	390,891 40	2 11	1,437	524,505	859,424 29	1 64
8. Chicago, L. S. & E.	256	81,420	159,745 35	1 96	16	5,831	11,517 06	1 96
9. Chicago & Lake Superior					1	313	466 00	1 50
10. Chicago, H. & G. L.	3	1,215	2,430 81	2 00	1	300	600 00	2 00
11. Chippewa Val. & Nor.								
12. Drummond & S. W.	2	632	1,190 55	1 88	1	283	502 23	1 77
13. Duluth, S. Shore & A.	282	95,904	170,302 33	1 78	117	42,718	73,271 45	1 72
14. Fairchild & N. W.					2	595	981 75	1 65
15. Great Northern	4,140	859,135	1,675,125 38	1 95	803	274,274	453,836 67	1 65
16. Green Bay & Western	40	12,672	20,907 80	1 65	38	15,240	19,860 00	1 50
17. Hawthorne, N. & S.	5	1,610	3,866 22	2 40	1	300	690 00	2 30
18. Hazelhurst & S. E.					1	255	441 79	1 73
19. Illinois Central	2,851	850,694	1,785,387 30	2 10	896	312,693	495,518 37	1 58
20. Iola & Northern					1	310	387 24	1 25
21. Kewanee, C. B. & W.	2	650	1,140 00	1 75	6	2,080	3,120 00	1 50
22. Lake Superior T. & T.	5	1,967	4,120 96	2 10	1	365	720 00	1 97
23. Marinette, T. & W.					5	1,039	1,798 00	1 73
24. Minneapolis, St. P. & S. S. M.	171	59,003	133,437 81	2 21	228	80,152	128,854 50	1 61
25. Northern Pacific	2,057	619,919	1,514,630 34	2 33	921	324,483	583,349 47	1 80
26. Northwestern Coal Ry.					1	66	127 71	1 90
27. Stanley, Merrill & Phillips	6	1,872	3,744 00	2 00	5	1,560	2,750 00	1 75
28. Wisconsin & Michigan	16	5,008	9,600 00	1 92	13	4,680	7,020 00	1 50
29. Whitcomb & Morris					1	300	525 00	1 75
30. Wisconsin Central	434	133,827	232,407 26	1 74	160	52,384	83,217 95	1 59
Total	25,374	7,269,085	\$14,590,654 87	2 00	7,280	2,401,253	\$4,155,819 80	1 69

WHOLE LINE, 1905—Continued.

Other Trackmen.				Switchmen, Flagmen and Watchmen.				Telegraph Operators and Dispatchers.				No.		
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.			
8	1,851	\$2,499	53	1	365	\$480	00	1	31			1		
12	3,909	5,863	78	1	365	424	14	1	61			2		
10	2,934	5,462	57									3		
3,233	1,011,929	1,371,059	04	1,765	552,445	1,306,603	22	2	37	610	190,980	\$439,991	03	
9,016	1,902,414	2,702,673	86	2,232	642,902	1,507,275	50	2	34	834	252,278	575,436	98	
1,244	389,372	544,078	09	280	87,640	234,106	51	2	67	251	79,502	173,990	95	
7,610	2,381,930	3,162,859	12	1,109	404,785	905,133	08	2	24	922	336,530	697,625	64	
172	53,835	78,883	56	284	102,971	286,629	45	2	78	7	2,186	3,489	57	
5	550	814	57											
4	1,025	1,348	56											
8	2,570	3,217	84											
387	124,404	187,554	70	34	12,253	16,459	21	1	34	55	19,464	39,705	92	
12	3,874	5,811	00											
11,859	1,917,625	2,874,896	89	73	36,903	57,883	19	1	57	491	137,618	321,644	69	
98	22,422	28,027	65	14	4,578	7,783	50	1	70	4	1,215	2,430	00	
5	1,445	2,529	20	3	1,033	1,855	38	1	85					
1	184	294	72											
7,502	2,057,722	2,512,469	39	585	218,325	323,230	51	1	48	641	212,904	474,135	62	
18	4,284	5,569	08	1	312	511	65	1	64					
9	2,510	3,616	88	2	626	1,001	65	1	60	1	300	600	00	
25	7,285	10,928	07	5	2,187	3,450	10	1	58	1	365	660	00	
1,147	248,008	337,691	56	21	6,315	8,877	84	1	41	104	35,926	72,868	58	
9,044	1,934,638	2,725,936	60	251	93,337	137,151	91	1	47	653	212,542	528,931	24	
4	638	937	64	2	730	1,217	20	1	67					
50	15,620	23,430	00											
39	12,201	18,720	00	2	720	549	00	75		2	720	1,560	00	
1	300	450	00											
612	1,851	208,905	48	85	28,684	35,331	49	1	23	104	37,227	73,488	31	
52,565	12,283,998	\$16,831,539	36	1,377	6,573	2,198,009	\$4,836,802	43	2	20	4,686	1,519,707	\$3,406,588	53

EMPLOYES AND SALARIES,

Distribution of

Name of Company.	Other Employes and Laborers.				General Administration.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & N. E.	1	313	948 48 3	3 03	2	180	720 00	4 00
2. Ahnapae & Western.....	1	1,962,197	4,485,042 63	2 29	4	612	1,755 00	2 87
3. Chicago, Milw. & St. Paul...	6,269	1,212,562	2,543,514 78	2 11	643	205,731	888,142 15	4 32
4. Chicago & Northwestern....	5,373	1,212,562	2,543,514 78	2 11	836	249,461	844,790 06	3 39
5. Chicago, St. P. M. & O.....	709	221,917	454,274 90	2 05	127	46,043	185,408 23	4 03
6. Chicago, Burlington & Q.....	4,397	1,376,261	2,812,756 60	2 04	2,107	667,915	2,048,615 88	3 07
7. Chicago, L. S. & E.....	88	27,364	50,005 09	1 83	35	10,826	50,081 92	2 78
8. Chicago & Lake Superior....	3	664	964 20	1 50	3	792	1,938 25	2 45
9. Chicago, Harvard & G. L....	1	127	207 48	1 64	1	312	200 00	64
10. Chippewa Valley & Northern	1	127	207 48	1 64	1	312	200 00	64
11. Drummond & S. W.....	156	54,035	108,034 21	2 00	82	27,550	91,527 35	3 32
12. Duluth, South Shore & A....	1	63	94 50	1 50	5	937	1,900 00	3 04
13. Fairchild & N. E.....	2,406	769,614	1,633,620 49	2 12	767	269,097	809,789 89	3 00
14. Great Northern.....	38	6,158	8,855 20	1 44	6	1,872	12,600 00	6 73
15. Green Bay & Western....	1	196	393 66	2 01	1	1,865	4,400 00	2 37
16. Hawthorne, Neb. & Supr....	1	18	27 76	1 54	6	2,478	5,181 69	2 09
17. Hazalhurst & S. E.....	1	18	27 76	1 54	3	90	2,955 00	2 98
18. Illinois Central.....	4,212	1,586,769	2,680,349 24	1 70	491	179,318	563,763 65	3 14
19. Iola & Northern.....	1	18	27 76	1 54	1	79,081	237,946 94	3 01
20. Kewanee, C. B. & Western.	12	1,254	1,794 33	1 60	6	1,865	4,400 00	2 37
21. Lake Supr. Term. & Trans..	1	365	500 00	1 37	6	2,478	5,181 69	2 09
22. Marinette, Tomahawk & W.	1	18	27 76	1 54	3	90	2,955 00	2 98
23. Mpls., St. P. & S. S. M.....	1,651	316,071	597,825 79	1 89	231	79,081	237,946 94	3 01
24. Northern Pacific.....	2,284	793,816	1,517,111 36	1 90	1,266	442,525	1,382,357 47	3 12
25. Northwestern Coal Ry.....	1	355	639 00	1 75	2	450	1,500 00	3 33
26. Stanley, Merrill & P.....	15	4,680	7,020 00	1 50	7	2,028	4,300 00	2 12
27. Winona Bridge Ry.....	6	1,878	2,430 93	1 29	5	313	300 00	96
28. Wisconsin & Mich.....	28	8,400	12,770 27	1 52	13	4,116	12,894 89	3 13
29. Whitcomb & Morris.....	723	163,340	284,917 33	1 69	192	64,531	208,082 66	3 15
30. Wisconsin Central.....	1	18	27 76	1 54	1	65	312 50	4 80
31. Bayfield, Lake S. & W.....	1	18	27 76	1 54	1	65	312 50	4 80
Total.....	28,377	8,513,427	17,226,098 20	2 02	6,841	2,256,117	7,333,421 73	3 26

REPORT OF THE RAILROAD COMMISSION.

WHOLE LINE, 1905—Continued.

the Foregoing.

Maintenance of Way and Structures.				Maintenance of Equipment.				Conducting Transportation.				No.
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	
11	2,496	3,631 68	1 45	.....	.....	.....	.....	6	1,900	3,889 87	2 05	1
19	6,114	9,802 56	1 60	.....	.....	.....	.....	15	4,069	8,260 68	2 03	2
8,590	2,700,545	4,320,873 09	1 60	5,268	1,656,055	3,510,835 58	2 16	15,378	4,703,320	11,532,940 07	2 45	3
17,040	3,622,036	6,103,014 11	1 68	3,979	1,150,588	2,567,455 11	2 23	17,876	5,298,151	12,979,039 99	2 45	4
1,842	576,546	954,662 85	1 66	1,241	388,433	784,484 03	2 02	3,130	985,566	2,541,836 37	2 58	5
12,294	3,922,954	6,263,624 87	1 60	8,237	2,578,390	5,578,389 16	2 12	12,569	4,363,772	10,251,410 59	2 35	6
226	71,418	111,637 07	1 56	361	112,791	227,626 49	2 02	667	240,962	620,456 40	2 57	7
1	213	456 00	1 50	.....	.....	.....	.....	3	991	1,530 00	1 54	8
9	1,074	2,378 77	2 21	4	1,261	2,546 29	2 02	11	3,957	7,436 16	1 88	9
5	1,152	1,556 04	1 35	.....	.....	.....	.....	3	959	1,759 74	2 88	10
9	2,853	3,750 07	1 31	5	1,175	3,180 60	2 71	7	1,147	1,208 92	1 92	11
553	181,823	293,348 50	1 61	311	165,214	193,970 21	1 84	823	296,225	671,842 14	2 27	12
16	4,897	7,434 75	1 52	1	275	1,028 25	3 83	3	3,167	6,057 13	1 91	13
12,462	2,283,767	3,512,717 09	1 51	4,511	954,722	2,000,638 84	2 10	8,865	2,326,976	5,664,803 06	2 43	14
167	41,376	58,483 60	1 41	71	20,696	38,021 79	1 84	149	44,974	97,270 33	2 16	15
6	1,745	3,219 20	1 84	5	1,610	3,866 22	2 40	28	7,374	17,255 38	2 34	16
2	439	736 51	1 68	1	196	393 66	2 01	12	3,061	6,300 87	2 06	17
9,946	2,886,660	4,149,816 36	1 44	5,927	1,784,729	4,104,962 50	2 30	14,859	5,504,801	12,084,194 83	2 20	18
1	310	387 74	1 25	.....	.....	.....	.....	6	1,578	2,796 78	1 77	19
28	6,818	9,324 63	1 37	10	1,450	2,298 73	1 58	29	8,446	15,645 39	1 85	20
10	2,875	4,376 88	1 51	6	2,256	5,118 22	2 27	27	12,666	32,202 43	2 54	21
33	9,126	13,928 98	1 53	3	919	2,054 97	2 24	9	3,031	7,470 09	2 46	22
2,442	508,689	818,868 30	1 61	848	275,879	559,934 16	2 03	1,706	515,304	1,248,416 45	2 42	23
12,355	2,950,007	4,835,901 51	1 64	3,613	1,168,981	2,720,969 05	2 33	7,442	2,554,896	6,824,779 72	2 67	24
6	740	1,245 35	1 68	3	406	1,248 29	3 07	8	2,811	6,513 14	2 31	25
70	21,860	33,180 00	1 52	6	1,872	3,744 00	2 00	30	9,360	19,620 00	2 96	26
6	1,878	2,430 93	1 29	.....	.....	.....	.....	.....	.....	.....	.....	27
52	16,887	25,740 00	1 52	23	7,825	17,505 00	2 23	88	30,000	51,860 11	1 73	28
2	600	975 00	1 02	.....	.....	.....	.....	2	626	1,260 00	2 01	29
1,121	271,161	420,490 21	1 55	726	235,091	467,981 17	1 99	1,960	616,061	1,457,114 07	2 37	30
11	3,254	6,062 57	1 86	.....	.....	.....	.....	7	1,586	3,880 27	2 45	31
79,341	20,102,313	31,974,105 27	1 59	35,163	10,451,106	22,798,853 82	2 18	85,754	27,547,737	66,171,050 98	2 40	.....

EMPLOYES AND SALARIES, WHOLE LINE, 1905—Continued.

Distribution of the Foregoing

Name of Company.	Total Including General Officers.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & N. E.....	19	4,576	\$8,241 55	\$1 80
2. Ahnapee & Western.....	39	11,087	20,449 64	1 84
3. Chicago, Milw. & St. Paul.....	29,879	9,265,651	20,252,790 89	2 19
4. Chicago & Northwestern.....	39,731	10,320,236	22,494,239 27	2 18
5. Chicago, St. P., M. & O.....	6,340	1,996,588	4,466,395 48	2 24
6. Chicago, Burlington & Q.....	35,207	11,533,031	24,142,040 60	2 69
7. Chicago, L. S. & E.....	1,289	435,967	989,801 88	2 27
8. Chicago & Lake Superior.....	4	1,304	1,986 03	1 52
9. Chicago, Harvrd & G. L.....	27	7,084	14,299 47	2 02
10. Chippewa Valley & Northern.....	8	2,111	4,315 78	2 04
11. Drummond & S. W.....	22	5,487	9,339 59	1 70
12. Duluth, South Shore & A.....	1,769	610,812	1,250,688 20	2 05
13. Fairchild & N. E.....	31	9,275	16,422 13	1 77
14. Great Northern.....	26,605	5,834,562	11,984,948 98	2 05
15. Green Bay & Western.....	393	108,918	206,375 72	1 89
16. Hawthorne, Neb. & Sup'r.....	89	10,729	2,340 80	1 89
17. Hazelhurst & S. E.....	15	3,696	7,401 94	1 93
18. Illinois Central.....	31,223	10,355,538	20,902,737 34	2 02
19. Iola & Northern.....	7	1,888	3,184 52	1 69
20. Kewaunee, C. B. & Western.....	73	18,579	31,668 80	1 70
21. Lake Sup'r Term. & Trans.....	49	20,275	44,839 32	2 31
22. Merinette, Tomahawk & W.....	48	14,066	26,409 04	1 88
23. Mpls., St. P. & S. S. M.....	5,233	1,378,933	2,865,165 85	2 08
24. Northern Pacific.....	24,676	7,116,409	13,764,037 75	2 22
25. Northwestern Coal Ry.....	19	4,407	10,546 78	2 38
26. Stanley, Merrill & P.....	113	35,120	60,844 00	1 86
27. Winona Bridge Ry.....	11	2,191	2,740 93	1 26
28. Wisconsin & Mich.....	178	58,468	108,000 03	1 84
29. Whitcomb & Morris.....	4	1,226	2,235 00	1 82
30. Wisconsin Central.....	4,029	1,186,844	2,548,668 11	2 15
31. Bayfield Lake S. & W.....	19	4,905	10,253 34	2 09
Total.....	207,099	60,360,013	128,277,353 80	2 12

EMPLOYES AND SALARIES, WHOLE LINE, 1905—Continued.

Distribution of the Foregoing.

Name of Company.	Total Excluding General Officers.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & N. E.	19	4,576	\$8,241 55	\$1 80
2. Ahnapee & Western.....	37	10,937	19,849 64	1 81
3. Chicago, Milw. & St. Paul.....	29,838	9,250,686	19,918,108 03	2 15
4. Chicago & Northwestern.....	39,706	10,312,411	22,240,598 22	2 16
5. Chicago, S. P., M. & O.....	6,310	1,985,638	4,310,745 21	1 77
6. Chicago, Burlington & Q.....	35,045	11,473,901	23,403,352 85	2 04
7. Chicago, L. S. & E.....	1,284	434,437	976,901 84	2 25
8. Chicago & Lake Superior.....	4	1,304	1,986 00	1 51
9. Chicago, Harvard & G. L.....	26	6,719	13,099 47	1 93
10. Chippewa Valley & Northern.....	8	2,111	4,315 73	2 04
11. Drummond & S. W.....	22	5,487	9,339 59	1 70
12. Duluth, South Shore & A.....	1,750	606,282	1,207,340 72	1 99
13. Fairchild & N. E.....	26	8,339	14,522 13	1 55
14. Great Northern.....	26,585	5,827,876	11,840,536 83	2 03
15. Green Bay & Western.....	388	107,358	194,975 72	1 82
16. Hawthorne, Neb. & Sup'r.....	39	10,729	24,340 80	2 26
17. Hazelhurst & S. E.....	15	3,696	7,401 04	2 01
18. Illinois Central.....	31,116	10,334,390	20,543,456 17	1 99
19. Iola & Northern.....	7	1,888	3,184 52	1 69
20. Kewaunee, C. B. & Western.....	68	17,014	27,868 80	1 64
21. Lake Sup'r Term & Trans.....	48	19,545	46,179 32	2 36
22. Marinette, Tomahawk & W.....	49	11,701	24,609 04	1 80
23. Mpls, St. P. & S. S. M.....	5,224	1,315,668	2,815,437 17	2 05
24. Northern Pacific.....	24,631	7,102,039	15,473,926 08	2 18
25. Northwestern Coal Ry.....	18	4,257	9,606 78	2 25
26. Stanley, Merrill & P.....	107	33,248	57,044 00	1 72
27. Winona Bridge Ry.....	11	2,191	2,730 93	1 26
28. Wisconsin & Mich.....	170	56,277	99,877 96	1 74
29. Whitcomb & Morris.....	4	1,226	2,250 00	1 82
30. Wisconsin Central.....	4,018	1,182,829	2,489,668 11	2 10
31. Bayfield, Lake S. & W.....	19	4,905	10,255 34	2 09
Total.....	206,664	60,201,665	125,801,734 44	2 08

EMPLOYES AND SALARIES.

Employes and Salaries paid by the several railroads doing business in Wisconsin.

Name of Company.	General Officers.				Other Officers and General Office Clerks.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbot-ford & Northeastern.....	2	150	\$600 00	\$4 00	2	180	\$775 00	\$4 31
2. Ahnapée & Western.....	2	150	.....	.....	2	417	1,360 00	3 27
3. Chicago, Milwaukee & St. Paul.....	41	14,961	318,155 06	21 26	648	205,268	588,765 14	87
4. Chicago & Northwestern.....	29	8,764	304,748 30	34 77	850	260,729	709,220 26	72
5. Chicago, St. P., Minneap. & O.....	31	11,315	156,396 23	13 82	213	77,745	164,134 15	11
6. Chicago, Burlington & Quincy.....	148	54,020	740,366 55	13 71	2,336	731,168	1,602,623 24	19
7. Chicago, Lake Shore & Eastern.....	5	1,565	17,649 96	11 27	87	27,700	51,097 10	1 90
8. Chicago & Lake Superior.....	1	365	1,200 00	3 28	.....	.....	.....	.....
9. Illinois Central.....	56	20,515	370,327 11	18 05	1,507	528,906	1,061,365 51	2 28
10. Chippewa River & Northern.....	.....	.....	.....	.....	.....	.....	.....	.....
11. Drummond & Southwestern.....	.....	.....	.....	.....	1	312	200 00	64
12. Duluth, South Shore & Atlantic.....	19	5,363	48,750 00	9 09	68	24,496	50,997 45	2 08
13. Fairchild & Northeastern.....	5	936	1,925 00	2 09	.....	.....	.....	.....
14. Great Northern.....	20	6,460	144,965 73	23 44	887	298,194	773,314 92	2 59
15. Green Bay & Western.....	5	1,560	11,400 00	7 31	12	2,831	6,992 67	2 48
16. Hawthorne, Nebagamou & Sup.....	.....	.....	.....	.....	.....	.....	.....	.....
17. Hazehurst & Southeastern.....	.....	.....	.....	.....	.....	.....	.....	.....
18. Ija & Northern.....	.....	.....	.....	.....	.....	.....	.....	.....
19. Kewaunee, Green Bay & West'n.....	5	1,565	3,800 00	2 43	4	1,162	1,980 00	1 80
20. Lake Sup. Term & Trans. Co.....	2	730	660 00	90	4	1,485	4,128 42	2 35
21. Marinette, Tomahawk & West'n.....	1	355	1,800 00	4 93	2	625	1,250 00	2 00
22. Minneap St. P. & Sault St. Marie.....	12	3,903	71,452 74	18 31	261	87,263	211,798 61	2 42
23. Northern Pacific.....	4	15,810	311,290 76	19 69	9 8	335,669	903,471 16	2 69
24. Northwestern Coal Ry. Co.....	1	150	900 00	6 00	2	336	780 00	3 50
25. Stanley, Merrill & Phillips.....	4	624	3,000 00	4 81	3	936	3,300 00	3 74
26. Winona Bridge Ry. Co.....	.....	.....	.....	.....	1	313	.....	.....
27. Wisconsin & Michigan.....	9	2,911	10,200 00	3 50	5	1,560	3,677 84	2 36
28. Whitcomb & Morris.....	1	200	200 00	1 00	.....	.....	.....	.....
29. Wisconsin Central.....	12	4,380	74,196 77	16 94	203	70,751	208,582 12	2 95
30. Mineral Point & Northern.....	4	1,240	5,500 00	4 44	2	620	870 00	1 43
Total (30 Roads Reporting).....	458	157,856	\$2,599,484 21	16 47	8,098	2,658,956	\$3,497,954 59	2 44

WHOLE LINE, 1906.

as reported to the Railroad Commission for the year ending June 30, 1906, for whole line.

Station Agents.				Other Station Men.				Engineers.			
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
			\$				\$				\$
1	313	\$720 00	2 30	1	602	880 00	1 46	1	332	\$1,082 77	3 26
4	1,228	2,100 00	1 71	2	602	880 00	1 46	1	403	1,564 12	3 89
1232	385,606	692,297 46	1 80	3,705	1,159,665	1,858,961 33	1 60	1,397	482,967	1,857,960 04	3 85
1048	325,833	729,949 62	2 24	3,756	1,107,394	1,984,542 35	1 79	1,825	565,278	2,325,038 73	4 11
212	66,356	154,849 36	2 33	651	204,702	368,587 24	1 80	3 21	100,473	458,041 60	4 56
1138	415,370	804,267 62	1 94	3,316	1,037,595	1,837,794 41	1 77	1,467	535,455	2,102,670 57	3 93
10	2,930	6,517 04	2 22	48	17,417	27,720 82	1 59	137	49,489	167,312 37	3 38
1	365	180 00	50					1	313	600 00	1 91
890	335,450	596,465 87	1 78	3,560	1,215,316	1,960,207 85	1 61	930	392,786	1,732,891 72	4 41
48	16,161	35,877 75	2 22	131	42,880	73,581 60	1 72	86	300	705 00	2 35
2	626	740 03	1 18					2	620	1,654 93	2 67
510	184,866	370,842 59	2 01	1,492	337,638	570,993 54	1 69	839	33,929	127,605 66	3 76
30	9,000	16,200 72	1 80	19	4,604	6,676 27	1 45	17	440	1,100 84	2 56
2	538	1,076 16	2 00					2	238,836	1,001,899 65	4 19
1	312	720 00	2 31	1	312	31 20	10	4	1,172	3,841 31	3 28
3	1,097	1,920 00	1 75	10	2,405	3,126 95	1 30	3	340	850 00	2 50
1	365	1,200 00	3 29	5	1,780	3,237 43	1 82	1	312	967 45	3 10
2	468	1,550 00	2 88	1	310	540 00	1 74	2	625	2,345 40	3 75
208	69,849	139,963 14	2 00	259	82,992	127,211 15	1 53	5	2,109	7,382 46	3 50
521	182,221	413,638 29	2 27	2,071	670,559	1,315,512 15	1 93	222	756	2,268 00	3 00
2	624	1,110 00	1 83	1	311	533 39	1 72	2	76,408	306,752 92	4 01
15	5,400	10,713 32	1 66	3	1,080	1,620 00	1 50	2	376,102	1,713,068 71	4 55
140	51,098	114,517 41	2 24	340	123,120	207,523 79	1 69	1	655	2,185 87	3 34
4	1,240	2,322 00	1 87	2	60	11 45	19	2	554	2,084 64	3 76
6027	2,057,616	\$4,100,209 64	1 99	19,367	6,011,686	\$10,350,072 97	1 72	3,603	2,933,253	\$12,106,469 17	4 13

EMPLOYES AND SALARIES.

Name of Company.	Firemen.				Conductors.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern ...	1	331	\$634 98	1 92	1	335	\$731 58	2 18
2. Alnapée & Western	2	402	864 00	2 50	1	351	720 00	2 05
3. Chicago, Milw. & St. Paul	1,365	462,711	1,104,408 00	3 39	1,033	323,329	1,240,273 59	3 84
4. Chicago & Northwestern	2,133	652,918	1,621,172 63	3 48	1,239	366,836	1,457,781 94	3 97
5. Chi., St. Paul, Minneap. & O.	321	100,473	284,442 23	3 33	203	65,104	269,685 52	4 14
6. Chicago, Burlington & Quincy	1,484	541,660	1,305,165 91	3 41	901	328,865	1,207,468 84	3 67
7. Chicago, Lake Shore & Eastern	134	48,241	99,327 69	2 06	19	6,936	24,090 23	3 47
8. Chicago & Lake Superior .....	.....	.....	.....	.....	1	313	480 00	1 55
9. Illinois Central	931	394,387	1,038,853 96	2 63	655	274,019	1,038,397 62	3 79
10. Chippewa River & Northern	1	300	525 00	1 75	1	300	900 00	3 00
11. Drummond & Southwestern	2	609	1,059 60	1 74	.....	.....	.....	.....
12. Duluth, South Shore & Atlantic	85	33,683	77,246 34	2 29	72	273 12	88,539 53	3 24
13. Fairchild & Northeastern	2	406	818 11	2 00	1	326	925 00	2 83
14. Great Northern	1,012	241,669	643,287 02	3 66	987	210,386	778,466 74	3 70
15. Green Bay & Western	21	6,768	15,566 85	2 30	13	4,263	11,723 04	2 75
16. Hawthorne, Nebakamon & Sup.	4	1,318	2,636 03	2 00	3	982	2,945 84	3 00
17. Hazelhurst & Southeastern	3	340	596 21	1 75	1	281	633 29	2 25
18. Iola & Northern	2	312	540 00	1 73	.....	.....	.....	.....
19. Kewaunee, Gr. Bay & Western	2	718	1,650 45	2 30	2	654	1,800 00	2 75
20. Lake Superior Term. & Trans.	5	2,104	4,419 06	2 10	2	.....	.....	.....
21. Marinette, Tomah'k & Western	2	756	1,512 00	2 00	2	720	2,160 00	3 00
22. Minneap., St. P. & S. S. Marie.	222	76,408	192,639 12	2 52	173	60,608	224,108 54	3 70
23. Northern Pacific	1,117	376,102	951,639 61	2 51	724	247,028	927,204 87	3 75
24. Northwestern Coal Ry.	1	308	648 86	2 11	1	275	1,203 89	4 38
25. Stanley, Merrill & Phillips	18	6,590	13,935 00	2 11	.....	.....	.....	.....
26. Wisconsin & Michigan	8	2,495	6,461 23	2 13	8	2,496	8,640 00	3 00
27. Whitcomb & Morris	1	313	540 00	1 70	.....	.....	.....	.....
28. Wisconsin Central	213	65,448	158,726 67	2 43	155	43,682	159,330 50	3 65
29. Mineral Point & Northern	2	626	1,288 78	2 05	2	639	1,699 85	2 66
Total (30 roads reporting).	9,093	3,918,400	\$7,533,586 31	2 50	6,203	1,966,040	\$7 449,910 60	3 78

WHOLE LINE, 1906—Continued.

Other Trainmen.				Machinists.				Carpenters.				No.
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensati. n.	Average daily compensati. n.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	
			\$				\$				\$	
1	353	\$600	66 1 72					1	52	\$107	12 2 06	1
2	702	1,260	00 1 79					1	350	700	00 2 00	2
2,138	669,191	1,468,649	32 2 20	594	188,591	\$649,046	62 3 44	955	268,868	606,504	62 2 25	3
2,627	806,914	1,964,311	14 2 43	1,124	362,434	916,274	81 2 53	2,060	593,135	1,231,403	86 2 08	4
471	147,423	373,006	43 2 53	539	168,707	376,205	25 2 23	533	166,829	338,939	80 2 03	5
1,760	642,400	1,440,114	90 2 24	930	291,000	857,947	93 2 95	1,617	506,121	1,254,837	49 2 48	6
39	14,280	36,354	04 2 55	66	20,582	46,950	07 2 28	23	7,187	15,835	41 2 20	7
2,395	990,199	2,475,317	15 2 50	1,298	357,300	1,027,478	40 2 88	2,429	708,532	1,601,457	76 2 26	8
1	300	435	00 1 45									9
3	736	1,315	60 1 79	1	312	1,591	00 5 10	1	223	532	12 2 39	10
188	69,058	146,062	90 2 12	27	8,426	22,169	32 2 63	60	18,444	40,220	07 2 18	11
1	319	564	85 1 74									12
2,389	489,439	1,081,038	35 2 21	561	132,892	449,360	62 3 38	323	90,504	229,482	29 2 54	13
20	6,384	11,809	64 1 85	16	5,046	13,542	42 2 70	13	4,020	8,039	61 2 00	14
6	1,690	3,380	06 2 00									15
2	20	38	42 1 92									16
												17
4	1,118	2,069	18 1 85									18
16	6,674	20,042	13 3 00	1	306	1,055	00 3 45					19
2	720	1,080	00 1 50									20
421	141,734	308,260	51 2 17	202	64,824	159,353	02 2 48	416	624	1,404	00 2 25	21
2,300	778,708	1,996,338	65 2 56	783	238,811	704,762	13 2 95	1,432	133,623	301,329	09 2 27	22
3	657	2,323	26 3 54						396,473	974,498	56 2 46	23
18	5,450	10,460	00 1 92									24
14	4,903	9,806	03 2 00	5	1,560	4,290	00 2 75	4	1,248	3,319	68 2 66	25
403	132,202	322,388	20 2 44	119	38,283	107,636	40 2 81	201	51,451	114,075	61 2 22	26
2	600	1,294	99 2 12					2	411	870	00 2 12	27
15,235	4,912,175	\$11,678,362	38 2 38	6,266	1,879,184	\$5,337,663	32 2 84	10,073	2,948,095	\$6,725,557	12 2 28	28

EMPLOYES AND SALARIES

Name of Company	Other Shopmen.				Section Foremen.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average yearly compensation.
1. Abbotsford & Northeastern	1	351	\$614 25 1 75	\$	2	626	\$1,035 00 1 65	\$
2. Ahnapee & Western	1	351	1,540		2	2,400 00 1 55		
3. Chicago, Milwaukee & St. P.	4,668	1,465,934	2,817,841 78 1 92	1,045	327,055	524,356 57 1 62		
4. Chicago & Northwestern	4,279	1,367,184	2,517,832 89 1 84	1,324	410,969	769,957 30 1 87		
5. Chi., St. P., Minneapolis & O.	309	96,717	190,283 31 1 97	286	89,518	172,437 68 1 93		
6. Chi., Burlington & Quincy	6,614	2,070,182	4,395,842 62 2 12	1,518	554,070	943,162 59 1 70		
7. Chi., Lake Shore & Eastern	298	101,421	194,695 22 1 92	24	8,718	17,083 68 1 96		
8. Chicago & Lake Superior	1			1	313	480 00 1 55		
9. Illinois Central	2,965	865,445	1,834,293 07 2 12	947	330,478	535,6 1 85 1 62		
10. Chippewa River & Northern	1			2	600	1,050 00 1 75		
11. Drummond & Southwestern	2	577	1,087 12 1 88	1	315	573 97 1 82		
12. Duluth, So. Shore & Atlantic	312	106,996	189,682 14 1 77	118	45,030	73,637 80 1 71		
13. Fairchild & Northeastern	1			2	545	1,007 96 1 84		
14. Great Northern	4,241	1,227,479	2,305,934 69 1 88	824	314,404	521,237 94 1 66		
15. Green Bay & Western	40	14,278	22,559 36 1 65	37	13,280	19,920 00 1 50		
16. Hawthorne, Nebag & Sup.	5	1,395	3,348 86 2 40	1	275	632 50 2 30		
17. Hazelhurst & Southeastern	1			1	111	203 84 1 71		
18. Iola & Northern	1			1	248	309 90 1 25		
19. Kewaunee, G. B. & Western	3	976	1,620 00 1 66	6	2,080	3,120 00 1 50		
20. Lake Sup. Term. & Trans Co	5	1,985	4,246 81 2 14	1	365	793 55 2 17		
21. Marinette, Tomahawk & W.	1			5	1,560	2,700 00 1 73		
22. Minneap., St. P. & S. Ste. M.	201	67,625	160,911 78 2 38	271	92,890	150,222 69 1 62		
23. Northern Pacific	2,444	773,006	1,741,418 63 2 25	1,339	328,878	596,205 40 1 81		
24. Northwestern Coal Ry. Co	1			1	315	606 92 1 93		
25. Stanley, Merrill & Phillips	13	3,810	7,800 00 2 05	6	1,337	3,560 00 1 84		
26. Wisconsin & Michigan	23	6,332	11,081 40 1 75	15	6,764	10,687 50 1 58		
27. Whitcomb & Morris	1			1	300	525 00 1 75		
28. Wisconsin Central	448	146,299	255,984 80 1 75	142	51,087	81,501 03 1 60		
29. Mineral Point & Northern	1			4	1,475	3,020 00 2 05		
Total (29 roads reporting) ..	26,871	8,317,992	\$16,658,079 33 2 00	7,930	2,583,764	\$4,443,170 76 1 72		

WHOLE LINE, 1906—Continued.

Other Trackmen.				Switchmen, Flagmen and Watchmen.				Telegraph Operators and Dispatchers.			
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
12	2,719	\$3,671 68	1 35	1	365	\$481 29	1 32				
12	3,744	5,616 00	1 50	1	365	547 50	1 50				
4,304	1,346,839	1,848,282 24	1 37	1,961	613,793	1,463,876 30	2 39	675	211,275	\$487,410 42	2 31
10,373	1,929,645	2,825,553 35	1 46	2,268	695,799	1,639,644 02	2 36	829	262,920	614,437 96	2 34
1,443	451,659	694,961 45	1 54	302	94,526	255,045 12	2 70	255	79,815	179,784 24	2 25
7,370	2,303,949	3,312,186 49	1 44	1,555	567,575	1,301,843 48	2 29	1,106	403,690	857,119 43	2 12
314	97,973	147,081 60	1 50	370	133,175	374,202 86	2 81	11	3,417	5,571 67	1 63
8,236	2,285,526	2,845,374 63	1 29	667	245,144	362,019 47	1 47	764	214,637	528,360 87	2 16
8	2,400	3,680 00	1 60								
19	5,859	8,986 81	1 51	1	228	340 91	1 49				
475	150,685	230,147 45	1 56	34	12,232	16,403 50	1 34	62	21,302	44,653 75	2 10
14	2,824	3,495 83	1 27	1	365	547 50	1 50				
13,776	2,276,710	3,513,944 47	1 54	126	48,185	74,800 40	1 55	656	164,207	377,730 04	2 30
101	20,545	29,790 09	1 45	15	4,648	8,134 36	1 75	4	1,245	2,490 00	2 00
5	1,439	2,519 59	1 75	3	1,098	2,032 49	1 85				
1	170	276 12	1 62								
17	4,540	6,356 18	1 40	2	312	497 25	1 59				
12	3,156	5,305 41	1 68	6	722	1,080 00	1 50	1	300	600 00	2 00
19	4,990	7,484 14	1 50		2,348	4,349 47	1 85	1	365	660 00	1 81
1,652	329,863	473,370 40	1 44	30	8,708	12,689 12	1 45	131	45,550	94,856 65	2 08
9,950	2,064,751	2,987,925 88	1 45	255	96,149	150,630 87	1 57	782	260,127	651,666 59	2 51
3	1,000	1,528 77	1 53	2	804	1,377 16	1 71				
106	10,330	15,520 00	1 50								
35	10,900	16,380 00	1 50	2	720	1,080 00	1 60	2	720	1,500 00	2 16
1	300	450 00	1 50								
813	173,803	240,108 33	1 38	83	30,495	40,412 67	1 33	133	39,942	78,288 54	1 96
57	11,814	18,804 12	1 59								
59,127	13,499,135	\$19,248,800 98	1 43	7,686	2,558,750	\$5,712,065 74	2 23	5,412	1,739,502	\$3,925,130 16	2 03

SALARIES AND EMPLOYES,
Distribution

Name of Company.	Other Employees and Laborers.				General Administration.			
	Number.	Number of days worked.	Total yearly compensation.	average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern				\$				\$
2. Ahnapec & Western	1	312	\$720 00	2 30	2	180	\$775 00	4 31
3. Chicago, Milwaukee & St. P.	7,451	2,332,163	5,185,488 85	3 22	689	220,233	1,980 00	3 46
4. Chicago & Northwestern	5,518	1,418,516	2,946,757 73	3 09	886	271,371	906,920 20	4 12
5. Chicago, St. P., M. & O.	803	251,339	515,834 43	3 05	131	48,077	938,330 96	3 95
6. Chicago, Burlington & Q.	5,134	1,606,942	3,629,550 29	3 26	2,484	78,188	2,347,989 79	2 98
7. Chicago, Lake Shore & East.	115	38,582	74,350 15	1 93	39	12,207	39,565 33	3 24
8. Chicago & Lake Superior	1	365	457 00	1 25	1	365	1,200 00	3 23
9. Illinois Central	4,798	1,697,695	2,911,205 94	1 71	585	202,054	666,544 57	3 39
10. Chippewa River & Northern	1	300	645 00	2 15				
11. Drummond & Southwestern.					1	312	200 00	1 64
12. Duluth, South Shore & A.	183	62,085	129,928 41	2 09	87	29,859	99,747 45	3 34
13. Fairchild & Northeastern	20	3,219	4,725 19	1 46	5	936	1,925 00	2 05
14. Great Northern	3,109	621,657	1,247,458 27	2 01	907	304,654	918,280 65	3 01
15. Green Bay & Western	21	2,417	3,625 66	1 50	6	1,872	12,600 00	6 73
16. Hawthorne, Nebagamon & S.								
17. Hazelhurst & Southeastern.	1	147	342 24	2 33				
18. I-a & Northern	1	8	12 07	1 51				
19. Kewaunee, Green Bay & West.	28	7,375	11,061 95	1 50	6	1,865	4,400 00	2 36
20. Lake Superior Term. & Trans.	1	365	500 00	1 37	7	2,580	5,288 42	2 05
21. Marinette, Tomahawk & W.					3	990	3,050 00	3 08
22. Minneapolis, St. P., & S. S. M.	1,556	395,494	752,905 00	1 90	273	91,166	283,251 35	3 11
23. Northern Pacific.	2,536	930,019	1,828,486 13	1 96	1,436	494,501	1,553,291 28	3 14
24. Northwestern Coal.	2	428	764 74	1 79	2	450	1,500 00	3 33
25. Stanley, Merrill & Phillips.					4	624	3,000 00	4 81
26. Winona Bridge Ry. Co.	5	1,487	2,198 22	1 48	1	313	300 00	1 96
27. Wisconsin & Michigan.	30	9,360	15,537 62	1 66	14	4,471	13,877 84	3 10
28. Whitcomb & Morris.					1	200	200 00	1 00
29. Wisconsin Central	792	163,841	291,989 39	1 78	149	51,913	183,855 03	3 54
30. Mineral Point & Northern.	3	612	1,174 49	1 92	6	1,860	6,370 00	3 42
Total (30 roads reporting) ...	32,119	9,544,728	\$19,554,818 77	2 05	7,731	2,528,808	\$8,179,118 91	3 23

WHOLE LINE, 1906—Continued.
of the Foregoing.

Maintenance of Way and Structure.				Maintenance of Equipment.				Conducting Transportation.								
Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.	Number.				
			\$				\$				\$					
15	3,397	\$4,813	70	1	42			6	2,029	\$4,260	28	10				
15	5,961	9,283	50	1	56			13	3,687	7,388	32	00				
8,725	2,730,828	4,826,737	99	1	77	7,557	2,343,132	5,006,781	01	14	16,239	5,164,010	11,976,818	94	2	
17,111	3,787,923	6,539,474	87	1	73	3,985	1,277,666	2,876,976	94	25	19,300	5,798,325	14,203,894	15	2	
2,138	669,194	1,157,842	31	1	73	1,294	405,022	835,236	10	06	3,336	1,050,408	2,769,860	03	2	
12,217	3,899,788	6,720,036	97	1	72	9,254	2,846,918	6,463,640	64	23	14,438	5,008,258	12,066,295	26	3	
404	127,619	207,612	63	1	63	407	135,637	266,731	29	1	850	304,350	793,931	61	2	
2	878	937	00	1	40							991	1,260	00	1	
11,273	3,263,215	4,780,705	29	1	47	6,168	1,788,541	4,111,177	65	2	30	5,634,585	12,506,240	27	2	
11	3,300	5,375	00	1	63							4	2,565	00	2	
20	6,174	9,560	78	1	55	4	1,112	3,210	24	2	88	8	4,371	04	1	
645	209,646	338,438	78	1	61	347	117,935	217,419	00	1	84	889	318,642	739,899	49	2
36	6,470	9,063	98	1	40							9	4,861	30	1	
14,923	2,681,618	4,264,664	70	1	59	4,802	1,360,371	2,755,295	61	2	03	11,110	2,536,883	6,146,487	59	2
151	37,845	57,749	70	1	53	77	21,715	40,727	44	1	88	150	44,708	98,182	39	2
6	1,714	3,152	09	1	83	5	1,395	3,348	86	2	40	22	6,798	15,914	89	2
2	289	479	96	1	66							11	1,281	2,697	88	2
1	248	309	99	1	25							6	1,568	2,767	97	1
51	13,995	20,578	13	1	49	3	976	1,620	00	1	66	29	8,499	15,919	98	1
13	3,523	6,098	96	1	73	6	2,291	5,301	41	2	31	39	15,745	41,290	60	2
26	7,174	10,184	14	1	42	2	720	1,404	00	1	95	9	3,010	8,910	00	2
2,896	665,370	1,104,721	11	1	66	1,054	347,626	707,034	49	2	03	2,014	633,560	1,594,917	53	2
13,732	3,140,400	5,247,097	81	1	67	4,179	1,350,034	3,106,872	85	2	30	9,076	3,085,806	8,263,551	45	2
6	1,385	2,417	46	1	75	1	296	1,015	98	3	46	10	3,110	7,921	43	2
113	12,579	20,400	00	1	60	14	4,122	8,880	00	2	15	41	13,600	27,515	00	2
5	1,487	2,198	22	1	48											
50	17,664	27,067	50	1	33	32	9,140	18,691	08	2	04		30	29,671	66,158	17
2	600	975	00	1	62								9	2,600	00	2
1,472	305,557	494,042	18	1	61	771	244,517	482,020	87	1	98	2,011	648,429	1,546,607	89	2
63	13,700	22,694	12	1	65							17	4,331	9,876	20	
86,128	21,619,344	35,894,393	57	1	66	3,996	12,310,058	\$26,916,041	95	2	19	94,708	20,328,906	72,931,676	65	

SALARIES AND EMPLOYEES, WHOLE LINE, 1906—Continued.
Totals.

Name of Company.	Total. Including General Officers.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern	23	5,606	\$9,848 98	\$1 76
2. Ahnapee & Western	38	10,916	19,946 07	1 83
3. Chicago, Milwaukee & St. Paul	33,211	10,458,253	22,717,278 14	2 17
4. Chicago & Northwestern	41,282	11,135,288	24,558,676 92	2 21
5. Chicago, St. Paul, Minneapolis & Omaha	6,901	2,172,701	4,952,634 43	2 28
6. Chicago, Burlington & Quincy	38,393	12,590,152	27,592,962 36	2 19
7. Chicago, Lake Shore & Eastern	1,700	579,813	1,307,840 86	2 26
8. Chicago & Lake Superior	6	2,034	3,397 00	1 67
9. Illinois Central	33,028	10,888,395	22,064,667 78	2 03
10. Chippewa River & Northern	15	4,500	7,940 00	1 54
11. Drummond & Southwestern	33	9,791	17,342 06	1 77
12. Duluth, South Shore & Atlantic	1,968	676,082	1,395,504 72	2 06
13. Fairchild & Northeastern	50	10,009	15,850 23	1 58
14. Great Northern	31,742	6,883,526	14,084,728 55	2 05
15. Green Bay & Western	384	106,136	209,259 53	1 97
16. Hawthorne, Nebazamon & Superior	33	9,907	22,415 84	2 26
17. Hazehurst & South-aster	14	1,717	3,520 08	2 05
18. Iola & Northern	7	1,816	3,077 96	1 69
19. Kewanee, Green Bay & Western	89	25,335	42,530 11	1 68
20. Lake Superior Terminal & Transfer	65	24,139	57,979 39	2 40
21. Marinette, Tomahawk & Western	40	11,894	23,518 14	1 99
22. Minneapolis, St. Paul & Sault Ste. Marie	6,237	1,737,722	3,689,924 48	2 12
23. Northern Pacific	28,423	8,070,741	18,170,813 39	2 25
24. Northwestern Coal	19	5,239	12,854 86	2 45
25. Stanley, Merrill & Phillips	172	30,925	59,495 00	1 92
26. Winona Bridge Ry. Co	6	1,800	2,498 22	1 39
27. Wisconsin & Michigan	186	60,946	125,794 59	2 06
28. Whitcomb & Morris	5	1,426	2,435 00	1 71
29. Wisconsin Central	4,403	1,230,416	2,707,525 97	2 17
30. Mineral Point & Northern	86	19,891	38,940 32	1 95
Total (30 roads reporting)	228,559	66,787,110	\$143,921,231 08	\$2 16

REPORT OF THE RAILROAD COMMISSION.

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SALARIES AND EMPLOYES, WHOLE LINE, 1906—Continued.
Totals.

Name of Company.	Total. Excluding General Officers.			
	Number.	Number of days worked.	Total yearly compensation.	Average daily compensation.
1. Abbotsford & Northeastern.....	23	5,606	\$9,848 98	\$1 76
2. Ahnapee & Western.....	36	10,766	19,346 07	1 80
3. Chicago, Milwaukee & St. Paul.....	33,170	10,443,288	22,399,123 08	2 14
4. Chicago & Northwestern.....	41,243	11,126,524	24,253,928 62	2 18
5. Chicago, St. Paul, Minneapolis & Omaha.....	6,870	2,161,386	4,796,238 25	2 22
6. Chicago, Burlington & Quincy.....	38,245	12,531,132	26,852,595 81	2 14
7. Chicago, Lake Shore & Eastern.....	1,695	578,248	1,290,190 90	2 23
8. Chicago & Lake Superior.....	5	1,669	2,197 00	1 40
9. Illinois Central.....	32,972	10,867,800	21,694,340 67	2 00
10. Chippewa River & Northern.....	15	4,500	7,940 00	1 54
11. Drummond & Southwestern.....	33	9,791	17,342 06	1 77
12. Duluth, South Shore & Atlantic.....	1,949	670,719	1,346,754 72	2 01
13. Fairchild & Northeastern.....	45	9,003	13,925 28	1 53
14. Great Northern.....	31,722	6,877,066	13,939,762 82	2 03
15. Green Bay & Western.....	379	104,576	197,859 53	1 89
16. Hawthorne, Nebagamon & Superior.....	33	9,907	22,415 84	2 26
17. Hazelhurst & Southeastern.....	14	1,717	3,520 08	2 05
18. Iola & Northern.....	7	1,816	3,077 96	1 09
19. Kewaunee, Green Bay & Western.....	84	23,770	38,730 11	1 63
20. Lake Superior Terminal & Transfer.....	63	23,409	57,319 39	2 45
21. Marinette, Tomahawk & Western.....	39	11,524	21,748 14	1 89
22. Minneapolis, St. Paul & Sault Ste. Marie.....	6,225	1,733,819	3,618,471 74	2 09
23. Northern Pacific.....	28,378	8,054,931	17,859,522 63	2 22
24. Northwestern Coal.....	18	5,089	11,954 86	2 35
25. Stanley, Merrill & Phillips.....	168	30,301	56,495 00	1 86
26. Winona Bridge Ry. Co.....	6	1,800	2,498 22	1 38
27. Wisconsin & Michigan.....	177	58,035	115,594 59	1 99
28. Whitcomb & Morris.....	4	1,226	2,235 00	1 82
29. Wisconsin Central.....	4,391	1,246,036	2,635,329 20	2 11
30. Mineral Point & Northern.....	82	18,651	33,410 32	1 79
Total (30 roads reporting).....	228,101	66,629,260	\$141,321,746 87	\$2 12

WISCONSIN PASSENGER TRAFFIC AND TRAIN MILEAGE AS REPORTED
JUNE

Passenger

Name of Company.	Number of passengers carried, earning revenue.	Number of passengers carried one mile.	Average distance carried.	Total passenger revenue.
1. Abbotsford & Northeastern.	5,823	81,792	14.00	\$2,943 65
2. Ahnapee & Western	37,800	1,285,200	34.00	26,834 92
3. Chicago, Mil. & St. P.				3,127,905 00
4. Chicago & Northwestern ...	5,165,942	158,771,919	30.73	3,202,789 66
5. Chicago, St. Paul Minneapolis & Omaha	1,202,125	58,680,762	46.49	1,358,537 11
6. Chi., Burlington & Quincy ¹				
7. Illinois Central	83,882	1,512,172	18.03	31,931 22
8. Dul. S. S. & Atlantic	85,237	4,522,634	53.02	98,010 31
9. Great Northern	171,517	3,743,924	21.83	83,453 74
10. Fairchild & North Eastern..	4,425	83,950	18.90	3,361 17
11. Green Bay & Western	200,054	4,863,007	24.31	119,783 19
12. Hawthorne, Nebagamon & Superior	912	22,800	25.00	253 00
13. Hazelhurst & Southeastern	1,231	11,368	9.24	448 54
14. Iola & Northern	7,514	35,316	4.70	1,487 81
15. Kewaunee, Green Bay & Western	47,051	1,032,895	21.95	25,443 71
16. Marinette, Tomahawk & Western	14,749	114,305	7.75	4,668 16
17. Mpls., St. P. & S. Ste. M.	258,635	12,856,309	50.00	330,173 77
18. Northern Pacific	249,995	6,266,567	25.70	148,194 88
19. Stanley, Merrill & Phillips.	4,592	117,936	21.09	3,633 96
20. Wisconsin Central	1,003,373	53,074,521	52.90	1,119,283 28
21. Wisconsin Western	31,036	611,082	19.69	13,706 58
Total	8,635,953	247,688,459	35.52	\$9,672,570 66
No. of railroad included	19	19	19	20

¹ C. B. & Q. Ry. Co., does not keep this information by states.

TO THE RAILROAD COMMISSION OF WISCONSIN FOR YEAR ENDING 30TH, 1905.

Traffic.

Average amount received from each passenger.	Average receipts per passenger per mile.	Total Passenger earnings.	Passenger earnings per mile of road.	Passenger earnings per train, mile.	Miles run by passenger trains.	No.
\$.50552	\$.03591	\$3,074 05	\$242 35	\$.38974	.....	1
.70392	.02088	32,384 73	952 49	.75764	.....	2
.....	.....	4,323,326 16	2,506 23	1.20777	3,272,398	3
.61998	.02017	3,882,451 41	2,182 51	1.01610	3,505,499	4
.....
.10760	.02315	1,587,812 43	2,134 01	1.01194	1,318,697	5
.....	.....	.....	.....	.....	.....	6
.38067	.02112	47,819 57	523 71	.54189	71,740	7
1.43009	.02762	117,923 99	1,060 47	.67932	149,604	8
.48356	.02229	96,256 28	2,547 14	1.27232	75,609	9
.75960	.04003	4,966 01	150 49	.....	.....	10
.59875	.02463	145,689 72	647 51	.60461	139,540	11
.....
.25000	.01109	253 00	10 12	.....	.....	12
.36437	.03946	644 90	58 63	.05243	.....	13
.19801	.04213	1,767 68	376 10	.15021	.....	14
.....
.54077	.02463	30,415 05	228 75	.63169	.....	15
.....
.31650	.04085	5,647 90	129 03	.27688	.....	16
1.16060	.02335	390,798 81	1,098 80	.91468	240,233	17
.59279	.02365	173,382 17	1,288 51	.95394	153,025	18
.65520	.03107	3,698 17	89 98	.....	.....	19
1.11552	.02109	1,365,783 91	1,623 44	.91848	1,460,015	20
.44163	.02243	23,947 83	460 80	.73141	.....	21
.....
\$.075760	\$.02127	\$12,239,143 79	\$1,918 62	\$1.16810	10,336,330	
19	19	20	22	17	10	

WISCONSIN FREIGHT TRAFFIC AND TRAIN MILEAGE AS REPORTED
ENDING

Freight

Name of Company.	Number of tons carried of freight earning revenue.	Number of tons carried one mile.	Average distance haul of one ton—Miles.	Total freight revenue.
1. Abbotsford & Northeastern	60,050	887,028	14.77	\$23,594 78
2. Ahnapee & Western	61,865	2,103,410	34.00	30,349 73
3. Chi., Milwaukee & St. P.				10,956,957 48
4. Chicago & Northwestern ¹	7,474,053	1,030,592,618	138.00	9,433,985 76
5. Chi., St. P., Mpls. & O.	3,529,400	510,627,851	144.68	3,680,419 59
6. Chi., Lake Shore & Eastern	666,946			52,939 33
7. Illinois Central	132,013	4,064,592	30.79	53,888 60
8. Drummond & Southwestern	46,958	469,580	10.00	14,768 22
9. Duluth, S. S. & Atlantic	274,844	19,021,616	69.21	155,808 13
10. Great Northern	8,828,307	171,674,094	19.45	965,625 23
11. Fairchild & Northeastern	69,881	642,205	9.19	30,632 73
12. Green Bay & Western	364,554	39,938,724	109.50	454,318 05
13. Hawth'ne, Nebag'n & Sup'r	319,738	8,792,795	25.00	47,836 59
14. Hazellhurst & Southeastern	126,423	751,174	5.94	22,752 74
15. Iola & Northern	13,880	65,236	4.70	5,674 86
16. Kewaunee, G. B. & W.	179,338	5,121,765	28.56	86,082 38
17. Marinette, Tamah'k & W.	98,426	1,427,177	14.50	45,516 66
18. Mpls., St. P. & S. Ste. M.	1,869,884	310,871,215	166.00	1,469,176 22
19. Northern Pacific	1,803,292	29,669,835	16.45	339,641 56
20. Stanley, Merrill & Phillips.	183,986	2,575,804	14.00	126,548 30
21. Wisconsin Central	4,032,390	637,285,792	158.04	4,184,702 41
22. Wisconsin Western	46,399	1,798,067	38.18	45,562 58
Total	30,182,627	2,778,382,008	92.05	\$32,226,781 94
No. of railroads included....	21	21	21	22

¹ Proportional.

TO THE RAILROAD COMMISSION OF WISCONSIN FOR THE YEAR
JUNE 30TH 1905.

Traffic.

Average amount received for each ton of freight.	Average receipts per ton per mile.	Total freight earnings.	Freight earnings per mile of road.	Freight earnings per train mile.	Miles run by freight trains.	No.
\$0.39291	\$0.02659	\$23,594 78	\$1,556 38	\$2.50289	9,427	1
.49051	.01443	30,349 73	892 64	.71003	.....	2
.....	.....	11,006,372 25	6,376 66	2.51015	4,077,139	3
1.26222	.00915	9,466,199 68	5,322 13	2.38308	3,656,809	4
1.04300	.00728	3,680,430 11	4,946 48	1.93309	1,653,535	5
.07937	.....	52,939 33	2,852 33	.31348	.....	6
.40821	.00133	54,127 00	592 79	.68729	62,249	7
.31450	.03145	14,768 22	1,805 40	.....	.....	8
.56689	.00819	157,679 53	1,417 98	.91584	172,169	9
.10938	.00562	969,810 03	25,663 14	7.63114	127,045	10
.43835	.04769	30,632 73	928 26	.....	.....	11
1.24620	.01138	454,318 06	2,019 19	1.64785	174,292	12
.14960	.00544	47,836 59	1,913 46	1.86859	20,860	13
.17977	.03029	22,752 74	2,068 43	.....	.....	14
.40885	.08699	5,674 86	1,207 42	.48223	.....	15
.48000	.01681	86,082 38	2,345 57	1.78787	.....	16
.46244	.03189	45,516 66	1,039 91	1.69825	.....	17
.78570	.00473	1,471,609 73	4,137 69	1.84524	610,495	18
.18835	.01145	341,877 77	2,540 71	1.96588	145,177	19
.68780	.04910	126,548 30	2,416 89	.....	.....	20
1.03777	.00657	4,192,896 40	4,983 39	2.07406	1,994,597	21
.98197	.02533	45,562 58	876 71	1.39156	.....	22
\$0.70460	\$0.00764	\$32,327,580 36	\$5,067 72	\$2,50770	12,703,734	
22	21	22	22	18	12	

PASSENGER AND FREIGHT

Name of Company.	Passenger and freight revenue.	Passenger and freight revenue per mile of road.	Passenger and freight earnings.	Passenger and freight earnings per mile of road.
1. Abbotsford & Northeastern.	\$26,538 43	\$1,750 50	\$27,268 83	\$1,798 55
2. Ahnapec & Western.....	57,184 65	640 30	62,734 46	640 30
3. Chi., Milwaukee & St. P....	14,084,862 48	8,164 05	15,330,198 41	8,885 89
4. Chicago & Northwestern * ..	12,636,775 42	7,104 70	13,348,651 09	7,504 93
5. C., St. P., M. & O.....	5,098,956 70	6,772 34	5,268,242 54	7,080 50
6. Chicago, L. S. & Eastern...	52,939 33	.....	52,939 33	.....
7. Illinois Central	85,819 82	939 87	101,947 47	1,116 50
8. Drummond & Southwestern.	14,768 22	.....	14,768 22	.....
9. Duluth, S. S. & Atlantic....	253,818 44	2,282 54	275,603 52	2,478 45
10. Great Northern	1,049,078 97	28,025 38	1,066,066 31	28,210 28
11. Fairchild & North Eastern....	33,993 90	1,030 12	35,568 74	1,078 68
12. Green Bay & Western.....	574,101 25	2,666 70	600,007 78	2,666 70
13. Hawthorne, Nebag. & Sup..	48,089 59	1,923 58	48,089 59	.....
14. Hazelhurst & South Eastern	23,201 28	2,109 21	23,397 64	2,127 06
15. Iola & Northern.....	7,162 67	.....	7,442 54	.....
16. Kewaunee, G. B. & Western	111,526 09	.....	116,497 43	.....
17. Marinette, Tomahawk & W.	50,184 82	1,158 36	51,164 56	1,168 94
18. Mpolis, St. P. & S. Ste. M.	1,769,346 99	4,974 83	1,862,408 54	5,236 49
19. Northern Pacific	487,836 44	3,625 42	515,259 94	3,829 22
20. Stanley, Merrill & Phillips.	130,212 26	2,486 88	130,246 49	2,487 51
21. Wisconsin Central	5,303,985 69	6,304 59	5,558,680 31	6,607 33
22. Wisconsin Western	59,269 16	1,140 45	69,510 41	1,337 51
Total (22 roads reporting.)	\$41,890,652 00	\$6,568 22	\$44,566,724 13	\$6,986 33

* Proportional.

† Deficit.

TRAFFIC, ETC., WISCONSIN, 1905—Continued.

	Gross earnings from operation.	Gross earnings from operation per mile of road.	Expenses.	Expenses per mile of road.	Income from operation.	Income from operation per mile of road.	No.
EE	\$28,536 17	\$1,882 33	\$18,415 88	\$1,214 77	\$10,120 29	\$667 56	1
	62,734 46	640 30	40,064 23	651 48	21,770 23	640 30	2
	15,388,999 15	8,919 97	8,658,866 42	5,018 96	6,730,132 73	3,901 01	3
	13,384,124 43	7,524 83	8,778,145 12	4,935 28	4,605,979 31	2,589 59	4
	5,355,231 10	7,197 40	3,465,953 55	4,658 23	1,889,267 55	2,539 17	5
	53,011 84	2,856 24	62,195 04	3,351 02	49,183 26	.....	6
	102,767 96	1,125 43	160,625 73	1,759 12	457,857 77	4633 64	7
	14,768 22	1,875 40	14,232 50	1,739 91	535 72	65 49	8
	276,056 06	2,482 52	288,026 60	2,590 17	411,970 54	4107 65	9
	1,106,674 05	29,284 84	550,779 75	14,574 75	555,894 30	14,710 09	10
	35,799 79	1,084 84	24,557 76	744 17	11,242 03	340 66	11
	600,007 78	2,666 70	357,017 66	1,586 74	242,990 12	1,079 96	12
	48,197 59	1,927 90	55,330 94	2,213 24	47,133 35	4285 33	13
	23,402 44	2,127 49	15,481 97	1,407 45	7,920 44	720 04	14
	7,442 54	1,583 52	5,595 06	1,190 44	1,847 48	393 08	15
	113,497 43	3,174 32	62,229 27	1,695 62	54,268 16	1,478 70	16
	51,210 25	1,169 98	46,695 91	1,066 85	4,514 34	103 13	17
	1,882,880 97	5,294 05	962,324 55	2,705 74	920,556 42	2,538 30	18
	565,638 93	4,203 62	475,803 34	3,535 99	89,835 59	667 62	19
	133,045 39	2,540 97	82,000 91	1,566 27	51,035 48	407 98	20
	5,562,851 54	6,612 29	3,716,904 72	4,418 10	1,845,946 89	2,194 19	21
	69,510 41	1,327 51	36,406 79	700 53	33,103 68	636 98	22
	\$44,869,378 50	\$7,633 77	\$27,878,562 70	\$4,370 27	\$16,990,815 88	\$2,663 50	

PASSENGER AND FREIGHT TRAFFIC,

Train

Name of Company.	Miles run by passen- ger trains.	Miles run by freight trains.	Miles run by mixed trains.
1. Abbotsford & Northeastern		9,427	
2. Ahnapee & Western			42,744
3. Chicago, Milwaukee & St. Paul	3,272,398	4,077,139	307,600
4. Chicago & Northwestern	3,505,499	3,656,809	315,464
5. Chicago, St. Paul, Mpls & Omaha ¹	1,318,697	1,653,535	250,378
6. Chicago & Lake Superior	71,740	62,249	16,506
7. Chicago, Lake Shore & Eastern			
8. Duluth, South Shore & Atlantic	149,604	172,169	
9. Green Bay & Western	139,540	174,292	101,412
10. Hawthorne, Nebagamon & Superior		20,800	4,800
11. Hazelhurst & Southeastern			12,300
12. Iola & Northern			11,768
13. Kewaunee, Green Bay & Western			48,148
14. Marinette, Tomahawk & Western			20,398
15. Minneapolis, St. P. & Sault Ste. Marie	240,233	610,495	187,018
16. Northern Pacific	153,025	145,177	28,728
17. Great Northern	75,609	127,045	45
18. Wisconsin Central	1,460,015	1,994,597	26,992
19. Wisconsin Western			32,742
Total	10,386,360	12,703,734	1,407,033
No. of railroads included	218	218	418

¹ Proportional.² Eight railroads report no passenger train mileage.³ Six railroads report no freight train mileage.⁴ Two railroads report no mixed train mileage.

WISCONSIN, 1905—Continued.

Mileage.

Total mileage earning income.	Miles run by switching trains.	Miles run by construction and other trains.	Grand total train mileage.	Mileage of loaded freight cars south or west.	Mileage of loaded freight cars south or west.	No.
9,427			9,427	3,212	36,551	1
42,744						2
7,657,187						3
7,477,762	2,558,709	811,293	10,847,764	33,791,561	36,154,113	4
3,222,610	571,052	141,780	3,935,442			5
150,495	3,193	3,423	157,111	269,320	286,937	6
	168,872		168,872			7
321,773	9,119	23,772	354,664	1,105,400	395,084	8
415,244			415,244	1,391,469	1,307,508	9
25,600	8,500	4,500	38,000	4,500	138,142	10
12,300		20,000	32,300	5,240	106,632	11
11,768			11,768	2,845	4,080	12
48,148			48,148	141,559	166,241	13
20,398	6,404		26,802			14
1,037,746		23,523	1,061,269	9,673,314	9,562,281	15
326,930		13,120	340,050	824,336	1,417,357	16
202,699		23,109	225,808	3,003,637	954,730	17
3,481,604	488,422	371,952	4,391,978	19,990,423	21,382,866	18
32,742			32,742	120,940	87,149	19
24,497,127						
18						

Totals omitted on account of the incompleteness of reports.

PASSENGER AND FREIGHT TRAFFIC,

Car mileage,

Name of Company.	Mileage of empty freight cars north or east.	Mileage of empty freight cars south or west.	Average number of freight cars in train.
1. Abbotsford & Northeastern....	34,747	1,505	8.00
2. Ahnapee & Western.....	*	*	*
3. Chicago, Milwaukee & St. P....	*	*	*
4. Chicago & Northwestern.....	15,833,849	13,895,038	25.09
5. Chicago, St. P. M. & O.....			
6. Chi., Lake Shore & Eastern.....			
7. Illinois Central.....	145,608	92,134	10.08
8. Drummond & Southwestern.....			
9. Duluth, South Shore & Atl....	214,580	912,539	15.26
10. Fairchild & North Eastern.....			
11. Green Bay & Western.....	280,263	311,309	
12. Hawthorne, Nebag. & Sup....	140,284	4,500	23.95
13. Hazelhurst & South Eastern..	106,632	5,240	18.00
14. Iola & Northern.....	2,190	975	
15. Kewaunee, G. B. & Western..	56,513	22,256	
16. Marinette, Tomahawk & W.....			
17. Mpolis, St. P. & S. Ste. M....	1,795,645	1,730,866	29.00
18. Northern Pacific.....	547,916	559,343	19.26
19. Stanley, Merrill & Phillips.....			
20. Great Northern.....	267,576	2,275,716	51.16
21. Wisconsin Central.....	8,929,443	7,105,905	28.40
22. Wisconsin Western.....	16,388	50,992	8.41
Total.....			

Totals omitted on account of the incompleteness of reports.

WISCONSIN, 1905—Continued.

tonnage, etc.

Average number of loaded cars in train.	Average number of empty cars in train.	Average number of tons of freight in train.	Average number of tons of freight in each loaded car.	Mileage upon which based.	No.
4.00	4.00	94.00	22.00	15.16	1
.....	.....	.....	.....	34.00	2
.....	.....	.....	.....	1,525.23	3
17.61	7.48	259.45	14.73	1,778.65	4
.....	.....	.....	.....	744.05	5
.....	.....	.....	.....	18.56	6
7.06	3.02	51.61	7.31	91.31	7
.....	.....	.....	.....	8.18	8
8.71	6.55	110.48	12.68	111.20	9
.....	.....	.....	.....	33.00	10
.....	.....	.....	.....	285.00	11
11.89	12.06	160.00	17.50	25.00	12
9.00	9.00	61.00	7.00	11.00	13
.....	.....	.....	.....	4.70	14
.....	.....	.....	.....	36.70	15
.....	.....	.....	.....	43.77	16
24.00	4.00	389.80	16.16	355.66	17
12.89	6.37	170.61	13.24	134.56	18
.....	.....	.....	.....	52.36	19
31.15	20.01	1,350.81	43.37	37.79	20
20.47	7.93	315.24	15.40	841.29	21
6.35	2.06	54.93	8.64	51.97	22
.....	.....	.....	.....	6,379.14	

Totals omitted on account of the incompleteness of reports.

PASSENGER AND FREIGHT TRAFFIC AND TRAIN

As reported to the Railroad Commission for the
Passenger

Name of Company.	Number of passengers carried earning revenue.	Number of passengers carried one mile.	Average distance carried.	Total passenger revenue.
1. Abbotsford & Northeastern.....	5,823	81,972	14.00	\$2,943 65
2. Ahnapee & Western.....	37,800	1,285,200	34.00	26,834 92
3. C., M. & St. P.....	10,364,725	451,490,651	43.56	10,126,957 74
4. Chicago & Northwestern.....	21,516,303	661,289,753	30.73	13,389,713 94
5. C., St. P., M. & O.....	2,686,080	132,283,051	49.25	3,081,664 67
6. C., B. & Q.....	14,574,481	802,357,612	55.05	15,688,766 42
7. Illinois Central.....	21,645,601	583,481,895	26.96	10,729,825 37
8. Duluth, S. S. & Atlantic....	554,093	31,019,854	55.98	829,190 22
9. Fairchild & Northeastern....	4,425	83,950	18.90	3,361 17
10. Green Bay & Western.....	200,054	4,863,007	24.31	119,783 19
11. Great Northern.....	4,238,865	312,597,715	73.75	7,383,147 33
12. Hawthorne, Nebag. & Sup..	912	22,800	25.00	253 00
13. Hazelhurst & Southeastern.	1,231	11,368	9.24	448 54
14. Iola & Northern.....	7,514	35,316	4.70	1,487 81
15. Kewaunee, Green Bay & W.	47,051	1,032,895	21.95	25,443 71
16. Marinette, Tomahawk & W.	14,749	114,305	7.75	4,668 16
17. Mpolis, St. P. & S. Ste. M.	931,174	78,878,949	84.71	1,799,034 13
18. Northern Pacific.....	5,142,891	488,522,472	94.99	10,897,765 20
19. Stanley, Merrill & Phillips.	4,592	117,936	25.68	3,663 96
20. Wisconsin & Michigan.....	58,292	1,145,277	19.64	34,745 65
21. Wisconsin Central.....	1,164,869	67,058,539	57.57	1,341,474 44
22. Wisconsin Western.....	31,036	611,082	19.69	13,706 58
23. Bayfield, Lake Shore & W..	8,832	30,912	3.50	1,189 20
Total.....	83,241,393	3,618,416,511	43.47	\$75,456,069 00
Number of roads reporting	26	26	26	26

MILEAGE FOR ROADS DOING BUSINESS IN WISCONSIN.

year ending June 30, 1905, for whole line.
Traffic.

Average amount received from each passenger.	Average receipts per passenger per mile.	Total passenger earnings.	Passenger earnings per mile of road.	Passenger earnings per train mile.	Miles run by passenger trains.	No.
\$0.50552	\$0.03591	\$3,074 05	\$242 35	\$0.38974		1
.70092	.02088	32,384 73	952 49	.75764		2
.97706	.02243	13,698,137 13	1,920 62	1.11713	11,112,163	3
.61998	.02017	16,170,525 30	2,182 81	1.01600	14,600,509	4
1.14727	.02330	3,630,262 68	2,157 60	1.00083	3,080,084	5
1.07645	.01355	19,725,280 34	2,306 30	1.32178	13,505,797	6
.49570	.01839	12,904,732 20	2,970 96	1.11580	11,169,880	7
1.49648	.02673	974,108 80	1,662 84	1.06095	895,166	8
.75960	.04003	4,966 01	150 49			9
.59875	.02463	145,689 72	647 51	.60461	139,540	10
1.74177	.02362	9,239,973 09	1,860 09	1.46857	5,915,388	11
.25000	.01109	253 00	10 12	.05270		12
.36437	.03946	644 90	58.63	.05243		13
.19801	.04214	1,767 68	376 10	.15021		14
.54077	.02463	30,415 05	828 73	.63169		15
.31650	.04085	5,647 90	129 04	.27688		16
1.93200	.02280	2,253,865 00	1,270 51	1.13912	1,454,782	17
2.11920	.02231	13,076,376 62	2,460 30	1.71247	6,786,799	18
.65520	.03107	3,698 19	99 98			19
.50606	.03033	38,047 27	265 23	.27710	137,277	20
1.15161	.02000	1,684,409 53	1,723 99	.94640	1,752,818	21
.44163	.02240	23,947 83	460 80	.73141		22
.13465	.03847	1,358 92	339 77			23
\$0.09060	\$0.02085	\$93,740,165 94	\$2,134 88	\$1.3271	70,550,208	.....
26	26	26	26	12	17	

PASSENGER AND FREIGHT TRAFFIC, ETC.,

Freight

Name of Company.	Number of tons carried of freight earning revenue.	Number of tons carried one mile	Average distance haul of one ton--miles.	Total freight revenue.
1. Abbotsford & Northeastern .	60,050	887,028	14.77	\$23,594 78
2. Ahnapee & Western	61,865	2,103,410	34.00	30,349 73
3. Chi., Mil. & St. Paul.....	23,303,908	4,081,408,559	175.14	35,968,946 47
4. Chicago & Northwestern.....	31,129,651	4,292,448,817	138.00	39,292,830 47
5. Chicago, St. Paul, Minnea- polis & Omaha	5,613,851	875,412,053	155.94	8,138,064 57
6. Chicago, Burl. & Quincy	20,399,557	5,188,952,589	254.36	43,346,403 78
7. Chicago, L. Shore & Eastern	8,646,368	.....	.....	3,861,784 70
8. Illinois Central	23,148,309	5,559,139,454	240.15	32,607,922 17
9. Drummond & Southwestern.	46,958	469,580	10 00	14,768 22
10. Duluth, S. Shore & Atlantic..	2,853,536	178,924,895	62.70	1,679,643 41
11. Fairchild & Northeastern ...	69,881	642,205	9.19	30,532 73
12. Great Northern	14,806,069	3,783,809,949	225.56	29,638,762 59
13. Green Bay & Western.....	364,554	39,938,724	109.56	454,318 06
14. Hawthorne, Nebagamon & Superior	319,738	8,792,795	25.00	47,836 59
15. Hazelhurst & S. E.	126,423	751,174	5.94	22,752 74
16. Iola & Northern	13,880	65,236	4.70	5,674 86
17. Kewaunee, Green Bay & Western	179,338	5,121,765	28.56	86,082 38
18. Marinette, Tomahawk & W..	98,426	1,427,177	14.50	45,516 06
19. Mpls., St. P. & S. Ste. M.	3,913,161	882,474,735	225.51	6,387,247 86
20. Northern Pacific	13,036,789	4,359,664,201	334.41	36,294,128 63
21. Northwestern Coal Ry. Co...	232,421	588,025	2.53	15,900 85
22. Wisconsin & Michigan.....	348,928	9,061,075	14.00	126,548 30
23. Wisconsin & Michigan	348,928	9,061,075	25.96	194,915 66
24. Wisconsin Central	4,213,618	740,632,329	175.77	4,936,219 56
25. Wisconsin Western	46,399	1,798,667	38.77	45,562 53
26. Bayfield, Lake Shore & W....	25,098	.....	.....	8,417 70
Total	153,242,762	30,017,090,246	195.84	\$243,274,826 05
No. of railroads included	26	26	.....	26

WHOLE LINE, 1905.—Continued.

Traffic.

Average amount received for each ton of freight.	Average receipts per ton per mile	Total freight earnings.	Freight earnings per mile of road	Freight earnings per train-mile.	Miles run by freight trains.	No.
\$0.39291	\$0.02659	\$23,594 75	\$1,556 38	\$2.50289	9,427	1
.49058	.01443	30,349 73	892 64	.71093	.....	2
1.54347	.00881	36,035,506 81	5,052 54	2.25244	14,848,678	3
1.26223	.00915	39,427,002 39	5,322 13	2.33308	15,230,716	4
1.44964	.00930	8,138,931 06	4,837 26	2.17999	3,186,301	5
2.12486	.00835	43,416,938 83	5,076 36	2.73023	14,198,894	6
.44664	.....	3,861,734 70	8,613 90	8.96821	429,650	7
1.40965	.00587	32,748,399 32	7,487 21	1.87921	16,950,494	8
.31450	.03145	14,768 23	1,805 41	.....	.....	9
.53862	.00939	1,699,531 96	2,901 17	1.62425	1,023,371	10
.43835	.04769	30,632 73	928 26	.....	.....	11
2.00180	.00783	29,689,539 85	5,976 77	4.24595	6,616,015	12
1.24620	.01138	454,318 06	2,019 19	1.64785	174,292	13
.14960	.00544	47,836 59	1,913 46	1.86859	20,800	14
.17997	.03029	23,752 74	2,068 43	1,849 81	.....	15
.40885	.08699	5,674 86	1,207 42	.48223	.....	16
.48900	.01681	86,082 38	2,345 57	1.78787	.....	17
.46900	.03189	45,516 66	1,039 91	1.69825	.....	18
1.63224	.00724	6,414,952 90	3,616 14	2.24294	2,336,233	19
2.73168	.00832	36,399,927 75	6,848 59	3.06200	11,045,432	20
6.84100	.02740	15,900 85	1,987 61	.....	.....	21
.68780	.04910	126,548 30	2,416 89	.....	.....	22
.55860	.02147	194,915 66	1,487 90	1.56777	124,326	23
1.17149	.00663	4,949,697 49	5,066 01	2.11541	2,312,834	24
.98197	.02533	45,562 58	876 71	1.39156	.....	25
.33500	.....	8,417 70	.....	.....	.....	26
\$1.53720	\$0.00810	\$243,935,085 41	\$5,555 48	\$2.75100	88,507,463	.....
2c	26	26	26	15	15	.....

PASSENGER AND FREIGHT TRAFFIC, ETC.,

Passenger and

Name of Company.	Passenger and freight revenue.	Passenger and freight revenue per mile of road.	Passenger and freight earnings.	Passenger and freight earnings per mile of road.
1. Abbotsford & N. Eastern	\$26,538 43	\$1,750 50	\$27,268 83	\$1,798 55
2. Ahnapee & Western.....	57,184 65	640 30	62,734 46	640 30
3. Chicago & Northwestern..	52,632,544 41	7,104 70	55,597,527 69	7,504 93
4. Chicago, Mil. & St. Paul..	46,095,904 21	6,463 11	49,733,643 94	6,973 16
5. Chicago, St. Paul, Minneap. neapolis & Omaha	11,219,729 24	6,668 29	11,769,194 28	6,994 86
6. Chicago, Burl. & Quincy...	59,035,170 20	6,902 47	63,142,219 17	7,382 67
7. Chicago, L. Shore & E.....	3,861,784 70	.....	3,861,784 70	.....
8. Illinois Central	43,337,747 54	9,908 24	45,743,131 52	10,458 18
9. Drummond & Southwestern	14,768 22	1,805 41	14,768 22	1,805 41
10. Dul. S. Shore & Atlantic..	2,508,833 63	4,282 67	2,673,640 76	4,564 01
11. Fairchild & Northeastern..	33,993 90	1,030 12	35,598 74	1,073 68
12. Great Northern	37,021,909 92	7,453 04	38,929,512 91	7,836 86
13. Green Bay & Western.....	574,161 25	2,666 70	600,007 78	2,636 70
14. Hawthorne, Nebagamon & Superior	48,089 59	1,923 58	48,089 59	1,923 58
15. Hazelhurst & Southeastern.	23,201 28	2,109 21	23,397 64	2,127 03
16. Iola & Northern	7,162 67	1,523 97	7,442 54	1,583 52
17. Kewaunee, Green Bay & Western	111,526 09	3,038 85	116,497 43	3,174 32
18. Marinette, Tomahawk & Western	50,184 82	1,158 37	51,164 56	1,168 94
19. Mpls., St. P. & S. Ste. M.	8,186,281 99	4,614 64	8,668,817 90	4,886 65
20. Northern Pacific	47,161,893 83	8,873 44	49,476,304 37	9,308 89
21. Northwestern Coal Ry. Co.	15,900 85	1,987 61	15,900 85	1,987 61
22. Stanley, Merrill & Phillips	130,212 26	2,486 88	130,246 49	2,487 51
23. Wisconsin & Michigan	229,661 31	1,753 14	232,962 93	1,778 65
24. Wisconsin Central	6,277,694 00	6,425 22	6,634,107 02	6,790 01
25. Wisconsin Western	59,269 16	1,140 45	69,510 41	1,337 51
26. Bayfield, Lake Shore & W.	9,606 90	.....	9,776 62	.....
Total	\$318,730,805 05	\$7,258 98	\$337,675,251 35	\$7,690 36
No. of railroads included....	26	26	26	26

¹ Excluding taxes which were \$1,632,332.58.² Deficit.

WHOLE LINE, 1905.—Continued.
Freight Traffic.—Continued.

Gross earnings from operation.	Gross earnings from operation per mile of road.	Expenses.	Expenses per mile of road.	Income from operation.	Income from operation per mile of road.	No.
\$28,536 17	\$1,882 33	\$13,415 88	\$1,214 77	\$10,120 29	\$667 56	1
62,734 46	640 30	40,964 23	651 48	21,770 23	640 30	2
55,745,275 17	7,524 88	36,561,234 83	4,935 29	19,184,040 34	2,589 59	3
49,884,113 65	6,994 26	30,661,708 27	4,299 08	19,222,405 38	.....	4
11,997,876 75	7,130 77	7,329,146 87	4,355 98	4,668,729 88	2,774 79	5
65,162,858 02	7,618 93	41,479,169 43	4,849 80	23,683,688 59	2,769 13	6
4,323,692 69	9,644 21	1,846,436 80	4,118 57	2,477,255 89	5,525 64	7
49,630,886 16	11,347 03	33,206,494 16	7,591 95	16,424,392 00	3,755 08	8
14,768 22	1,805 41	14,232 50	1,739 91	535 72	65 49	9
2,706,936 02	4,620 84	1,852,705 09	3,162 64	854,230 93	1,458 20	10
35,799 79	1,084 84	24,557 76	744 17	11,242 03	340 66	11
39,577,726 70	7,967 35	19,154,402 66	3,855 95	20,423,324 04	4,111 40	12
600,007 78	2,666 70	357,017 66	1,586 74	242,990 12	1,079 96	13
48,197 59	1,927 96	55,330 94	2,213 24	27,133 35	2285 33	14
23,402 44	2,127 49	15,481 97	1,407 45	7,920 47	720 04	15
7,442 54	1,583 52	5,595 06	1,190 44	1,847 48	393 08	16
116,497 43	3,174 32	62,229 27	1,695 62	54,268 16	1,478 70	17
51,210 25	1,169 99	46,695 91	1,066 85	4,514 34	103 14	18
8,797,885 19	4,959 40	4,676,815 51	2,636 34	4,121,069 68	2,323 03	19
50,771,070 95	9,552 50	26,881,943 77	5,057 80	23,889,127 18	4,494 70	20
15,900 85	1,987 61	17,047 24	2,130 90	21,146 39	2143 30	21
133,045 39	2,540 97	82,009 91	1,566 27	51,035 48	407 98	22
247,476 62	1,889 13	174,312 49	1,330 62	73,164 13	558 50	23
6,648,285 46	6,804 52	4,374,336 07	4,477 13	2,273,049 39	2,327 39	24
69,510 41	1,337 51	36,406 79	700 53	33,103 62	636 98	25
9,798 37	.....	17,283 72	.....	27,485 35	2816 53	26
\$346,710,935 07	\$7,896 14	\$208,991,974 79	\$4,759 67	\$137,718,960 28	\$3,136 47	
26	26	26	26	26	26	

PASSENGER AND FREIGHT TRAFFIC,

Train

Name of Company.	Miles run by passen- ger trains	Miles run by freight trains.	Miles run by mixed trains.
1. Abbotsford & Northeastern		9,427	
2. Ahnapee & Western			1,149,743
3. Chicago, Milwaukee & St. Paul	11,112,163	14,848,678	1,148,743
4. Chicago & Northwestern	14,600,509	15,230,716	1,313,874
5. Chi., St. Paul, Minneapolis & Omaha..	3,080,084	3,186,301	547,169
6. Chicago, Burlington & Quincy	13,505,797	14,198,894	1,417,368
7. Chicago, Lake Shore & Eastern		429,650	
8. Chicago, Milwaukee & St. Paul.....	11,112,163	14,848,678	1,149,743
9. Duluth, South Shore & Atlantic.....	895,166	1,023,371	22,977
10. Great Northern	5,915,388	6,616,015	376,422
11. Green Bay & Western.....	139,540	174,292	101,412
12. Hawthorne, Nebagamon & Superior		20,800	4,800
13. Holmes & Son Railway			13,300
14. Iola & Northern			11,768
15. Keweenaw, Green Bay & Western.....			48,148
16. Marinette Tomahawk & Western.....			20,398
17. Minneapolis, St. P. & S. Ste. Marie....	1,454,782	2,336,233	523,827
18. Northern Pacific	6,786,799	11,045,432	849,178
19. Wisconsin & Michigan	137,277	124,326	
20. Wisconsin Central	1,752,818	2,312,834	26,992
21. Wisconsin Western			32,742
22. Bayfield, Lake Shore & W.			8,052
Total	70,550,203	88,507,463	6,986,069
No. of roads reporting.....	22	22	22

WHOLE LINE, 1905.—Continued.

Mileage.

Total mileage earning revenue.	Miles run by switching trains.	Miles run by construction and other trains.	Grand total train mileage.	Mileage of loaded freight cars. North or East.	Mileage of loaded freight cars. South or West.	No.
9,427			9,427	3,212	36,551	1
42,744			42,744			2
27,110,584	5,826,416	1,336,104	34,273,104	157,079,426	140,038,494	3
31,145,099	10,657,101	3,379,058	45,181,258	140,742,854	150,582,954	4
6,813,551	1,436,916	287,198	8,537,665	26,927,143	30,955,768	5
29,122,059	7,047,097	2,594,013	38,763,169		329,961,387	6
429,650	1,417		431,067	4,984,808	2,684,124	7
28,596,562	6,748,838	568,055	35,913,455	176,994,718	150,330,570	8
1,941,514	333,919	63,564	2,338,997	7,188,919	4,054,798	9
12,907,825	2,408,346	951,408	16,267,579	118,004,482	75,375,765	10
415,244	73,363	11,469	500,076	1,391,469	1,307,508	11
25,600	8,500	4,500	38,600	4,500	138,142	12
12,300		20,000	32,300	5,240	106,632	13
11,768			11,768	2,845	4,080	14
48,148			48,148	141,550	166,241	15
20,398	6,404		26,802			16
4,314,842		162,684	4,477,526	27,108,038	30,043,207	17
18,681,409		1,413,598	20,095,007	162,935,074	107,859,996	18
261,603	24,250	62,263	348,116	182,632	432,669	19
4,062,644	860,762	420,325	5,373,731	22,921,043	24,592,126	20
32,742			32,742	120,940	87,149	21
8,052			8,052	1,078	12,771	22
166,043,765	35,433,329	11,274,239	212,751,333	846,739,975	1,048,770,532	....

PASSENGER AND FREIGHT TRAFFIC, ETC.,

Car Mileage,

Name of Company.	Mileage of empty freight car north or east.	Mileage of empty freight cars south or west.
1. Abbotsford & Northeastern	34,747	1,505
2. Ahnapee & Western		
3. Chicago, Milwaukee & St. Paul	54,815,641	72,737,413
4. Chicago & Northwestern	65,948,451	57,873,249
5. Chicago, St. Paul, Minneapolis & Omaha	13,322,862	8,448,940
6. Chicago, Burlington & Quincy		151,580,426
7. Chicago, Lake Shore & Eastern		
8. Illinois Central	49,926,054	79,205,044
9. Drummond & Southwestern		
10. Duluth, South Shore & Atlantic	2,018,503	4,461,788
11. Fairchild & Northeastern		
12. Great Northern	17,773,973	64,011,821
13. Green Bay & Western	280,263	311,309
14. Hawthorne, Nebagamon & Superior	140,284	4,500
15. Holmes & Son Railway	106,632	52,40
16. Iola & Northern	2,190	975
17. Kewaunee, Green Bay & Western	56,513	22,256
18. Marinette, Tomahawk & Western		
19. Minneapolis, St. Paul & Sault Ste. Marie.....	10,898,799	7,365,564
20. Northern Pacific	26,435,392	85,618,812
21. Northwestern Coal Ry. Co.		
22. Stanley, Merrill & Phillips		
23. Wisconsin & Michigan	402,529	38,583
24. Wisconsin Central	10,522,436	8,122,747
25. Wisconsin Western	16,388	50,992
26. Bayfield, Lake Shore & W.	12,504	1,268
Total	252,714,161	539,862,432

WHOLE LINE, 1905.—Continued.

Tonnage, etc.

Average number of freight cars in train.	Average number of loaded cars in train.	Average number of empty cars in train.	Average number of tons of freight in train.	Average number of tons in each loaded car.	Mileage upon which based.	No.
8.00	4.00	4.00	94.00	22.00	15.16	1
					34.00	2
26.54	18.57	7.97	255.11	13.74	7,132.15	3
25.09	17.61	7.48	259.45	14.73	7,408.13	4
21.34	15.51	5.83	234.48	15.12	1,682.55	5
30.84	21.13	9.71	332.28	15.73	8,552.76	6
					448.32	7
26.19	18.78	7.41	319.00	16.98	4,373.91	8
					8.18	9
16.94	10.75	6.19	171.00	15.91	585.81	10
					33.00	11
39.35	27.66	11.69	541.13	19.56	4,967.49	12
					225.00	13
23.95	11.89	12.06	160.00	17.50	25.00	14
18.00	9.00	9.00	61.00	7.00	11.00	15
					4.70	16
					36.70	17
					43.77	18
26.37	19.98	6.39	308.55	15.44	1,773.98	19
32.19	22.77	9.42	366.52	16.10	5,314.95	20
					8.00	21
					52.36	22
24.00	13.00	11.00			131.00	23
28.28	20.31	7.97	316.53	15.59	977.04	24
8.41	6.35	2.06	54.93	8.64	51.97	25
4.32	2.19	2.12	13.57	6.02	12.00	26
					4,390,893	....

PASSENGER TRAFFIC AND TRAIN MILEAGE OF ROADS DOING BUSINESS
THE YEAR ENDING

Passenger

Name of Company.	Number of passengers carried earning revenue.	Number of passengers carried one mile.	Average distance carried.	Total passenger revenue.
1. Abbotsford & Northeastern.	5,454	78,507	14.00	\$2,891 71
2. Ahnapee & Western	38,702	1,315,868	34.00	28,762 79
3. Chicago, Mil. & St. Paul...	11,190,021	498,461,791	44.55	11,123,545 22
4. Chicago & Northwestern ..	22,977,335	703,176,138	30.00	14,441,415 07
5. Chi., St. P., Mpls. & Omaha	2,951,645	145,304,415	49.23	3,422,704 68
6. Chicago, Burl. & Quincy..	15,179,634	794,171,881	52.31	10,211,665 44
7. Illinois Central	22,052,673	511,391,077	23.19	10,004,041 27
8. Dul., S. Shore & Atlantic..	681,337	34,413,938	55.66	937,101 45
9. Great Northern	4,781,947	376,783,210	78.79	8,778,865 55
10. Fairchild & Northeastern ..	4,373	87,452	20.00	3,616 42
11. Green Bay & Western	192,200	4,797,500	24.96	126,584 91
12. Hawthorne, Nebagamon & Superior	928	27,840	25.00	232 00
13. Hazelhurst & South Eastern	453	3,932	8.68	153 45
14. Iola & Northern	7,951	37,370	4.70	1,550 51
15. Kewaunee, Green Bay & Western	64,600	1,104,610	17.10	25,892 85
16. Marinette, Tomahawk & W.	14,332	103,907	7.40	4,526 21
17. Mpls., St. P. & S. Ste. M.	1,173,869	111,058,518	94.61	2,427,538 94
18. Northern Pacific	5,920,280	659,050,227	111.32	13,791,339 57
19. Stanley, Merrill & Phillips.	12,209	312,042	25.72	8,022 58
20. Wisconsin & Michigan	66,522	1,294,218	19.45	38,893 82
21. Wisconsin Central	1,235,596	70,100,795	56.73	1,412,434 14
22. Wisconsin Western	31,646	641,112	22.59	14,307 27
23. Chi., Harvard & Geneva L.	.....	.....	.....	(¹)
24. La Crosse & Southeastern..	.....	.....	.....	(²)
25. Mineral Point & Northern .	17,891	239,386	13.38	6,113 95
Totals	88,601,598	31,913,955,734	44.18	\$82,802,199 80
No. of roads reported.....	23	23	23	23

¹ Total passenger revenue, \$13,399.95.² Total passenger revenue, \$37,619.32.

ESS IN WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR JUNE 30, 1906. WHOLE LINE.

Traffic.

Average amount received from each passenger.	Average receipts per passenger per mile.	Estimated cost of carrying each passenger per mile.	Total passenger earnings.	Passenger earnings per mile of road.	Passenger earnings per train mile.	No.
\$0.53020	.03683		\$3,598 93	\$237 39	\$0.37653	1
.74318	.02185		34,711 42	1,020 92	81543	2
.99406	.02232		15,036,890 47	2,092 70	1.17042	3
.62851	.02054		17,574,372 93	2,338 79	1.04485	4
1.15959	.02355		4,004,792 62	2,365 12	1.06695	5
1.06799	.02041		20,458,341 11	2,376 59	1.30533	6
.45394	.01956		12,625,392 20	2,853 99	1.06824	7
1.49935	.02694		1,088,642 50	1,836 78	1.15742	8
1.82583	.02330		10,861,646 81	2,108 83	1.56645	9
.82698	.04135	.06036	5,201 03	157 60		10
.65861	.02639		153,693 47	683 08	.64163	11
.25000	.00833	.00450	232 00	7 73	.05426	12
.33874	.03079		319 88	29 08	.06104	13
.19501	.04149		1,833 92	390 19	.15534	14
.40082	.02344		30,822 04	839 84	.62982	15
.3158	.04356		5,860 33	133.88	.29157	16
2.06798	.02186		3,005,990 72	1,487 83	1.27437	17
2.32951	.03093		16,244,695 19	3,007 64	1.82386	18
.65710	.02570	.02078	8,089 18	143 68		19
.58467	.03000		42,303 41	295 12	.28880	20
1.14312	.02015		1,763,040 36	1,804 47	.98404	21
.45210	.02232		25,031 52	481 46	.72177	22
			13,836 91	1,257 90	.29024	23
			40,633 37			24
			6,933 82	226 57	.17984	25
.93452	.02115		\$102,836,876 14	\$2,324 53		
23	23	3	25	24	22	

PASSENGER AND FREIGHT TRAFFIC,
Freight

Name of Company.	Number of tons of freight carried earning revenue.	Number of tons carried one mile.	Average distance haul of one ton.	Total freight revenue.
1. Abbotsford & Northeastern ..	80,709	1,185,375	14.68	\$29,274 95
2. Ahnapee & Western	62,196	2,114,664	34.00	33,069 82
3. Chicago, Milwaukee & St. P.	26,201,941	4,663,808,007	177.99	40,187,710 03
4. Chicago & Northwestern	35,788,243	5,156,074,115	144.07	45,802,852 58
5. Chi., St. P., Mpls. & Omaha.	6,435,925	940,081,837	146.07	8,753,165 94
6. Chicago, Burlington & Quincy	23,217,160	6,303,883,569	271.52	50,714,275 74
7. Chi., Lake Shore & Eastern..	(¹)	.....	.....	(²)
8. Illinois Central	25,641,146	6,230,593,529	242.99	34,637,124 59
9. Chi., Harvard & Geneva Lake	.....	.....	.....	(³)
10. Drummond & Southwestern ..	88,113	881,130	10.00	27,068 40
11. Duluth, S. Shore & Atlantic.	3,281,506	227,172,246	69.23	1,930,240 05
12. Great Northern	16,119,514	4,484,575,584	278.21	34,898,734 94
13. Fairchild & Northeastern ...	29,093	339,879	11.60	16,757 63
14. Green Bay & Western	321,760	34,496,890	107.21	450,047 88
15. Hawthorne, Neb'g'n & Sup'r.	351,640	11,779,940	30.00	57,697 14
16. Hazelhurst & Southeastern ...	32,844	151,801	4.62	15,712 61
17. Iola & Northern	10,686	50,224	4.70	4,868 91
18. Kewaunee, G. B. & Western.	175,930	6,050,860	34.39	94,520 07
19. Marinette, Tomahawk & W.	67,235	941,290	14.00	54,112 87
20. Mpls., St. P. & S. Ste. Marie	4,886,498	1,084,153,866	221.87	8,468,674 79
21. Northern Pacific	15,356,312	5,245,260,080	341.57	43,431,781 61
22. Northwestern Coal Ry. Co.	314,183	794,883	2.53	20,700 08
23. Stanley, Merrill & Phillips ...	298,581	7,859,300	26.33	130,244 93
24. Winona Bridge Ry Co.	.....	.....	.....	.....
25. Wisconsin & Michigan	503,980	15,944,870	31.63	252,580 59
26. Wisconsin Central	4,343,279	804,040,467	185.12	5,317,236 64
27. Wisconsin Western	50,906	2,138,561	42.01	48,680 29
28. La Crosse & Southeastern ...	.....	.....	.....	.....
29. Roddis Lumber & Veneer Co.	17,422	139,376	3.00	6,174 39
30. Mineral Point & Northern ...	65,175	902,539	13.84	39,642 26
Total	163,741,986	35,225,414,882	215.13	\$275,422,940 53
Number of roads reported ...	26	26	26	26

¹ Tons of freight carried earning revenue, 10,158,258.² Total freight revenue, \$3,662,127.44.³ Total freight revenue, \$12,652.44.⁴ Tolls.⁵ Total freight revenue, \$27,119.44.

WHOLE LINE, 1906—Continued.

Traffic.

Average amount received for each ton of freight.	Average receipts per ton per mile.	Estimated cost of carrying one ton one mile.	Total freight earnings.	Freight earnings per mile of road.	Freight earnings per train mile.	No.
\$0.36271	\$0.2470	\$0.1899	\$29,274 95	\$1,931 06	\$3.06288	1
.53156	0.1563	.....	33,060 82	972 35	.77696	2
1.53377	0.0862	.....	40,230,718 98	5,598 95	2.34211	3
1.27982	0.0888	.....	45,951,106 19	6,185 56	2.54826	4
1.36000	0.0731	.....	8,763,764 12	5,175 76	2.09699	5
2.18434	0.0894	.....	50,792,774 36	5,900 47	2.68431	6
.....	.....	.....	3,662,127 44	7,728 62	7.47855	7
1.35084	0.0556	.....	34,788,467 49	7,863 81	1.97218	8
.....	.....	.....	12,652 44	1,150 22	.39528	9
.30720	0.3072	0.2900	27,068 40	3,309 09	.....	10
.58822	0.0850	.....	1,944,124 78	3,283 17	1.60947	11
2.16500	0.0778	.....	34,941,267 26	6,783.97	4.24411	12
.57600	0.4929	0.3352	16,757 63	507 80	.....	13
1.39871	0.1305	.....	450,047 88	2,000 21	1.59646	14
.16408	0.0489	1.5384	57,697 14	1,923 24	2.68984	15
.48601	1.0035	.....	15,712 61	1,428 41	2.99805	16
.45563	0.9694	.....	4,868 91	1,035 94	.41374	17
.53726	0.1562	.....	94,520 07	2,375 48	1.93142	18
.80483	0.5749	.....	54,112 87	1,236 30	.26922	19
1.73308	0.0781	.....	8,497,251 32	4,205 75	2.57713	20
2.82827	0.0828	.....	43,616,181 18	8,075 37	3.33009	21
.06588	0.2445	.....	20,700 08	2,587 51	.....	22
.43621	0.1657	.01361	130,244 94	2,313 41	.....	23
.....	.....	.....	*26,907 29	*26,123 58	.....	24
.50116	0.1584	.....	252,580 59	1,916 53	1.62003	25
1.22424	0.0661	.....	5,330,726 24	5,456 00	2.15181	26
.95628	0.2276	.....	48,680 29	936 70	1.40423	27
.....	.....	.....	27,119 44	.....	.....	28
.35400	0.4430	0.4430	6,174 39	617 44	.....	29
.69824	0.4392	.....	39,642 26	1,295 50	1.02818	30
\$1.67594	\$0.0782	.....	\$279,866,532 36	6,258 94	.....
26	26	.....	30	30	23	

PASSENGER AND FREIGHT TRAFFIC, ETC., 1906.

Passenger and

Name of Company.	Passenger and freight revenue.	Passenger and freight revenue per mile of road.	Passenger and freight earnings.	Passenger and freight earnings per mile of road.
1. Abbotsford & Northeastern	\$32,166 66	\$2,121 81	\$32,873 88	\$2,168 46
2. Ahnapee & Western	61,523 61	1,993 36	67,772 24	1,993 30
3. Chi., Milwaukee & St. P.	51,311,255 25	7,141 04	55,267,569 45	7,691 65
4. Chicago & Northwestern	60,244,267 65	8,109 58	63,325,479 12	8,524 35
5. Chicago & North Western	12,115,870 62	7,190 74	12,768,756 74	7,540 88
6. Chicago & North Western	63,923,941 18	7,774 62	71,251,115 47	8,277 06
7. Chicago, L. S. & Eastern	.....	.....	3,662,127 44	7,728 62
8. Illinois Central	44,641,165 63	10,090 98	47,413,859 69	10,717 73
9. Chi., Harv. & Geneva Lake	.....	.....	26,489 35	2,408 11
10. Drummond & Southwestern	27,068 40	.....	27,068 40	3,309 09
11. Duluth, S. S. & Atlantic	2,857,341 50	4,820 97	3,032,767 28	5,116 95
12. Great Northern	43,677,600 49	8,480 17	45,802,914 07	8,892 80
13. Fairchild & Northeastern	20,374 05	614 36	21,958 66	638 44
14. Green Bay & Western	576,632 79	2,567 26	603,741 35	2,683 30
15. Hawthorne, Nebagin & Sup'r	57,929 14	1,930 97	57,929 14	1,930 97
16. Hazelhurst & Southeastern	15,866 06	1,442 37	16,032 49	1,457 49
17. Iola & Northern	6,419 42	1,365 83	6,702 83	1,426 13
18. Kewanee, G. B. & W.	120,412 92	3,281 00	125,342 11	3,415 32
19. Marinette, Tomah'k & W.	58,639 08	1,339 70	59,973 20	1,370 18
20. Mpls., St. P. & S. Ste. M.	10,896,213 73	5,393 12	11,503,242 04	5,693 57
21. Northern Pacific	57,223,121 18	10,594 64	59,860,876 37	11,083 01
22. Northwestern Coal Ry. Co.	20,700 08	2,587 51	20,700 08	2,587 51
23. Stanley, Merrill & Phillips	138,267 51	2,455 90	138,334 12	2,457 09
24. Winona Bridge Ry. Co.	.....	.....	26,907 29	26,123 58
25. Wisconsin & Michigan	291,474 41	2,213 00	294,884 00	2,211 65
26. Wisconsin Central	6,729,670 78	6,887 81	7,093,766 60	7,260 47
27. Wisconsin Western	62,987 56	1,212 00	73,701 81	1,418 16
28. La Crosse & South eastern	.....	.....	67,742 81	1,542 23
29. Roddis L. & V. Co.	6,174 39	617 44	6,174 39	617 44
30. Mineral Point & Northern	45,756 21	1,495 30	46,576 08	1,522 09
Total	\$358,225,140 33	\$8,011 35	\$382,703,408 50	\$8,583 47
Number of roads reported.	26	24	30	30

WHOLE LINE—Continued.

Freight Traffic.

Gross earnings from operation.	Gross earnings from operation per mile of road.	Expenses.	Expenses per mile of road.	Income from operation.	Income from operation per mile of road.	No.
\$34,312 34	\$2,263 34	\$22,513 18	\$1,485 04	\$11,799 16	\$778 31	1
67,772 24	1,993 30	42,216 32	1,241 06	25,555 92	751 65	2
55,423,052 99	7,713 29	34,713,602 53	4,831 13	20,709,450 46	2,882 16	3
63,481,577 98	8,545 36	39,890,909 09	5,369 79	23,590,578 89	3,175 56	4
13,007,017 47	7,681 60	7,901,338 13	4,666 32	5,105,679 34	3,015 28	5
73,413,385 88	8,528 25	50,655,161 43	5,884 48	22,758,224 45	2,643 77	6
4,311,336 90	9,098 72	2,384,835 40	5,033 00	1,926,501 50	4,065 72	7
51,734,291 56	11,694,35	34,400,363 07	7,776 08	17,333,928 49	3,918 27	8
26,489 35	2,408 11	25,777 26	2,343 39	712 09	64 73	9
27,068 40	3,309 09	25,678 02	3,139 12	1,390 38	169 97	10
3,057,808 73	5,159 20	2,057,459 76	3,471 39	1,000,348 97	1,687 81	11
46,494,226 57	9,087 02	23,133,081 11	4,491 37	23,361,145 46	4,535 65	12
22,204 66	672 86	16,674 10	505 28	5,530 56	129 56	13
609,370 52	2,708 31	392,713 61	1,745 39	216,656 91	962 92	14
60,969 14	2,032 30	51,969 21	1,732 30	8,999 93	299 99	15
16,032 49	1,457 49	6,677 85	607 07	8,706 15	791 46	16
6,702 83	1,426 13	4,947 45	1,052 65	1,755 38	373 48	17
126,736 89	3,453 05	85,908 90	2,340 84	40,817 99	1,112 21	18
60,028 20	1,371 44	53,825 25	1,229 72	6,202 95	141 71	19
11,588,262 23	5,735 66	5,905,867 78	2,923 13	5,682,394 45	2,812 52	20
61,132,655 47	11,318 47	31,029,612 10	5,745 01	30,103,043 37	5,573 46	21
20,700 08	2,587 51	20,405 06	2,550 69	294 52	36 82	22
140,341 29	2,492 74	113,440 23	901 10	26,901 06	477 82	23
26,907 29	20,123 58	3,407 65	3,308 40	23,499 64	22,815 18	24
324,289 24	2,400 65	192,082 36	1,457 49	132,206 88	1,003 16	25
7,151,339 79	7,319 39	4,580,288 18	4,687 92	2,571,051 61	2,631 47	26
73,701 81	1,418 16	42,615 52	820 00	31,086 29	598,16	27
67,742 81	1,542 23	28,082 95	1,542 23	39,659 86	901 57	28
6,174 39	617 44	6,174 39	617 44	.....	.....	29
46,732 82	1,527 21	60,523 00	1,977 87	13,790 18	145 07	30
\$392,559,188 87	\$8,779 19	\$237,848,241 39	\$5,319 24	\$154,710,331 48	\$3,459 94	
30	30	30	30	30	30	

¹ Deficits.

TRAIN MILEAGE.

Freight traffic, whole line, 1906—Continued.

Name of Company.	Miles run by passenger trains.	Miles run by freight trains.	Miles run by mixed trains.
Abbotsford & Northeastern.....		9,558	
Ahnapee & Western			42,568
Chicago, Milwaukee & St. Paul.....	11,578,780	15,908,492	1,268,655
Chicago & Northwestern.....	15,513,801	16,919,058	1,114,642
Chicago, St. P., Minneapolis & Omaha	3,163,744	3,589,554	589,760
Chicago, Burlington & Quincy.....	14,395,262	15,742,307	1,277,655
Chicago, Lake Shore & Eastern.....			489,684
Illinois Central	11,388,699	17,209,387	430,192
Duluth, South Shore & Atlantic.....	902,902	1,194,013	13,913
Great Northern	6,581,780	7,836,217	396,674
Green Bay & Western.....	138,112	180,492	101,412
Hawthorne, Nebagamon & Superior.....		17,175	4,275
Hazelhurst & South Eastern.....			5,240
Iola & Northern.....			11,768
Kewaunee, Green Bay & Western.....			48,938
Marquette, Tomahawk & Western.....			20,099
Minneapolis, St. P. & Sault Ste. Marie.	1,874,523	2,812,896	484,273
Northern Pacific	8,057,721	12,248,582	849,035
Wisconsin & Michigan.....	146,479	155,911	
Wisconsin Central	1,764,102	2,449,782	27,541
Wisconsin Western			34,667
Mineral Point & Northern.....			38,556
Totals	75,553,579	96,305,424	7,249,547
No. of roads reported.....	14	15	19

TRAIN MILEAGE.

Freight traffic, whole line, 1906—Continued.

Name of Company.	Total mileage earning revenue.	Miles run by switching trains.	Miles run by construction and other trains.	Grand total train mileage.
Abbotsford & Northeastern.....	9,558	.....	.....	9,558
Ahnapee & Western.....	42,568	.....	.....	42,568
C., M. & St. P.....	28,755,927	.....	.....	28,755,927
Chicago & Northwestern....	33,547,501	9,527,757	4,037,201	47,112,459
C., St. P., M. & O.....	7,343,058	1,770,462	460,264	9,573,784
Chicago, Burlington & Q....	31,415,224	.....	.....	31,415,224
Chicago, L. S. & Eastern...	489,684	5,846	.....	495,530
Illinois Central	29,028,278	7,083,530	702,814	36,814,622
Chi., Harvard & Geneva L.	79,674	.....	.....	79,674
Duluth, S. S. & Atlantic....	2,110,828	382,112	55,318	2,548,258
Great Northern	14,814,671	.....	1,127,506	15,942,177
Green Bay & Western.....	420,016	.....	.....	420,016
Hawthorne, Nebag. & Sup..	21,450	8,500	4,500	34,450
Hazelhurst & Southeastern..	5,240	.....	.....	5,240
Iola & Northern.....	11,768	.....	.....	11,768
Kewaunee, Green Bay & W.	48,938	.....	.....	48,938
Marquette, Tomahawk & W.	20,099	2,484	.....	22,583
Mpolis, St. Paul & Sault	.....	.....	.....	.....
Ste. Marie	5,171,692	.....	152,060	5,323,752
Northern Pacific	21,155,338	.....	1,229,736	22,385,074
Wisconsin & Michigan.....	302,390	.....	62,325	364,715
Wisconsin Central	4,241,425	838,089	492,488	5,572,002
Mineral Point & Northern..	38,556	.....	.....	38,556
Totals	179,108,550	19,618,780	8,324,212	207,051,542
Number of roads reported	28	8	10	23

FREIGHT TRAFFIC,

Car Mileage

Name of Company,	Mileage of loaded freight cars—north or east.	Mileage of loaded freight cars—south or west.	Mileage of empty freight cars—north or east.	Mileage of empty freight cars—south or west.
1. Abbotsford & Northeastern	2,305	45,670	43,237	376
2. Ahnapee & Western				
3. Chi., Milwaukee & St. P.	172,517,540	153,796,373	55,485,890	74,835,026
4. Chicago & Northwestern	157,987,863	163,256,049	74,187,694	65,033,165
5. Chi., St. P., Mpls. & O.	29,548,655	33,400,182	14,815,788	8,723,850
6. Chi., Burl. & Quincy		1381,373,238		1170,688,451
7. Chicago, L. S. & Eastern	5,965,283	3,212,077	2,156,377	5,031,551
8. Chi., Harv. & Geneva Lake				
9. Illinois Central	185,706,347	167,576,131	51,764,848	73,759,356
10. Duluth, S. S. & Atlantic	7,647,263	4,701,137	2,727,004	6,062,874
11. Great Northern	138,874,281	90,236,382	18,951,190	70,974,779
12. Fairchild & Northeastern				317
13. Green Bay & Western	1,141,126	1,554,863	317,873	180,596
14. Hawth'ne, Nebag'n & Sup'r	60,050	102,734	102,650	60,250
15. Hazelhurst & Southeastern	7,510	981	981	7,510
16. Iola & Northern	1,959	3,046	1,916	706
17. Kewaunee, G. B. & W.	134,416	182,839	83,643	22,112
18. Marinette Tomah'k & W.				
19. Mpls., St. P. & S. Ste. M.	31,000,020	36,301,543	12,277,415	7,359,056
20. Northern Pacific	178,624,131	124,564,059	26,732,519	85,437,636
21. Stanley, Merrill & Phillips				
22. Winona Bridge Ry. Co.				
23. Wisconsin & Michigan	274,378	469,386	355,954	85,740
24. Wisconsin Central	23,963,643	25,636,296	11,212,528	7,720,781
25. Wisconsin Western	135,225	99,847	22,404	57,480
26. La Crosse & Southeastern				
27. Mineral Point & Northern				
Totals	933,291,994	1,186,512,833	271,240,001	576,041,295
Number of roads reported	18	19	18	19

¹ Including loaded cars north or east.

WHOLE LINE, 1906—Continued,
and Tonnage.

Average number of freight cars in train.	Average number of loaded cars in train.	Average number of empty cars in train.	Average number of tons of freight in train.	Average number of tons of freight in each loaded car.	Mileage upon which based.	No.
10.00	5.00	5.00	124.00	25.00	15.16	1
26.59	19.00	7.59	271.51	14.29	34.00	2
25.51	17.80	7.72	285.91	16.07	7,185.40	3
20.69	15.06	5.63	224.94	14.93	7,428.77	4
32.43	22.41	10.03	370.38	16.53	1,693.27	5
33.42	18.74	14.67			8,608.26	6
					473.84	7
					11.00	8
27.14	20.03	7.11	353.22	17.64	4,423.87	9
17.50	10.22	7.28	188.07	18.40	592.69	10
38.75	27.83	10.92	544.71	19.57	5,150.56	11
					33.00	12
					225.00	13
15.18	7.58	7.59	139.54	21.22	30.00	14
3.24	1.62	1.62	29.35	17.85	11.00	15
					4.73	16
					36.70	17
					43.77	18
26.37	20.41	5.96	328.81	16.11	2,020.39	19
31.71	23.15	8.56	400.47	17.30	5,401.14	20
					56.30	21
					1.03	22
7.60	4.77	2.83	102.27	21.43	131.79	23
27.66	20.02	7.64	324.56	16.21	977.04	24
9.09	6.78	2.31	61.69	9.10	51.97	25
					43.99	26
					30.06	27
22.06	15.02	7.03	249.96	16.11	44,714.70	
16	16	16	15	15	27	

PASSENGER AND FREIGHT TRAFFIC, ETC., OF RAILROADS
SION FOR THE YEAR ENDING JUNE

Passenger

Name of Company.	Number of passengers carried earning revenue.	Number of passengers carried one mile.	Average distance carried.	Total passenger revenue.
1. Abbotsford & Northeastern.	5,454	78,507	14.00	\$2,891 71
2. Ahnapee & Western.....	38,702	1,315,868	34.00	28,762 79
3. C., M. & St. P.....				3,370,717 98
4. Chicago & Northwestern....	5,572,416	170,532,829	30.60	3,502,302 24
5. C., St. P., M. & O.....	1,329,707	63,576,831	47.81	1,516,671 61
6. Illinois Central.....	90,769	1,662,677	18.32	38,156 13
7. Duluth, S. S. & Atlantic....	100,405	5,595,014	55.72	118,795 47
8. Fairchild & Northeastern...	4,373	87,452	20.00	3,616 42
9. Great Northern.....	178,815	4,047,794	22.70	90,615 50
10. Green Bay & Western.....	192,200	4,797,500	24.96	126,584 91
11. Hawthorne, Nebag. & Sup..	928	27,840	25.00	232 00
12. Hazelhurst & Southeastern.	453	3,932	8.68	153 45
13. Iola & Northern.....	7,951	37,370	4.70	1,550 51
14. Kewaunee, G. B. & W.....	64,600	1,104,601	17.10	25,892 85
15. Marinette, Tomahawk & W.	14,332	103,907	7.40	4,526 21
16. Mpls. St. P. & S. Ste. M....	282,538	14,161,861	50.00	323,686 30
17. Northern Pacific.....	273,427	7,042,045	25.75	165,435 05
18. Stanley, Merrill & Phillips.	12,209	312,042	25.72	8,022 58
19. Wisconsin & Michigan.....	44,545	776,531	15.00	22,707 94
20. Wisconsin Central.....	1,055,728	54,986,711	52.08	1,171,636 32
21. Wisconsin Western.....	31,646	641,112	22.59	14,307 27
22. La Crosse & Southeastern..				37,619 32
23. Mineral Point & Northern..	17,891	239,386	13.38	6,113 95
Totals *				

* Totals omitted on account of incompleteness of reports.

DOING BUSINESS AS REPORTED TO THE RAILROAD COMMISSION, 1906, FOR WISCONSIN.

traffic.

Average amount received from each passenger.	Average receipts per passenger per mile.	Estimated cost of carrying each passenger per mile.	Total passenger earnings.	Passenger earnings per mile of road.	Passenger earnings per train mile.	No.
\$0.53020	\$0.03683		\$3,598 93	\$237 39	\$.037653	1
.74318	.02185		34,711 42	1,020 92	.81543	2
.....	.....		4,657,496 12	2,696 70	1.26512	3
.62851	.02054		4,213,597 14	2,338 79	1.04484	4
1.14060	.02386		1,765,576 07	.....	1.07893	5
.42037	.02295		58,116 64	636 48	.64888	6
1.13336	.02034		136,315 97	1,193 56	.90963	7
.32698	.04145	\$0.06036	5,201 03	157 60	.....	8
.50675	.02239		105,243 71	2,792 35	1.37163	9
.65861	.02639		153,693 47	683 08	.64166	10
.25000	.00833	.00450	232 00	7 73	.05426	11
.33874	.03079		319 88	29 08	.06104	12
.19501	.04149		1,833 92	390 19	.15584	13
.40082	.02344		30,822 04	839 84	.62982	14
.31580	.04356		5,860 33	133 88	.29157	15
1.14564	.02286		423,523 46	1,190 81	.78244	16
.60504	.02349		190,696 30	1,417 18	1.04253	17
.65710	.02570	.02078	8,089 18	143 68	.....	18
.50979	.02924		24,794 49	336 05	.29561	19
1.10979	.02131		1,420,399 10	1,688 36	.94870	20
.45210	.02232		25,021 52	481 46	.72177	21
.....	.....		40,623 37	.....	.....	22
.34172	.02553		6,933 82	226 57	.17984	23
.....

PASSENGER AND FREIGHT, ETC.,

Freight

Name of Company.	Number of tons carried of freight earning revenue.	Number of tons carried one mile.	Average distance haul of one ton.	Total freight revenue.
1. Abbotsford & Northeastern	80,709	1,185,375	14.68	\$29,274 95
2. Ahnapee & Western	62,196	2,114,664	34.00	33,060 82
3. Chicago, Mil. & St. P.				11,661,906 95
4. Chicago & Northwestern	8,679,291	1,250,440,475	144.07	11,108,013 48
5. Chi., St. P., M. & O.	4,015,152	548,726,673	136.66	4,056,979 93
6. Chi., Burlington & Quincy				
7. Chi., Lake Shore & Eastern	429,894			38,069 84
8. Illinois Central	161,293	5,001,083	31.01	65,513 39
9. Drummond & Southwestern	88,113	881,130	10.00	27,068 40
10. Duluth, So. Shore & Atlan.	427,356	28,206,724	66.00	214,542 00
11. Great Northern	9,093,537	182,870,219	20.10	1,051,014 01
12. Fairchild & Northeastern	29,093	339,879	11.60	16,757 63
13. Green Bay & Western	321,760	34,496,890	107.21	450,047 88
15. Hawthorne, Nebagamon & Superior	351,640	11,779,940	30.00	57,697 14
16. Hazelhurst & Southeastern	32,844	151,801	4.62	15,712 61
17. Iola & Northern	10,686	50,224	4.70	4,368 91
18. Kewaunee, Green B. & W.	175,930	6,050,860	34.39	94,520 07
19. Mariquette, Tomahawk & W.	67,235	941,290	14.00	54,112 87
20. Mpls., St. P. & St. Ste. M.	1,866,537	306,832,403	164.00	1,581,913 25
21. Northern Pacific	2,008,643	36,288,815	18.07	369,255 59
22. Northwestern Coal Ry. Co.	314,183	794,883	2.53	20,700 08
23. Stanley, Merrill & Phillips.	298,581	7,859,300	26.33	130,244 93
24. Wisconsin & Michigan	445,503	12,189,557	27.36	192,629 04
25. Wisconsin Central	4,070,888	687,437,130	168.87	4,449,238 94
26. Wisconsin Western	50,906	2,138,561	42.01	48,680 29
27. La Crosse & Southeastern				27,119 44
28. Roddis Lumber & Veneer Co.	17,422	139,376	3.00	6,174 39
29. Mineral Point & Northern	65,175	902,539	13.84	39,642 26

Totals omitted on account of incomplete reports.

PASSENGER AND FREIGHT TRAFFIC,

Passenger and

Name of Company.	Passenger and freight revenue.	Passenger and freight revenue per mile of road.	Passenger and freight earnings.	Passenger and freight earnings per mile of road.
1. Abbotsford & Northeastern .	\$32,166 66	\$2,121 81	\$32,873 88	\$2,168 46
2. Ahnapee & Western	61,823 61	1,993 30	67,772 24	1,993 30
3. Chi., Milwaukee & St. P...	15,032,624 93	8,703 92	16,349,037 18	9,466 13
4. Chicago & Northwestern ..	14,610,315 72	8,109 58	15,357,564 77	8,524 35
5. Chicago, St. Paul, Minnea- polis & Omaha	5,573,651 54	7,395 05	5,824,007 38	7,727 22
6. Chi., Lake Shore & Eastern .....	.....	.....	.....	.....
7. Illinois Central	103,669 52	1,135 36	123,992 80	1,357 93
8. Drummond & Southwestern ..	.....	.....	.....	.....
9. Dul., S. Shore & Atlantic..	328,337 47	2,874 86	353,088 60	3,091 58
10. Fairchild & Northeastern ..	20,374 05	614 36	21,955 66	668 44
11. Great Northern	1,141,629 51	30,289 99	1,157,637 09	30,714 70
12. Green Bay & Western	576,632 79	2,567 26	603,741 35	2,683 30
13. Hawthorne, Nebagamon & Superior	57,929 14	1,930 97	57,929 14	1,930 97
14. Hazelhurst & Southeastern ..	15,866 06	1,442 37	16,032 49	1,457 49
15. Iola & Northern	6,419 42	1,365 83	6,702 83	1,426 13
16. Kewaunee, Green Bay & Western	120,412 92	3,281 00	125,342 11	3,415 32
17. Marinette, Tomahawk & Western	58,639 08	1,339 70	59,973 20	1,370 18
18. Mpls., St. P. & S. Ste. M..	1,905,602 55	5,357 93	2,007,866 40	5,645 47
19. Northern Pacific	534,690 64	3,973 62	561,005 26	4,169 18
20. Northwestern Coal Ry. Co. ....	.....	.....	.....	.....
21. Stanley, Merrill & Phillips ..	138,267 51	2,455 90	138,334 12	2,457 09
22. Wisconsin & Michigan	217,423 53	2,946 90	217,423 53	2,946 90
23. Wisconsin Central	5,620,875 26	6,681 26	5,874,722 94	6,982 99
24. Wisconsin Western	62,987 56	1,212 00	73,701 81	1,418 16
25. La Crosse & Southeastern ..	.....	.....	.....	.....
26. Roddis Lum. & Veneer Co..	6,174 39	617 44	6,174 39	617 44
27. Mineral Point & Northern..	45,756 21	1,495 30	46,576 08	1,522 09
Totals ¹ .....	.....	.....	.....	.....

¹Totals omitted on account of incomplete reports.

ETC., WISCONSIN, 1906.—Continued.

Freight Traffic.

Gross earnings from operation.	Gross earnings from operation per mile of road.	Expenses.	Expenses per mile of road.	Income from operation.	Income from operation per mile of road.	No.
\$34,312 34	\$2,263 34	\$22,513 18	\$1,485 04	\$11,799 16	\$778 31	1
67,772 24	1,993 30	.....	.....	.....	.....	2
16,409,416 84	9,501 08	9,577,482 94	5,545 38	6,831,933 90	3,957 70	3
15,395,421 54	8,545 36	9,674,282 93	5,369 79	5,721,138 61	3,175 56	4
5,923,069 65	7,858 66	3,792,642 30	5,032 03	2,130,427 35	2,826 26	5
82,567 92	4,260 47	60,809 91	3,137 77	21,758 01	1,122 70	6
124,851 28	1,367 33	147,415 71	1,614 45	22,564 43	247 12	7
27,068 40	3,309 09	25,678 02	3,139 12	1,390 38	169 97	8
353,644 64	3,096 44	306,616 40	2,684 67	47,028 24	411 77	9
22,204 66	672 86	16,674 10	505 28	4,275 57	129 56	10
1,231,666 60	34,005 48	612,872 45	16,260 87	668,794 15	17,744 61	11
609,370 52	2,708 31	392,713 61	1,745 39	216,656 91	962 92	12
60,969 14	2,032 30	51,969 21	1,732 30	8,999 93	299 99	13
16,032 49	1,457 49	6,677 85	607 07	8,706 15	791 46	14
6,702 83	1,426 13	4,947 45	1,052 65	1,755 38	373 48	15
126,726 80	3,453 05	85,908 90	2,340 84	40,817 99	1,112 21	16
60,028 20	1,371 44	53,825 25	1,229 72	6,202 95	141 71	17
2,015,095 67	5,685 79	1,036,407 60	2,914 04	988,265 52	2,778 68	18
595,408 26	4,424 85	515,430 18	3,830 49	79,978 08	594 36	19
20,700 08	2,537 51	20,405 56	2,550 69	294 52	36 82	20
140,341 29	2,492 74	50,731 81	901 10	26,901 06	477 82	21
246,828 77	3,345 44	141,626 18	1,919 54	105,202 59	1,425 89	22
5,913,149 14	7,028 67	3,870,845 69	4,601 08	2,042,303 45	2,427 59	23
73,701 81	1,418 16	42,615 52	320 00	31,086 29	598 16	24
67,742 81	.....	28,082 95	.....	39,659 86	.....	25
6,174 30	.....	.....	.....	.....	.....	26
46,732 82	1,527 21	60,523 00	1,977 87	213,790 18	245 07	27
.....

² Deficit.

PASSENGER AND FREIGHT TRAFFIC, WISCONSIN, 1906.—Continued.

Train Mileage, Etc.

Name of Company.	Miles run by passenger trains.	Miles run by freight trains.	Miles run by mixed trains.
Abbotsford & Northeastern		9,558	
Ahnapee & Western			42,568
Chicago, Milwaukee & St. Paul.....	3,323,279	4,253,734	358,182
Chicago & Northwestern	3,762,375	4,103,175	270,321
Chi., St. Paul, Minneapolis & Omaha..	1,362,799	1,837,952	273,605
Illinois Central	61,231	62,811	28,333
Duluth, South Shore & Atlantic.....	149,858	195,457	
Great Northern	76,695	127,013	34
Green Bay & Western	138,112	180,492	101,412
Hawthorne, Nebagamon & Superior....	17,175	4,275	
Hazelhurst & Southeastern			5,240
Iola & Northern			11,768
Kewaunee, Green Bay & Western			48,938
Marinette, Tomahawk & Western			20,099
Minneapolis, St. Paul & Sault Ste. M.	364,982	604,328	176,302
Northern Pacific	154,473	142,456	28,439
Wisconsin & Michigan	83,875	89,210	
Wisconsin Central	1,469,662	2,096,302	27,541
Wisconsin Western			34,667
Mineral Point & Northern			38,556
Totals ¹			

¹Totals omitted on account of incomplete reports.

PASSENGER AND FREIGHT TRAFFIC, WISCONSIN, 1906.—Continued.

Train Mileage, Etc.

Name of Company.	Total mileage of trains earning revenue.	Miles run by switching trains.	Miles run by construction and other trains.	Grand total train mileage.
Abbotsford & Northeastern.	9,558	.....	.....	9,558
Ahnapee & Western	42,568	.....	.....	42,568
Chi., Milwaukee & St. Paul	7,935,195	.....	.....	7,935,195
Chicago & Northwestern ...	8,135,871	2,310,652	979,094	11,425,617
Chi., St. P., Mpls. & Omaha	3,524,356	754,866	238,398	4,517,620
Chi., L. Shore & Eastern....	.....	126,200	61,320	187,520
Illinois Central	152,375	3,647	1,342	157,364
Dul., S. Shore & Atlantic..	345,315	11,414	14,032	370,761
Great Northern	203,742	.....	16,313	2,220,055
Green Bay & Western	420,016	.....	.....	420,016
Hawthorne, Nebagamon & Superior	21,450	8,500	4,500	34,450
Hazelhurst & Southeastern .	5,240	.....	.....	5,240
Iola & Northern	11,768	.....	.....	11,768
Kewaunee, Green B. & W....	48,938	.....	.....	48,938
Marquette, Tomahawk & W.	20,099	2,484	.....	22,583
Mpls., St. P. & S. Ste. M..	1,146,112	.....	21,357	1,167,469
Northern Pacific	325,373	.....	17,480	342,853
Wisconsin & Michigan	173,085	21,683	39,720	234,488
Wisconsin Central	3,593,505	474,038	411,997	4,479,540
Wisconsin Western	34,637	.....	.....	34,667
Mineral Point & Northern .	38,556	.....	.....	38,556
Totals ¹ .....	.....	.....	.....	.....

¹ Totals omitted on account of incomplete reports.

PASSENGER AND FREIGHT TRAFFIC,

Car Mileage,

Name of Company.	Mileage of loaded freight cars—north or east.	Mileage of loaded freight cars—south or west.	Mileage of empty freight cars—north or east.	Mileage of empty freight cars—south or west.
1. Abbotsford & Northeastern.	2,305	45,670	43,237	376
2. Ahnapee & Western				
3. Chi., Milwaukee & St. Paul ..				
4. Chicago & Northwestern ...	38,242,136	39,592,521	17,991,847	15,771,709
5. Chicago, St. Paul, Minnea- polis & Omaha, ¹	14,183,355	16,032,087	7,111,578	4,187,448
6. Illinois Central	321,953	320,348	156,599	133,150
7. Dul., S. Shore & Atlantic..	1,166,531	591,493	349,942	864,413
8. Great Northern	3,119,848	1,094,435	284,525	2,171,829
9. Green Bay & Western	1,141,126	1,554,863	315,873	180,596
10. Hawthorne, Nebagamon & Superior	60,050	102,734	102,650	60,250
11. Hazelhurst & Southeastern .	7,510	981	981	7,510
12. Iola & Northern	1,959	3,046	1,916	706
13. Kewaunee, Green B. & W..	134,416	182,839	83,643	22,112
14. Marinette, Tomahawk & W.				
15. Mpls., St. P. & S. Ste. M.	8,712,975	9,799,884	2,458,948	1,477,865
16. Northern Pacific	756,365	1,622,830	665,694	465,676
17. Wisconsin & Michigan	161,540	294,852	234,556	48,516
18. Wisconsin Central	20,822,127	21,987,133	9,241,293	6,736,352
19. Wisconsin Western	135,225	99,847	22,404	57,480
Totals ²				

¹ Proportional.² Totals omitted on account of incomplete reports.

WISCONSIN, 1906.—Continued.

Tonnage, Etc.

Average number of freight cars in train.	Average number of loaded cars in train.	Average number of empty cars in train.	Average number of tons of freight in train.	Average number of tons of freight in each loaded car.	Mileage upon which based.	No.
10.00	5.00	5.00	124.00	25.00	15.16	1
					34.00	2
					1,727.11	3
25.52	17.80	7.72	285.91	16.07	1,801.61	4
19.21	13.98	5.23	253.86	18.16	753.70	5
10.23	7.05	3.18	54.87	7.79	91.31	6
15.21	9.00	6.21	144.31	16.04	114.21	7
52.51	33.17	19.34	1,439.31	43.39	37.69	8
					225.00	9
15.18	7.58	7.59	139.54	21.22	30.00	10
3.00	1.62	1.62	29.35	17.85	11.00	11
					4.70	12
					36.70	12
					43.77	14
29.00	24.00	5.00	392.80	17.00	355.66	15
20.54	13.92	6.62	212.35	15.25	134.56	16
8.28	5.11	3.17	136.63	26.00	73.78	17
27.68	20.16	7.52	323.68	16.06	841.29	18
9.00	6.78	2.31	61.69	9.10	51.97	19

WISCONSIN FREIGHT TRAFFIC

Freight traffic movement in Wisconsin (companies' material excluded) as reported

Name of Company.	Grain.	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other fr'gt rec'd from connecting roads and other carriers. (Whole tons.)
1. Ahnapee & Western.....	6,258	426
2. Chicago, Milwaukee & St. Paul.....	388,661	*
3. Chicago & Northwestern	220,122	204,939
4. Chicago, St. Paul, Minneapolis & Omaha.....	138,249	36,646
5. Illinois Central	752	3,646
6. Duluth, South Shore & Atlantic.....	1,145	11,348
7. Fairchild & Northeastern.....	1,220	110
8. Green Bay & Western	37,309	28,630
9. Hawthorne, Nebagamon & Superior.....	.....	600
10. Hazelhurst & Southeastern.....	.....	234
11. Iola & Northern	150	.....
12. Kewaunee, Green Bay & Western.....	12,126	27,937
13. Marinette, Tomahawk & Western.....	.....	1,276
14. Minneapolis, St. Paul & Sault Ste. Marie.....	302,480	2,700
15. Northern Pacific	162,028	403,231
16. Stanley, Merrill & Phillips.....	286	186
17. Wisconsin & Michigan.....	107	855
18. Wisconsin Central	56,936	89,266
19. Wisconsin Western	390	661
20. Bayfield, Lake Shore & Western.....	108	.....
21. Mineral Point & Northern.....	564	85
Total	1,323,891	812,716

*Not given.

FFIC MOVEMENT, 1905.

ted to the railroad commission of Wisconsin for the year ending June 30, 1905.

Total Freight Tonnage.		Flour.				No.
Whole tons.	Per cent.	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other fr'gt rec'd from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.		
				Whole tons.	Per cent.	
6,684	10.80	98	484	582	.94	1
388,661	5.81	101,968	*	101,968	1.57	2
425,061	5.32	15,542	58,134	73,676	.92	3
174,895	8.25	20,678	877	21,555	1.01	4
4,398	3.33	370	1,704	2,074	1.57	5
12,493	4.55	6,946	9,736	16,682	6.07	6
1,330	1.90	.....	.....	.....	.....	7
65,939	18.09	3,145	7,009	10,154	2.79	8
600	.19	.....	70	70	.02	9
234	.18	.....	58	58	.05	10
150	1.08	.....	494	494	3.56	11
40,063	22.34	1,607	968	2,575	1.44	12
1,276	1.30	.....	83	83	.08	13
305,180	16.32	257,422	5,969	263,391	14.09	14
565,259	31.35	8,268	4,393	12,661	70	15
472	.25	.65	.278	343	.18	16
962	.28	27	900	927	.27	17
146,142	3.62	2,507	278,512	281,019	6.97	18
1,051	2.26	164	721	885	1.91	19
108	.40	31	.....	31	.11	20
649	4.46	30	229	259	1.78	21
2,136,607	7.71	418,868	370,619	789,487	2.85	

FREIGHT TRAFFIC MOVEMENT

Name of Company.	Other Mill	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freig't rec'd from connecting roads and other car- riers. (Whole tons.)
1. Ahnapee & Western		1
2. Chicago, Milwaukee & St. Paul	70,292	65,659
3. Chicago & Northwestern	22,736	561
4. Chicago, St. Paul, Minneapolis & Omaha	9,901	1,306
5. Illinois Central	130	5,437
6. Duluth, South Shore & Atlantic	1,314	116
7. Fairchild & Northeastern		
8. Green Bay & Western		
9. Hawthorne, Nebagamon & Superior		
10. Hazelhurst & Southeastern		404
11. Iola & Northern		
12. Kewaunee, Green Bay & Western		54
13. Marinette, Tomahawk & Western		6,187
14. Minneapolis, St. Paul & Sault Ste. Marie	78,562	2,666
15. Northern Pacific	4,140	139
16. Stanley, Merrill & Phillips	99	
17. Wisconsin & Michigan		
18. Wisconsin Central	2,129	27,655
19. Wisconsin Western	6	48
20. Bayfield, Lake Shore & W.	9	
21. Mineral Point & Northern	9	12
Total	189,427	110,244

¹ Not given.

IN WISCONSIN, 1905.—Continued.

Products.		Hay.				No.
Total Freight Tonnage.		Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freig't rec'd from connecting roads and other car- riers. (Whole tons).	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
.....	.....	6,947	.....	6,947	11.23	1
70,292	1.08	34,869	.....	34,869	.54	2
88,445	1.11	39,138	7,001	46,139	.58	3
10,462	.49	51,684	1,283	52,967	2.50	4
1,486	1.13	373	824	1,197	.91	5
6,751	2.46	2,06	2,950	3,156	1.15	6
116	.17	1,120	.....	1,120	1.60	7
.....	.....	7,372	73	7,445	2.04	8
.....	.....	.....	642	642	.20	9
404	.08	.....	349	349	.28	10
.....	.....	.....	10	10	.07	11
.....	.....	15,948	1,021	16,969	9.46	12
54	.06	.....	644	644	.66	13
84,749	4.53	8,496	1,933	10,429	.56	14
6,806	.38	801	3,482	4,283	.24	15
238	.13	492	.....	492	.26	16
.....	.....	.....	146	146	.04	17
29,784	.74	23,536	780	24,316	.60	18
54	.12	30	.....	30	.06	19
9	.03	294	.....	294	.11	20
21	.14	10	142	152	1.04	21
299,671	1.08	191,316	21,280	212,596	77	....

FREIGHT TRAFFIC MOVEMENT IN

Name of Company.	Tobacco.	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight ¹ rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons.)
1. Chicago, Milwaukee & St. Paul	41,766	.....¹
2. Chicago & Northwestern	6,431	710
3. Chicago, St. Paul, Minneapolis & Omaha	47	14
4. Illinois Central	55	13
5. Green Bay & Western	348	.....
6. Hazelhurst & Southeastern .....	.....	2
7. Kewaunee, Green Bay & Western	35	.....
8. Wisconsin Central	402	268
9. Wisconsin Western	2,253	153
Total	51,337	1,160

¹ Not given.

WISCONSIN, 1905.—Continued.

Total Freight Tonnage.		Cotton.				No.
Whole tons.	Per cent.	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other car- riers. (Whole tons)	Total Freight Tonnage.		
				Whole tons.	Per cent.	
41,766	.64	.....¹.....	.....¹.....	.....	.....	1
7,141	.09	..... 27	..... 164	..... 191	.....	2
61	.01	.....	.....	.....	.....	3
68	.05	.....	.....	.....	.....	4
348	.10	.....	.....	.....	.....	5
2	.....	.....	.....	.....	.....	6
35	.02	.....	.....	.....	.....	7
670	.02	.....	.....	.....	.....	8
2,406	5.18	.....	.....	.....	.....	9
52,497	19	..... 27	..... 164	..... 191	.....	.....

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Fruit and	
	Freight originating on this road in Wisconsin. (Whole tons).	Freight rec'd from this road outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons).
1. Ahnapee & Western	874	.....
2. Chicago, Milwaukee & St. Paul.....	117,173	*
3. Chicago & Northwestern	184,258	30,989
4. Chicago, St. Paul, Minneapolis & Omaha.....	40,048	6,055
5. Illinois Central	735	904
6. Duluth, South Shore & Atlantic	178	3,045
7. Fairchild & Northeastern	1,359	40
8. Green Bay & Western	43,839	13,037
9. Hawthorne, Nebagamon & Superior .....	.....	16
10. Hazelhurst & Southeastern .....	.....	90
11. Iola & Northern .....	.....	.....
12. Kewaunee, Green Bay & Western	2,669	5,857
13. Marinette, Tomahawk & Western	5,974	3,623
14. Minneapolis, St. Paul & Sault Ste. Marie .....	.....	88
15. Northern Pacific	9,773	3,756
16. Stanley, Merrill & Phillips	3,551	5,309
17. Wisconsin & Michigan	115	19
18. Wisconsin Central	538	651
19. Wisconsin Western	114,703	14,536
20. Bayfield, Lake Shore & Western	152	211
21. Mineral Point & Northern	37	.....
.....	1	24
Total	525,977	88,250

* Not given.

MOVEMENT, 1905.—Continued.

Vegetables.		Live Stock.				No.
Total Freight Tonnage.		Freight originating on this road in Wisconsin. (Whole tons).	Freight re'cd from this road originating outside of Wis., and all other freight re'cd from connecting roads and other carriers. (Whole tons).	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
874	1.41	1,329	201	1,530	2.47	1
117,173	1.80	156,948	.....	156,948	2.41	2
215,247	2.70	121,177	11,021	132,198	1.66	3
46,103	2.18	30,170	4,304	34,474	1.63	4
1,639	1.24	14,435	650	15,085	11.43	5
3,223	1.17	258	320	578	.21	6
1,399	2.00	396	.....	396	.57	7
56,876	15.60	10,324	6,765	17,089	4.69	8
16	.01	15	5	20	.01	9
90	.07	3	9	12	.01	10
8,526	61.43	596	.....	596	4.29	11
9,597	5.35	2,573	660	3,233	1.30	12
88	.09	.....	.....	.....	.....	13
13,529	.72	5,568	439	6,007	.32	14
8,860	.49	946	1,165	2,111	.12	15
134	.07	68	.....	68	.05	16
1,189	.35	.....	.....	.....	.....	17
129,239	3.21	19,659	12,282	31,941	.79	18
363	.78	4,354	69	4,423	9.53	19
37	.14	.....	.....	.....	.....	20
25	.17	730	30	760	5.22	21
614,227	2.22	369,547	37,920	406,709	1.47	

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Dressed	
	Freight originating on this road in Wisconsin. (Whole tons).	Freight received from this road originating outside Wis., and all other freight received from connecting roads and other carriers. (Whole tons).
1. Chicago, Milwaukee & St. Paul	2,124	1
2. Chicago & Northwestern	71,716	3,754
3. Chicago, St. Paul, Minneapolis & Omaha	33	32
4. Illinois Central		
5. Duluth, South Shore & Atlantic		3,974
6. Hawthorne, Nebagamon & Superior		23
7. Hazelhurst & Southeastern		420
8. Minneapolis, St. Paul & Sault Ste. Marie	16,635	637
9. Northern Pacific	244	1,010
10. Stanley, Merrill & Phillips	94	9
11. Wisconsin Central	983	5,297
12. Wisconsin Western	2	53
13. Bayfield, Lake Shore & W.	47	
14. Mineral Point & Northern	9	4
Total	91,942	15,213

¹ Not given.

MOVEMENT, 1905.—Continued.

Meats.		Other Packing House Products.				No.
Total Freight Tonnage.		Freight originating on this road in Wiscon- sin. (Whole tons).	Freight received from this road origin- ating out- side Wis., and all other freight re- ceived from connecting roads and other car- riers. (Whole tons).	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole ton.	Per cent.	
2,124	.03	20,395	.....¹	20,395	.31	1
75,470	.94	1,827	1,320	3,147	.04	2
65	.01	2,867	5,350	8,217	.39	3
.....	.....	13	.....	13	.01	4
3,974	1.45	.....	.....	.....	.....	5
23	.01	.....	4	4	.....	6
420	.33	.....	258	258	.20	7
17,322	.93	637	1,057	1,694	.09	8
1,254	.07	517	374	891	.05	9
103	.07	24	18	42	.03	10
6,285	.16	223	16,068	16,291	.40	11
55	.12	1	90	91	.20	12
47	.17	.....	.....	.....	.....	13
13	.09	.....	9	9	.06	14
107,155	39	26,504	24,548	51,052	.18	....

WISCONSIN FREIGHT TRAFFIC

Name of Company	Poultry, Game	
	Freight originating on this road in Wiscon- sin. (Whole tons)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other car- riers. (Whole tons.)
1. Ahnapee & Western	10	.....
2. Chicago, Milwaukee & St. Paul	1,577	.....¹
3. Chicago & Northwestern	3,244	2,957
4. Chicago, St. Paul, Minneapolis & Omaha	2,052	130
5. Illinois Central .....	.....	257
6. Duluth, South Shore & Atlantic	4,143	89
7. Green Bay & Western	1,506	2,281
8. Kewaunee, Green Bay & Western	213	2,338
9. Minneapolis, St. Paul & Sault Ste. Marie	15	690
10. Northern Pacific	81	1,572
11. Wisconsin Central	28	1
12. Wisconsin Western	26	1
13. Wisconsin Western	1	1
14. Mineral Point & Northern .....	.....	.....
Total	13,821	10,316

¹ Not given.

MOVEMENT, 1905—Continued.

and Fish.		Wool.				No.
Total Freight Tonnage.		Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
10	.02					1
1,577	.02	2,313	1	2,313	.04	2
6,201	.08	342	675	1,017	.01	3
2,182	.10	207	24	231	.01	4
		23		23	.02	5
257	.09		4,456	4,456	1.62	6
4,232	1.16	38		38	.01	7
3,787	2.11					8
2,551	.14	92	1,019	1,111	.06	9
705	.04		3,937	3,937	.22	10
1,653	.04	228	579	807	.02	11
29	.06	105	8	113	.24	12
951	2.51					13
2	.01	1		1	.01	14
24,137	.09	3,344	10,698	14,042	.05	

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Hides and	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside Wisconsin and all other freight received from connecting roads and other carriers. (Whole tons.)
1. Ahnapee & Western	65	.....
2. Chicago, Milwaukee & St. Paul	17,691	1.....
3. Chicago & Northwestern	23,994	13,356
4. Chicago, St. Paul, Minneapolis & Omaha.....	171	162
5. Illinois Central		195
6. Duluth, South Shore & Atlantic		21
7. Fairchild & Northeastern		
8. Green Bay & Western		
9. Iola & Northern		
10. Kewaunee, Green Bay & Western		
11. Marinette, Tomahawk & Western	285	572
12. Minneapolis, St. Paul & Sault Ste. Marie	1,810	2,918
13. Northern Pacific	26	176
14. Northwestern Coal Ry.		
15. Wisconsin Central	5,801	11,196
16. Wisconsin Western	51	1
17. Mineral Point & Northern	4	
Total	49,898	28,597

¹ Report not given.

MOVEMENT, 1905—Continued.

Leather.		Anthracite Coal.				No.
Total Freight Tonnage.		Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside Wisconsin and all other freight received from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per Cent.			Whole tons.	Per cent.	
65	.10	.....	303	303	.49	1
17,691	.27	391,168	1	391,108	6.02	2
37,350	.47	360,490	4,092	364,582	4.56	3
333	.02	125,924	606	126,530	5.97	4
195	.15	.....	3,997	3,997	3.03	5
21	.01	.....	178	178	.07	6
.....	.....	.....	81	81	.12	7
.....	.....	6,959	5,667	12,626	3.46	8
.....	.....	.....	131	131	.94	9
.....	.....	346	.....	346	.19	10
857	.87	.....	115	115	.12	11
4,728	.25	27	29,558	29,585	1.58	12
202	.01	.....	198,727	198,727	11.02	13
.....	.....	28,040	.....	28,040	12.06	14
16,997	.42	.....	38,890	38,890	.93	15
51	.11	8	234	242	.52	16
5	.03	18	3,058	3,076	21.13	17
78,495	28	912,920	285,637	1,198,557	432	

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Bituminous	
	Freight originating on this road in Wisconsin. (Whole tons)	Freight re'cd from this road outside of Wis. and all other freight re'cd from connecting roads and other carriers. (Whole tons).
1. Ahnapee & Western	226	4,920
2. Chicago, Milwaukee & St. Paul	423,819	1
3. Chicago & Northwestern	637,489	56,661
4. Chicago, St. Paul, Minneapolis & Omaha	200,117	19,587
5. Chicago, Lake Shore & Eastern		2,318
6. Illinois Central		32,785
7. Duluth, South Shore & Atlantic		3,322
8. Fairchild & Northeastern		699
9. Green Bay & Western	39,765	14,513
10. Hawthorne, Nebagamon & Superior		44
11. Iola & Northern		315
12. Kewaunee, Green Bay & Western	38,878	61
13. Marinette, Tomahawk & Western		1,050
14. Minneapolis, St. Paul & Sault Ste. Marie		32,734
15. Northern Pacific		288,180
16. Northwestern Coal	204,381	
17. Stanley, Merrill & Phillips	279	3,140
18. Wisconsin & Michigan	2,273	23,643
19. Wisconsin Central		358,436
20. Wisconsin Western	5	140
21. Bayfield, Lake Shore & W.	204	
22. Mineral Point & Northern	189	2,340
Total	1,537,625	844,858

¹ Not given.

MOVEMENT, 1906.—Continued.

Coal.		Coke.				No.
Total Freight Tonnage.		Freight originating on this road in Wiscon- sin. (Whole tons).	Freight re'cd from this road originating outside of Wis., and all other freight re'cd from connecting roads and other car- riers. (Whole tons).	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
5,146	8.32					1
423,819	6.53	83,536		83,536	1.29	2
684,150	8.57	65,089	19,152	84,241	1.05	3
219,704	10.37	1,806	23,239	25,045	1.18	4
2,318	.35					5
32,785	24.83		354	354	.27	6
3,322	1.21		179	179	.07	7
669	.96		17	17	.02	8
54,278	14.88		119	119	.03	9
44	.01					10
315	2.27					11
38,939	21.71					12
1,050	1.07					13
32,734	1.75		954	954	.05	14
288,180	15.98	1,784	19,248	21,032	1.17	15
204,381	87.94					16
3,419	1.86					17
25,916	7.60					18
358,436	8.89	2,710	1,733	4,443	.11	19
145	.51					20
204	.75					21
2,529	17.37		22	22	.15	22
2,382,483	8.59	154,925	65,017	219,942	.79	....

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Ores.	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other fr'gt rec'd from connecting roads and other carriers. (Whole tons.)
1. Ahnapee & Western		1 ¹
2. Chicago, Milwaukee & St. Paul	157,919	75
3. Chicago & Northwestern	463,859	48
4. Chicago, St. Paul, Minneapolis & Omaha	17,415	13,800
5. Chicago, Lake Shore & Eastern		100
6. Illinois Central	459	22,680
7. Duluth, South Shore & Atlantic	341	
8. Green Bay & Western		
9. Iola & Northern		
10. Kewaunee, Green Bay & Western		
11. Marinette, Tomahawk & Western		
12. Minneapolis, St. Paul & Sault Ste. Marie		
13. Northern Pacific		31,747
14. Stanley, Merrill & Phillips		
15. Wisconsin & Michigan		
16. Wisconsin Central	422,744	747,202
17. Wisconsin Western		18
18. Mineral Point & Northern	1,876	1,451
Total	1,064,613	817,121

¹ Not given.

MOVEMENT, 1906—Continued.

		Stone, Sand and Other Like Articles.				No.
Total Freight Tonnage.		Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
		1,315	174	1,489	2.41	1
157,919	2.43	396,117	1,.....	396,117	6.10	2
463,934	5.81	346,014	21,025	367,039	4.60	3
17,463	.82	14,541	1,139	15,680	.74	4
13,800	2.07	.....	26,486	26,486	3.74	5
559	.42	110	841	951	.72	6
23,021	8.37	31,649	392	32,041	11.66	7
		659	2,781	3,440	.94	8
		.....	75	75	.54	9
		1,454	432	1,886	1.05	10
		.....	43	43	.04	11
		2,196	1,961	4,157	.22	12
31,747	1.76	13,215	6,338	19,553	1.08	13
		79	63	142	.08	14
		362	1,294	1,656	.49	15
1,169,946	29.01	90,124	4,094	94,218	2.34	16
18	.04	.....	50	50	.11	17
3,327	22.85	12	12	24	.17	18
1,881,734	6.79	897,847	67,200	965,047	3.48	

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Lumber and	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road outside of Wis., and all other freig't rec'd from connecting roads and other carriers. (Whole tons.)
1. Abbotsford & Northeastern	51,250	2,795
2. Ahnapee & Western	5,785	3,522
3. Chicago, Milwaukee & St. Paul	1,786,237	1
4. Chicago & Northwestern	2,139,664	413,054
5. Chicago, St. Paul, Minneapolis & Omaha	375,553	112,990
6. Chicago, Lake Shore & Eastern		400
7. Illinois Central	2,131	14,228
8. Chippewa Valley & Northern	41,680	30,000
9. Drummond & Southwestern	46,615	
10. Duluth, South Shore & Atlantic	96,712	22,467
11. Fairchild & Northeastern	61,536	146
12. Green Bay & Western	35,736	22,384
13. Hawthorne, Nebagamon & Superior	317,710	
14. Hazelhurst & Southeastern	124,210	284
15. Iola & Northern	412	576
16. Kewaunee, Green Bay & Western	8,209	19,537
17. Marinette, Tomahawk & Western	63,312	23,780
18. Minneapolis, St. Paul & Sault Ste. Marie	747,431	48,953
19. Northern Pacific	260,211	89,417
20. Stanley, Merrill & Phillips	173,998	263
21. Wisconsin & Michigan	162,740	108,494
22. Wisconsin Central	658,925	218,782
23. Wisconsin Western	23,586	4,694
24. Bayfield, Lake Shore & Nor.....	24,870	
25. Chippewa Valley & Northern.....	341,680	330,000
26. Mineral Point & Northern	51	1,372
Total	7,250,244	1,168,138
Supt. not given.		

¹ Logs, 70 per cent.² Logs, 72 per cent; lumber, 26 per cent of total.³ Estimated.⁴ Logs, 65.58 per cent; 13.95 per cent lumber and shingles of total.

MOVEMENT, 1905.—Continued.

Forest Products.		Petroleum and Other Oils.				No.
Total Freight Tonnage.		Freight originating on this road in Wisconsin. (Whole tons).	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons).	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
54,045	90.00	.....	.....	.....	.....	1
9,307	15.05	.....	390	390	.63	2
1,786,237	27.50	8,570	1	8,570	.13	3
2,552,718	31.96	6,665	12,655	19,320	.24	4
488,543	23.05	161	7,932	8,093	.38	5
400	.06	.....	120	120	.02	6
16,359	12.39	56	764	820	.62	7
71,680	99.00	.....	.....	.....	.....	8
46,615	99.27	.....	.....	.....	.05	9
119,179	43.35	.....	147	147	.14	10
61,682	88.26	.....	97	97	.48	11
58,120	15.94	70	1,690	1,760	.02	12
317,710	199.36	.....	89	89	.04	13
124,494	298.47	.....	52	52	.09	14
988	7.12	.....	12	12	.31	15
27,746	15.47	305	257	562	.....	16
87,092	88.48	.....	.....	.....	.35	17
796,384	42.59	34	6,442	6,476	.60	18
349,628	29.39	1,759	9,084	10,843	.03	19
174,261	94.73	11	64	75	.....	20
271,234	479.54	.....	.....	.....	.69	21
877,707	21.77	679	27,198	27,877	.59	22
28,280	60.95	18	258	276	.03	23
24,870	91.81	7	.....	7	.....	24
371,680	99.00	.....	.....	.....	19	25
1,423	9.77	1	27	28	.....	26
8,418,382	30.38	18,336	67,251	85,614	.31	....

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Sugar.	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons).
1. Ahnapee & Western		15
2. Chicago & Northwestern	22,110	1,281
3. Chicago, St. Paul, Minneapolis & Omaha	5,893	1,125
4. Illinois Central		1,495
5. Duluth, South Shore & Atlantic		1,256
6. Fairchild & Northeastern		109
7. Green Bay & Western	38	418
8. Hazelhurst & Southeastern		24
9. Kewaunee, Green Bay & Western	83	105
10. Minneapolis, St. Paul & Sault Ste. Marie		3,848
11. Northern Pacific	4,966	2,048
12. Stanley, Merrill & Phillips	23	4
13. Wisconsin & Michigan		350
14. Wisconsin Central	713	9,206
15. Bayfield, Lake Shore & Western	8	
Total	33,924	21,284

MOVEMENT, 1906—Continued.

Sugar.		Naval Stores.				No.
Total Freight Tonnage.		Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other car- riers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
15	.02	.....	.....	.....	.....	1
23,391	.29	..... 64	..... 24	..... 88	.....	2
7,108	.34	.....	.....	.....	.....	3
1,495	1.13	.....	.....	.....	.....	4
1,256	.46	.....	.....	.....	.....	5
109	.16	.....	.....	.....	.....	6
456	.15	.....	.....	.....	.....	7
24	.02	.....	.....	.....	.....	8
188	.11	.....	.....	.....	.....	9
3,848	.21	.....	.....	.....	.....	10
7,014	.39	.....	.....	.....	.....	11
27	.01	.....	.....	.....	.....	12
350	.10	.....	.....	.....	.....	13
9,919	.25	.....	.....	.....	.....	14
8	.03	.....	.....	.....	.....	15
55,208	20	..... 64	..... 24	..... 88	.....

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Iron, Pig	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight re'cd from this road outside of Wis., and all other freight re'cd from connecting roads and other carriers. (Whole tons).
1. Ahnapee & Western		
2. Chicago, Milwaukee & St. Paul	321,317	*
3. Chicago & Northwestern	5,553	45,658
4. Chicago, St. Paul, Minneapolis & Omaha	18,528	222
5. Chicago, Lake Shore & Eastern	111,549	1,719
6. Illinois Central		171
7. Duluth, South Shore & Atlantic	3,507	11,190
8. Green Bay & Western		
9. Hawthorne, Nebagamon & Superior		1
10. Minneapolis, St. Paul & Sault Ste. Marie	7,304	3,869
11. Northern Pacific	2,316	1,996
12. Stanley, Merrill & Phillips		
13. Wisconsin & Michigan		
14. Wisconsin Central	3,036	4,084
15. Wisconsin Western		
16. Bayfield, Lake Shore & W.		
17. Mineral Point & Northern		
Total	563,445	68,910

*Not given.

MOVEMENT, 1905—Continued.

and Bloom.		Iron and Steel Rails.				No.
Total Freight Tonnage.		Freight originating on this road in Wisconsin. (Whole tons.)	Freight re'cd from this road originating outside of Wis., and all other freight re'cd from connecting road and other carriers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons	Per cent.	
.....	.....	.....	15	15	.02	1
321,317	4.95	*	*	*		2
141,246	1.77	39,045	21,420	60,465	.76	3
19,050	.90	2,168	2,445	4,613	.21	4
113,268	16.98	63,325	81,601	144,926	21.73	5
171	.13	.....	.....	.....	.....	6
14,697	5.35	.....	343	343	.12	7
.....	.....	1,822	.....	1,822	.49	8
1	.....	.....	.....	.....	.....	9
11,173	.60	1,288	14,816	16,104	.86	10
4,312	.24	271	1,137	1,408	.08	11
.....	.....	549	175	724	.38	12
.....	.....	.....	8,862	8,852	2.60	13
7,120	.18	740	3,158	3,898	.10	14
.....	.....	33	287	329	.09	15
.....	.....	188	.....	188	.69	16
.....	.....	.....	21	21	.14	17
632,355	2.28	109,429	134,280	243,709	.88	

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Other Castings	
	Freight originating on the road in Wisconsin. (Whole tons.)	Freight received from this road originating outside Wisconsin and all other freight received from connecting roads and other carriers. (Whole tons.)
1. Ahnapee & Western	105	223
2. Chicago, Milwaukee & St. Paul.....	79,781	1
3. Chicago & Northwestern	71,626	12,025
4. Chicago, St. Paul, Minneapolis & Omaha	2,573	6,664
5. Chicago, Lake Shore & Eastern	6,076	181,600
6. Illinois Central	206	807
7. Duluth, South Shore & Atlantic	995	2,644
8. Green Bay & Western	776	1,238
9. Hawthorne, Nebagamon & Superior		3
10. Hazelhurst & Southeastern	8	15
11. Kewaunee, Green Bay & Western	445	285
12. Marinette, Tomahawk & Western		91
13. Minneapolis, St. Paul & Sault Ste. Marie	1,771	5,068
14. Northern Pacific	1,855	2,274
15. Stanley, Merrill & Phillips	60	218
16. Wisconsin & Michigan		
17. Wisconsin Central	5,538	10,356
18. Wisconsin Western	92	246
19. Bayfield, Lake Shore & W.	73	
20. Mineral Point & Northern	59	167
Total	172,039	223,824

¹ Not given.

MOVEMENT, 1905.—Continued.

and Machinery.		Bar and Steel Metal.				No.
Total Freight Tonnage.		Freight originating on the road in Wisconsin. (Whole tons.)	Freight received from this road originating outside Wisconsin and all other freight received from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole ton.	Per cent.	
328	.53	.....	.....	.....	.....	1
79,781	1.23	5,052	1	5,052	.08	2
83,651	1.05	88,841	26,421	115,262	1.44	3
9,237	.43	64	284	348	.02	4
187,676	28.13	156,182	729	156,911	23.53	5
1,013	.77	348	800	1,148	.87	6
3,639	1.32	.....	1,626	1,626	.59	7
2,014	.55	432	563	1,045	.28	8
3	.....	.....	.....	.....	.....	9
23	.02	.....	.....	.....	.....	10
730	.41	1,250	253	1,503	.84	11
91	.09	.....	.....	.....	.....	12
6,839	.37	834	13,971	14,805	.79	13
4,129	.23	1,087	2,358	3,445	.19	14
278	.15	.....	.....	.....	.....	15
.....	.....	45	2,987	3,032	.89	16
15,894	.39	1,206	9,614	10,820	.27	17
338	.73	.....	1	1	.....	18
73	.27	.....	.....	.....	.....	19
226	1.55	.....	1	1	.01	20
395,963	143	255,391	59,608	314,999	114	....

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Cement, Brick	
	Freight originating on the road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis. and all other freight rec'd from connecting roads and other carriers. (Whole tons.)
1. Ahnapee & Western	1,084	656
2. Chicago, Milwaukee & St. Paul.....	170,088	*
3. Chicago & Northwestern.....	187,700	32,894
4. Chicago St. Paul, Minneapolis & Omaha.....	49,115	8,743
5. Chicago, Lake Shore & Eastern.....		2,772
6. Illinois Central	532	4,015
7. Duluth, South Shore & Atlantic.....	907	1,992
8. Fairchild & Northeastern.....	16	630
9. Green Bay & Western.....	4,137	4,114
10. Hawthorne, Nebagamon & Superior.....		16
11. Hazelhurst & Southeastern.....		5
12. Iola & Northern.....	20	662
13. Kewaunee, Green Bay & Western.....	7,165	136
14. Marinette, Tomahawk & Western.....		908
15. Minneapolis, St. Paul & Sault Ste. Marie.....	7,523	17,969
16. Northern Pacific	25,640	10,253
17. Stanley, Merrill & Phillips.....	50	407
18. Wisconsin & Michigan.....		3,718
19. Wisconsin Central	39,582	24,150
20. Wisconsin Western	35	572
21. Bayfield, Lake Shore & Western.....	2	
22. Mineral Point & Northern.....	3	113
Total	493,599	114,725

*Not given.

MOVEMENT, 1905—Continued.

and Lime.		Agricultural Implements.				No.
Total Freight Tonnage.		Freight originating on the road in Wisconsin (Whole tons)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole line.	Per cent.	
1,740	2.81	45	117	162	.26	1
170,088	2.62	50,107	*	50,107	.77	2
220,594	2.76	24,338	4,451	28,789	.36	3
57,858	2.73	366	6,706	7,072	.33	4
2,772	.42	.....	.....	.....	.....	5
4,547	3.44	234	379	613	.46	6
2,899	1.06	.....	50	50	.02	7
646	.92	.....	.....	.....	.....	8
8,251	2.27	214	1,557	1,771	.49	9
16	.01	.....	.....	.....	.....	10
5	.....	.....	.....	.....	.....	11
682	4.91	10	72	82	.59	12
7,301	4.07	256	149	405	.23	13
908	.92	.....	.....	.....	.....	14
25,492	1.36	283	1,130	1,413	.08	15
35,893	1.99	142	116	258	.01	16
457	.24	.....	.....	.....	.....	17
3,718	1.09	.....	.....	.....	.....	18
63,732	1.58	1,285	15,427	16,712	.41	19
607	1.51	26	156	182	.39	20
2	.2	.01	.....	.....	.....	21
116	.80	4	50	54	.37	22
608,324	2.20	77,310	30,360	107,670	.39	

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Wagons, Carriages,	
	Freight originating on the road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons.)
1. Ahnapee & Western		191
2. Chicago, Milwaukee & St. Paul	36,284	1
3. Chicago & Northwestern	35,200	14,195
4. Chicago, St. Paul, Minneapolis & Omaha	112	2,286
5. Illinois Central	96	164
6. Duluth, South Shore & Atlantic		271
7. Green Bay & Western	62	75
8. Hazelhurst & Southeastern		
9. Iola & Northern		30
10. Kewaunee, Green Bay & Western	118	16
11. Marinette, Tomahawk & Western		
12. Minneapolis, St. Paul & Sault Ste. Marie	55	113
13. Northern Pacific	189	41
14. Stanley, Merrill & Phillips	2	6
15. Wisconsin & Michigan		
16. Wisconsin Central	739	2,258
17. Wisconsin Western	2	53
18. Bayfield, Lake Shore & W.	111	
19. Mineral Point & Northern	38	8
Total	73,005	19,707

¹ Not given.

MOVEMENT, 1905.—Continued.

Tools, Etc.		Wines, Liquors, Beers.				No.
Total Freight Tonnage.		Freight originating on the road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis. and all other fr'ight rec'd from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	Whole tons.	Per cent.
191	.31	153	802	955	1.54	1
36,284	.56	549,600	1,000	549,600	8.46	2
49,395	.62	281,027	1,265	282,392	2.91	3
2,398	.11	882	8,109	8,991	.42	4
260	.20	99	16	115	.09	5
271	.10	155	1,526	1,681	.61	6
137	.04	3,138	423	3,561	.98	7
.....	.....	.....	70	70	.06	8
30	.22	.....	.....	.....	.....	9
134	.08	436	.....	436	.24	10
.....	.....	.....	611	611	.62	11
168	.01	1,838	2,441	4,279	.23	12
227	.01	462	5,755	6,217	.34	13
8	.01	12	.....	12	.01	14
.....	.....	.....	1,076	1,076	.31	15
2,997	.07	25,580	4,091	32,671	.81	16
55	.12	196	586	782	1.68	17
111	.40	.....	.....	.....	.....	18
46	.32	98	75	173	1.19	19
92,712	34	816,676	26,846	843,522	3.04	....

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Household Goods	
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons.)
1. Ahnapee & Western	372	59
2. Chicago, Milwaukee & St. Paul.....	28,601	*
3. Chicago & Northwestern.....	74,842	2,968
4. Chicago, St. Paul, Minneapolis & Omaha.....	6,109	7,415
5. Illinois Central	170	125
6. Chippewa Valley & Northern.....		
7. Drummond & Southwestern.....		
8. Duluth, South Shore & Atlantic.....	314	274
9. Fairchild & Northeastern.....	100	74
10. Green Bay & Western	1,457	409
11. Hawthorne, Nebagamon & Superior.....	5	9
12. Hazelhurst & Southeastern.....	10	16
13. Iola & Northern.....	40	20
14. Kewaunee, Green Bay & Western.....	5,889	86
15. Marinette, Tomahawk & Western.....	33	
16. Minneapolis, St. Paul & Sault Ste. Marie.....	2,824	1,776
17. Northern Pacific	797	518
18. Stanley, Merrill & Phillips.....	36	24
19. Wisconsin & Michigan.....	10	1
20. Wisconsin Central	9,730	3,835
21. Wisconsin Western	294	268
22. Bayfield, Lake Shore & W.....	61	
23. Mineral Point & Northern.....	39	67
Total	131,733	17,944

*Not given.

MOVEMENT, 1905—Continued.

and Furniture.		Merchandise.				No.
Total Freight Tonnage.		Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other car- riers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
431	.70	1,779	16,059	17,838	28.83	1
28,601	.44	713,737	*	713,737	10.99	2
77,810	.97	386,995	45,167	432,162	5.41	3
13,524	.64	50,608	47,535	98,143	4.63	4
295	.22	10,230	17,278	27,508	20.84	5
.....		343	750	750	.01	6
588	.21	5,877	12,259	343	.73	7
174	.25	911	614	18,136	6.60	8
1,866	.51	27,872	17,850	1,525	218	9
14	.01	43	443	45,722	12.54	10
26	.02	.....	144	486	.15	11
60	.43	369	1,033	144	.12	12
5,975	3.33	10,200	2,385	1,402	10.10	13
33	.03	612	1,244	12,585	7.02	14
4,600	.25	26,493	1,856	1,856	1.89	15
1,315	.07	.....	25,150	51,643	2.76	16
60	.03	474	566	.....	.....	17
11	.....	2,721	15,863	1,040	.56	18
13,565	.34	73,975	85,890	18,584	5.45	19
562	1.21	759	2,247	158,965	3.94	20
61	.23	97	.....	3,006	6.48	21
106	.73	159	295	97	.36	22
149,677	.54	1,313,354	292,772	454	3.12	23
				1,606,126	5.80	

WISCONSIN FREIGHT TRAFFIC

Name of Company.	Miscellaneous: Other tioned	
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other car- riers. (Whole tons.)
1. Abbotsford & Northeastern	5,694	311
2. Ahnapee & Western	5,584	1,279
3. Chicago, Milwaukee & St. Paul	342,398	1
4. Chicago & Northwestern	802,347	72,111
5. Chicago, St. Paul, Minneapolis & Omaha	525,977	112,673
6. Chicago, Lake Shore & Eastern	11,728	6,541
7. Illinois Central	8,914	3,931
8. Chippewa Valley & Northern		
9. Drummond & Southwestern		
10. Duluth, South Shore & Atlantic		
11. Fairchild & Northeastern	246	274
12. Green Bay & Western	2,017	3,428
13. Hawthorne, Nebagamon & Superior		
14. Hazelhurst & Southeastern	23	35
15. Iola & Northern	97	230
16. Kewaunee, Green Bay & Western	1,909	2,434
17. Marinette, Tomahawk & Western	865	2,760
18. Minneapolis, St. Paul & Sault Ste. Marie.....	53,858	94,681
19. Northern Pacific	32,354	175,439
20. Northwestern Coal Ry. Co.		
21. Stanley, Merrill & Phillips.....	1,236	347
22. Wisconsin & Michigan.....	405	2,963
23. Wisconsin Central	249,949	189,487
24. Wisconsin Western	1,049	934
25. Bayfield, Lake Shore & Western.....		750
26. Mineral Point & Northern	270	768
Total	2,046,920	671,176

¹ Not given.

MOVEMENT, 1905.—Continued.

Commodities Not Men- Above.		Total Tonnage.				No.
Total Freight Tonnage.		Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other car- riers. (Whole tons.)	Total Freight Tonnage.		
Whole tons.	Per cent.			Whole tons.	Per cent.	
6,005	10.00	56,944	3,106	60,050	1	
6,863	11.09	32,029	29,836	61,865	2	
343,398	5.27	6,495,048	5	6,495,048	3	
874,458	10.95	6,779,597	1,207,273	7,986,870	4	
638,650	30.13	1,694,409	425,186	2,119,595	5	
18,209	2.74	348,860	318,086	666,946	6	
12,845	9.73	40,521	91,492	132,013	7	
		41,680	30,750	72,430	8	
		46,858		46,958	9	
		150,504	124,340	274,844	10	
520	.74	66,904	2,977	69,881	11	
5,445	1.49	231,722	132,832	364,554	12	
		317,773	1,965	319,738	13	
58	.05	124,254	2,109	126,423	14	
327	2.36	4,363	9,517	13,880	15	
4,343	2.42	116,712	62,626	179,338	16	
3,625	3.63	65,107	33,319	98,426	17	
148,539	7.49	1,535,497	334,387	1,869,884	18	
207,793	10.97	527,320	1,275,972	37,712,350	19	
		232,421		232,421	20	
1,583	.86	178,052	5,934	183,986	21	
3,368	.99	169,228	171,803	341,031	22	
439,436	10.90	1,816,548	2,215,842	4,043,390	23	
1,983	4.27	33,639	12,760	46,399	24	
		27,098		27,098	25	
750	.01	41,680	30,750	72,430	26	
1,038	6.96	4,176	10,384	14,560	27	
2,711,096	9.73	21,179,044	6,533,306	1,803,292	19	

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.

Freight Traffic Movement—Wisconsin (Companies' Material Excluded) as Reported to the Railroad Commission for year ending June 30, 1906—Products of Agriculture.

Name of Company.	Flour.			
	Freight originating on this road in Wisconsin. (Whole tons).	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western	6,349	321	6,670	10.72
Chic., Milwaukee & St. P.	423,962	.....	423,962	5.86
Chicago & Northwestern.....	272,446	250,498	522,944	5.63
Chi., St. P., M. & O.....	128,834	12,032	140,866	5.88
Illinois Central	1,084	2,684	3,768	2.34
Duluth, South Shore & Atl.	1,119	11,177	12,296	2.87
Fairchild & Northeastern.....	913	139	1,052	3.62
Green Bay & Western.....	37,987	25,687	63,674	19.79
Hawthorne, Nebagamon & Superior .....	.....	528	528	.16
Hazelhurst & Southeastern .....	.....	104	104	.31
Iola & Northern.....	179	140	319	2.98
Kewaunee, Green Bay & Western	17,114	25,755	42,869	24.37
Marinette, Tomahawk & W. ....	.....	1,322	1,322	1.96
Minneapolis, St. Paul & Sault Ste. Marie.....	200,113	3,186	203,299	10.89
Northern Pacific.....	71,657	434,695	506,352	25.21
Stanley, Merrill & Phillips.	536	357	893	.30
Wisconsin & Michigan.....	47	958	1,005	.23
Wisconsin Central	57,717	112,565	170,282	4.19
Wisconsin Western.....	277	152	429	.84
Total	1,220,334	882,300	2,102,634	7.00

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Product of Agriculture—Continued.

Name of Company.	Other Mill Products.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....	34	494	528	.85
Chi., Milwaukee & St. P.	122,528	.....	122,528	1.69
Chicago & Northwestern.....	15,545	83,060	98,605	1.03
Chicago, St. Paul, Minneapolis & Omaha	23,393	1,169	2,562	1.03
Illinois Central	273	1,993	2,366	1.46
Duluth, South Shore & Atlantic	19,033	8,361	27,394	6.41
Fairchild & Northeastern.....	.....	.....	.....	.....
Green Bay & Western.....	2,960	6,618	9,578	2.98
Hawthorne, Nebagamon & Superior .....	.....	128	128	.04
Hazelhurst & Southeastern.....	.....	75	75	.23
Iola & Northern.....	65	454	519	4.86
Kewaunee, Green Bay & W.	1,791	1,987	3,778	2.15
Marinette, Tomahawk & W.	.....	193	193	.28
Minneapolis, St. Paul & Sault Ste. Marie.....	270,752	4,051	274,803	14.72
Northern Pacific.....	7,193	5,012	12,205	.61
Stanley, Merrill & Phillips.	77	127	204	.07
Wisconsin & Michigan.....	155	812	967	.22
Wisconsin Central	5,200	1,315	1,559	7.27
Wisconsin Western	244	1,315	1,559	3.06
Total	469,433	406,487	873,920	2.91

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Product of Agriculture—Continued.

Name of Company.	Grain.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wis., and all other freight rec'd from connecting roads and other car- riers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....				
Chicago, Milwaukee & St. Paul.....	82,138		82,138	1.14
Chicago & Northwestern...	30,343	50,461	80,804	.87
Chicago, St. Paul, Minne- apolis & Omaha.....	11,382	426	11,808	.49
Illinois Central.....	92	1,015	1,107	.69
Duluth, South Shore & At- lantic.....	957	6,017	6,974	1.63
Fairchild & Northeastern..	13	206	219	.75
Green Bay & Western.....				
Hawthorne, Nebagamon & Superior.....				
Hazelhurst & Southeastern.....		97	97	.30
Iola & Northern.....				
Kewaunee, Green Bay & W. Marinette, Tomahawk & W. Minneapolis, St. Paul & Sault Ste. Marie.....	51,256	5,753	57,009	3.05
Northern Pacific.....	4,921	4,023	8,954	.45
Stanley, Merrill & Phillips.	67		67	.02
Wisconsin & Michigan.....	89	168	257	.06
Wisconsin Central.....	2,807	33,715	36,522	.90
Wisconsin Western.....	4	130	134	.26
Total.....	184,079	102,011	286,090	.95

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Products of Agriculture.—Continued

Name of Company.	Hay.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tons.	
			Whole tons.	Per cent.
Ahnapee & Western	8,812		8,812	14.17
Chi., Milwaukee & St. P....	35,456		35,456	.49
Chicago & Northwestern ...	53,341	3,572	56,913	.61
Chi., St. P., Mpls. & Omaha	51,803	1,373	53,176	2.22
Illinois Central	317	92	409	.25
Dul., S. Shore & Atlantic...	307	1,273	1,580	.57
Fairchild & Northeastern ...	973		973	3.34
Green Bay & Western	3,599	1,728	5,327	1.65
Hawthorne, Nebagamon & Superior		726	726	.20
Iola & Northern	15		15	
Kewaunee, Green B. & W..	10,907	829	11,736	6.67
Marquette, Tomahawk & W.		524	524	.78
Mpls., St. P. & S. Ste. M...	7,873	182	8,055	.43
Northern Pacific	38	2,988	3,026	.15
Stanley, Merrill & Phillips .	788	8	791	.27
Wisconsin & Michigan	108	520	628	.14
Wisconsin Central	27,151	765	27,916	.69
Wisconsin Western				
Total	211,485	14,755	216,238	.72

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.
 Products of Agriculture—Continued.

Name of Company.	Tobacco.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freigt rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....				
Chicago, Milwaukee & St. Paul	44,667		44,667	.62
Chicago & Northwestern....	5,732	607	6,339	.07
Chicago, St. Paul, Minne- apolis & Omaha	81		81	
Illinois Central	14	24	38	.02
Duluth, South Shore & At- lantic				
Fairchild & Northeastern....				
Green Bay & Western.....	422		422	.13
Hawthorne, Nebagamon & Superior				
Hazelhurst & Southeastern.		1	1	
Iola & Northern.....				
Kewaunee, Green Bay & W. Marinette, Tomahawk & Minneapolis, St. Paul & Sault Ste. Marie.....	13	171	189	.01
Northern Pacific				
Stanley, Merrill & Phillips.				
Wisconsin & Michigan.....				
Wisconsin Central	397	303	700	.02
Wisconsin Western	2,027	132	2,159	4.24
Total	533 58	1,362	54,620	.18

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Product of Agriculture—Continued.

Name of Company.	Fruits and Vegetables.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....	741	.....	741	1.19
Chicago, Milwaukee & St. Paul	80,539	.....	80,539	1.11
Chicago & Northwestern....	159,093	37,573	196,666	2.13
Chicago, St. Paul, Minneapolis & Omaha.....	39,473	3,180	42,653	1.78
Illinois Central	237	1,046	1,283	.80
Duluth, South Shore & Atlantic	103	4,350	4,453	1.04
Fairchild & Northeastern....	437	.....	437	1.50
Green Bay & Western.....	30,089	3,529	33,618	10.45
Hawthorne, Nebagamon & Superior .....	.....	17	17	.01
Hazelhurst & Southeastern.....	.....	56	56	.17
Iola & Northern.....	5,293	.....	5,293	49.53
Kewaunee, Green Bay & W. Marinette, Tomahawk & Western	6,215	2,472	8,687	4.94
Minneapolis, St. Paul & Sault Ste. Marie.....	.....	12	12	.01
.....	13,600	4,748	18,348	.98
Northern Pacific	3,622	8,377	11,999	.60
Stanley, Merrill & Phillips.....	149	77	226	.08
Wisconsin & Michigan.....	.....	11,238	104,288	2.56
Wisconsin Central	93,050	210	325	.64
Wisconsin Western	115	.....	.....	.....
Total	432,756	76,885	509,641	1.70

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Eggs and Dairy Products.

Name of Company.	Other Products of Agriculture.			
	Freight originating on this road in Wiscon- sin. (Whole Tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freig't rec'd from connecting roads. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Chicago, Milwaukee & St. Paul.	99,851	.....	99,851	1.38
Chicago & Northwestern....	.....	184	184	.....
Minneapolis, St. Paul & Sault Ste. Marie.....	154	1,072	1,226	.07
Northern Pacific.....	.....	36	36	.....
Wisconsin & Michigan.....	1,379	10,802	12,181	2.73
Wisconsin Central.....	.....	.....	.....	.....
Wisconsin Western	123	105	231	.45
Total	101,507	12,202	113,709	38

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.
Eggs and Dairy Products—Continued.

Name of Company.	Eggs.			
	Freight originating on this road in Wiscon- sin. (Whole Tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freig't rec'd from connecting roads. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Chicago, Milwaukee and St. Paul	9,253	.....	9,253	.13
Chicago & Northwestern.....	.....	.....	.....	.....
Minneapolis, St. Paul & Sault Ste. Marie.....	.....	.....	.....	.....
Northern Pacific .....	.....	.....	.....	.....
Wisconsin & Michigan.....	.....	.....	.....	.....
Wisconsin Central .....	.....	.....	.....	.....
Wisconsin Western	280	24	304	60
Total	9,533	24	9,557	.03

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.
Eggs and Dairy Products—continued.

Name of Company.	Dairy Products.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting roads. (Whole tons.)	Total Freight Tonnage	
			Whole tons.	Per cent.
Chicago, Milwaukee & St. Paul	55,223	.....	55,223	.76
Chicago & Northwestern.....	.....	.....	.....	.50
Minneapolis, St. Paul & Sault Ste. Marie.....	3,839	279	4,118	.22
Northern Pacific .....	.....	.....	.....	.....
Wisconsin & Michigan	11,355	1,244	12,599	.31
Wisconsin Central	697	8	705	1.38
Wisconsin Western .....	.....	.....	.....	.....
Total	71,114	1,531	72,645	.24

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Name of Company.	Live Stock.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside of Wisconsin, and all other freight received from connecting roads. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western	1,624	41	1,665	2.68
Chicago, Mil. & St. P.	143,376	.....	143,376	1.98
Chicago & Northwestern....	112,745	9,779	122,526	1.31
Chi., St. P., Mpls. & Omaha	31,372	3,772	35,144	1.47
Illinois Central	12,471	1,685	14,156	8.78
Dul., S. Shore & Atlantic ..	144	415	559	.13
Fairchild & Northeastern ...	474	67	494	1.79
Green Bay & Western	10,116	1,499	11,615	3.61
Hawthorne, Nebagamon & Superior	69	106	175	.07
Hazelhurst & Southeastern ..	.....	7	7	.02
Iola & Northern	1,090	.....	1,090	10.20
Kewaunee, Green B. & W. Marquette, Tomahawk & Western	2,263	122	2,385	1.36
Mpls. St. P., & S. Ste. M.	6,027	907	6,934	.37
Northern Pacific	713	1,506	2,219	.11
Stanley, Merrill & Phillips ..	396	.....	396	.13
Wisconsin & Michigan	11	12	23	.....
Wisconsin Central	22,705	17,884	40,589	1.00
Wisconsin Western	4,589	172	4,761	9.35
Total	350,138	37,974	388,112	1.29

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Name of Company.	Dressed Meats.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside Wisconsin and all other freight received from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western				
Chi., Mil. & St. Paul.....	5,354		5,354	.07
Chicago & Northwestern ..	80,383	4,538	84,921	.91
Chi., St. P., Mpls. & Omaha				
Illinois Central				
Dul., S. Shore & Atlantic..	4,041	4,041		.95
Fairchild & Northeastern ..				
Green Bay & Western.....				
Hawthorne, Nebagamon & Superior				
Hazelhurst & Southeastern.		322	322	.98
Iola & Northern				
Kewaunee, Green B. & W. Marinette Tomahawk & Western		32	32	.02
Mpls. St. P. & S. Ste. M..	13,749	1,165	14,914	.80
Northern Pacific	70	811	881	.04
Stanley Merrill & Phillips..	63	15	78	.03
Wisconsin & Michigan				
Wisconsin Central	1,031	4,693	5,724	.14
Wisconsin Western	2	73	75	.15
Total	100,652	15,690	116,342	.39

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Name of Company.	Other Packing House Products.			
	Freight originating on this road in Wisconsin. (Whole tons)	Freight received from this road originating outside of Wisconsin and all other freight received from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western				
Chi., Mil. & St. Paul	20,096		20,096	.28
Chicago & Northwestern ...	2,216	2,463	4,679	.05
Chi., St. P. Mpls. & Omaha ..	4,143	7,803	11,946	.50
Illinois Central		25	25	.02
Dul., S. Shore & Atlantic..	56	783	839	.20
Fairchild & Northeastern ..				
Green Bay & Western				
Hawthorne, Nebagamon & Superior		6	6	.01
Hazelhurst & Southeastern..		183	183	.56
Iola & Northern				
Kewaunee, Green B. & W. Marinette, Tomahawk & Western				
Mpls. St. P. & S. Ste. M..	6,926	88	7,014	.38
Northern Pacific	133	656	789	.04
Stanley, Merrill & Phillips..	22	24	46	.01
Wisconsin & Michigan				
Wisconsin Central	122	2,176	2,299	.06
Wisconsin Western	2	30	32	.06
Total	33,717	14,237	47,954	.16

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Products of Animals—Continued.

Name of Company.	Poultry, Game and Fish.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting roads. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....	20	.....	20	.03
Chicago, Milwaukee & St. Paul	1,905	.....	1,905	.02
Chicago & Northwestern ...	1,962	5,438	7,400	.08
Chl., St. P., Mpls. & Omaha	1,169	858	2,027	.08
Illinois Central	31	.....	31	.02
Duluth, S. S. & Atlantic.....	.....	176	176	.04
Green Bay & Western.....	3,042	89	3,131	.97
Kewaunee, Green Bay & W. Marinette, Tomahawk & W. Mpolis, St. P. & S. Ste. M. Northern Pacific	1,502	917	2,419	1.37
.....	133	2,972	3,155	.17
.....	130	257	387	.02
Wisconsin & Michigan.....	.....	.....	.....	.....
Wisconsin Central	91	363	454	.01
Wisconsin Western	21	5	26	.05
Total	10,056	11,075	21,131	.07

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.
 Products of Animals.—Continued.

Name of Company.	Wool.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
J., M. & St. P.....	3,914	.....	3,914	.05
Chicago & Northwestern....	.....	1,548	1,548	.02
C., St. P., M. & O.....	97	33	130	.01
Duluth, S. S. & Atlantic....	.....	5,756	5,756	1.35
Green Bay & Western.....	156	.....	156	.05
Kewaunee, Green Bay & W.....	.....	32	32	.02
Mpols, St. P. & S. Ste. M.....	122	46	168	.01
Northern Pacific.....	.....	4,509	4,509	.22
Wisconsin Central.....	118	761	879	.02
Wisconsin Western.....	33	4	37	.07
Total.....	4,440	12,689	17,129	.06

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Products of Animals.—Continued.

Name of Company.	Hides and Leather.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freig't rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....	41	.....	41	.07
C., M. & St. P.....	17,507	.....	17,507	.24
Chicago & Northwestern....	18,854	12,802	31,656	.34
C., St. P., M. & O.....	513	255	768	.08
Illinois Central .....	.....	65	65	.04
Duluth, S. S. & Atlantic....	.....	104	104	.03
Marinette, Tomahawk & W.	1,163	2,177	3,340	4.97
Mpolis, St. P. & S. Ste. M.	1,396	6,741	8,137	.44
Northern Pacific	95	238	333	.02
Wisconsin & Michigan.....	.....	82	82	.02
Wisconsin Central	5,284	12,560	17,844	.44
Wisconsin Western	55	2	57	.11
Total	44,908	35,026	79,934	.26

WISCONSIN FREIGHT MOVEMENT, 1906.—Continued.

Products of Mines.

Name of Company.	Anthracite Coal.			
	Freight originating on this line in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....		5,160	5,160	8.30
C. M. & St. P.....	442,429		442,429	6.11
Chicago & Northwestern....	382,536	3,348	385,884	4.15
C. St. P., M. & O.....	112,606	2,173	114,779	4.79
Illinois Central		5,942	5,942	3.68
Duluth, S. S. & Atlantic....		60	60	.02
Fairchild & Northeastern....		131	131	.45
Green Bay & Western.....	7,008	2,977	10,075	3.13
Hawthorne, Nebag. & Sup....		46	46	.14
Holmes & Son Railway.....		68	68	.04
Kewaunee, Green Bay & W....	523	147	670	.88
Mpolis, St. P. & S. Ste. M....	425	5,296	5,721	.31
Northern Pacific		258,906	258,906	12.89
Northwestern Coal Ry. Co..	34,181		34,181	10.88
Stanley, Merrill & Phillips..	415	5,670	6,085	2.03
Wisconsin Central		48,832	48,832	1.20
Wisconsin Western		190	190	.37
Total	980,213	538,946	1,319,159	4.39

WISCONSIN FREIGHT MOVEMENT, 1906.—Continued.

Products of Mines.

Name of Company.	Bituminous Coal.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freig't rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
C., M. & St. P.....	468,199	.....	468,199	6.47
Chicago & Northwestern...	736,155	47,398	783,553	8.43
C., St. P., M. & O.....	234,820	17,249	252,069	10.52
Illinois Central .....	.....	39,191	39,191	24.30
Duluth, S. S. & Atlantic....	517	6,318	6,318	1.60
Fairchild & Northeastern....	.....	669	669	2.33
Green Bay & Western.....	42,104	14,689	56,793	17.65
Holmes & Son Railway.....	.....	71	71	.66
Kewaunee, Green Bay & W.	53,443	87	53,530	30.43
Marinette, Tomahawk & W.	.....	8,127	8,127	12.09
Mpolis, St. P. & S. Ste. M.	2,508	80,322	82,830	4.44
Northern Pacific .....	.....	419,163	419,163	20.87
Northwestern Coal Ry. Co.	280,002	.....	280,002	89.12
Wisconsin & Michigan.....	1,933	18,910	20,843	4.63
Wisconsin Central .....	.....	351,501	351,501	8.63
Wisconsin Western .....	.....	134	134	.26
Total	1,819,681	1,003,829	2,823,510	9.40

WISCONSIN FREIGHT MOVEMENT, 1906.—Continued.

Products of Mines.

Name of Company.	Coke.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
C., M. & St. P.....	100,621	.....	100,621	1.39
Chicago & Northwestern....	75,376	3,204	78,580	.84
C., St. P., M. & O.....	1,055	28,533	29,588	1.23
Chicago, L. S. & Eastern.....	.....	3,755	3,755	.87
Illinois Central .....	.....	156	156	.10
Duluth, S. S. & Atlantic....	868	7,917	8,785	2.06
Mpolis, St. P. & S. Ste. M.	10	328	338	.02
Northern Pacific	4,114	21,766	25,880	1.29
Wisconsin & Michigan .....	.....	91	91	.02
Wisconsin Central	6,585	660	7,245	.18
Wisconsin Western .....	.....	49	49	.10
Total	188,629	66,459	255,088	.85

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Products of Mines.—Continued.

Name of Company.	Ores.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freig't rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
C., M. & St. P.....	203,305	.....	203,305	2.81
Chicago & Northwestern....	319,756	16	419,772	4.52
C., St. P., M. & O.....	19,209	7,061	26,270	1.10
Illinois Central	245	138	383	.24
Duluth, S. S. & Atlantic....	.....	15,877	15,877	3.72
Mpolis, St. P. & S. Ste. M. ....	.....	150	150	.01
Northern Pacific .....	.....	61,314	61,314	3.05
Wisconsin & Michigan.....	.....	53,409	53,409	11.99
Wisconsin Central	394,987	559,517	954,504	23.43
Total	1,037,502	697,483	1,734,984	5.77

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Products of Mines.—Continued.

Name of Company.	Stone, Sand and Other Like Material.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....	1,841	102	1,943	3.12
C., M. & St. P.....	492,813	.....	492,813	6.81
Chicago & Northwestern....	465,393	37,407	502,800	5.41
C., St. P., M. & O.....	10,157	1,889	12,046	.50
Chicago, L. S. & Eastern.....	.....	1,123	1,123	.26
Illinois Central.....	44	1,073	1,117	.69
Duluth, S. S. & Atlantic....	24,749	31,787	56,536	13.23
Green Bay & Western.....	1,832	4,615	6,447	2.00
Holmes & Son Railway.....	.....	54	54	.51
Kewaunee, G. B. & W.....	1,250	532	1,782	1.01
Mpolis, St. P. & S. Ste. M.	3,768	2,887	6,655	.36
Northern Pacific.....	37,243	4,541	41,784	2.08
Stanley, Merrill & Phillips.	223	45	268	.09
Wisconsin & Michigan.....	557	3,879	4,436	.99
Wisconsin Central.....	84,284	14,111	98,395	2.42
Wisconsin Western.....	.....	70	70	.14
Total.....	1,124,154	104,115	1,228,269	4.09

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Products of Mines.—Continued.

Name of Company.	Lumber, Lath and Shingles.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....	2,437	2,641	5,078	8.16
Chicago, Mil. & St. Paul.....	682,283	.....	682,283	9.43
Chicago & Northwestern	2,521,882	456,655	2,978,537	32.04
Chicago, St. P., Mpls. & Omaha	362,339	94,393	456,732	19.01
Illinois Central	6,092	11,129	17,221	10.68
Chippewa Valley & Northern	22,540	.....	22,540	29.29
Dul., South Shore & Atlantic.	80,175	30,261	110,436	25.84
Fairchild & Northeastern	13,869	130	13,999	48.13
Green Bay & Western	16,644	26,336	42,980	13.36
Hawth'ne, Nebag'n & Superior	63,678	29	63,707	18.16
Hazelhurst & Southeastern	28,989	385	29,374	89.44
Holmes & Son Railway	876	82	958	8.96
Kewaunee, Green Bay & W....	7,723	10,029	17,752	10.09
Minneapolis, St. Paul & Sault Ste. Marie	735,885	64,000	799,885	42.85
Northern Pacific	48,968	72,623	121,591	6.05
Stanley, Merrill & Phillips.....	50,821	140	50,961	17.07
Wisconsin & Michigan.....	36,816	19,269	56,085	12.57
Wisconsin Central	324,577	200,103	524,680	12.89
Wisconsin Western	8,674	1,791	10,465	20.56
Total	5,015,268	989,996	6,005,264	20.00

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906,—Continued.

Forest Products and Manufactures.

Name of Company.	Other Products of Forest.			
	Freight originating on this line in Wisconsin (Whole tons.)	Freight received from this road originating outside of Wisconsin, and all other freight received from connecting carriers. (Whole tons)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Abbotsford & Northeastern.	68,634	4,004	72,638	90.00
Ahnapee & Western.....	649	.....	649	1.04
Chicago, Milwaukee & St. Paul.....	1,092,843	.....	1,092,843	15.10
Chicago & Northwestern.....	.....	.....	.....	.....
Chicago, St. Paul, Minneapolis & Omaha.....	.....	.....	.....	.....
Illinois Central.....	.....	.....	.....	.....
Chippewa River & Northern	22,140	.....	22,140	100.00
Chippewa Valley & Northern	23,620	.....	23,620	69.67
Drummond & Southwestern	86,810	.....	86,810	98.70
Duluth, South Shore & Atlantic.....	84,449	9,354	93,803	21.95
Fairchild & Northeastern...	8,405	.....	8,405	28.88
Green Bay & Western.....	.....	.....	.....	.....
Hawthorne, Nebagamon & Superior.....	285,114	.....	285,114	81.00
Hazelhurst & Southeastern..	1,456	.....	1,456	4.43
Iola & Northern.....	.....	.....	.....	.....
Kewaunee, Green Bay & Western.....	.....	.....	.....	.....
Marinette, Tomahawk & Western.....	35,886	3,454	39,340	58.54
Minneapolis, St. Paul & Sault Ste. Marie.....	.....	.....	.....	.....
Northern Pacific.....	155,454	65,257	220,711	10.99
Stanley, Merrill & Phillips.	232,449	.....	232,449	77.85
Wisconsin & Michigan.....	170,707	103,519	274,226	61.55
Wisconsin Central.....	290,899	100,358	391,257	9.61
Wisconsin Western.....	18,876	2,183	21,059	41.37
Roddis Lumber & Veneer Co	17,422	.....	17,422	100.00
Total.....	2,595,813	288,129	2,883,942	9.60

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906,—Continued.

Manufactures.

Name of Company.	Petroleum and Other Oils.			
	Freight originating on this road in Wisconsin (Whole tons.)	Freight received from this road originating outside of Wisconsin, and all other freight received from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western.....		376	376	.60
Chicago, Milwaukee & St. Paul.....	5,545		5,545	.08
Chicago & Northwestern.....	8,430	12,929	21,349	.23
Chicago, St. Paul, Minneapolis & Omaha.....	108	7,607	7,715	.32
Illinois Central.....	18	790	808	.50
Duluth, South Shore & Atlantic.....	14,087	7,798	21,885	5.12
Fairchild & Northeastern.....		75	75	.26
Green Bay & Western.....	66	1,800	1,866	.58
Hawthorne, Nebagamon & Superior.....		107	107	.03
Hazelhurst & Southeastern.....		39	39	.12
Iola & Northern.....		116	116	1.09
Kewaunee, Green Bay & West. Marquette, Tomahawk & Western.....	399	325	724	.41
Minneapolis, St. Paul & Sault Ste. Marie.....		16	16	.01
Northern Pacific.....	288	13,689	13,977	.75
Stanley, Merrill & Phillips.....	4,359	8,741	13,100	.65
Wisconsin & Michigan.....	13	113	126	.04
Wisconsin-Central.....		1,290	1,290	.29
Wisconsin Western.....	992	32,289	33,281	.82
	5	260	265	.52
Total.....	34,300	88,360	122,660	.41

WISCONSIN FREIGHT TRAFFIC MOVEMENTS, 1906—Continued.

Manufactures.

Name of Company.	Sugar.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside of Wisconsin and all other freight received from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western		30	30	.05
Chicago & Northwestern	20,395	3,118	23,513	.25
Chicago, St. Paul, Minneapolis & Omaha	3,302	1,591	4,893	.24
Illinois Central		1,583	1,583	.98
Duluth, South Shore & Atlantic		130	130	.02
Fairchild & Northeastern		92	92	.31
Green Bay & Western	1,034	1,505	2,539	.79
Hazelhurst & Southeastern		28	28	.08
Kewaunee, Green Bay & Western	551	125	676	.38
Minneapolis, St. Paul & Sault Ste. Marie	15	9,249	9,264	.50
Northern Pacific	2,280	2,172	4,452	.22
Stanley, Merrill & Phillips		41	41	.01
Wisconsin & Michigan	3	2,468	2,471	.55
Wisconsin Central	2,214	10,114	12,328	.30
Wisconsin Western		4	4	.01
Total	29,794	32,250	62,044	.21

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Manufactures.—Continued.

Name of Company.	Iron, Pig and Bloom.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Chicago, Milwaukee & St. Paul	1377,111	.....	1377,111	5.21
Chicago & Northwestern	139,307	62,020	201,327	2.17
Chicago, St. Paul, Minneapolis & Omaha	33,703	108	33,811	1.41
Chicago, Lake Shore & Eastern	125,267	921	126,188	29.35
Illinois Central .....	.....	556	556	.34
Duluth, South Shore & Atlantic	1,266	4,592	5,858	1.37
Marinette, Tomahawk & West- ern	33	296	329	.48
Minneapolis, St. Paul & Sault Ste. Marie	10,064	9,754	19,818	1.06
Northern Pacific	6,553	6,611	13,164	.66
Wisconsin & Michigan .....	.....	28	28	.01
Wisconsin Central	4,009	6,264	10,273	.25
Total	697,313	91,150	788,463	2.62

¹ Including other iron and steel.

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Manufactures.—Continued.

Name of Company.	Iron and Steel Rails.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freight rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Chicago & Northwestern	40,153	24,136	64,289	.69
Chicago, St. Paul, Minneapolis & Omaha	2,352	14,794	17,146	.72
Chicago, Lake Shore & Eastern	128	56,053	56,181	13.07
Illinois Central		24	24	.01
Duluth, South Shore & Atlantic	320	19,601	19,921	4.66
Fairchild & Northeastern		314	314	1.08
Green Bay & Western	768		768	.24
Hawthorne, Nebagamon & Superior	350		350	.09
Hazelhurst & Southeastern	308		308	.94
Marinette, Tomahawk & Western	38	10	48	.06
Minneapolis, St. Paul & Sault Ste. Marie		13,505	13,505	.72
Northern Pacific	8,133	1,751	9,884	.49
Stanley, Merrill & Phillips	27	3	30	.01
Wisconsin & Michigan	378	604	982	.22
Wisconsin Central	7,374	10,984	18,358	.45
Wisconsin Western	97	223	320	.63
Total	60,426	142,002	202,428	.67

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.
Manufactures.—Continued.

Name of Company.	Other Castings and Machinery.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all other freig't rec'd from connecting carriers. (Whole tons.)	Total Freight Tonnage	
			Whole tons.	Per cent.
Ahnapee & Western	42	164	206	.33
Chicago, Milwaukee & St. Paul	99,471	.....	99,471	1.37
Chicago & Northwestern	99,344	16,561	115,905	1.25
Chicago, St. Paul, Minneapolis & Omaha	3,441	11,649	15,000	.63
Chicago, Lake Shore & Eastern .....	.....	168	168	.04
Illinois Central	398	1,431	1,829	1.13
Duluth, South Shore & Atlantic	555	4,141	4,696	1.10
Green Bay & Western	278	935	1,213	.38
Hawthorne, Nebagamon & Superior	123	110	233	.07
Hazellurst & Southeastern	40	141	181	.56
Iola & Northern	5	11	16	.15
Kewaunee, Green Bay & West- ern	338	268	606	.34
Marinette, Tomahawk & West- ern .....	.....	59	69	.06
Minneapolis St. Paul & Sault Ste. Marie	1,389	5,472	6,861	.37
Northern Pacific	3,315	3,388	6,703	.33
Stanley, Merrill & Phillips	161	172	333	.11
Wisconsin & Michigan	806	1,689	2,495	.56
Wisconsin Central	8,071	13,079	21,150	.52
Wisconsin Western	47	151	198	.39
Total	217,824	59,590	277,413	.92

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Manufactures—Continued.

Name of Company.	Bar and Sheet Metal.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all freight rec'd from connect- ing carrier. (Whole tons.)	Total Freight Tonnage.	
			Whole ton.	Per cent.
Chicago, Milwaukee & St. Paul	8,509	.....	8,509	.12
Chicago & Northwestern	120,397	51,545	171,942	1.85
Chicago, St. Paul, Minneapolis & Omaha	.....	1,035	1,035	.04
Chicago, Lake Shore & Eastern	20,469	230	20,699	4.82
Illinois Central	263	1,450	1,713	1.06
Duluth, South Shore & Atlantic	.....	307	307	.07
Green Bay & Western	239	890	1,129	.35
Iola & Northern	21	17	38	.36
Kewaunee, Green Bay & West- ern	1,546	350	1,896	1.08
Minneapolis, St. Paul & Sault Ste. Marie	1,572	13,268	14,840	.79
Northern Pacific	42	992	1,034	.05
Stanley, Merrill & Phillips	.....	4	4	.....
Wisconsin & Michigan	151	724	875	.20
Wisconsin Central	1,601	13,321	14,922	.37
Wisconsin Western	.....	3	3	.....
Total	154,810	84,136	238,946	.79

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Manufactures—Continued.

Name of Company.	Cement, Brick and Lime.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all freight received from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole ton.	Per cent.
Ahnapee & Western	963	720	1,683	2.71
Chicago, Milwaukee & St. Paul	205,479	.....	205,479	2.84
Chicago & Northwestern.....	176,840	50,772	227,612	2.45
Chicago, St. Paul, Minneapolis & Omaha	42,654	13,117	55,771	2.33
Chicago, Lake Shore & Eastern .....	.....	619	619	.14
Illinois Central	436	6,089	6,525	4.05
Duluth, South Shore & Atlantic	1,280	3,398	4,678	1.10
Fairchild & Northeastern.....	15	529	544	1.87
Green Bay & Western.....	3,131	3,611	6,742	2.10
Hawthorne, Nebagamon & Superior .....	.....	2	2	.....
Hazelhurst & Southeastern.....	.....	97	97	.29
Iola & Northern .....	.....	496	496	4.64
Kewaunee, Green Bay & Western	6,321	36	6,357	3.62
Marinette, Tomahawk & Western	15	502	517	.75
Minneapolis, St. Paul & Sault Ste. Marie	7,468	26,540	34,008	1.82
Northern Pacific	19,014	26,839	45,853	2.28
Stanley, Merrill & Phillips....	2,946	182	3,128	1.05
Wisconsin & Michigan.....	248	3,021	3,269	.74
Wisconsin Central	42,763	37,903	80,666	1.98
Wisconsin Western	143	801	944	1.85
Total	509,716	175,274	684,990	2.28

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Manufactures—Continued.

Name of Company.	Agricultural Implements.			
	Freight originating on this road in Wiscon- sin. (Whole tons).	Freight rec'd from this road originating outside of Wisconsin, and all freight re- ceived from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole ton.	Per cent.
Alnapee & Western.....	20	138	158	.25
Chicago, Milwaukee & St. Paul	59,774	.....	59,774	.83
Chicago & Northwestern.....	30,476	15,351	45,827	.49
Chicago, St. Paul, Minneapolis & Omaha	184	7,523	7,710	.32
Illinois Central	141	651	792	.49
Fairchild & Northeastern	17	.....	17	.06
Green Bay & Western.....	249	1,306	1,555	.48
Iola & Northern	10	63	73	.68
Kewaunee, Green Bay & West- ern	364	96	460	.26
Minneapolis, St. Paul & Sault Ste Marie	240	709	949	.05
Northern Pacific	96	165	261	.01
Stanley, Merrill & Phillips .....	.....	10	10	.01
Wisconsin Central	1,049	17,785	18,834	.46
Wisconsin Western	99	200	299	.59
Total	97,719	44,000	136,719	.45

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Manufactures.—Continued.

Name of Company.	Wagons, Carriages, Tools, Etc.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all fr'ght rec'd from other connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western		140	140	.23
Chicago, Milwaukee & St. Paul	49,981		49,981	.69
Chicago & Northwestern	45,528	22,056	67,584	.73
Chicago, St. Paul Minneapolis & Omaha	126	2,879	3,005	.13
Illinois Central	92	211	303	.19
Duluth, South Shore & Atlantic	51	173	224	.05
Fairchild & Northeastern	10		10	.03
Green Bay & Western		40	40	.01
Kewaunee, Green Bay & West- ern	180	97	277	.16
Minneapolis St. Paul & Saul, Ste. Marie	153	693	846	.05
Northern Pacific	212	165	377	.02
Stanley, Merrill & Phillips....	56	10	66	.02
Wisconsin Central	961	2,394	3,355	.08
Wisconsin Western	4	90	94	.18
Total	97,354	28,948	126,302	.42

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.
Manufactures.—Continued.

Name of Company.	Wines, Liquor and Beers.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all fr'ght rec'd from other connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western		916	916	1.47
Chicago, Milwaukee & St. Paul	608,082		608,082	8.40
Chicago & Northwestern	262,943	1,276	264,219	2.84
Chicago, St. Paul, Minneapolis & Omaha	1,335	9,194	10,529	.44
Illinois Central	15	143	158	.10
Duluth, South Shore & Atlantic	189	1,775	1,964	.44
Green Bay & Western	3,657	167	3,824	1.19
Hazelhurst & Southeastern		64	64	.19
Kewaunee, Green Bay & Western	613		613	
Marinette, Tomahawk & Western		620	620	.99
Minneapolis, St. Paul & Sault Ste. Marie	2,126	2,061	4,187	.22
Northern Pacific	514	6,203	6,717	.34
Stanley, Merrill & Phillips	67		67	.02
Wisconsin & Michigan		1,215	1,215	.27
Wisconsin Central	29,045	3,986	33,031	.81
Wisconsin Western	228	494	722	1.42
Total	908,814	28,114	936,928	3.12

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.
Manufactures.—Continued.

Name of Company.	Household Goods and Furniture.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all fr'ght rec'd from other connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western	242	168	410	.66
Chicago, Milwaukee & St. Paul	31,213	.....	31,213	.43
Chicago & Northwestern	95,331	4,434	99,765	1.07
Chicago, St. Paul, Minneapolis & Omaha	8,336	8,826	17,162	.71
Illinois Central	208	192	400	.25
Duluth, South Shore & Atlantic	76	390	456	.11
Fairchild & Northeastern	60	83	143	.49
Green Bay & Western	2,449	855	3,404	1.03
Hawthorne, Nebagamon & Superior	2	2	4	.....
Hazelhurst & Southeastern	3	12	15	.04
Iola & Northern	30	30	60	.56
Kewaunee, Green Bay & Western	531	150	681	.39
Minneapolis, St. Paul & Sault Ste. Marie	1,776	2,153	3,929	.21
Northern Pacific	1,001	763	1,764	.09
Stanley, Merrill & Phillips	95	27	122	.04
Wisconsin & Michigan	80	44	124	.03
Wisconsin Central	9,452	4,598	14,050	.35
Wisconsin Western	516	225	741	1.46
Total	151,401	22,942	174,343	.58

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.

Miscellaneous Commodities.

Name of Company.	Merchandise.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside of Wisconsin, and all freight received from other connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Ahnapee & Western	1,342	18,023	19,365	31.13
Chicago, Milwaukee and St. Paul	835,626	.....	835,626	11.55
Chicago & Northwestern	477,761	55,340	533,101	5.73
Chicago, St. Paul, Minneapolis & Omaha	48,785	62,287	111,072	4.63
Illinois Central	11,132	10,784	21,916	13.58
Chippewa Valley & Northern	800	.....	800	1.04
Drummond & Southwestern	1,303	.....	1,303	1.30
Duluth, South Shore & Atlantic	10,038	20,979	31,017	7.26
Fairchild & Northeastern	657	474	1,131	3.85
Green Bay & Western	16,217	14,364	30,581	9.50
Hawthorne, Nebagamon & Superior	14	529	543	.16
Hazelhurst & Southeastern .....	.....	153	153	.47
Iola & Northern	393	913	1,306	12.22
Kewaunee, Green Bay & Western	11,040	2,956	13,996	7.95
Marinette, Tomahawk & Western	1,024	1,154	2,178	3.27
Minneapolis, St. Paul & Sault Ste. Marie	27,685	30,671	58,356	3.13
Stanley, Merrill & Phillips	464	685	1,149	.38
Wisconsin & Michigan	2,051	2,436	4,487	1.01
Wisconsin Central	65,073	89,890	154,963	3.81
Wisconsin Western	1,042	2,279	3,321	6.52
Total	1,512,447	313,917	1,826,364	6.08

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.
Miscellaneous Commodities—Continued.

Name of Company	Ice.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside of Wisconsin, and all freight received from other connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Chicago, Milwaukee & St. Paul	287,703	.....	287,703	3.96
Total	287,703	.....	287,703	3.96

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906—Continued.
Miscellaneous Commodities—Continued.

Name of Company.	Salt.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight received from this road originating outside of Wisconsin, and all freight received from connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Chicago, Milwaukee & St. Paul	40,739	.....	40,739	.56
Fairchild & Northeastern .....	.....	104	104	.36
Minneapolis, St. Paul & Sault Ste. Marie	60	5,886	5,946	.32
Stanley, Merrill & Phillips .....	.....	82	82	.03
Wisconsin Central .....	.....	10,139	10,139	.25
Wisconsin Western	21	339	360	.71
Total	40,820	16,550	57,370	.19

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.
Miscellaneous Commodities— Continued.

Name of Company.	Miscellaneous—All Other Commodities.			
	Freight originating on this road in Wisconsin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all freight rec'd from other connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Abbotsford & Northeastern	7,626	445	8,071	10.00
Ahnapee & Western	6,114	1,491	7,605	12.24
Chicago & Northwestern	1,005,606	89,636	1,095,242	11.79
Chicago, St. Paul, Minneapolis & Omaha	730,371	166,661	897,032	37.43
Chicago, Lake Shore & Eastern	10,942	1210,219	221,161	51.45
Illinois Central	30,536	6,892	37,428	23.20
Fairchild & Northeastern	269	15	284	.97
Green Bay & Western	18,912	5,471	24,383	7.58
Hazelhurst & Southeastern	37	26	63	.20
Iola & Northern	128	66	194	1.82
Kewaunee, Green Bay & Western	2,448	1,532	3,980	2.26
Marinette, Tomahawk & Western	8,589	1,970	10,559	15.72
Minneapolis, St. Paul & Sault Ste. Marie	73,102	104,001	177,103	9.48
Northern Pacific	32,379	171,916	204,295	10.17
Stanley, Merrill & Phillips	787	159	946	.32
Wisconsin & Michigan	1,004	2,948	3,952	.89
Wisconsin Central	331,902	221,186	553,088	13.58
Wisconsin Western	154	680	834	1.64
Total	2,260,906	985,314	3,246,220	10.81

¹ Including billets 205,219 tons.

WISCONSIN FREIGHT TRAFFIC MOVEMENT, 1906.—Continued.

Total of all Commodities.

Name of Company.	Total Tonnage.			
	Freight originating on this road in Wiscon- sin. (Whole tons.)	Freight rec'd from this road originating outside of Wisconsin, and all freight rec'd from other connecting carriers. (Whole tons.)	Total Freight Tonnage.	
			Whole tons.	Per cent.
Abbotsford & Northeastern	76,260	4,449	80,709	.....
Ahnapee & Western	31,271	30,925	62,196	.....
Chicago, Milwaukee & St. Paul	7,237,495	.....	7,237,495	.....
Chicago & Northwestern	7,876,259	1,419,725	9,295,984	.....
Chicago, St. Paul, Minneapolis & Omaha	1,907,143	489,652	2,396,795	.....
Chicago, Lake Shore & Eastern	156,806	273,088	429,894	.....
Illinois Central	64,239	97,054	161,293	.....
Chippewa River & Northern ...	22,140	.....	22,140	.....
Chippewa Valley & Northern ..	76,960	.....	76,960	.....
Drummond & Southwestern ...	88,113	.....	88,113	.....
Duluth, South Shore & Atlantic	226,252	201,104	427,356	.....
Fairchild & Northeastern	26,065	3,028	29,093	.....
Green Bay & Western	203,049	118,711	321,760	.....
Hawthorne, Nebagamon & Superior	349,350	2,290	351,640	.....
Hazelhurst & Southeastern	30,833	2,011	32,844	.....
Iola & Northern	8,105	2,581	10,686	.....
Kewaunee, Green Bay & West- ern	127,062	48,868	175,930	.....
Marquette, Tomahawk & West- ern	46,748	20,487	67,235	.....
Minneapolis, St. Paul & Sault Ste. Marie	1,444,542	421,995	1,866,537	.....
Northern Pacific	412,259	1,596,384	2,008,643	.....
Northwestern Coal	314,183	.....	314,183	.....
Stanley, Merrill & Phillips ...	290,611	7,970	298,581	.....
Wisconsin & Michigan	216,523	228,980	445,503	.....
Wisconsin Central	1,832,957	2,237,928	4,070,885	.....
Wisconsin Western	38,375	12,531	50,906	.....
Roddis Lumber & Veener Co. Ry.	17,422	.....	17,422	.....
Total	23,121,022	7,219,761	30,340,783	.....

EQUIPMENT

Of Railroads Wholly or in Part in the State of Wisconsin Report to the Railroad Commission for the year Ending June 30, 1906.

Name of Company.	Locomotives.			Passenger and Other cars.				Cars in Freight Service.					Cars in Company's service.			Totals.						
	Passenger.	Freight.	Switching and leased.	First class passenger.	Second class passenger and emigrant cars.	Dining, parlor and sleeping cars.	Combination baggage, express and passenger cars.	Box cars.	Flat cars.	Stock cars.	Coal and ore cars.	Refrigerator and other cars.	Derrick cars.	Other road cars.	Officer's and pay cars.	Ca boose cars.	Locomotives.	Cars in passenger service.	Cars in freight service.	Other cars in company service.	Cars contributed to fast freight service.	
Abbotsford and Northeastern		1							4							1				4		1
Ahnapee & Western				1			2	6	30								1			36		1
Chicago, Milwaukee & St. Paul	194	651	172	261	209	110	393	28,973	4,631	2,955	1,828	3,019	13	102	14	495	1,017	973	41,406		624	1
Chicago & Northwestern	289	767	251	628	48	50	408	27,960	4,538	4,075	8,894	5,894	24	7	326	667	1,307	1,134	51,361		1,024	1
Chi., St. P., Minneapolis & O.	55	214	47	78	35	32	107	8,245	1,443	393	1,150	215	9	174	2	143	316	255	11,446		328	1
Chicago, Burlington & Quincy	302	763	264	661		28	425	25,287	2,818	6,663	11,306	1,148	25	1,793	24	609	1,329	1,114	47,222		2,451	1
Chicago, Lake Shore & Eastern		16	64					1,354	379	4	992	1,893	1	14		21	80		4,622		36	1
Illinois Central	241	755	162	350	152	27	243	28,467	2,762	1,143	10,270	2,503	29	1,753	13	619	1,158	772	54,145		2,414	1
Chicago, Harvard & Geneva L.				2								3						4		3		1
Chippewa Valley & Northern		1										13					1			13		1
Drummond & Southwestern		3							3			82				1				85		1
Duluth, South Shore & Atlantic	27	35	11	17	9	10	24	1,039	402		93	957	3	148		34	73	60	2,491		185	97
Dunbar & Wausaukee		1					1										1					
Fairchild & Northeastern		2					2		5			1					2			9		
Great Northern	141	437	77	213		121	172	20,655	3,537	1,223		3,342	55	665	19	419	655	506	28,757		1,158	
Green Bay & Western	9	10	3	7	4		12	498	4			13		81	1	10	22	23	515		92	
Hawthorne, Nebag. & Superior		4	1				1	2				154		1		1	6	1	158		2	
Hazelhurst & Southeastern		1	2				1	2				63				1	3	1	63		1	
Iola & Northern		1					1									1	1					
Kewaunee, Green Bay & Western		2					3	173									2	5	173			
Marinette, Tomahawk & Western		4		1			3	2	25							1	4	4	27		1	
Minneap., St. Paul & Ashland		6	3								6	185		14		9			193		17	
Minneap., St. P. & Sault Ste. M.	39	90	12	34	22	23	41	8,195	1,064	96	56	290	3	168		87	141	120	9,701		258	459

Roddis Lumber & Veneer Co.....		1						2				20		1		2	20				
Northern Pacific.....	202	593	120	161	226	123	231	21,548	7,712	1,243	2,863	1,771	23	408	8	341	915	741	35,137	780	
Northwestern Coal Ry. Co.....			2														2				
Stanley, Merrill & Phillips.....		6					1	8	78			125		7	2	6	1	211	9		
Whitcomb & Morris.....		1							5							1		5			
Wisconsin Central.....	37	100	53	37	22	19	39	4,827	466		356	1,771	1	50		96	190	117	7,420	147	
Wisconsin Western.....	3			1								*1,159					3	1		1	
Hillsboro & Northeastern.....		1					1	1	2								1	1	3		
Superior & Southeastern.....		1															1				
Total.....	1,540	4,469	1,244	2,454	732	543	2,111	177,245	29,912	17,795	46,814	23,442	186	5,407	407	3,552	7,253	5,840	295,208	9,552	558

* Leased.

EQUIPMENT.

Of railroads located wholly or in part in the state of Wisconsin. Report to the Railroad Commission for the year ending June 30, 1906.

Name of Company.	Locomotives.				Cars in Passenger Service.				Cars in Freight Service.						Other Cars in Company's Service.				Total.				
	Passenger.	Freight.	Switching.	Leased.	First class passenger cars.	Second class and immigrant cars.	Combination baggage, express, postal and other cars in passenger service.	Dining parlor and sleeping cars.	Box cars.	Flat cars.	Stock cars.	Coal cars.	Tank cars.	Refrigerator cars.	Other cars.	Gravel cars.	Derrick cars.	Ca boose cars.	Other road cars.	Locomotives.	Cars in passenger service.	Cars in freight service.	Other cars in company's service.
1. Abbotsford & N. W.		1								4							1		1		4		1
1. Ahnapee & W.		2						6		30											36		1
3. Bayfield H. & G. W.		2						19													42		5
4. Chicago, M. & St. P.	206	640	170		285	205	419	125	25,667	4,769	2,830	2,533	1,931	1,699	15	14	486	176	1,016	1,034	39,429	69	1,061
5. Chicago & N. W.	303	806	233		665	48	419	51	30,010	4,538	5,075	8,894	1,838	4,556	254	26	702	79	1,342	1,183	54,911	1,061	416
6. Chi., St. P., M. & O.	62	224	47		84	38	111	35	8,245	1,560	393	1,386	207	8	154	9	143	110	332	268	11,799	416	1,688
7. Chicago, B. & Q.	384	780	271		643		494	31	24,508	2,807	6,663	10,929	1,521	98	500	31	537	1,590	1,465	1,169	46,327	2,688	54
8. Chicago, L. S. & E.		27	46	18					1,073	311	3	2,793		1,577		1	33	20	91		5,757		54
9. Chicago & Lake S.	1																						
10. Illinois Central	242	779	172		357	151	246	28	29,195	2,842	1,045	19,320	2,968		609	30	652	1,418	1,193	782	55,573	2,709	30
11. Chippewa R. & N.		1								30													
12. Chicago, H. & G. L.		1																					
13. Chippewa V. & N.		2																					
14. Drummond & S. W.		2								3				82								31	
15. Duluth, S. S. & A.		35					24	12	1,221	536		137		24			1					85	1
16. Dunbar & Wausaukee.	27	35	11		17	8								924		3	34	94	73	61	2,842	131	
17. Fairchild & N. E.		1																					
17. Great Northern	167	484	81	2	238		190	116	21,359	3,916	1,208		606	3,388	364	60	419	382	734	544	30,477	1,225	71
19. Green Bay & Western.	3	16	3		7	7	13		495	24				13			42	22	22	21	532		71
20. Hawthorne, N. & S.	1	4	2						2	2					154	1					158		1
21. Hazelhurst & S. E.		1													63						63		
22. Hillsboro & Northern		1							1	2											3		
23. Iola & Northern																							
24. Kewaunee, G. B. & W.			2		2		3			173											173		

MILEAGE, 1905,

Mileage (Single Track) Operated by Railroads in Wisconsin as re

Name of Company.	Lines Represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.
	Main line.	Branches and spurs.		
1. Abbotsford & Northeastern	15.16			
2. Ahnapee & Western	34.00			
3. Big Falls Railway Co.	31.00			
4. Chi., Milwaukee & St. Paul	1,716.44			
5. Chicago & Northwestern	953.85	748.72	16.06	
6. Chicago, St. Paul, Minne- apolis & Omaha	746.69			
7. Chi., Burlington & Quincy		222.57		
8. Chi., L. Shore & Eastern				18.56
9. Chicago & Lake Superior	3.00			
10. Illinois Central		91.31		
11. Chip. River & Northern	24.00			
12. Chi., Harvard & Geneva L.	5.50			
13. Chippewa Valley & Northern	10.00			
14. Drummond & Southwestern	8.18			
15. Duluth, So. Shore & Atlan.	106.53	1.27		
16. Dunbar & Wausaukee	13.50			
17. Fairchild & Northeastern	33.00			
18. Great Northern				37.79
19. Green Bay & Western	212.50	12.50		
20. Hawthorne, Nebagamon & Superior	7.35	20.15		
21. Hazelhurst & Southeastern	11.00			
22. Iola & Northern	4.70			
23. Kewaunee, Green Bay & Western	36.70			
24. Lake Superior Terminal & Transfer	16.33			
25. Mattoon Railway Co.	29.36			
26. Marinette, Tomahawk & W.	43.77			
27. Mpls, St. P. & Ashland	30.50	15.25		
28. Mpls, St. P. & St Ste. M.	262.80	92.86		
29. Northern Pacific	87.04	57.51		
30. Northwestern Coal	8.00			
31. Robbins	20.00	10.00		
32. Stanley, Merrill & Phillips	32.80	7.64		7.86
33. Winona Bridge	.54			
34. Wisconsin & Michigan	66.68			
35. Whitcomb & Morris	6.00			
36. Wisconsin Central	512.68	299.69		
37. Wisconsin Western	51.97			
38. Bayfield, L. S. & W.				
39. Hillsboro & S. E.	5.00			
40. Roddis L. & V. Co.				
41. La Crosse & S. E.	38.24			
42. Superior & S. E.	6.72			
Total	5,181.53	1,579.47	16.06	64.21

WISCONSIN.

ported to the Railroad Commission for the year ending June 30, 1905.

Line operated under contract, etc.	New line constructed during year.	Total mileage excluding trackage rights.	Line operated under trackage rights.	Rails.		No.
				Iron.	Steel.	
		15.16		4.78	10.38	1
		34.00			34.00	2
		21.00			21.00	3
	1.55	1,716.44	8.98		1,716.44	4
60.02		1,778.65		18.35	1,760.30	5
	10.00	746.69	1.29	5.14	741.55	6
		222.57			222.57	7
	.37	18.56			18.56	8
		3.00			3.00	9
		91.31			91.31	10
		24.00			24.00	11
		5.50			5.50	12
		10.00			10.00	13
		8.18			8.18	14
		107.80	3.40		107.80	15
		13.50			13.50	16
		33.00			33.00	17
		37.79			37.79	18
		225.00			225.00	19
		27.50	6.00		27.50	20
		11.00			11.00	21
		4.70			4.70	22
		36.70			36.70	23
		16.33			16.33	24
		29.36			29.36	25
		43.77		18.03	25.74	26
		45.75			45.75	27
		355.66			355.66	28
		144.55	.87	.18	144.37	29
		8.00			8.00	30
		30.00			30.00	31
4.00	9.23	52.36			52.36	32
		.54			.54	33
	28.36	66.68	7.30		66.68	34
		6.00			6.00	35
		812.37	28.92	66.25	746.12	36
		51.97			51.97	37
14.00		14.00			14.00	38
		5.00			5.00	39
10.00		10.00			10.00	40
1.80		40.04	1.80		40.04	41
		6.72			6.72	42
89.82	49.51	6,931.15	58.47	112.73	6,931.15	

MILEAGE, 1906,

Mileage (Single Track) Operated by Railroads in Wisconsin as re

Name of Company.	Lines Represented by Capital Stock.		Line of proprietary company.	Line operated under lease.
	Main line.	Branches and spurs.		
1. Abbotsford & Northeastern.	15.16			
2. Ahnapee & Western	34.00			
3. Big Falls Ry. Co.	21.00			
4. Chi., Mil. & St. Paul	1,722.77			
5. Chicago & Northwestern	953.85	796.49	16.06	
6. Chicago, St. Paul, Minneapolis & Omaha	756.69			
7. Chicago, Burl. & Quincy.		222.57		
8. Chicago, L. Shore & Eastern				19.38
9. Chicago & Lake Superior	3.00	.24		
10. Illinois Central		91.31		
11. Chi., Harv. & Geneva L.	5.50			
12. Drummond & South Western	8.18			
13. Dul., S. Shore & Atlantic.	106.53	4.28		
14. Dunbar & Wausaukee	13.50			
15. Chippewa River & Northern	21.00			
16. Fairchild & North Eastern.	33.00			
17. Green Bay & Western	212.50	12.50		
18. Hawthorne, Nebagamon & Superior	7.35	26.15		
19. Hazelhurst & South Eastern	11.00			
20. Hillsboro & North Eastern	5.75			
21. Iola & Northern	4.70			
22. Kewaunee, Green B. & W.	36.70			
23. Lake Sup., T. & T. Ry. Co.	17.51			
24. Mattoon Ry Co.	29.36			
25. Chippewa Valley & Northern	11.74			
26. Marinette, Tomahawk & Western	43.77			
27. Great Northern				37.69
28. Mpls. St. P., & S. Ste. M.	262.80	92.86		
29. Northern Pacific	86.85	57.75		
30. Northwestern Coal	8.00			
31. La Crosse & Southeastern	40.81			
32. Mineral Point & Northern.	26.40			
33. Robbins	20.00	10.00		
34. Roddis Lum. & Veneer Co.				
35. Stanley, Merrill & Phillips.	37.66	8.17		
36. Winona Bridge	.54			5.93
37. Wisconsin & Michigan	32.62	53.49		
38. Whitcomb & Morris	6.00			
39. Wisconsin Central	512.68	299.69		
40. Wisconsin Western	51.97			
41. Superior & Southeastern	6.72			
42. Mineral Point & Northern	26.40			
Total	5,194.01	1,675.50	16.06	63.00

WISCONSIN.

ported to the Railroad Commission for the year ending June 30, 1906.

Line operated under contract.	New line constructed during year.	Total mileage, excluding trackage rights.	Line operated under trackage rights.	Rails.		No.
				Iron.	Steel.	
		15.16		4.06	1,110	1
		34.00			3,400	2
		21.00			2,100	3
	6.33	1,722.77	8.98		1,722.77	4
60.02	47.77	1,826.42		17.94	1,808.48	5
	10.00	756.69	1.28	3.13	753.56	6
		222.57			222.57	7
	.82	19.38			19.38	8
		3.24			3.24	9
		91.31			91.31	10
		5.50			5.50	11
		8.18			8.18	12
	3.01	110.81	3.40		110.81	13
		13.50			13.50	14
		21.00			21.00	15
		33.00			33.00	16
		225.00			225.00	17
		33.50			33.50	18
		11.00			11.00	19
		5.75			5.75	20
		4.70			4.70	21
		36.70			36.70	22
	1.18	17.51			17.51	23
		29.36			29.36	24
		11.74			11.74	25
		43.77			43.77	26
		37.69			37.69	27
		355.66			355.66	28
		144.60	.87	.18	144.42	29
		8.00			8.00	30
	1.80	42.61		1.80	40.81	31
	4.20	30.60			30.60	32
		30.00			30.00	33
	10.00	10.00			10.00	34
	4.54	56.30			56.30	35
		.54			.54	36
		86.11	6.08		86.11	37
		6.00			6.00	38
		812.37	28.92	66.25	746.12	39
		51.97			51.97	40
		6.72			6.72	41
		26.40	4.20		26.40	42
80.56	60.11	7,029.13	54.33	93.36	6,935.77	

MILEAGE, 1905—

Mileage (single track) operated by railroads doing business in Wisconsin

Name of Company.	Lines Represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.
	Main line.	Branches and spurs.		
1. Abbotsford & Northeastern.....	15.16	.....	.....	.....
2. Ahnapee & Western.....	34.00	.....	.....	.....
3. Big Falls Railway Co.....	21.00	.....	.....	.....
4. C., M. & St. P.....	6,897.57	.....	.....	.....
5. Chicago & Northwestern.....	3,050.93	4,239.62	19.31	.....
6. C., St. P., M. & O.....	1,616.88	.....	.....	.....
7. C. B. & Q.....	822.41	7,536.14	.....	.....
8. Chicago, L. S. & Eastern... ..	109.87	.....	62.31	.....
9. Chicago & Lake Superior....	3.00	.....	.....	.....
10. Illinois Central.....	1,354.79	741.59	1,478.67	20.56
11. Chippewa River & Northern	24.00	.....	.....	.....
12. Chi., Harvard & G. Lake... ..	11.00	.....	.....	.....
13. Chippewa Valley & Northern	10.00	.....	.....	.....
14. Drummond & Southwestern	8.18	.....	.....	.....
15. Duluth, S. S. & Atlantic....	517.44	58.73	.....	.....
16. Dunbar & Wausaukee.....	13.50	.....	.....	.....
17. Fairchild & Northeastern....	33.00	.....	.....	.....
18. Great Northern.....	.....	.....	213.24	4,604.50
19. Green Bay & Western.....	212.50	12.50	.....	.....
20. Hawthorne, Nebag. & Sup..	7.35	20.15	.....	.....
21. Hazelhurst & Southeastern.	11.00	.....	.....	.....
22. Iola & Northern.....	4.70	.....	.....	.....
23. Kewaunee, Green Bay & W.	36.70	.....	.....	.....
24. Lake Sup. T. & T. Ry. C....	16.33	.....	.....	.....
25. Mattoon Railway Co.....	29.36	.....	.....	.....
26. Marinette, Tomahawk & W.	43.77	.....	.....	.....
27. Mpolis, St. P. & Ashland... ..	30.50	15.25	.....	.....
28. Mpls., St. P. & Ste. M.....	1,039.89	770.80	.....	.....
29. Northern Pacific.....	2,697.28	2,713.05	18.29	196.12
30. Northwestern Coal Ry. Co....	8.00	.....	.....	.....
31. Robbins Railway Co.....	20.00	10.00	.....	.....
32. Stanley, Merrill & Phillips..	32.80	7.64	.....	7.86
33. Winona Bridge Ry. Co.....	1.03	.....	.....	.....
34. Wisconsin & Michigan.....	55.20	1.45	.....	.....
35. Whitcomb & Morris.....	6.00	.....	.....	.....
36. Wisconsin Central.....	585.09	332.01	.....	.....
37. Wisconsin Western.....	51.97	.....	.....	.....
38. Bayfield, L. S. & Eastern... ..	14.00	.....	.....	.....
39. Hillsboro & Southeastern... ..	5.00	.....	.....	.....
40. Roddis Lbr. & Veneer Co....	.....	.....	.....	.....
41. La Crosse & Southeastern... ..	38.24	.....	.....	.....
42. Superior & Southeastern.....	6.72	.....	.....	.....
Total	19,496.16	16,458.94	1,791.82	4,829.04

WHOLE LINE.

as reported to the Railroad Commission for the year ending June 30, 1905.

Line operated under contract, etc.	New line constructed during year.	Total mileage excluding trackage rights.	Line operated under trackage rights.	Rails.		No.
				Iron.	Steel	
.....		15.16	.....	4.78	10.38	1
.....		34.00	.....	.....	34.00	2
.....		21.00	.....	.....	21.00	3
.....	496.00	6,897.57	238.18	94.36	6,803.21	4
60.02		7,369.88	38.25	103.28	7,266.60	5
.....	10.00	1,616.88	69.59	58.83	1,558.05	6
.....	63.27	8,358.55	203.09	58.88	8,300.17	7
.....	13.73	172.18	276.14	.....	172.18	8
.....		3.00	.....	.....	3.00	9
759.88	18.55	4,355.49	.32	.....	4,355.49	10
.....		24.00	.....	.....	24.00	11
.....		11.00	.....	.....	11.00	12
.....		10.00	.....	.....	10.00	13
.....		8.18	.....	.....	8.18	14
.....	8.41	576.17	9.64	7.83	568.34	15
.....		13.50	.....	.....	13.50	16
.....		33.00	.....	.....	33.00	17
196.19	178.10	5,013.93	4.45	69.70	4,944.23	18
.....		225.00	.....	.....	225.00	19
.....		27.50	6.00	.....	27.50	20
.....		11.00	.....	.....	11.00	21
.....		4.70	.....	.....	4.70	22
.....		36.70	.....	.....	36.70	23
.....		16.33	.....	.....	16.33	24
.....		29.36	.....	.....	29.36	25
.....		43.77	.....	18.03	25.74	26
.....		45.75	.....	.....	45.75	27
.....	181.05	1,810.69	18.52	.....	1,810.69	28
.....	29.04	5,624.74	.....	35.32	5,589.42	29
.....		8.00	.....	.....	8.00	30
.....		30.00	.....	.....	30.00	31
4.00	9.23	52.36	.....	.....	52.36	32
.....		1.03	.....	.....	1.03	33
.....	36.86	56.65	8.52	.....	56.65	34
.....		6.00	.....	.....	6.00	35
.....		917.10	.....	82.09	835.01	36
.....		51.97	.....	.....	51.97	37
.....		14.00	.....	.....	14.00	38
.....		5.00	.....	.....	5.00	39
10.00		10.00	.....	.....	10.00	40
1.80		40.04	.....	.....	40.04	41
.....		6.72	.....	.....	6.72	42
1,031.89	1,044.24	43,607.85	872.70	532.60	43,075.25	....

MILEAGE, 1906,

Mileage (single track) operated by railroads doing business in
30, 1906—

Name of Company.	Line Represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.
	Main Line.	Branches and spurs.		
1. Abbotsford & Northeastern.....	15.16	.....	.....	.....
2. Ahnapee & Western	34.00	.....	.....	.....
3. Big Falls Ry Co.....	21.00	.....	.....	.....
4. Chi., Mil. & St. P.....	7,029.49	.....	.....	.....
5. Chicago & Northwestern.....	3,049.92	4,286.08	19.31	.....
6. C., St. P., M. & O.....	1,627.98	.....	.....	.....
7. C., B. & Q.....	822.41	7,651.59	.....	.....
8. Chicago, L. S. & Eastern....	138.00	.....	.....	64.16
9. Chicago & Lake Superior....	1,354.79	741.59	1,479.13	20.56
10. Drummond & Southwestern	8.18	.....	.....	.....
11. Dunbar & Wausaukee.....	13.50	.....	.....	.....
12. Chippewa River & Northern	21.00	.....	.....	.....
13. Fairchild & Northeastern....	33.00	.....	.....	.....
14. Green Bay & Western.....	212.50	12.50	.....	.....
15. Hawthorne, Nebag. & Sup..	7.35	26.15	.....	.....
16. Hazelhurst & Southeastern..	11.00	.....	.....	.....
17. Hillsboro & Northeastern...	5.75	.....	.....	.....
18. Iola & Northern.....	4.70	.....	.....	.....
19. Kewaunee, Green Bay & W.	36.70	.....	.....	.....
20. Lake Sup. T. & T. Ry. Co.	17.51	.....	.....	.....
21. Mattoon Ry. Co.....	29.36	.....	.....	.....
22. Chippewa Valley & Northern	11.74	.....	.....	.....
23. Marinette, Tomahawk & W.	43.77	.....	.....	.....
24. Northwestern Coal Ry. Co..	8.00	.....	.....	.....
25. La Crosse & Southeastern...	40.81	.....	.....	.....
26. Mineral Point & Northern..	26.40	.....	.....	.....
27. Robbins Ry. Co.....	20.00	10.00	.....	.....
28. Roddis Lbr. & Veneer Co...	.....	.....	.....	.....
29. Stanley, Merrill & Phillips.	37.66	8.17	.....	5.93
30. Wisconsin & Michigan.....	73.38	78.07	.....	.....
31. Whitcomb & Morris.....	6.00	.....	.....	.....
32. Wisconsin Central	585.09	332.01	.....	.....
33. Wisconsin Western	51.97	.....	.....	.....
34. Superior & Southeastern....	6.72	.....	.....	.....
Total	15,404.84	13,146.09	1,498.44	90.65

WHOLE LINE.

Wisconsin as reported to the Railroad Commission for the year ending June whole line.

Line operated under contract, etc.	New line constructed during year.	Total mileage excluding trackage rights.	Line operated under trackage rights.	Rails.		No.
				Iron.	Steel.	
		15.16		4.06	11.10	1
		34.00			34.00	2
		21.00			21.00	3
	132.86	7,029.49	238.18	83.15	6,946.34	4
60.02	45.45	7,415.33	38.25	89.88	7,325.45	5
	10.00	1,627.98	69.59	7.69	1,620.29	6
	61.15	8,473.92	203.09	69.72	8,404.21	7
	29.98	202.16	296.95		202.16	8
844.52		4,440.59	18.55		4,440.59	9
		8.18			8.18	10
		13.50			13.50	11
		21.00			21.00	12
		33.00			33.00	13
		225.00			225.00	14
		33.50			33.50	15
		11.00			11.00	16
		5.75			5.75	17
		4.70			4.70	18
		36.70			36.70	19
	1.18	17.51			17.51	20
		29.36			29.36	21
		11.74			11.74	22
		43.77			43.77	23
		8.00			8.00	24
1.80		42.61		1.80	40.81	25
4.20		30.60			30.60	26
		30.00			30.00	27
10.00		10.00			10.00	28
4.54		56.30			56.30	29
		151.45			151.45	30
		6.00			6.00	31
		917.10	59.94	82.09	835.01	32
		51.97			51.97	33
		6.72			6.72	34
925.08	280.62	31,065.10	924.55	338.39	31,065.10	

TRACK MILEAGE, 1905.

Track mileage operated by railroads doing business in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.

Name of Company.	Wisconsin.					Total.
	Miles of first track.	Miles of second track.	Miles of third track.	Miles of fourth track.	Miles of yard tracks, sidings, etc.	
Abbotsford & Northeastern...	15.16				.58	15.74
Ahnapee & Western.....	34.00				2.75	36.75
Big Falls Railway Co.....	21.00					21.00
C., M. & St. P.....	1,725.42	143.05	1.62		821.03	2,691.12
Chicago & Northwestern.....	1,778.60	158.60	3.46		821.52	2,762.18
C., St. P. M. & O.....	747.97	12.20			230.56	990.73
C., B. & Q.....	223.10	8.70			62.72	294.52
Chicago, L. S. & Eastern.....	18.56					18.56
Chicago & Lake Superior.....	3.00				.24	3.24
Illinois Central.....	91.31				11.04	102.35
Chippewa River & Northern...	24.00					24.00
Chic., Harvard & Geneva L...	5.50				.50	6.00
Chippewa Valley & Northern...	10.00					10.00
Drummond & Southwestern...	8.18				12.92	21.10
Duluth, S. S. & Atlantic.....	111.20				14.96	126.16
Dunbar & Wausaukee.....	13.50					13.50
Fairchild & Northeastern.....	33.00				2.00	35.00
Great Northern.....	37.79	18.15			62.46	118.40
Green Bay & Western.....	225.00				28.63	253.63
Hawthorne, Nebag. & Sup	27.50				2.00	29.50
Hazelhurst & Southeastern...	11.00				1.00	12.00
Iola & Northern.....	4.70				.68	5.38
Kewaunee, Green Bay & W.	36.70				6.29	42.99
Lake Sup. T. & T. Ry. Co...	16.33					16.33
Matton Ry. Co.....	29.56					29.56
Marquette, Tomahawk & W.	45.77				5.00	48.77
Mpls., St. Paul & Ashland...	45.75					45.75
Mpls., St. P. & S. Ste. M.	355.66				64.31	419.97
Northern Pacific.....	145.42	.85			40.95	187.22
Northwestern Coal Ry. Co...	8.00					8.00
Robbins Railway Co.....	30.00					30.00
Stanley, Merrill & Phillips...	52.36					52.36
Winona Bridge Ry. Co.....	.54					.54
Wisconsin & Michigan.....	73.98					73.98
Whitcomb & Morris.....	6.00					6.00
Wisconsin Central.....	841.29	8.42			218.75	1,068.46
Wisconsin Western.....	51.97				3.83	55.80
Bayfield, L. S. & Western...	12.00					12.00
Hillsboro & Northeastern...	5.00				.75	5.75
La Crosse & Southeastern...	41.84				1.97	43.81
Roddis Lumber & Veneer Co...	10.00					10.00
Superior & Southeastern.....	6.72				1.07	7.79
Totals.....	6,982.18	349.97	5.08		2,418.51	9,755.74

TRACK MILEAGE, 1905.—Continued.

Track mileage operated by railroads doing business in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.

Name of Company.	Whole Line.					Total.
	Miles of first track.	Miles of second track.	Miles of third track.	Miles of fourth track.	Miles of yard track, sidings, etc.	
Abbotsford & Northeastern...	15.16				.58	15.74
Ahnapee & Western.....	34.00				2.75	36.75
Big Falls Railway Co.....	21.00					21.00
C., M. & St. P.....	7,135.75	447.32	6.71	1.72	12,076.51	9,668.01
Chicago & Northwestern.....	7,408.13	808.39	25.68	22.22	2,645.92	10,910.34
C., St. P., M. & O.....	1,686.47	37.99			535.66	2,260.12
C., B. & Q.....	8,561.64	523.11	23.55		2,193.80	11,302.10
Chicago, L. S. & Eastern.....	448.32	10.32				458.64
Chi. & Lake Superior	3.00				.24	3.24
Illinois Central	4,374.04	667.54	13.67	13.81	21,604.52	6,673.58
Chippewa River & Northern.....	24.00					24.00
Chic., Harvard & Geneva L.....	5.50				.50	6.00
Chippewa Valley & Northern.....	10.00					10.00
Drummond & Southwestern...	8.18					8.18
Duluth, S. S. & Atlantic.....	585.81	2.50			140.83	729.14
Dunbar & Wausaukee.....	13.50					13.50
Fairchild & Northeastern.....	33.00				2.00	35.00
Great Northern	5,018.33	84.56	9.28	9.29	21,099.49	6,221.00
Green Bay & Western.....	225.00				28.63	253.63
Hawthorne, Nebag. & Sup.....	27.50				2.00	29.50
Hazelhurst & Southeastern.....	11.00				1.00	12.00
Iola & Northern.....	4.70				.68	5.38
Kewaunee, Green Bay & W.....	36.70				6.29	42.99
Lake Sup. T. & T. Ry. Co.....	16.33					16.33
Mattoon Railway Co.....	29.36					29.36
Marquette, Tomahawk & W.....	43.77					43.77
Mpls., St. Paul & Ashland.....	45.75					45.75
Mpls., St. P. & S. Ste. M.....	1,829.21				254.37	2,083.58
Northern Pacific	5,676.26	114.91			1,375.18	7,166.35
Northwestern Coal Ry. Co.....	8.00					8.00
Robbins Railway Co.....	30.00					30.00
Stanley, Merrill & Phillips....	52.36					52.36
Winona Bridge Ry. Co.....	1.03					1.03
Wisconsin & Michigan.....	131.00					131.00
Whitcomb & Morris.....	6.00					6.00
Wisconsin Central	977.04	42.53	7.65	7.65	265.53	1,300.40
Wisconsin Western	51.97				3.83	55.80
Bayfield, Lake Shore & W.....	12.00					12.00
Hillsboro & Northeastern.....	5.00				.75	5.75
La Crosse & Southeastern.....	41.84				1.97	43.83
Roddis Lumber & Veneer Co....	10.00					10.00
Superior & Southeastern.....	6.72				1.07	7.79
Total	44,664.42	2,739.17	86.54	54.69	12,244.10	59,788.92

¹ Including 41.54 miles "Connecting track."

² Additional main track 45.08 miles including 41.54 miles "Connecting track."

³ Including 2.32 miles 5th track, 1.44 miles 6th track.

TRACK MILEAGE, 1906.

Track mileage operated by railroads doing business in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.

Name of Company.	Wisconsin.					Total.
	Miles of first track.	Miles of second track.	Miles of third track.	Miles of fourth track.	Miles of yard track, sidings, etc.	
Abbotsford & Northeastern.....	15.16				.58	15.74
Ahnapee & Western.....	34.00				2.75	36.75
Big Falls Railway Co.....	21.00					21.00
C., M. & St. P.....	1,731.75	143.05	1.62	14.30	855.46	2,746.18
Chicago & Northwestern.....	1,826.42	158.60	3.46		883.03	2,871.51
C., St. P., M. & O.....	757.97	18.39			235.26	1,011.62
C., B. & Q.....	223.10	8.70			65.43	297.23
Chicago, L. S. & Eastern.....	20.10					20.10
Chicago & Lake Superior.....	3.24					3.24
Illinois Central.....	91.31				12.39	103.70
Chi., Harvard & Geneva L.....	5.50				.50	6.00
Drummond & Southwestern.....	8.18				12.92	21.10
Duluth, S. S. & Atlantic.....	114.21				16.15	130.36
Duluth, Sup. & W. Ter. Co.....	6.20					6.20
Dunbar & Wausaukee.....	13.50					13.50
Chippewa River & Northern.....	21.00					21.00
Fairchild & Northeastern.....	33.00				2.00	35.00
Green Bay & Western.....	225.00				28.69	253.69
Hawthorne, Nebag. & Sup.....	33.50				2.00	35.50
Hazelhurst & Southeastern.....	11.00				1.00	12.00
Hillsboro & Northeastern.....	5.00				.75	5.75
Iola & Northern.....	4.70				.68	5.38
Kewaunee, Green Bay & Western.....	36.70				6.35	43.05
Lake Shore & Eastern.....	20.50					20.50
Lake Superior Terminal & Transfer.....	17.51					17.51
Mattoon Ry. Co.....	29.36					29.36
Chippewa Valley & Northern.....	12.74					12.74
Marinette, Tomahawk & Western.....	43.77				8.30	52.07
Great Northern.....	37.69	18.13			66.12	121.94
Minneapolis, St. Paul & Sault Ste Marie.....	355.66				68.32	423.98
Northern Pacific.....	145.47	.85			41.78	188.10
Northwestern Coal.....	8.00					8.00
La Crosse & Southeastern.....	42.61				3.18	45.79
Mineral Point & Northern.....	30.60				2.74	33.34
Robbins Ry. Co.....	30.00					30.00
Roddis Lumber & Veneer Co.....	12.50					12.50
Stanley, Merrill & Phillips.....	56.30				2.54	58.84
Winona Bridge.....	.54					.54
Wisconsin & Michigan.....	73.78				19.01	92.79
Whitcomb & Morris.....	6.00				3.00	9.00
Wisconsin Central.....	841.29	8.42			222.41	1,072.12
Wisconsin Western.....	51.97				4.20	56.17
Superior & Southeastern.....	6.72				9.15	15.87
Total	7,064.55	356.14	5.08	14.30	2,576.69	10,016.76

TRACK MILEAGE, 1906—continued.

Track mileage operated by railroads doing business in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1906.

Name of Company.	Whole Line.					Total.
	Miles of first track.	Miles of second track.	Miles of third track.	Miles of fourth track.	Miles of yard, tracks, sidings, etc.	
Abbotsford & Northeastern ..	15.16	.....	.....	.....	.58	15.74
Ahnapee & Western	34.00	.....	.....	.....	2.75	36.75
Big Falls	21.00	.....	.....	.....	.....	21.00
Chicago, Milwaukee & St. P.	7,267.67	447.54	7.64	2.64	2,149.71	9,875.20
Chicago & Northwestern	7,453.53	813.23	31.94	25.91	2,715.95	11,040.61
Chicago, St. Paul, Minnea- polis & Omaha	1,697.57	42.47	.....	.....	545.82	2,285.86
Chicago, Burl. & Quincy	8,677.02	525.70	23.55	.....	2,287.16	11,513.43
Chi., L. Shore & Eastern	499.11	10.32	.....	.....	.....	509.43
Chicago & Lake Superior	3.24	.....	.....	.....	.....	3.24
Illinois Central	4,459.14	677.43	13.67	13.81	1,666.64	6,830.66
Chicago, Harvard & Geneva L.	11.00	.....	.....	.....	.....	11.00
Drummond & South Western ..	8.13	.....	.....	.....	12.92	21.10
Duluth, S. Shore & Atlantic	592.69	2.50	.....	.....	145.86	741.05
Duluth, Superior & Western Terminal Co	6.20	.....	.....	.....	.....	6.20
Dunbar & Wausaukee	13.50	.....	.....	.....	.....	13.50
Chippewa River & Northern	21.00	.....	.....	.....	.....	21.00
Fairchild & Northeastern	33.00	.....	.....	.....	2.00	35.00
Green Bay & Western	225.00	.....	.....	.....	28.69	253.69
Hawthorne, Nebagamon & Su- perior	33.50	.....	.....	.....	2.00	35.50
Hazelhurst & Southeastern	11.00	.....	.....	.....	1.00	12.00
Hillsboro & Northeastern	5.00	.....	.....	.....	.75	5.75
Iola & Northern	4.70	.....	.....	.....	.68	5.38
Kewaunee, Green Bay & W.	36.70	.....	.....	.....	6.35	43.05
Lake Shore & Eastern	20.50	.....	.....	.....	.....	20.50
Lake Superior Terminal & Transfer	17.51	.....	.....	.....	.....	17.51
Mattoon Railway Co.	29.36	.....	.....	.....	.....	29.36
Chippewa Valley & Northern ..	12.74	.....	.....	.....	.....	12.74
Marquette, Tomahawk & W.	43.77	.....	.....	.....	8.30	52.07
Great Northern	5,183.11	87.60	9.23	9.29	1,180.28	6,469.59
Minneapolis, St. Paul & Sault Ste. Marie	2,153.25	.....	.....	.....	294.35	2,447.60
Northern Pacific	5,793.59	124.00	.....	.....	1,456.74	7,374.33
Northwestern Coal	8.00	.....	.....	.....	.....	8.00
La Crosse & Southeastern	42.61	.....	.....	.....	3.18	45.79
Mineral Point & Northern	30.60	.....	.....	.....	2.74	33.34
Robbins Ry. Co.	30.00	.....	.....	.....	.....	30.00
Roddis Lumber & Veneer Co.	12.50	.....	.....	.....	.....	12.50
Stanley, Merrill & Phillips	56.30	.....	.....	.....	2.54	58.84
Winona Bridge .....	.49	.....	.....	.....	.....	.49
Wisconsin & Michigan	131.79	.....	.....	.....	28.16	159.95
Whitcomb & Morris	6.00	.....	.....	.....	3.00	9.00
Wisconsin Central	977.04	52.53	7.65	7.65	273.31	1,318.18
Wisconsin Western	51.97	.....	.....	.....	4.20	56.17
Superior & Southeastern	6.72	.....	.....	.....	9.15	15.87
Total	4,736.81	2,783.32	93.73	59.30	12,834.78	61,607.94

RENEWALS OF RAILS FOR
New Rails Laid by Railroads in Wisconsin as Re

Name of Company.	56 and 60 pounds per yard. No. tons.	66 and 67 pounds per yard. No. tons.	70 and 72 pounds per yard. No. tons.	75 and 77½ pounds per yard. No. tons.
Year Ending June, 30, 1905:				
1. Abbotsford & Northeastern.....	69.60			
2. Chi., Milwaukee & St. P....				89.66
3. Chicago & Northwestern.....			6,256.65	
4. Chicago, St. P., M. & O.....				
5. Chi., Burlington & Quincy.....		311.46		
6. Chi., Lake Shore & Eastern.....				51.52
7. Great Northern.....				127.49
8. Green Bay & Western.....			926.00	
9. Hawthorne, Nebagamon & Superior.....	*202.48			
10. Lake Superior Terminal & Transfer.....	2.00			
11. Mpls, St. P. & St. Ste. M.....				
12. Northern Pacific.....		.07	.14	
13. Wisconsin & Michigan.....			210.00	
14. Wisconsin Central.....				
Total	274.08	311.53	7,392.79	268.67
Year Ending June 30, 1906:				
1. Abbotsford & Northeastern.....	68.00			
2. Chi., Mil. & St. Paul.....				12,858.87
3. Chicago & Northwestern.....	.11		3,441.62	
4. Chicago St. Paul, M. & O.....				
5. Chi., Burlington & Quincy.....		269.90		64.84
6. Chi., Lake Shore & Eastern.....				260.04
7. Green Bay & Western.....				1,982.00
8. Lake Superior Terminal & Transfer.....	3.48	7.77		
9. Wisconsin & Michigan.....			23.14	
10. Wisconsin Central.....				
Total	71.59	277.67	3,464.76	15,165.75

*50 lbs. per yard.

WISCONSIN, 1905 AND 1906.

ported to the Railroad Commission for 1905 and 1906.

80 pounds per yard. No. tons.	85 pounds per yard. No. tons.	90 pounds per yard. No. tons.	Total number of tons.	Average price per ton at distributing point.		No.
			60.60	\$22 00	\$1,531 20	1
			89.66	27 93	2,504 21	2
1,576.41		4,604.93	12,437.99	28 11	349,631 90	3
2,338.49			2,338.49	29 20	68,283 91	4
	833.18		1,144.64	28 05	32,107 15	5
			51.52	26 23	1,351 37	6
			127.49	32 35	4,124 30	7
			926.00	30 19	27,955 94	8
			202.48	27 00	5,466 96	9
			2.00	22 00	44 00	10
2,348.80			3,348.80	29 50	98,789 60	11
	88.18		88.39	29 39	2,597 78	12
			210.00	30 50	6,405 00	13
	6,872.62		6,872.62	28 50	196,488 21	14
7,263.70	7,783.98	4,604.93	27,909.68	\$28 57	\$797,281 35	
			68.00	\$26 00	\$1,768 00	1
			12,858.87	28 50	366,477 80	2
47.58		1,496.52	4,985.83	28 13	140,251 40	3
5,139.62			5,169.62	29 20	150,952 90	4
	1,601.86		1,936.60	28 05	54,321 63	5
			260.04	21 53	5,598 66	6
			1,982.00	27 00	53,514 00	7
			11.25	23 00	258 75	8
			23.14	30 50	705 77	9
	2,975.00		2,975.00	28 48	84,728 00	10
5,217.20	4,576.86	1,496.52	30,270.35	\$28 36	\$858,577 91	

NEW TIES

On Roads doing Business in Wisconsin as Reported to the Railroad

Name of Company.	Oak.		Tamarack.	
	Number.	Average price at distributing point.	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.....				
2. Chicago, Mil. & St. Paul... ..	(¹)			
3. Chicago & Northwestern	309,462	.5600		
4. Chicago, St. Paul, Minnea- polis & Omaha	72,531	.6400	32,237	.3100
5. Chicago, Burl., & Quincy	66,270	.5250		
6. Chi., L. Shore & Eastern..	1,455	.5100		
7. Illinois Central	221,054	.3797		
8. Drummond & Southwestern			486	.1725
9. Dul., S. Shore & Atlantic....				
10. Green Bay & Western	5,600	.5000		
11. Hawthorne, Nebagamon & Superior			1,705	.2000
12. Iola & Northern				
13. Kewaunee, Green Bay & Western	1,900	.5000		
14. Lake Superior Terminal & Transfer	93	.6500	2,142	.3200
15. Northern Pacific	4,220	.6730	44,502	.3040
16. Northwestern Coal	613	.3600		
17. Wisconsin & Michigan				
Total	483,198		81,072	
(Number roads reporting.)....	22		11	

¹ Revenue train mileage basis.
² Red oak treated 20994 at 38c.

LAIID.

Commission for the Year Ending June 30, 1905.—Wisconsin.

?

Pine.		Cedar.		Hemlock.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at distributing point.	
				5,667	.2466	1
						2
						3
5,200	.3000	23,455	.3700	36,179	.2700	4
3,333	.4500	11,548	.4900			5
				4,152	.3500	6
						7
7,000	.1200					8
		457	.2666	30,447	.2535	9
		8,600	.4500	64,600	.3500	10
						11
				623	.3200	12
		900	.4500	9,443	.3500	13
						14
						15
						16
		6,595	.4000	17,717	.3000	17
15,633		51,555		168,828		
22		22		22		

NEW TIES

On Roads doing Business in Wisconsin as Reported to the Railroad

Name of Company.	Mixed.		Culls.	
	Number.	Average price at distributing point.	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.	48	.28		
2. Ahnapee & Western	4,119	.28		
3. Chicago, Mil. & St. Paul. ¹	256,929	.4599		
4. Chicago & Northwestern ...	600,666	.3400		
5. Chicago, St. Paul, Minnea- polis & Omaha	3,287	.2700	17,419	.1200
6. Chicago, Burl. & Quincy ..	4,818	.5250		
7. Chicago, L. Shore & Eastern ..			60	.1800
8. Illinois Central				
9. Drummond & Southwestern ..				
10. Dul., S. Shore & Atlantic..	3	1.25	1,716	.0721
11. Great Northern	42,590	.3763		
12. Green Bay & Western				
13. Glenwood & Northern				
14. Hawthorne, Nebagamon & Superior			1,000	.1000
15. Iola & Northern				
16. Kewaunee, Green B. & W... ..				
17. Lake Superior Terminal & Transfer				
18. Marinette, Tomahawk & Western	10,559	.2500		
19. Mpls., St. P. & S. Ste. M.	97,485	.3593		
20. Northern Pacific				
21. Northwestern Coal				
22. Wisconsin & Michigan				
23. Wisconsin Central	452,991	.3100		
Total	1,473,495		20,195	
(Number roads reporting.)...	22		22	
	22		22	

¹Revenue train mileage basis.

L.A.I.D.

Commission for the Year Ending June 30, 1905.—Wisconsin.

Bridge.		Switch.		Total.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at distributing point.	
				5,715	.2469	1
				4,119	.2800	2
				256,929	.4599	3
				910,128	.4060	4
				190,408	.4200	5
				85,969	.5170	6
				5,667	.3460	7
				21,054	.3797	8
				7,000	.1200	9
460	1.0734	124	.5266	33,693	.2556	10
						11
				42,590	.3763	12
				78,800	.3720	13
				2,705	.1633	14
				623	.3200	15
				12,243	.3810	16
		108	1.0200	2,343	.3640	17
				10,559	.2500	18
				97,485	.3593	19
				48,722	.3360	20
		316	1.3400	929	.6950	21
				24,312	.3271	22
1,321	1.1800	10,249	.5200	464,561	.3200	23
1,781		10,797		2,306,554	.3838	....
22		22		22	22	....

NEW TIES

On roads doing business in Wisconsin as reported to the

Name of Company.	Oak.		Tamarack.	
	Number.	Average price at distributing point	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.....	13	\$0.48461		
3. Bayfield Harbor & G. W.				
4. Chicago & Northwestern....	175,610	.533		
5. Chicago, St. P., M. & O....	25,063	.53	39,278	\$0.32
6. Chi., Burlington & Quincy..	62,883			
7. Chi., L. Shore & Eastern:				
First grade	310	.60		
Second grade	600	.50		
8. Duluth, S. Shore & Atlantic				
9. Great Northern			14,966	.3822
10. Green Bay & Western	7,000	.50		
11. Iola & Northern				
12. Kewaunee, Green Bay & Western	1,500	.50		
13. Lake Superior Terminal & Transfer	475	.113	3,880	.325
14. Mattoon Railway Co.			5,706	.20
15. Northern Pacific	6,201	.408	32,558	.342
16. Northwestern Coal			1,000	.462
17. Stanley, Merrill & Phillips			6,662	.286
18. Winona Bridge				
19. Wisconsin & Michigan.....			9,098	.28
20. Whitcomb & Morris.....				
Total	279,655		113,148	

LAIID.

Railroad Commission for the year ending June 30, 1906.—Wisconsin.

Pine.		Cedar.		Hemlock.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at distributing point.	
.....	5,209	\$0.25289	1
.....	2,000	.25	3
.....	4
4,823	\$0.29	33,112	.43	29,775	.23	5
*8,033	1,648	.....	.....	.....	6
.....
.....	2,513	.34	} 7
.....	200	.30	
.....	296	.2667	17,900	.2444	8
14,965	.3822	14,965	.3822	.....	.....	9
1,500	.30	22,000	.....	69,200	.35	10
.....	822	.35	11
.....	3,700	.45	5,200	.35	12
.....	13
.....	5,707	.20	14
.....	15
.....	16
.....	6,663	.286	17
30	.761	.....	.....	.....	.....	18
.....	1,319	.42	8,989	.23	19
.....	1,000	.20	20
29,351	77,040	.....	155,178	.....	.....

*Pine and Cypress.

NEW TIES

Name of Company.	Mixed.		Culls.	
	Number.	Average price at distributing point.	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.	31	\$0.29032	.....	.....
2. Bayfield Harbor & Great Western	.....	.....	.....	.....
3. Chicago, Milwaukee & St. P	307,312	.4653	.....	.....
4. Chicago & Northwestern	504,589	.333	.....	.....
5. Chicago, St. P., M. & O.	2,131	.25	13,169	\$0.12
6. Chi., Burlington & Quincy	4,564	.....	.....	.....
7. Chicago, L. Shore & Eastern	.....	.....	.....	.....
8. Drummond & Southwestern	8,233	.133	.....	.....
9. Duluth, S. Shore & Atlantic	1	1.2508	835	.732
10. Great Northern	4,374	.8132	.....	.....
11. Green Bay & Western	.....	.....	.....	.....
12. Hawthorne, Nebagamon & Superior	.....	.....	10,000	.10
13. Iola & Northern	.....	.....	.....	.....
14. Kewaunee, G. Bay & West.	.....	.....	.....	.....
15. Lake Superior Terminal & Transfer	.....	.....	.....	.....
16. Mattoon Railway Co.	.....	.....	.....	.....
17. Northern Pacific	.....	.....	.....	.....
18. Northwestern Coal	.....	.....	.....	.....
19. Stanley, Merrill & Phillips.	.....	.....	.....	.....
20. Winona Bridge	34	.30	.....	.....
21. Wisconsin & Michigan	.....	.....	.....	.....
22. Whitcomb & Morris	.....	.....	.....	.....
Total	833,749	.....	24,004	.....

LAIID.—Continued.

Bridge.		Switch.		Total.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at disributing point.	
.....	5,253	\$0.28343	1
.....	2,000	.25	2
.....	307,312	.4653	3
.....	680,199	.384	4
.....	147,351	.35	5
.....	77,128	.....	6
.....	3,623	.47	7
.....	8,233	.133	8
379	.13210	223	\$0.5011	19,634	26.12	9
.....	51,750	40.17	10
.....	99,700	.382	11
.....	10,000	.10	12
.....	822	.35	13
.....	10,400	.407	14
.....	4,355	.412	15
.....	11,413	.20	16
.....	38,759	.352	17
.....	1,000	.462	18
.....	13,325	.286	19
.....	64	.....	20
.....	19,406	.....	21
.....	1,000	.20	22
379	223	.....	1,512,727	.....	.....

NEW TIES

On Roads doing Business in Wisconsin as Reported to the

Name of Company.	Oak.		Tamarack.	
	Number.	Average price at distributing point.	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.....				
2. Chicago & Northwestern ...	901,510	.6030		
3. Chicago, St. Paul, Minnea- polis & Omaha	113,485	.6500	53,478	.3400
4. Chicago, Burl. & Quincy....	1,342,886	.5250		
5. Chi., L. Shore & Eastern ..	7,687	.5900		
6. Illinois Central	1,757,408	.3620		
7. Drummond & Southwestern ..				
8. Dul., S. Shore & Atlantic ..			22,309	.1725
9. Green Bay & Western	5,600	.5000		
10. Hawthorne, Nebagamon & Superior			1,705	.2000
11. Iola & Northern				
12. Kewaunee, Green B. & W... ..	1,900	.5000		
13. Lake Superior T. & T.	93	.6500	2,142	.3200
14. Northern Pacific	106,171	.4970	587,165	.3160
15. Northwestern Coal	613	.3600		
16. Wisconsin & Michigan				
Total	4,237,353		666,799	
No. of railroads reporting	21		21	

¹Red oak treated 1125354 at 38c.

L A I D .

Railroad Commission of Wisconsin for Year Ending June 30, 1905.—Whole Line.

Pine.		Cedar.		Hemlock.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at distributing point.	
				5,667	.2466	1
						2
10,316	.3100	139,685	.4100	61,473	.2900	3
		560,373	.4900			4
				4,152	.3500	5
						6
7,000	.1200					7
		29,161	.2666	121,515	.2535	8
		8,600	.4500	64,600	.3500	9
						10
				623	.3200	11
		900	.4500	9,443	.3500	12
						13
						14
						15
		8,763	.4000	37,197	.3000	16
17,316		747,482		304,670		.....
21		21		21		.....

NEW TIES

Name of Company.	Mixed.		Culls.	
	Number.	Average price at distributing point.	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.	48	.2800		
2. Ahnapee & Western	4,119	.2800		
3. Chi., Mil. & St. Paul.....	909,805	.4599		
4. Chicago & Northwestern	2,096,431	.3820		
5. Chicago, St. Paul, Minnea- polis & Omaha	3,311	.2700	19,777	.1200
6. Chicago, Burl. & Quincy ...	{ 1619,848	.45 to 52½		
	47,274	.55		
7. Chi., L. Shore & Eastern...	21,354	.5400		
8. Illinois Central	76,991	.3329		
9. Drummond & Southwestern				
10. Dul., S. Shore & Atlantic...	58	1.2500	7,940	.0720
11. Great Northern	1,064,808	.3867		
12. Green Bay & Western				
13. Hawthorne, Nebagamon & Superior			1,000	.1000
14. Iola & Northern				
15. Kewaunee, Green B. & W.				
16. Lake Superior Terminal & Transfer				
17. Mpls., St. P. & S. Ste. M. ...	335,603	.3586		
18. Northern Pacific	21,163,681	.2820		
19. Northwestern Coal				
20. Wisconsin & Michigan				
21. Wisconsin Central	509,111	.3010		
Total	6,852,442		28,717	
No. of railroads reporting....	21		21	

¹ Treated.

² Fir.

LAIID—Whole Line—Continued.

Bridge.		Switch.		Total.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at distributing point.	
				5,715	.2469	1
				4,119	.2800	2
				906,805	.4599	3
				2,997,941	.4520	4
				401,525	.4300	5
				2,570,381		6
				33,193	.4155	7
				1,834,399	.3607	8
				7,000	.1200	9
584	1.0734	3,513	.5266	185,080	.2461	10
				1,064,808	.3867	11
				78,800	.3720	12
				2,705	.1633	13
				623	.3200	14
				12,243	.3810	15
		108	1.020	2,343	.3640	16
				335,603	.3586	17
				1,857,017	.3050	18
		316	1.340	929	.6950	19
				45,960	.3271	20
1,460	1.180	13,212	.5320	523,783	.3170	21
2,044		17,199		12,873,972	.3867	....
21		21		21	20	....

NEW TIES

On roads doing business in Wisconsin as reported to the Rail

Name of Company.	Oak.		Tamarack.	
	Number.	Average price at distributing point.	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.....	13	.48461	.....	.....
2. Ahnapee & Western.....	.....	.....	.....	.....
3. Bayfield Transfer.....	.....	.....	.....	.....
4. Chicago & Northwestern.....	521,490	.61	.....	.....
5. Chicago, St. P., M. & O....	31,641	.55	85,095	.35
6. Chicago, Burlington & Q....	1,449,325	.525	.....	.....
7. Chi., L. Shore & Eastern:	.....	.....	.....	.....
First grade.....	9,507	.60	.....	.....
Second grade.....	32,509	.49	.....	.....
8. Illinois Central.....	415,659	.35	.....	.....
9. Duluth, S. Shore & Atlantic	.....	.....	11,558	.2391
10. Great Northern.....	88,097	.5044	.....	.....
11. Green Bay & Western.....	7,000	.50	.....	.....
12. Iola & Northern.....	.....	.....	.....	.....
13. Kewaunee, Green Bay & Western	1,500	.50	.....	.....
14. Lake Superior Terminal & Transfer	475	.113	3,880	.325
15. Mattoon Railway Co.....	.....	.....	5,706	.20
16. Minneapolis St. Paul & Sault Ste. Marie.....	17,524	.50	.....	.....
17. Northern Pacific.....	73,815	.409	370,788	.352
18. Northwestern Coal.....	.....	.....	1,000	.462
19. Stanley, Merrill & Phillips..	.....	.....	6,662	.286
20. Winona Bridge.....	.....	.....	.....	.....
21. Wisconsin & Michigan.....	.....	.....	12,667	.28
22. Whitcomb & Morris.....	.....	.....	.....	.....
Totals.....	2,598,455	.....	497,356	.....

LAIID—

road Commission for the year ending June 30, 1906—Whole Line.

Pine.		Cedar.		Hemlock.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at distributing point.	
.....	.....	.....	.....	5,200	\$0.28289	1
.....	.....	3,500	.28	3,500	.28	2
.....	.....	.....	.....	2,000	.25	3
.....	.....	.....	.....	.....	.....	4
8,218	.30	121,801	.45	77,630	.31	5
30,295	.475	440,919	.50	.....	.....	6
.....	.....	.....	.....	2,798	.35	7
.....	.....	2,709	.49	268	.30	8
.....	.....	.....	.....	.....	.....	9
124	.2154	29,603	.2637	113,332	.2444	10
.....	.....	.....	.....	.....	.....	11
1,500	.30	22,000	.382	69,200	.35	12
.....	.....	.....	.....	822	.35	13
.....	.....	3,700	.45	5,200	.35	14
.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	5,707	.20	16
.....	.....	.....	.....	.....	.....	17
1,022,659	.28	.....	.....	.....	.....	18
.....	.....	.....	.....	6,663	.286	19
.....	.....	.....	.....	.....	.....	20
30	.761	2,509	.42	12,849	.28	21
.....	.....	.....	.....	1,000	.20	22
1,062,826	.....	623,241	.....	302,678	.....	.....

NEW TIES

Name of Company.	Mixed.		Culls.	
	Number.	Average price at distributing point.	Number.	Average price at distributing point.
1. Abbotsford & Northeastern.	31	.29032		
2. Bayfield Transfer				
3. Chi., Milwaukee & St. P...	1,113,863	.4653		
4. Chicago & Northwestern....	1,442,555	.37		
5. Chicago, St. P., M. & O....	2,131	.25	15,960	.12
6. Chi., Burlington & Quincy..	1,028,353			
7. Chicago, L. Shore & Eastern				
8. Illinois Central	1,157,697	.38		
9. Drummond & Southwestern	8,233	.133		
10. Duluth, S. Shore & Atlantic	52	.12508	6,853	.732
11. Great Northern	734,516			
12. Green Bay & Western				
13. Hawthorne, Nebagamon & Superior			10,000	.10
14. Iola & Northern				
15. Kewaunee, Green Bay & Western				
16. Lake Superior Terminal & Transfer				
17. Mattoon Railway Co.				
18. Minneapolis, St. Paul & Sault Ste. Marie.....	236,989	.27	19,921	
19. Northern Pacific				
20. Northwestern Coal				
21. Stanley, Merrill & Phillips..				
22. Winona Bridge	34	.30		
23. Wisconsin & Michigan				
24. Whitcomb & Morris				
25. Wisconsin Central	386,118	.291		
Totals	6,110,562		52,734	

LAIID—Whole Line, 1906.—Continued.

Bridges.		Switch.		Total.		No.
Number.	Average price at distributing point.	Number.	Average price at distributing point.	Number.	Average price at distributing point.	
.....	5,253	\$0.283434	1
.....	2,000	.25	2
.....	1,113,853	.4653	3
.....	1,964,045	.43	4
.....	342,476	.38	5
.....	2,948,892	.....	6
.....	47,691	.45	7
.....	1,573,356	.37	8
.....	8,233	.133	9
1,394	1.3210	2,958	.5011	165,874	.2548	10
.....	772,615	.4017	11
.....	99,700	.382	12
.....	10,000	.10	13
.....	822	.35	14
.....	10,400	.407	15
.....	4,355	.412	16
.....	11,413	.20	17
.....	3,347	.85	277,781	.282	18
.....	1,467,262	.305	19
.....	1,000	.462	20
.....	13,325	.286	21
.....	64	.....	22
.....	28,025	.....	23
.....	1,000	.20	24
2,415	.99	15,109	.535	403,642	.304	25
3,809	21,414	.....	11,273,075	.....	.....

CONSUMPTION OF FUEL BY LOCOMOTIVES.

For roads doing business in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.—Wisconsin.

Name of Company.	Passenger Locomotives.					
	Bituminous coal Tons.	Wood, cords.		Total fuel con- sumed.	Miles run.	Average pounds con- sumed per mile.
		Hard.	Soft.			
Ahnapee & Western.....	1,390			1,390	42,744	65.04
C., M. & St. P. ¹	129,826		278	129,965	3,216,189	78.38
Chicago & Northwestern..	180,100	634	1,270	181,157	4,067,136	89.08
C., St. P., M. & O.....	60,956		830	61,371	1,404,197	87.41
Illinois Central.....	4,917	29		4,936	72,797	135.62
Duluth, S. S. & Atlantic..	4,056		42	4,077	150,825	54.06
Green Bay & Western.....	5,658		184	5,750	221,989	51.80
Iola & Northern ²	370		24	382	11,570	69.03
Kewaunee, G. B. & W. ²	2,507		52	2,533		69.27
M., St. P. & S. Ste. M.....	11,273		118	11,332	302,790	74.85
Northern Pacific.....	4,167	6	57	4,200	153,398	54.76
Wisconsin & Michigan.....	2,721			2,721	76,875	70.00
Wisconsin Central.....	56,840		505	57,093	1,465,475	77.88
Wisconsin Western ²	1,352			1,352	45,478	59.46
Total (18 roads reporting)	466,133	669	3,360	468,259	11,331,463	82.20

¹ Revenue train mileage basis.

² Passenger and freight.

CONSUMPTION OF FUEL BY LOCOMOTIVES, WISCONSIN, 1905.—Cont.

Name of Company.	Freight Locomotives.					Average pounds consumed per mile.
	Bituminous coal. Tons.	Wood, cords.		Total fuel consumed.	Miles run.	
		Soft.	Hard.			
Abbotsford & Northeastern	600		57	639	9,427	133.44
C., M. & St. P. ¹	349,966		750	350,341	5,838,003	120.02
Chicago & Northwestern	486,453	866	1,733	487,897	5,545,650	175.96
C., St. P., M. & O.	135,618		1,847	136,542	2,173,971	125.61
Illinois Central	5,344	31		5,364	80,209	133.77
Drummond & Southwestern	795			795		
Duluth, S. S. & Atlantic	8,330		114	8,437	176,271	95.73
Green Bay & Western	13,195		250	13,320	260,840	102.13
Hawthorne, Nebag. & Sup.	2,271		710	2,627	25,300	207.63
Hazelhurst & Southeastern	622			622	12,300	101.14
M., St. P. & S. Ste. M.	51,604		492	51,850	914,924	113.34
Northern Pacific	12,023	10	98	12,079	211,630	114.16
Wisconsin & Michigan	1,989			1,989	56,076	70.00
Wisconsin Central	152,143		829	152,558	2,148,889	141.98
Total (13 roads reporting)	1,221,003	907	6,880	1,225,050	17,453,480	140.27

¹ Revenue train mileage basis.

CONSUMPTION OF FUEL BY LOCOMOTIVES, WISCONSIN, 1905.—Cont.

Name of Company.	Switching Locomotives.					Average pounds consumed per mile.
	Bituminous coal. Tons.	Wood, cords.		Total fuel consumed. Tons.	Miles run.	
		Hard.	Soft.			
C., M. & St. P. ¹	67,735		145	67,808	1,645,380	82.42
Chicago & Northwestern..	109,006	467	932	109,784	2,992,006	73.05
C., St. P., M. & O.....	17,560		163	17,641	571,052	61.79
Chicago, L. S. & Eastern..	3,743			3,743	168,872	44.33
Illinois Central	214	1		215	3,193	134.46
Duluth, S. S. & Atlantic..	262		3	263	9,119	57.69
Green Bay & Western.....	1,736		74	1,773	73,363	48.33
Hawthorne, Nebag. & Sup.	491		154	568	8,500	133.62
Hazelhurst & Southeastern	622			622	20,000	62.20
Lake S. T. & T. Ry. Co.	3,838		34	3,855	118,350	65.15
Northern Pacific	4,605		31	4,632	121,269	76.23
Northwestern Coal Ry. Co.	456		14	463	20,200	45.00
Wisconsin & Michigan.....	935			935	24,250	77.00
Wisconsin Central	20,378		316	20,536	489,122	83.98
Total (18 roads reporting.)	231,5	471	1,866	232,828	6,264,676	74.32

¹ Revenue train mileage basis.

CONSUMPTION OF FUEL BY LOCOMOTIVES, WISCONSIN, 1905.—Cont.

Name of Company.	Construction Locomotives.					
	Bituminous coal. Tons.	Wood, cords.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard.	Soft.			
Ahnapee & Western.....	500			500	8,500	117.65
C., M. & St. P. ¹	16,934		36	16,952	377,316	89.86
Chicago & Northwestern...	22,051	88	177	22,198	565,210	78.55
C., St. P., M. & O.....	6,562		70	6,597	141,780	93.03
Illinois Central	214	1		215	3,035	141.46
Duluth, S. S. & Atlantic..	572		1	573	23,772	48.23
Green Bay & Western	342		12	348	11,409	63.69
Hawthorne, Nebag. & Sup.	307		96	355	4,500	157.75
Northern Pacific	407		1	408	8,353	97.63
Wisconsin & Michigan	1,194			1,194	11,233	68.00
Wisconsin Central	11,012		37	11,031	234,524	94.03
Total	60,096	89	430	60,371	1,389,692	83.89

¹ Revenue train mileage basis.

CONSUMPTION OF FUEL BY LOCOMOTIVES.

For roads doing business in Wisconsin as reported to the railroad commission for the year ending June 30, 1906.—Wisconsin.

Passenger Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard, cords.	Soft, cords.			
Ahnapee & Western.....	1,705			1,705	42,568	80.10
C., M. & St. P.....	133,142		191	133,237	3,347,591	79.61
Chicago & Northwestern..	181,263	651	1,303	182,347	4,080,071	89.38
C., St. P., M. & O.....	62,588		987	63,082	1,464,007	86.18
Illinois Central	4,462	15		4,472	61,619	145.15
Chi., Harv. & Geneva Lake	619			619	11,919	62.00
Duluth, S. S. & Atlantic..	4,072		30	4,087	151,982	53.78
Green Bay & Western.....	6,094		274	6,231	220,196	56.60
M., St. S. & S. Ste. M....	11,026		108	11,080	288,721	76.75
Northern Pacific	4,603	5	46	4,629	155,598	59.50
Wisconsin & Michigan.....	3,054			3,054	83,875	72.84
Wisconsin Central.....	67,671		543	67,942	1,486,597	91.41
Mineral Point & Northern..	2,079			2,079	38,556	107.87
Total	482,378	671	3,482	484,564	11,433,300	84.76

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1906, WISCONSIN.—Cont.

Freight Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per m. e.
		Hard, cords.	Soft, cords.			
Abbotsford & Northeastern	889		20	889	9,558	181.11
C., M. & St. P.	375,218		539	375,488	6,192,964	121.26
Chicago & Northwestern	498,374	941	1,882	499,943	5,896,171	169.58
C., St. P., M. & O.	147,343		1,752	148,219	2,275,753	130.25
Chicago & Lake Superior	400			400	10,620	75.31
Illinois Central	6,643	23		6,658	91,742	145.15
Chp. River & Northern	700			700	12,000	120.00
Chi., Harv. & Geneva Lake					8,000	62.00
Drummond & Southwestern	1,343			1,343		
Dul., S. Shore & Atlantic	10,539		94	10,586	212,481	99.64
Green Bay & Western	13,718		374	13,905	269,132	103.31
Hawthorne, Nebagamon & Superior	2,475		94	2,569	24,450	210.12
Hazelhurst & Southeastern	621			621	5,240	252.86
Hillsboro & Northeastern	1,772			1,772		
Iola & Northern	410		30	425	11,770	72.22
Kewaunee, Green B. & W. Marinette, Tomahawk & Western	2,740		72	2,776	72,828	76.23
Minneapolis, St. Paul & Sault Ste. Marie	887	172		973	20,099	96.73
Northern Pacific	55,001		488	55,245	935,392	118.12
Northwestern Coal	13,603	8	71	13,644	253,579	107.61
Stanley, Merrill & Phillips	684		26	710	22,000	30.98
Wisconsin & Michigan	5,084		148	5,158	116,696	88.45
Whitcomb & Morris	3,250			3,250	89,210	72.88
Wisconsin Central		300				
Wisconsin Western	184,031		909	184,485	2,229,430	165.49
Superior & Southeastern	1,450			1,450	43,185	67.15
	915			915		
Total	1,328,090	1,444	6,499	1,332,124	18,802,330	141.55

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1906, WISCONSIN—Cont.
Switching Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard, cords.	Soft. Cords.			
Chicago, Mil. & St. P...	78,675	.....	113	78,731	1,805,695	87.20
Chicago & Northwestern..	120,848	407	814	121,525	2,550,304	95.32
Chicago, St. Paul Minne- apolis & Omaha.....	24,075	.....	277	24,213	754,866	64.15
Chicago, Lake Shore & Eastern	3,689	.....	18	3,698	177,520	41.21
Illinois Central	264	1	.....	265	3,647	145.14
Duluth, South Shore & At- lantic	322	.....	3	322	11,414	56.48
Green Bay & Western.....	1,902	.....	112	1,958	76,267	51.35
Hawthorne, Nebagamon & Superior	528	.....	22	550	8,500	129.41
Lake Superior Terminal & Transfer	5,100	.....	32	5,116	137,085	74.61
Marinette, Tomahawk & Western	144	.....	28	158	2,484	127.47
Northern Pacific	1,397	1	13	1,404	193,948	32.29
Wisconsin & Michigan.....	889	.....	.....	889	21,683	82.00
Wisconsin Central	26,576	.....	387	26,766	488,039	109.70
Total	264,409	409	1,819	265,598	6,163,452	86.20

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1906, WISCONSIN—Cont.

Construction Locomotives.

Name of Company.	Bituminous coal, Tons.	Wood.		Total fuel consumed. tons.	Miles run.	Average pounds consumed per mile.
		Hard, cords.	Soft. Cords.			
Chicago, Milwaukee & St. Paul.	18,155		27	18,169	462,879	78.51
Chicago & Northwestern..	23,108	102	204	23,279	641,655	72.56
Chicago, St. Paul, Minneapolis & Omaha	11,474		124	11,536	238,398	96.78
Illinois Central	69			69	954	144.65
Duluth, South Shore & Atlantic	316			316	14,032	45.02
Green Bay & Western.....	303		14	310	8,722	71.08
Hawthorne, Nebagamon & Superior	327		9	336	4,500	149.44
Kewaunee, G. B. & W.....	770		12	776	25,050	61.06
Northern Pacific	560			560	19,120	58.58
Wisconsin & Michigan	1,289			1,289	39,720	64.95
Wisconsin Central	13,209		41	13,229	271,124	97.58
Total	69,580	102	431	69,859	1,726,154	80.94

CONSUMPTION OF FUEL BY LOCOMOTIVES AS REPORTED BY ROADS OPERATING IN WISCONSIN TO THE RAILROAD COMMISSION FOR THE YEAR ENDING JUNE 30, 1905, WHOLE LINE.

Passenger Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood, cords.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard,	Soft,			
Ahnapee & Western	1,390			1,390	42,744	65.04
Chicago, Milwaukee & St. Paul	459,724		985	460,217	11,742,880	78.36
Chicago & Northwestern ..	702,321	2,401	4,805	706,324	15,367,504	91.92
Chicago, St. Paul, Minneapolis & Omaha	137,962		1,744	138,834	3,296,872	84.22
Chi., Burlington & Quincy	619,460		7,183	623,051	13,978,499	89.10
Illinois Central	800,577	4,653		803,679	11,819,177	136.00
Duluth, South Shore & Atlantic	24,471		252	24,597	909,934	54.06
Great Northern	262,014		4,535	265,037	6,207,960	85.39
Green Bay & Western	5,658		184	5,750	221,989	51.89
Minneapolis, St. Paul & Sault Ste. Marie	59,966		630	60,281	1,614,896	74.66
Northern Pacific	336,352	164	1,480	337,201	7,186,955	93.84
Wisconsin & Michigan	4,860			4,860	137,277	70.00
Wisconsin Central	68,171		607	68,475	1,758,338	77.88
Total	3,482,926	7,218	22,405	3,499,696	74,285,025	99.42
No. of railroads included..	13		10	13	13	.13

CONSUMPTION OF FUEL BY LOCOMOTIVES AS REPORTED BY ROADS OPERATING IN WISCONSIN TO THE RAILROAD COMMISSION FOR THE YEAR ENDING JUNE 30, 1905, WHOLE LINE—Continued.

Freight Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood, cords.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard,	Soft,			
Abbotsford & Northe'stn Chicago, Milwaukee & St. Paul.	600	.....	57	629	9,427	133.44
Chicago & Northwestern Chicago, St. Paul, Min- neapolis & Omaha.	1,239,255	.....	2,654	1,240,582	20,672,816	120.02
Chicago, Burlington & Quincy	1,652,495	3,243	6,490	1,657,902	20,780,833	159.56
Chicago, Lake Shore & Eastern	265,635	.....	3,527	267,399	4,191,688	127.59
Illinois Central	1,630,597	.....	18,752	1,639,974	16,733,520	196.00
Drummond & Southw- estern	52,758	.....	194	52,855	497,763	212.37
Duluth, South Shore & Atlantic	1,252,874	7,282	.....	1,257,729	18,258,325	137.77
Great Northern	795	.....	.....	795	.....	.....
Green Bay & Western....	55,578	.....	759	55,957	1,169,095	95.73
Hawthorne, Nebagam- & Superior	773,763	.....	13,392	782,691	8,711,140	179.70
Hazelhurst & Southe- astern	13,195	.....	250	13,320	260,840	102.13
Iola & Northern	2,271	.....	710	2,626	25,300	207.63
Kewaunee, Green Bay & Western	622	.....	.....	622	12,300	101.14
Marinette, Tomahawk & Western	370	.....	24	382	11,570	66.03
Minneapolis, St. Paul & Sault Ste. Marie.....	2,507	.....	52	2,533	70,300	69.27
Northern Pacific.....	1,289	.....	98	1,338	20,398	131.21
Wisconsin & Michigan ..	207,248	.....	1,974	208,235	3,669,849	113.48
Wisconsin Central	1,208,735	476	4,291	1,211,198	14,385,291	168.39
Wisconsin Western	3,552	.....	.....	3,552	100,076	70.00
Total	175,117	.....	954	175,594	2,473,417	141.98
No. of railroads included	1,352	.....	.....	1,352	45,478	59.46
Total	8,540,608	11,001	54,178	8,577,265	112,099,426	153.01
No. of railroads included	21	.....	21	21	21	20

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1905, WHOLE LINE.—Cont.

Switching Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood, cords.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard.	Soft.			
Chicago, Milwaukee & St. Paul	239,856		514	240,113	5,826,416	82.42
Chicago & Northwestern..	381,386	1,658	3,316	384,149	10,657,101	72.09
Chicago, St. Paul, Minneapolis & Omaha	44,381		535	44,649	1,436,916	82.14
Chicago, Burl. & Quincy	351,530		4,225	353,701	7,047,097	100.03
Chi., L. Shore & Eastern	87,836		290	87,981	2,891,960	69.85
Illinois Central	1,459,856	2,648		461,621	6,748,838	136.80
Dul., S. Shore & Atlantic	9,585		93	9,632	333,919	57.69
Great Northern	116,366		2,014	117,709	2,005,520	117.38
Green Bay & Western.....	1,736		74	1,773	73,363	48.33
Hawthorne, Nebagamon & Superior	491		154	568	8,500	133.62
Hazelhurst & S. Eastern	632			622	20,000	62.20
Lake Superior Terminal & Transfer	3,838		34	3,855	118,350	65.15
Marinette, Tomahawk & Western	430		33	446	6,404	139.31
Northern Pacific	177,279	72	643	177,649	4,508,961	78.80
Northwestern Coal	456	14		463	20,200	45.00
Wisconsin & Michigan	935			935	24,250	.77
Wisconsin Central	35,896		556	36,174	861,492	83.98
Total	1,912,538	4,392	12,481	1,922,040	42,589,287	90.26
No. of railroads included..	17	4	13	17	17	17

¹ Of this coal 3873 tons were anthracite and coke.

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1905, WHOLE LINE.—Cont.

Construction Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood, cords.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard.	Soft.			
Ahnapee & Western	500			500	8,500	117.65
Chi., Mil. & St. Paul.....	59,964		128	60,028	1,336,104	89.86
Chicago & Northwestern ..	60,056	240	492	60,462	1,570,739	76.99
Chicago, St. Paul, Minneap- olis & Omaha	12,666		245	12,783	287,198	89.06
Chicago, Burl. & Quincy..	151,106		1,977	152,094	2,594,013	117.20
Illinois Central	35,619	206		35,756	486,967	146.85
Dul., S. Shore & Atlantic	1,531		3	1,533	63,564	48.23
Green Bay & Western.....	342		12	348	11,469	60.69
Hawthorne, Nebagamon & Superior	307		96	355	4,500	157.75
Mpls. St. P. & S. Ste. M.	3,351			3,351	177,968	37.65
Northern Pacific	57,906	15	137	57,984	1,396,336	83.05
Wisconsin & Michigan	2,133			2,133	62,263	88
Wisconsin Central	13,030		44	13,052	277,463	94.08
Total	398,511	461	3,134	400,384	8,277,084	96.74
No. of railroads included..	13	3	9	13	12	13

CONSUMPTION OF FUEL BY LOCOMOTIVES FOR ROADS OPERATING IN WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR YEAR ENDING JUNE 3, 1906, FOR WHOLE LINE.

Passenger Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard. Cords.	Soft. Cords.			
Ahnapee & Western	1,705			1,705	42,568	
Chicago, Milwaukee & St. Paul	482,573		693	482,919	12,133,349	79.61
Chicago & Northwestern ..	744,570	2,595	5,203	748,901	16,288,343	91.96
Chicago, St. Paul Minneapolis & Omaha	143,223		1,998	144,222	3,380,753	85.32
Chi., Burlington & Quincy ..	694,214		7,257	697,859	14,995,885	93.10
Illinois Central	850,674	2,878		852,593	11,833,922	144.09
Chic., Harv. & Geneva L..	*1,238			*1,238	23,837	62.00
Dul., S. Shore & Atlantic..	24,407		181	24,498	910,961	53.78
Great Northern	323,851	8,156		329,288	7,086,650	92.93
Green Bay & Western	6,094		274	6,231	220,196	56.60
Mpls., St. P. & S. Ste. M.	77,432		760	77,812	2,027,462	76.76
Northern Pacific	455,579	187	1,678	456,543	8,617,770	105.95
Wisconsin & Michigan	5,335			5,335	126,479	72.84
Wisconsin Central	81,153		651	81,478	1,782,764	91.41
Mineral Point & Northern	2,079			2,079	38,556	107.87
Total	3,894,127	13,816	18,695	3,912,701	79,509,495	98.43

* Power house.

CONSUMPTION OF FUEL BY LOCOMOTIVES FOR ROADS OPERATING IN WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR YEAR ENDING JUNE 3, 1906, FOR WHOLE LINE.

Freight Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood.		Total fuel consumed. Tons.	Miles run.	Average pounds consumed per mile.
		Hard. Cords.	Soft. Cords.			
Abbotsford & Northeastern	889		20	899	9,558	181.11
Chi., Mil. & St. Paul	1,359,978		1,954	1,360,955	22,446,410	121.26
Chicago & Northwestern	1,798,998	3,542	7,091	1,804,904	22,193,318	162.65
Chicago, St. Paul, Minneapolis & Omaha	292,632		3,635	294,475	4,479,041	131.49
Chi. Burlington & Quincy	1,967,144		20,133	1,977,260	17,914,608	220.80
Chi., L. Shore & Eastern	60,290		336	60,459	528,166	228.94
Chicago & Lake Superior	400			400	10,620	75.31
Illinois Central	1,318,459	4,464		1,321,435	18,342,631	144.08
Chippewa River & Northern	700			700	12,000	120.00
Drummond & Southwestern	1,343			1,343		
Dul., S. Shore & Atlantic	70,551		632	70,867	1,422,509	99.64
Great Northern	980,421	11,782		988,276	10,320,940	191.51
Green Bay & Western	13,718		374	13,905	269,182	103.31
Hawthorne, Nebagamon & Superior	2,475		94	2,569	24,450	210.11
Hazelnut & Southeastern	621			621	5,240	252.86
Hillsboro & Northeastern	1,772			1,772		
Iola & Northern	410		30	425	11,770	72.22
Kewaunee, Green Bay & W.	2,740		72	2,776	72,828	76.23
Marquette, Tomahawk & Western	887	172		973	20,099	96.73
Mpls., St. P. & S. Ste. M.	262,532		2,332	263,698	4,465,793	118.10
Northern Pacific	1,490,514	528	4,755	1,493,244	15,928,957	187.49
Northwestern Coal	684		26	710	22,000	30.98
Stanley, Merrill & Phillips	5,084		148	5,158	116,626	88.45
Wisconsin & Michigan	4,891			4,891	134,228	72.88
Whitcomb & Morris		300				
Wisconsin Central	213,664		1,055	214,192	2,588,483	165.49
Wisconsin Western	1,450			1,450	43,185	67.15
Superior & Southeastern	915			915		
Total	9,854,162	20,788	42,737	9,889,272	121,398,642	162.93

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1906, WHOLE LINE.—Cont.

Switching Locomotives.

Name of Company,	Bituminous coal. Tons.	Wood.		Total fuel con- sumed.	Miles run.	Average pounds con- sumed per mile.
		Soft. Cords.	Hard. Cords.			
Chi., Mil. & St. Paul.....	285,157		410	285,362	6,544,745	87.20
Chicago & Northwestern..	452,993	1,519	3,040	455,525	9,527,757	96.67
Chicago, St. Paul, Min- neapolis & Omaha ..	60,212		721	60,572	1,770,462	68.43
Chi., Burlington & Quincy	414,965		4,676	418,311	7,921,271	105.60
Chi., L. Shore & Eastern	101,971		497	102,219	3,688,330	55.45
Illinois Central	*514,832	1,721		515,969	7,083,530	145.68
Dul., S. Shore & Atlantic	10,750		84	10,792	332,112	56.48
Great Northern	141,969	2,719		143,782	2,483,150	115.81
Green Bay & Western.....	1,902		112	1,958	76,267	51.35
Hawthorne, Nebagamon & Superior	528		22	550	8,500	129.41
Lake Superior Terminal & Transfer	5,100		32	5,116	137,085	74.64
Marinette, Tomahawk & Western	144		28	158	2,484	127.47
Northern Pacific	237,067	74	673	237,453	5,808,794	81.76
Wisconsin & Michigan.....	889			889	21,683	82.00
Wisconsin Western	46,400		676	46,738	852,090	109.70
Total	2,274,869	6,033	10,971	2,285,394	46,308,310	98.70

*5745 tons coke.

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1906, WHOLE LINE.—Cont.
Construction Locomotives.

Name of Company.	Bituminous coal. Tons.	Wood.		Total fuel con- sumed.	Miles run.	Average pounds con- sumed per mile.
		Soft. Cords.	Hard. Cords.			
Chi., Mil. & St. Paul.....	65,805		95	65,853	1,677,705	78.51
Chicago & Northwestern ..	82,208	338	684	82,778	2,151,730	76.94
Chicago, St. Paul, Minnea- polis & Omaha	21,875		410	22,080	460,264	95.94
Chi., Burlington & Quincy	217,643		1,837	217,567	3,339,194	130.30
Illinois Central	45,172	152		45,273	628,099	144.16
Dul., S. Shore & Atlantic.	1,245			1,245	55,318	45.02
Green Bay & Western	303		14	310	8,722	71.08
Hawthorne, Nebagamon & Superior	327		9	336	4,500	149.44
Kewaunee, Green Bay & Western	770		12	776	25,050	61.96
Mpls., St. P. & S. Ste. M.	6,441			6,441	139,659	92.24
Northern Pacific	54,045	13	121	54,115	1,269,768	85.24
Wisconsin & Michigan	2,024			2,024	62,325	64.95
Wisconsin Central	16,788		52	16,814	344,595	97.58
Total	514,646	503	3,235	515,612	10,166,929	101.43

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1905, WISCONSIN AND WHOLE LINE.—Continued.

Name of Company.	Total for Wisconsin.							
	Bituminous coal. Tons.	Average cost at dis-tributing point.	Wood, cords.	Average cost at dis-tributing point.	Total fuel consumed. Tons.	Average cost at dis-tributing point.	Miles run.	Average lbs. consumed per mile.
Abb. & Northeast.	600	3.12	57	.....	699	.....	9,427	138.44
Alnapee & West'n	1,890	3.50	.....	.....	1,890	.....	51,244	73.70
C., M. & St. P. ...	564,461	2.15	1,209	2.86	565,069	2.15	11,176,888	101.11
Chi. & N. Western	797,610	1.83	6,167	2.72	801,036	.....	13,170,002	121.65
C., St. P., Mpls. & Omaha	220,696	2.73	2,910	98	222,151	2.73	4,291,000	103.54
C., L. S. & East.	3,743	2.44	.....	.....	3,743	2.44	168,872	44.33
Illinois Central	10,689	1.42	62	2.19	10,730	1.42	159,234	134.77
Drummond & S. Western	795	3.65	1	.....	795	3.65	1	1
Duluth, South S. & Atlantic	13,270	3.13	160	1.50	13,350	3.13	359,987	74.17
Green B. & W.	20,931	2.80	520	1.00	21,191	2.79	567,661	74.66
Hawthorne, Neba- gamon & Sup.	3,069	3.90	960	2.25	3,549	3.95	38,300	185.35
Hazelhurst & S. Eastern	1,244	3.35	.....	.....	1,244	3.35	32,300	77.03
Iola & Northern...	370	3.00	24	1.00	382	.....	11,570	66.03
Kewaunee, Green Bay & West..	2,507	3.00	52	1.00	2,533	2.99	70,300	69.27
L. Superior Termi- nal & Trans.	3,838	2.97	34	1.76	3,855	2.97	118,350	65.15
Marquette, Tema- hawk & W. ...	1,719	4.16	131	1.37	1,784	4.11	26,802	133.15
Mpls. St. P. & S. Ste. Marie ...	62,877	1.77	610	1.90	63,182	.....	1,217,714	103.77
Northern Pacific ...	21,202	2.89	206	2.13	21,809	2.90	494,640	86.16
Northwestern Coal.	456	2.90	14	2.65	463	2.94	20,200	45.
Wisconsin & Mich.	6,839	3.20	.....	.....	6,839	3.20	168,434	.....
Wisconsin Central.	240,374	2.03	1,687	1.19	241,219	.....	4,338,010	111.21
Wisconsin Western	1,352	2.90	.....	.....	1,352	2.90	45,478	59.46
Total	1,980,532	2.09	14,803	.....	1,988,292	.....	36,536,413	108.79
No. of R. R. incl'd	22	22	16	.....	.....	16	21	21

¹ Not given.

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1905, WISCONSIN AND WHOLE LINE.—Continued.

Name of Company.	Total for Whole Line.						
	Bituminous coal. Tons.	Average cost at dis-tributing point.	Wood, cords.	Average cost at dis-tributing point.	Total fuel consumed. Tons.	Miles run.	Average lbs consumed per mile.
Abbotsford & N. Eastern	600	3.12	57	.....	629	9,427	133.44
Ahnapee & Western.....	1,890	3.50	.....	.....	1,890	51,244	73.76
Chicago, Mil. & St. P.	1,998,799	2.15	4,281	2.86	2,000,940	39,578,216	101.11
Chicago & Northwestern.	2,796,258	1.83	22,645	2.72	2,808,837	48,376,177	116.12
Chicago, St. Paul, Min-neapolis & Omaha ..	460,644	2.73	6,051	1.19	463,670	9,212,674	100.66
Chicago, Burl. & Quincy	2,752,752	1.70	32,137	2.44	2,768,830	40,353,129	137.20
Chicago, Lake Shore & Eastern	140,594	1.24	484	1.75	140,833	3,389,723	83.09
Illinois Central	2,548,926	1.29	14,783	1.73	2,558,785	37,313,307	137.15
Drummond & South-western	795	3.65	1	.....	795	1	1
Duluth, South Shore & Atlantic	91,165	3.05	1,107	1.50	91,719	2,476,513	74.04
Great Northern	1,152,143	2.92	19,941	1.67	1,165,437	16,924,620	137.72
Green Bay & Western...	20,931	2.80	520	1.00	21,191	567,661	74.66
Hawthorne, Nebagamon & Superior	3,069	3.90	960	2.25	3,549	33,300	185.35
Hazelhurst & S. Eastern	1,244	3.35	.....	.....	1,244	32,300	77.03
Iola & Northern	370	3.00	24	1.00	382	11,570	66.03
Kewaunee, Green Bay & Western	2,507	3.00	52	1.00	2,533	70,300	69.27
Lake Superior Terminal & Transfer	3,838	2.97	34	1.76	3,855	118,350	65.15
Marquette, Tomahawk & Western	1,719	4.16	131	1.37	1,784	26,802	133.15
Minneapolis, St. Paul & Sault Ste. Marie...	270,565	2.91	2,604	1.90	271,867	5,462,713	99.54
Northern Pacific	1,780,272	2.10	7,278	1.97	1,784,032	27,477,543	129.85
Northwestern Coal	456	2.90	14	265	463	20,200	45.00
Wisconsin & Michigan...	11,480	.....	.....	.....	11,480	323,866	70.89
Wisconsin Central	292,214	2.03	2,161	1.19	293,295	5,370,710	109.22
Wisconsin Western	1,352	2.90	.....	.....	1,352	45,478	59.46
Total	14,334,533	1.93	115,270	.....	14,399,385	237,250,822	121.37
No. of R. R. included.	24	23	19	.....	24	23	23

¹ Not given.

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1906, WISCONSIN AND WHOLE LINE.—Continued.

Name of Company.	Total of Wisconsin.						Average lbs. consumed per mile.
	Bituminous coal. Tons.	Average cost at dis-tributing point.	Wood. Cords.	Average price at dis-tributing point	Total fuel consumed. Tons.	Miles run.	
Abbotsford & N. Eastern	889	2.94	20	.....	899	9,558	188.11
Ahnapee & Western	1,705	3.24	.....	.....	1,705	42,568	80.10
Chi., Mil. & St. Paul	605,190	2.11	870	2.01	605,625	11,809,129	102.57
Chicago & Northwestern	823,593	1.78	6,304	2.54	827,094	13,168,201	125.62
Chicago, St. Paul, Minneap-olis & Omaha.	245,480	2.60	3,140	1.00	247,050	4,733,024	104.39
Chicago, Lake Shore & Eastern	3,689	2.71	18	1.36	3,698	177,520	41.21
Chi., & Lake Superior	400	4.00	.....	.....	400	10,620	75.31
Illinois Central	11,438	1.48	39	2.40	11,464	157,962	145.15
Chippewa R. & Northern	700	3.90	.....	.....	700	12,000	120.00
Chicago, Harvard & Geneva Lake	619	2.50	.....	.....	619	19,919	62.00
Drummond & Southwestern	1,343	3.40	.....	.....	1,343	.....	.....
Duluth, South Shore & Atlantic	15,249	3.10	127	1.50	15,311	389,909	78.54
Green Bay & Western	22,017	3.00	774	1.00	22,404	574,367	78.01
Hawthorne, Nebagam- on & Superior	3,330	3.45	125	2.25	3,455	37,450	184.51
Hazelhurst & S. Eastern	621	3.35	.....	.....	621	5,240	252.86
Hillsboro & N. Eastern.	1,772	2.98	.....	.....	1,772	.....	.....
Iola & Northern	410	3.00	30	1.00	425	11,770	72.22
Kewaunee, Green Bay & Western	3,510	3.00	84	1.00	3,552	97,878	72.58
Lake Superior Terminal & Transfer	5,100	2.73	32	1.71	5,116	137,035	74.64
Marinette, Tomahawk & Western	1,031	4.20	200	1.39	1,131	22,583	100.16
Minneapolis, St. Paul & Sault Ste. Marie	66,027	1.76	596	1.23	66,325	1,224,113	108.36
Northern Pacific	20,163	2.79	144	2.19	20,237	554,245	93.03
Northwestern Coal	684	2.84	26	3.03	710	22,000	30.98
Stanley, Merrill & Phillips	5,084	3.70	148	2.00	5,158	116,626	88.45
Wisconsin & Michigan	8,482	3.00	.....	.....	8,482	234,488	72.03
Whitcomb & Morris	.....	.....	300	.75	.....	.....	.....
Wisconsin Central	291,486	1.85	1,880	1.07	292,426	4,475,240	130.65
Wisconsin Western	1,450	2.11	.....	.....	1,450	43,185	67.15
Mineral P. & Northern	2,079	3.21	.....	.....	2,079	38,556	107.87
Superior & Southeastern	915	3.65	.....	.....	915	.....	.....
Total	2,144,456	.....	14,857	.....	1,952,145	38,125,236	10.24

CONSUMPTION OF FUEL BY LOCOMOTIVES, 1906, WISCONSIN AND WHOLE LINE.—Continued.

Name of Company.	Total for whole Line.						
	Bituminous coal. Tons.	Average cost at dis-tributing point.	Wood Cords.	Average price at dis-tributing point.	Total fuel con-sume Tons.	Miles run.	Average lbs. con-sumed per mile.
Abbotsford & N. Eastern	889	2.94	20	.....	899	9,558	188.11
Alnapee & Western.....	1,705	3.24	.....	.....	1,705	42,568	80.10
Chi., Mil. & St. Paul...	2,193,513	2.11	3,152	2.01	2,195,039	42,802,209	102.57
Chicago & Northwestern	3,078,766	1.78	24,012	2.54	3,092,108	50,161,148	123.29
Chicago, St. Paul, Min-neapolis & Omaha..	517,942	2.62	6,814	1.22	521,349	10,000,520	103.33
Chi., Burl. & Quincy	3,293,966	1.60	33,903	2.18	3,310,997	44,170,958	149.90
Chicago, Lake Shore & Eastern	162,261	1.42	833	1.39	162,678	4,216,546	77.16
Chicago & L. Superior	400	4.00	.....	.....	400	10,620	75.31
Illinois Central	*2,729,121	1.28	9,215	1.93	2,735,270	37,888,182	144.39
Chippewa R. & Northern	700	3.90	.....	.....	700	12,000	120.00
Chic., Harv. & G. Lake	1,238	2.50	.....	.....	1,238	39,837	62.00
Drummond & S. Western	1,343	3.40	.....	.....	1,343	.....	.....
Duluth, South Shore & Atlantic	106,953	3.07	898	1.50	107,402	2,770,900	77.52
Great Northern	1,446,241	2.77	22,657	1.68	1,461,346	19,890,740	146.94
Green Bay & Western...	22,017	3.00	774	1.00	22,404	574,367	78.01
Hawthorne, Nebagamon & Superior	3,330	3.45	125	2.25	3,455	37,450	184.51
Hazelhurst & S. Eastern	621	3.35	.....	.....	621	5,241	252.86
Hillsboro & Northeastern	1,772	2.98	.....	.....	1,772	.....	.....
Iola & Northern.....	410	3.00	30	1.00	425	11,770	72.22
Kewaunee, Green Bay & Western	2,510	3.00	84	1.00	3,552	97,878	72.58
Lake Sup. Ter. & Trans-fer Ry. Co.....	5,100	2.73	32	1.71	5,116	137,085	74.64
Marinette, Tomahawk & Western	1,031	4.20	200	1.39	1,131	23,583	100.16
Mpolis, St. P. & S. Ste. Marie	346,405	2.92	3,092	2.01	347,951	6,632,914	104.92
Northern Pacific	2,237,205	2.79	8,029	2.19	2,241,355	31,625,289	141.74
Northwest Coal Ry. Co.	684	2.84	26	3.03	710	22,000	30.98
Stanley, Mer. & Phillips	5,084	3.70	148	2.00	5,158	116,626	88.45
Wisconsin & Michigan..	13,139	3.00	.....	.....	13,139	344,715	72.05
Wisconsin Central	358,005	1.86	2,434	1.07	359,221	5,567,932	129.03
Wisconsin Western	1,450	2.11	.....	.....	1,450	43,185	67.15
Min. Point & Northern..	2,079	3.21	.....	.....	2,079	38,556	107.87
Superior & Southeastern.	915	.....	.....	.....	915	.....	.....
Total	16,537,804	.....	116,778	.....	16,602,979	257,383,376	129.01

* Includes 5,745 tons coke and anthracite at \$4.53.

BRIDGES, 1905.

Bridges on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.

Stone .

Name of Company.	No.	Aggregate Length.		Min. Length.		Max. Length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern.....							
Ahnapee & Western							
Chicago, Milwaukee & St. Paul.....	1	360		360		360	
Chicago & Northwestern							
Chicago, St. Paul, Minneapolis & O.	25	298		3		20	
Chicago, Burlington & Quincy.....							
Chippewa River & Northern.....							
Drummond & Southwestern.....							
Duluth, South Shore & Atlantic.....							
Duluth, Superior & W. Terminal...							
Eastern Ry. Co. of Minn.....							
Fairchild & Northeastern.....							
Great Northern							
Green Bay & Western.....							
Hawthorne, Nebagamon & Superior							
Hazelhurst & S. E.....							
Illinois Central	32	232		4		28	
Iola & Northern							
Kewaunee, Green Bay & W.....							
Marquette Tomahawk & W.....							
Minneapolis, St. P. & S. Ste. M.....							
Northern Pacific							
Stanley, Merrill & Phillips.....							
Whiteomb & Morris							
Wisconsin Central							
Wisconsin Western							
Totals (26 roads reporting).....	58	890					

BRIDGES 1905.—Continued.

Bridges on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.—Continued.

Iron.

Name of Company.	No.	Aggregate Length.		Min. Length.		Max. Length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern.....	.....	.....	.....	.....	.....	.....	.....
Ahnapee & Western.....	1	48	.....	48	.....	48	.....
Chicago, Milwaukee & St. Paul.....	214	26,360	.....	8	.....	985	.....
Chicago & Northwestern.....	446	30,499	2	2	.....	2,289	6
Chicago, St. Paul, Minneapolis & O.	162	14,382	.....	14	.....	1,317	.....
Chicago, Burlington & Quincy.....	11½	4,806	.....	22	.....	1,452	.....
Chippewa River & Northern.....	.....	.....	.....	.....	.....	.....	.....
Drummond & Southwestern.....	.....	.....	.....	.....	.....	.....	.....
Duluth, South Shore & Atlantic....	6	212	2	16	.....	51	6
Duluth, Superior & W. Term.....	3	249	.....	30	.....	150	.....
Eastern Ry. Co. of Minn.....	8	2,212	.....	21	.....	1,378	.....
Fairchild & Northeastern.....	1	160	.....	160	.....	160	.....
Great Northern.....	.....	.....	.....	.....	.....	.....	.....
Green Bay & Western.....	12	2,012	.....	30	.....	624	.....
Hawthorne, Nebagamon & Superior	.....	.....	.....	.....	.....	.....	.....
Hazelhurst & S. E.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central.....	13	1,647	.....	25	.....	250	.....
Iola & Northern.....	.....	.....	.....	.....	.....	.....	.....
Kewaunee, Green Bay & W.....	2	180	.....	90	.....	90	.....
Marquette, Tomahawk & W.....	.....	.....	.....	.....	.....	.....	.....
Minneapolis, St. P. & S. Ste. M....	1½	233	.....	23	.....	200	.....
Northern Pacific.....	3	534	.....	69	.....	303	.....
Stanley, Merrill & Phillips.....	.....	.....	.....	.....	.....	.....	.....
Whitcomb & Morris.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin Central.....	49	11,097	1	26	.....	2,339	.....
Wisconsin Western.....	.....	.....	.....	.....	.....	.....	.....
Totals (26 roads reporting).....	933	94,631	5	.....	.....	.....	.....

BRIDGES 1905.—Continued.

Bridges on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.—Continued.

Wooden.

Name of Company.	No.	Aggregate Length.		Min. Length.		Max. Length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern.....	8	848	.....	64	.....	400	.....
Ahnapee & Western	5	6,700	.....	48	.....	1,296	.....
Chicago, Milwaukee & St. Paul	23	4,055	.....	48	.....	717	.....
Chicago & Northwestern.....	155	10,617	.....	4	.....	573	.....
Chicago, St. Paul, Minneapolis & O.	15	1,625	.....	49	.....	300	.....
Chicago, Burlington & Quincy .....	.....	.....	.....	.....	.....	.....	.....
Chippewa River & Northern.....	28	1,800	.....	2	.....	10	.....
Drummond & Southwestern.....	.....	.....	.....	.....	.....	.....	.....
Duluth, South Shore & Atlantic....	9	682	6	28	.....	150	.....
Duluth, Superior & W. Term.....	.....	.....	.....	.....	.....	.....	.....
Eastern Ry. Co. of Minn.....	.....	.....	.....	.....	.....	.....	.....
Fairchild & Northeastern.....	7	280	.....	30	.....	50	.....
Great Northern	11	2,461	.....	21	.....	1,378	.....
Green Bay & Western	106	4,400	.....	28	.....	430	.....
Hawthorne, Nebagamon & Superior	7	700	.....	30	.....	100	.....
Hazelhurst & S. E.....	1	277	.....	277	.....	277	.....
Illinois Central .....	.....	.....	.....	.....	.....	.....	.....
Iola & Northern	5	791	.....	60	.....	120	.....
Kewaunee, Green Bay & W.....	13	892	.....	16	.....	210	.....
Marquette, Tomahawk & W.....	13	1,690	.....	16	.....	567	.....
Minneapolis, St. P. & S. Ste M....	155	23,365	.....	15	.....	1,073	.....
Northern Pacific	3	423	.....	44	.....	110	.....
Stanley, Merrill & Phillips.....	2	202	6	42	6	160	.....
Whitcomb & Morris	4	72	.....	.....	.....	.....	.....
Wisconsin Central	7	1,404	8	47	.....	553	.....
Wisconsin Western	29	1,925	.....	14	.....	362	.....
Totals (26 roads reporting).....	606	65,210	8	.....	.....	.....	.....

BRIDGES 1905.—Continued.

Bridges on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.—Continued.

Combination.

Name of Company.	No.	Aggregate Length.		Min. Length.		Max. Length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern							
Ahnapee & Western							
Chicago, Milwaukee & St. Paul.....							
Chicago & Northwestern.....	2	399	6	42		357	6
Chicago, St. Paul, Minneapolis, & O.....							
Chicago, Burlington & Quincy.....							
Chippewa River & Northern.....							
Drummond & Southwestern.....							
Duluth, South Shore & Atlantic.....							
Duluth, Superior & W. Terminal.....							
Eastern Ry. Co. of Minn.....							
Fairchild & Northeastern.....							
Great Northern							
Green Bay & Western							
Hawthorne, Nebagamon & Superior.....							
Hazelhurst & S. E.....							
Illinois Central							
Iola & Northern.....							
Kewaunee, Green Bay & W.....	1	1,700		1,700		1,700	
Marinette, Towahawk & W.....							
Minneapolis, St. P. & S. Ste M.....	2½	2,293		331		1,573	
Stanley, Merrill & Phillips.....							
Northern Pacific	3	234		78		228	
Stanley, Merrill & Phillips.....							
Whitcomb & Morris							
Wisconsin Central					12		240
Wisconsin Western	16	2,682					
Totals (26 roads reporting).....	24½	7,308	6				

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS, 1905.

Trestles, tunnels and overhead crossings on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.

Trestles.

Name of Company.	No.	Aggregate Length.		Min. Length.		Max. Length	
		Feet.	In.	Feet.	In.	Feet.	In.
Chicago, Milwaukee & St. Paul.....	1,334	103,047	.....	6	.....	1,656	.....
Chicago & Northwestern.....	916	67,895	.....	14	.....	2,181	.....
Chicago St. Paul, Mpolis & Omaha..	326	24,842	.....	8	.....	1,200	.....
Drummond & Southwestern.....	1	210	.....	210	.....	210	.....
Duluth, South Shore & Atlantic.....	98	9,619	.....	16	.....	1,196	.....
Duluth, Superior & W. Term.....	2	2,284	.....	693	.....	1,591	.....
Eastern Ry. Co. of Minnesota.....	2	2,376	.....	820	.....	1,556	.....
Fairchild & Northeastern.....	.....	.....	.....	.....	.....	.....	.....
Great Northern.....	4	4,640	.....	693	.....	1,591	.....
Hawthorne, Nebagamon & Superior.	2	900	.....	78	.....	825	.....
Illinois Central.....	175	14,633	.....	13	.....	614	.....
Kewaunee, Green Bay & Western.....	.....	.....	.....	.....	.....	.....	.....
Marquette, Tomahawk & Western....	1	105	.....	105	.....	105	.....
Mpls., St. P., & S. Ste. M.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific.....	43	9,015	.....	13	.....	2,280	.....
Northwestern Coal Ry. Co.....	2	270	.....	111	.....	159	.....
Stanley, Merrill & Phillips.....	16	1,553	.....	.....	.....	.....	.....
Wisconsin Central.....	508	40,732	1	10	.....	1,468	.....
Wisconsin Western.....	16	161	.....	34	.....	466	.....
Total (20 roads reporting).....	3,386	282,282	1	.....	.....	.....	.....

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS, 1905.—Continued.

Trestles, tunnels and overhead crossings on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.—Continued.

Tunnels.

Name of Company.	No.	Aggregate Length.		Min. Length.		Max. Length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Chicago, Milwaukee & St. Paul.....	1	1,330	.....	1,330	.....	1,330	.....
Chicago & Northwestern.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. Paul, Mpolis & Omaha	1	872	.....	872	.....	872	.....
Chicago, Burlington & Quincy.....	.....	.....	.....	.....	.....	.....	.....
Drummond & Southwestern.....	.....	.....	.....	.....	.....	.....	.....
Duluth, South Shore & Atlantic.....	.....	.....	.....	.....	.....	.....	.....
Duluth, Superior & W. Term.....	.....	.....	.....	.....	.....	.....	.....
Eastern Ry. Co. of Minnesota.....	.....	.....	.....	.....	.....	.....	.....
Fairchild & Northeastern.....	.....	.....	.....	.....	.....	.....	.....
Great Northern.....	.....	.....	.....	.....	.....	.....	.....
Hawthorne, Nebagamon & Superior.	1	1,214	.....	1,214	.....	1,214	.....
Illinois Central.....	.....	.....	.....	.....	.....	.....	.....
Kewaunee, Green Bay & Western.....	.....	.....	.....	.....	.....	.....	.....
Marinette, Tomahawk & Western.....	.....	.....	.....	.....	.....	.....	.....
Mpolis, St. Paul & S. Ste. Marie.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific.....	.....	.....	.....	.....	.....	.....	.....
Northwestern Coal Ry. Co.....	.....	.....	.....	.....	.....	.....	.....
Stanley, Merrill & Phillips.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin Central.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin Western.....	1	404	.....	404	.....	404	.....
Total.....	4	3,320	.....	.....	.....	.....	.....

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS, 1905.—Continued.

Trestles, tunnels and overhead crossings on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.—Continued.

Overhead Highway Crossings.

Name of Company.	Bridges.			Conduits.			Trestles		
	No.	Height of Lowest Above Surface of Rail.		No.	Height of Lowest Above Surface of Rail.		No.	Height of Lowest Above Surface of Rail.	
		Feet.	In.		Feet.	In.		Feet.	In.
Chicago, Milwaukee & St. P...	10	17	5	.....	.....	.....	38	16	4
Chicago & Northwestern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. P., Mpolis & O.	11	17	6	.....	.....	.....	.....	.....	.....
Chicago, Burlington & Quincy	.....	.....	.....	.....	.....	.....	.....	.....	.....
Drummond & Southwetsern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Duluth, S. S. & Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Duluth, Sup. & West. Term.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eastern Ry. Co. of Minnesota.	2	21	.....	.....	.....	.....	.....	.....	.....
Fairchild & Northeastern.....	1	28	.....	.....	.....	.....	.....	.....	.....
Great Northern	2	21	.....	.....	.....	.....	.....	.....	.....
Hawthorne, Nebag. & Sup.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central .....	.....	.....	.....	.....	.....	.....	5	19	.....
Kewaunee, G. Bay & Western	1	22	.....	.....	.....	.....	.....	.....	.....
Marinette, Tom. & Western..	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mpolis, St. P. & S. Ste. M....	.....	.....	.....	.....	.....	.....	2	22	.....
Northern Pacific .....	.....	.....	.....	.....	.....	.....	1	21	8
Northwestern Coal Ry. Co....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stanley, Merrill & Phillips.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin Central	13	17	6	.....	.....	.....	.....	.....	.....
Wisconsin Western .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	40	.....	.....	.....	.....	.....	46	.....	.....

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS, 1905.—Continued.

Trestles, tunnels and overhead crossings on railroads in Wisconsin as reported to the Railroad Commission for the year ending June 30, 1905.—Continued.

Overhead Railway Crossings.

Name of Company.	Bridges.			Conduits.		Trestles.			
	No.	Height of Lowest Above Surface of Rail.		No.	Height of Lowest Above Surface of Rail.		No.	Height of Lowest Above Surface of Rail.	
		Feet.	In.		Feet.	In.		Feet.	In.
Chicago, Milwaukee & St. P.	6	17	5½	.....	.....	2	22	6
Chicago & Northwestern	.....	.....	.....	.....	.....	.....	.....	.....
Chicago, St. P., M. & O.	2	17	6	.....	.....	.....	.....	.....
Chicago, Burlington & Quincy	.....	.....	.....	.....	.....	.....	.....	.....
Drummond & Southwestern	.....	.....	.....	.....	.....	.....	.....	.....
Duluth, S. S. & Atlantic	2	22	.....	.....	.....	.....	.....	.....
Duluth, Superior & W. Term.	.....	.....	.....	.....	.....	.....	.....	.....
Eastern Ry. Co. of Minn.	.....	.....	.....	.....	.....	.....	.....	.....
Fairchild & Northeastern	.....	.....	.....	.....	.....	.....	.....	.....
Great Northern	.....	.....	.....	.....	.....	.....	.....	.....
Hawthorne, Nebag. & Sup.	.....	.....	.....	.....	.....	.....	.....	.....
Illinois Central	1	18	.....	.....	.....	.....	.....	.....
Kewaunee, Green Bay & W.	.....	.....	.....	.....	.....	.....	.....	.....
Marinette, Tomahawk & W.	.....	.....	.....	.....	.....	.....	.....	.....
Mpls., St. P. & S. Ste. M.	.....	.....	.....	.....	.....	.....	.....	.....
Northern Pacific	.....	.....	.....	.....	.....	.....	.....	.....
Northwestern Coal Ry. Co.	.....	.....	.....	.....	.....	.....	.....	.....
Stanley, Merrill & Phillips	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin Central	1	17	3	.....	.....	4	17	5
Wisconsin Western	.....	.....	.....	.....	.....	.....	.....	.....
Total	12	.....	.....	.....	.....	6	.....	.....

BRIDGES ON RAILROADS IN WISCONSIN.

As reported to the Railroad Commission for the year ending June 30, 1906.

Stone.

Name of Company	No.	Aggregate length.		Minimum length.		Maximum length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern.....							
Chicago, Burlington & Quincy.....	1	179		179		179	
Chicago, Milwaukee & St. Paul.....	1	360		360		360	
Chicago & Northwestern.....							
Chicago, St. P., Mpolis, & Omaha..	29	2,348		40		493	
Chippewa River & Northern.....							
Drummond & Southwestern.....							
Duluth, South Shore & Atlantic....							
Duluth, Superior & Western Ter...							
Fairchild & Northeastern.....							
Green Bay & Western.....							
Hawthorne, Nebagamon & Superior.							
Hazelhurst & Southeastern.....							
Illinois Central.....	32	232		4		8	
Iola & Northern.....							
Kewaunee, Green Bay & Western...							
Marquette, Tomahawk & Western...							
Mpolis, St. P. & Sault Ste. Marie..							
Northern Pacific.....							
Stanley, Merrill & Phillips.....							
Wisconsin Western.....							
Wisconsin & Michigan.....							
Wisconsin Central.....							
Chicago & Lake Superior.....							
Great Northern.....							
Mineral Point & Northern.....							
Whitcomb & Morris.....							
Ahnapee & Western.....							
Hillsboro & Northeastern.....							
Total.....	63	3,119		4		493	

BRIDGES ON RAILROADS IN WISCONSIN.—Continued.

As reported to the Railroad Commission for the year ending June 30, 1906.

Iron.

Name of Company.	No.	Aggregate length.		Minimum length.		Maximum length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern.....							
Chicago, Burlington & Quincy.....	11½	6,038		20		1,455	
Chicago, Milwaukee & St. Paul.....	226	27,472		8		985	
Chicago & Northwestern.....	470	31,186	4	5		2,289	6
Chicago, St. P., Mpolis & Omaha..	138	11,450		14		1,317	
Chippewa River & Northern.....							
Drummond & Southwestern.....							
Duluth, South Shore & Atlantic.....	7	345	6	16		66	8
Duluth, Superior & Western Term..	3	249		30		150	
Fairchild & Northeastern.....	1	160		160		160	
Green Bay & Western.....	12	2,012		30		624	
Hathorne, Nebagamon & Superior..							
Hazelhurst & Southeastern.....							
Illinois Central.....	13	1,647		25		250	
Iola & Northern.....							
Kewaunee, Green Bay & Western...	2	180		90		90	
Marinette, Tomahawk & Western...							
Mpolis, St. P. & S. Ste. Marie.....	1½	223		23		200	
Northern Pacific.....	6	754		69		303	
Stanley, Merrill & Phillips.....							
Wisconsin Western.....							
Wisconsin & Michigan.....	4	429		60		162	
Wisconsin Central.....	48	11,140	7	26		2,339	
Chicago & Lake Superior.....							
Great Northern.....	11	2,461		21		1,378	
Mineral Point & Northern.....							
Whitcomb & Morris.....							
Ahnapee & Western.....	1	48		48		48	
Hillsboro & Northeastern.....							
Total.....	955	95,795	5	5		2,339	

BRIDGES ON RAILROADS IN WISCONSIN.—Continued.

As reported to the Railroad Commission for the year ending June 30, 1906.

Wooden.

Name of Company.	No.	Aggregate length.		Minimum length.		Maximum length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern.....	8	848	.....	64	.....	400	.....
Chicago, Burlington & Quincy.....	.....	.....	.....	.....	.....	.....	.....
Chicago, Milwaukee & St. Paul.....	37	3,392	.....	48	.....	717	.....
Chicago & Northwestern.....	142	10,351	8	4	.....	575	10
Chicago St. Paul, Mpolis & Omaha.	19	1,788	.....	49	.....	240	.....
Chippewa River & Northern.....	21	.....	.....	20	.....	1,800	.....
Drummond & Southwestern.....	.....	.....	.....	.....	.....	.....	.....
Duluth, South Shore & Atlantic.....	9	639	6	28	.....	150	.....
Duluth, Superior & W. Terminal.....	.....	.....	.....	.....	.....	.....	.....
Fairchild & Northeastern.....	7	280	.....	30	.....	50	.....
Green Bay & Western.....	106	4,400	.....	28	.....	430	.....
Hawthorne, Nebagamon & Superior.	7	700	.....	30	.....	100	.....
Hazelhurst & Southeastern.....	1	277	.....	277	.....	277	.....
Illinois Central.....	.....	.....	.....	.....	.....	.....	.....
Iola & Northern.....	5	791	.....	60	.....	120	.....
Kewaunee, Green Bay & Western...	13	892	.....	16	.....	210	.....
Marinette, Tomahawk & Western...	13	1,123	.....	16	.....	16	.....
Mpolis, St. P. & S. Ste. Marie.....	155	23,365	.....	15	.....	1,078	.....
Northern Pacific.....	4	677	.....	44	.....	254	.....
Stanley, Merrill & Phillips.....	2	202	.....	42	.....	160	.....
Wisconsin Western.....	29	1,925	.....	14	.....	362	.....
Wisconsin & Michigan.....	1	200	.....	200	.....	200	.....
Wisconsin Central.....	7	1,404	8	47	.....	553	.....
Chicago & Lake Superior.....	2	100	.....	.....	.....	.....	.....
Great Northern.....	.....	.....	.....	.....	.....	.....	.....
Mineral Point & Northern.....	.....	.....	.....	.....	.....	.....	.....
Whitcomb & Morris.....	4	75	.....	.....	.....	.....	.....
Ahnapee & Western.....	5	1,700	.....	48	.....	1,296	.....
Hillsboro & Northeastern.....	.....	.....	.....	.....	.....	.....	.....
Total	597	55,130	10	4	.....	1,800	.....

BRIDGES ON RAILROADS IN WISCONSIN.—Continued.

As reported to the Railroad Commission for the year ending June 30, 1906.

Combination.

Name of Company.	No.	Average length.		Minimum length.		Maximum length.	
		Feet	In.	Feet	In.	Feet.	In.
Abbotsford & Northeastern.....							
Chicago, Burlington & Quincy.....							
Chicago, Milwaukee & St. Paul.....							
Chicago & Northwestern.....	2	399	6	42		357	6
Chicago, St. Paul, Mpolis. & Omaha							
Chippewa River & Northern.....							
Drummond & Southwestern.....							
Duluth, South Shore & Atlantic.....							
Dul., Superior & Western Terminal							
Fairchild & North Eastern.....							
Green Bay & Western.....							
Hawthorne Nebagamon & Superior.....							
Hazelhurst & Southeastern.....							
Illinois Central.....							
Iola & Northern.....							
Kewaunee, Green Bay & Western.....	1	1,700		1,700		1,700	
Marinette, Tomahawk & Western.....	1	567		567		567	
Mpls., St. Paul & St. Ste. Marie.....	2½	2,293		331		1,573	
Northern Pacific.....							
Stanley, Merrill & Phillips.....							
Wisconsin Western.....	16	2,682		12		240	
Wisconsin & Michigan.....							
Wisconsin Central.....							
Chicago & Lake Superior.....							
Great Northern.....							
Mineral Point & Northern.....	5	469		60		123	
Whitcomb & Morris.....							
Ahnapee & Western.....							
Hillsboro & Northeastern.....							
Total.....	25½	8,110	6	12		1,700	

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS ON ROADS OPERATING IN WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR YEAR ENDING JUNE 30, 1906, FOR WISCONSIN.

Trestles.

Name of Company.	No.	Aggregate length.		Minimum length.		Maximum length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern	325	24,633		8		1,295	
Chicago, Burlington & Quincy	1,179	98,874		64		1,751	
Chicago, Milwaukee & St. Paul	1,531	116,921	1	5		1,652	
Chicago & Northwestern	580	36,345		14		2,181	
Chi., St. P., Minneapolis & Omaha							
Chicago, Lake Shore & Eastern							
Chippewa River & Northern							
Drummond & Southwestern	1	210		210		210	
Duluth, South Shore & Atlantic	37	9,459		16		1,196	
Dul., Superior & Western Terminal	2	2,264		693		1,571	
Fairchild & North Eastern							
Green Bay & Western							
Hawthorne, Nebagamon & Superior	2	900		75		825	
Hazelhurst & Southeastern							
Illinois Central	174	14,249		8		614	
Iola & Northern							
Kewaunee, Green Bay & Western							
Lake Superior Terminal & Transfer	1	543		543		543	
Marinette, Tomahawk & Western	1	105		105		105	
Mpls. St. Paul & Sault Ste. Marie							
Northern Pacific	33	8,176		13		2,280	
Northwestern Coal	2	270		111		159	
Stanley, Merrill & Phillips	2	268		79		189	
Superior & South Eastern	6	592		43		176	
Wisconsin Western	16			34		463	
Wisconsin & Michigan	1	200		200		200	
Wisconsin Central	500	38,266	2	10		723	7
Bayfield Transfer	2	1,235		610		625	
Chicago & Lake Superior							
Great Northern	4	4,640		693		1,571	
Mineral Point & Northern	60	2,672		16		160	
Ahnapee & Western							
Total (26 roads reporting)	4,459	360,821	2	5		2,280	

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS ON ROADS OPERATING IN WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR YEAR ENDING JUNE 30, 1906, FOR WISCONSIN.—Continued.

Tunnels.

Name of Company.	No.	Aggregate length.		Minimum length.		Maximum length.	
		Feet.	In.	Feet.	In.	Feet.	In.
Abbotsford & Northeastern							
Chicago, Burlington & Quincy							
Chicago, Milwaukee & St. Paul....	1	1,330		1,330		1,330	
Chicago & Northwestern	4	7,446		354		3,822	
Chi., St. P., Minneapolis & Omaha	1	872		872		872	
Chicago, Lake Shore & Eastern							
Chippewa River & Northern							
Drummond & Southwestern							
Duluth, South Shore & Atlantic ...							
Dul., Superior & Western Terminal ..							
Fairchild & North Eastern							
Green Bay & Western							
Hawthorne, Nebagamon & Superior ..							
Hazelhurst & Southeastern							
Illinois Central	1	1,214		1,214		1,214	
Iola & Northern							
Kewaunee, Green Bay & Western ...							
Lake Superior Terminal & Transfer ..							
Marinette, Tomahawk & Western							
Mpls., St. Paul & Sault Ste. Marie ..							
Northern Pacific							
Northwestern Coal							
Stanley, Merrill, & Phillips							
Superior & South Eastern							
Wisconsin Western	1	404		404		404	
Wisconsin & Michigan							
Wisconsin Central							
Bayfield Transfer							
Chicago & Lake Superior							
Great Northern							
Mineral Point & Northern							
Ahnapee & Western							
Total (26 roads reporting.).....	7	11,266		354		3,822	

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS ON ROADS OPERATING IN WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR YEAR ENDING JUNE 30, 1906.—Continued.

Overhead Highway Crossings.

Name of Company.	Bridges.			Conduits.			Trestles.		
	Number.	Height of lowest above surface of rail.		Number.	Height of lowest above surface of rail.		Number.	Height of lowest above surface of rail.	
		Feet.	In.		Feet.	In.		Feet.	In.
Abbotsford & Northeastern									
Chicago, Burlington & Quincy									
Chicago, Milwaukee & St. P.	10	17	5	1		38	16	4	
Chicago & Northwestern	52	16	5			4	18		
Chicago, St. Paul, Minneapolis & Omaha	11	17	6						
Chi., Lake Shore & Eastern									
Chippewa River & Northern									
Drummond & Southwestern									
Dul., South Shore & Atlantic									
Dul., Superior & W. Terminal									
Fairchild & North Eastern	1	28							
Green Bay & Western									
Hawthorne, Nebagam'n & Sup.									
Hazelhurst & Southeastern									
Illinois Central						5	19		
Iola & Northern									
Kewaunee, Green Bay & West.						1	19	2	
Lake Sup., Terminal & Trans.									
Marquette, Tomahawk & West.									
Mpls., St. P. & S. St. M.						2	22		
Northern Pacific						1	218		
Northwestern Coal									
Stanley, Merrill & Phillips									
Superior & South Eastern									
Wisconsin Western									
Wisconsin & Michigan									
Wisconsin Central						13	17	6	
Bayfield Transfer									
Chicago & Lake Superior									
Great Northern	2	21							
Mineral Point & Northern									
Ahnapee & Western									
Total (26 roads reporting.)	76	17	5			64	16	4	

TRESTLES, TUNNELS AND OVERHEAD CROSSINGS ON ROADS OPERATING IN WISCONSIN AS REPORTED TO THE RAILROAD COMMISSION FOR YEAR ENDING JUNE 30, 1906.—Continued.

Overhead Railway Crossings.

Name of Company.	Bridges.			Conduits.			Trestles.		
	Number.	Height of lowest above surface of rail.		Number.	Height of lowest above surface of rail.		Number.	Height of lowest above surface of rail.	
		Feet.	In.		Feet.	In.		Feet.	In.
Abbotsford & Northeastern									
Chicago, Burlington & Quincy									
Chi., Milwaukee & St. Paul	6	17	5½			2		22	6
Chicago & Northwestern	6	16				3		22	1
Chicago, St. Paul, Minneapolis & Omaha	2	17	6						
Chi., Lake Shore & Eastern									
Chippewa River & Northern									
Drummond & Southwestern									
Dul., South Shore & Atlantic	2	22							
Dul., Superior & W. Terminal									
Fairchild & North Eastern									
Green Bay & Western									
Hawthorne, Nebagamon & Sup.									
Hazelhurst & Southeastern									
Illinois Central	1	18							
Iola & Northern									
Kewaunee, Green Bay & W.									
Lake Sup. Terminal & Trans.									
Marquette, Tomahawk & West.									
Mpls., St. P. & S. Ste. M.									
Northern Pacific									
Northwestern Coal									
Stanley, Merrill & Phillips									
Superior & South Eastern									
Wisconsin Western									
Wisconsin & Michigan									
Wisconsin Central	1	17	3			4		17	5
Bayfield Transfer									
Chicago & Lake Superior									
Great Northern									
Mineral Point & Northern									
Ahnapee & Western									
Total (26 roads reporting.)	18	16				9		17	5

NET ADDITIONS TO ROADS AND
Net Addition to Road and Equipment of Railroads Operating as Reported

Name of Company,	Right of way.	Other real estate.	Fences.	Grading and bridge and culvert masonry.
1. Chi., Milwaukee & St. Paul		\$79,486 28	\$8,060 81	
2. Chicago & Northwestern ...	\$1,608,825 28		78,919 90	\$1,863,786 47
3. Chi., St. P., Mpls. & Omaha	79,320 93		110 81	95,286 79
4. Chicago, Burl. & Quincy ...	1,094,021 21	25,102 84	33,020 76	1,784,330 88
5. Chi., Lake Shore & Eastern				
6. Illinois Central	35,119 09		144,908 13	170,302 80
7. Chippewa Valley & Northern	1,232 60			12,748 02
8. Dul. South Shore & Atlantic	6,834			3,403 07
9. Great Northern	538,965 08	28,905 02	20,764 79	384,370 45
10. Fairchild & Northeastern ..	426 75			651 03
11. Hawthorne, Nebagamon & Superior				10 00
12. La Crosse & S. E.	6,878 85		2,670 32	74,740 79
13. L. Sup. Terminal & Trans.				
14. Mineral Point & Northern ..	923 32			
15. Mpls., St. P. & S. Ste. M.	20,911 10		950 87	
16. Stanley, Merrill & Phillips			1,060 24	31 49
Total	\$3,386,692 85	\$133,494 14	\$292,258 50	\$4,389,671 82

EQUIPMENT, WHOLE LINE 1906.

to the Railroad Commission for the year ending June 30, 1906, Whole Line.

Bridges and trestle.	Rails.	Ties.	Other super-structure.	Buildings, furniture and fixtures.	Shop, machinery and tools.	No.
\$108,096 39						1
1,325,643 38	\$922,535 58	\$418,715 54	\$1,534,533 62	\$871,770 84	\$88,763 58	2
79,174 33	44,652 18	17,307 16	48,203 48	99,278 07		3
761,796 33	738,060 65	507,082 04	28,381 03	91,695 02	16,619 49	4
		166,646 96				5
50,218 47	46,642 52	19,384 80		13,047 78	99,457 60	6
	15,949 83	926 27			369 23	7
				12,516 63	3,007 47	8
135,356 81	339,263 77	152,201 96		89,602 82	10,643 16	9
3,374 38		12,261 44	986 70		116 65	10
		22,812 74				11
2,099 88		170,465 67		17,876 32	140 87	12
				24,714 93		13
	395 46					14
				109,080 66	55,066 87	15
9 20	27 00	261 01	644 14	100 13		16
\$2,465,769 17	\$2,107,493 02	\$1,262,118 09	\$1,612,748 97	\$1,329,683 20	\$274,189 92	....

¹ Includes rails.

² Credits.

NET ADDITIONS TO ROAD AND EQUIP
Construction,

Name of Company.	Engineer- ing expenses.	Interest during construc- tion.	Discount on securities.	Telegraph line.
1. Chicago, Milwaukee & St. P.				
2. Chicago & Northwestern....	\$128,175 80		\$135,731 73	\$4,079 61
3. Chi., St. P., M. & O.....	7,756 70		4,550 00	1,337 37
4. Chicago, Burlington & Q...	79,348 21			49,676 69
5. Chicago, L. Shore & Eastern				
6. Illinois Central	5,516 77			2,067 82
7. Chippewa Val. & Northern	1,499 24	\$3,473 77		364 60
8. Duluth, S. Shore & Atlantic	12,067 67			54 50
9. Great Northern	23,193 66			5,273 96
10. Fairchild & North Eastern.				
11. Hawthorne, Nebagamon & S.				
12. La Crosse & S. E.....	7,692 45	16,750 00		545 53
13. L. Sup. T. & T. Ry. Co.				
14. Mineral Point & Northern.				
15. Marinette, Tomahawk & W.				
16. M., St. P. & S. Ste. M...				
17. Northern Pacific				
18. Stanley, Merrill & Phillips.	14 22			59 69
19. Wisconsin & Michigan				
20. Wisconsin Central				
Total	\$265,264 72	\$20,223 77	¹ \$31,181 73	\$63,459 77

¹Credits.

MENT, WHOLE LINE, 1906—Continued.

continued.

Wharfing, etc.	Sidings and yard extensions.	Terminal facilities and eleva- tors.	Purchase of constructed road.	Other items.	Total con- struction.	No.
.....	\$4,252,819 27	\$45,235 62	.....	\$630,277 46	\$5,123,975 83	1
\$30,479 66	.....	¹ 19,987 71	.....	1,006,209 18	9,826,719 00	2
5,356 87	97,144 96	.....	.....	.....	579,489 65	3
.....	.....	.....	3,771 37	1,215,809 40	6,428,715 92	4
.....	.....	.....	.....	¹ 4,518 04	62,128 92	5
.....	.....	.....	.....	485,261 43	1,071,927 21	6
.....	.....	.....	.....	1,500 00	38,063 59	7
265,315 78	55,152 21	.....	.....	.....	353,377 54	8
.....	.....	.....	.....	1,046,057 14	2,774,603 62	9
.....	.....	.....	.....	.....	17,816 98	10
.....	.....	.....	.....	65	12,802 00	11
.....	.....	.....	.....	.....	199,860 68	12
.....	9,830 92	.....	.....	.....	34,545 85	13
.....	.....	.....	.....	12,325 42	13,644 20	14
.....	136 96	.....	.....	.....	136 96	15
.....	909 99	.....	.....	.....	186,919 49	16
.....	.....	.....	.....	283,012 90	283,012 90	17
.....	.....	.....	.....	8,652 48	10,503 58	18
.....	.....	.....	.....	451,111 43	451,111 43	19
.....	.....	.....	¹ 162,461 51	.....	¹ 162,461 51	20
\$301,152 31	\$4,415,994 31	\$25,247 91	¹ \$158,690 14	\$5,135,699 45	\$27,291,289 75	

NET ADDITIONS TO ROAD AND EQUIP¹

Equip

Name of Company.	Locomotives.	Passenger cars.	Sleeping, parlor and dining cars.	Baggage, express and postal cars.
1 Chi., Milwaukee & St. Paul		\$350,556 38	\$351,483 31	\$120,754 79
2. Chicago & Northwestern ..	\$512,875 91	253,942 20	29,924 30	47,937 12
3. Chi., St. P., Mpls. & Omaha ..	258,449 06	44,133 50	37,021 06	18,225 32
4. Chicago, Burl. & Quincy ..	1,782,386 87	1758 31	38,790 47	162,029 07
5. Chi., Lake Shore & Eastern				
6. Illinois Central	452,317 05		14,800 00	
7. Chippewa Valley & Northern	1,137 87			
8. Dul., S. Shore & Atlantic			33,076 12	
9. Great Northern	1,305,401 41	114,431 33	305,121 02	50,955 63
10. Fairchild & North Eastern	1950 00			
11. Green Bay & Western		16,500 00		
12. Hawthorne, Nebagamon & Superior	11,000 00			
13. Hazelhurst & Southeastern ..				
14. La Crosse & South Eastern ..	5,488 50	2,814 00		
15. L. Sup. Terminal & Trans				
16. Mineral Point & Northern	1,163 60			
17. Marinette, Tomahawk & W. ..				
18. Mpls., St. P. & S. Ste. M. ..	582,188 02	56,004 65	104,229 19	17,008 23
19. Northern Pacific				
20. Stanley, Merrill & Phillips ..	4,500 00	2,243 70		
21. Wisconsin & Michigan	21,469 32	4,018 89		
22. Wisconsin Central				
Total	\$4,915,427 61	\$843,886 34	\$914,445 47	\$192,852 08

¹ Credits.

² Less \$6,000,000 charged against income; \$151,337.35, land income credited account P. & W. Ry., and sinking fund bonds of 1879 retired and credited "Cost of Road," leaving \$6,912,692.94 cost of construction and equipment.

MENT, WHOLE LINE, 1906.—Continued.

ment.

Combina- tion cars.	Freight cars.	Other cars of all classes.	Floating equipment.	Total equip- ment.	Total con- struction and equip- ment.	No.
.....	\$2,171,627 64	\$104,255 37	.....	\$3,098,677 49	\$8,222,653 32	1
.....	2,511,631 76	14,000 00	.....	3,370,311 29	213,197,030 29	2
.....	243,132 66	.....	.....	600,951 60	1,180,441 25	3
\$417 90	1,489,701 83	137,540 36	.....	3,386,050 10	9,814,766 02	4
.....	.....	4,805 98	.....	4,805 98	66,034 00	5
.....	1,261,530 60	6,033 96	.....	1,734,631 61	2,806,608 82	6
.....	3,540 00	4,400 00	.....	9,077 87	47,141 46	7
.....	259,326 47	1,073 94	.....	293,476 53	646,854 07	8
.....	1,560,797 77	86,751 74	.....	3,423,458 96	6,198,062 58	9
.....	14,827 70	.....	.....	15,777 70	12,039 28	10
.....	10,200 00	.....	.....	26,700 00	26,700 00	11
.....	1,350 00	664 60	.....	18,985 40	111,787 49	12
.....	.....	529 40	.....	529 40	529 40	13
975 00	1,392 00	1,165 10	.....	11,834 60	211,695 28	14
.....	.....	.....	.....	.....	34,545 85	15
.....	1,329 93	.....	.....	2,493 53	16,137 73	16
.....	.....	11,043 00	.....	11,043 00	1906 04	17
12,872 13	1,083,330 11	26,158 53	.....	1,881,790 86	2,068,710 35	18
.....	.....	516,309 76	.....	516,309 76	799,322 66	19
.....	.....	.....	.....	6,743 70	17,247 28	20
.....	106,434 72	14,574 01	\$3,883 52	131,232 44	582,343 87	21
.....	.....	.....	.....	.....	1162,461 51	22
\$14,265 08	\$10,700,487 84	\$598,071 73	\$3,883 52	\$18,483,319 62	\$45,774,609 37	....

RECAPITULATION SHOWING CAPITAL STOCK, BONDS, AND
INDEBT

Name of Company.	Capital stock.	Bonds.	Equipment trust obliga- tions.	Current liabilities.
1. Chi., Mil. & St. Paul....	\$107,838,300 00	\$121,849,500 00		
2. Chicago & Northwestern.	102,345,700 53	164,214,000 00		\$7,799,122 90
3. Ch., St. P., M. & O.....	34,050,126 62	29,376,800 00		
4. Chicago, Bur. & Quincy.	110,839,100 00	174,172,000 00		
5. Chi., L. S. & E.....	650,000 00	3,230,000 00	\$2,324,000 00	
6. Illinois Central	95,040,000 00	80,394,275 00		
7. Duluth, S. Shore & Atl.	22,000,000 00	23,000,000 00	406,493 19	4,252,581 75
8. Great Northern	149,546,050 00	107,612,600 00		
9. E. Ry. Co. of Minn.....	16,000,000 00	9,700,000 00		
10. Green Bay & Western....	2,500,000 00	7,600,000 00		
11. C., Har. & G. Lake.....	150,000 00	125,000 00		
12. M., St. P. & S. Ste. M..	21,000,000 00	50,115,000 00	40,184 91	2,726,016 37
13. Northern Pacific	155,000,000 00	186,275,500 00	70,312 68	107,612,600 00
14. Winona Bridge Ry. Co....	400,000 00	384,000 00		
15. Wisconsin & Michigan....	951,500 00	2,401,000 00		
16. Wisconsin Central	30,000,000 00	30,191,000 00	755,485 00	
Total	\$848,310,777 15	\$990,640,675 00	\$3,596,475 78	\$122,390,321 02

¹N. P. & G. P. Joint Bonds. N. P. proportion issued in exchange for C., B. & Q. R. R. Stock. Not included in total.

²Apportioned to R. R. and Land Grant.

³This amount includes all bonds issued under Superior & Duluth Div. Term. Mtg. covering 160.56 miles under construction but not included in mileage, but in obtaining "amount per mile of line" both the bonds, viz.: \$3,485,000.00 are excluded.

OTHER OBLIGATIONS: MILEAGE, AMOUNT PER MILE, OF STOCK EDNESS, 1906.

Total amount outstanding.	Apportionment.		Total Amount Per Mile of Road.		Amount per mile—stock.	No.
	To railroads.	To other properties.	Miles.	Total amount.		
\$229,687,800 00	\$229,687,800 00	.....	7,029.49	\$32,674 89	.....	1
274,358,823 43	271,998,823 43	\$2,360,000 00	7,355.31	36,976 92	.....	2
63,426,926 62	63,426,926 62	.....	1,627.98	38,960 51	.....	3
285,011,100 00	285,011,100 00	.....	8,473.93	33,634 00	.....	4
6,204,000 00	6,204,000 00	.....	202.16	30,688 00	.....	5
175,434,275 00	175,434,275 00	.....	4,440.59	39,057 00	.....	6
49,659,074 94	49,659,074 94	.....	582.05	85,172 00	.....	7
257,158,650 00	.....	257,158,650 00	.....	.....	.....	8
25,700,000 00	23,500,000 00	2,200,000 00	501.46	46,863 00	.....	9
10,100,000 00	10,100,000 00	.....	225.00	44,889 00	.....	10
275,000 00	275,000 00	.....	11.00	24,999 99	.....	11
73,881,201 28	73,881,201 28	.....	2,134.73	34,609 15	.....	12
448,958,412 68	448,958,412 68	.....	5,884.43	58,008 00	.....	13
784,000 00	784,000 00	.....	1.03	761,165 00	.....	14
3,352,500 00	3,352,500 00	.....	151.45	36,270 53	.....	15
60,946,485 00	60,946,485 00	.....	982.51	58,484.37	.....	16
\$1,964,938,248 95	\$1,703,219,508 95	\$261,718,650 00	39,603.12	\$1,362,452 36	.....

WISCONSIN MILEAGE, 1904 AND 1905.

Comparative Statement of Railroad Mileage in Wisconsin on June 30, 1904, and June 30, 1905, as reported to the Railroad Commission.

Name of Company.	Miles of road operated June 30, 1904.	Miles of road operated June 30, 1905.	Increase.	Decrease.	Remarks.
Abbotsford & Northeastern	15.16	15.16	.....	.....
Ahnapee & Western	34.00	34.00	.....	.....
Big Falls Railway Co.	15.86	21.00	5.14	.....	No explanation given for increase in mileage.
Bayfield Transfer	21.00	.....	.....	21.00	Reported by the Bayfield, Lake Shore & Western for 1905.
Chicago, Milwaukee & St. Paul	1,723.87	1,725.42	1.55	.....	Extension: Gleason southeast, 1.55 miles.
Chicago & Northwestern	1,778.65	1,778.65	.....	.....
Chicago, St. P., Minn. & O.	738.28	747.97	9.69	.....	Extension: Radisson to Winter, 9.69 miles.
Chicago, Burlington & Quincy	223.10	223.10	.....	.....
Chicago, Lake Shore & Eastern	18.19	18.56	.37	.....	Extension at Bay View Works, Milwaukee, .43 mile; tracks taken up at same place .06 mile.
Chicago & Lake Superior	3.00	3.00	.....	.....
Illinois Central	91.31	91.31	.....	.....
Chippewa River & Northern	24.00	24.00	.....	.....
Chi., Harvard & Geneva L.	5.50	5.50	.....	.....
Chippewa Valley & Northern	10.32	10.00	.....	.32	No explanation given for decrease in mileage.
Drummond & Southwestern	21.72	8.18	.....	13.54	Abandoned 13.54 miles of road.
Duluth, South Shore & Atlantic	112.47	111.20	.....	1.27	Changes in branches and spurs decrease mileage 1.27 miles.
Duluth, Superior & W. Term. ....	.....	.....	.....	.....	Reported by the Great Northern Ry. Co.
Dunbar & Wausaukee	13.50	13.50	.....	.....
Fairchild & Northeastern	33.00	33.00	.....	.....
Great Northern	37.79	37.79	.....	.....
Green Bay & Western	225.00	225.00	.....	.....
Glenwood & Northern	14.00	14.00	.....	.....
Hawthorne, Nebagamon & S.	33.50	27.50	.....	6.00	Extensions: Poplar Crossing to Taylor's Works, 7 miles; Bell siding to Casey's Works, 2 miles; Blueberry to Casey's Works, 4 miles. No explanation given for decrease in mileage.
Hazelhurst & Southeastern	11.00	11.00	.....	.....
Holmes & Son Railway	24.00	24.00	.....	.....
Iola & Northern	4.70	4.70	.....	.....
Kewaunee, Green Bay & W.	36.70	36.70	.....	.....

Lake Shore & Eastern.....		20.50	20.50	.....	Not reported in 1904.
Lake Sup. Term. & Trans. Co.	16.33	16.33	.....	.....	.....
Mattoon Railway Co.	29.36	29.36	.....	.....	.....
Marinette, Tomahawk & West.	39.77	43.77	4.00	.....	Extension: Somo Jct. to Wisconsin River Dam, 4 miles.
Minneapolis, St. P. & Ashland	45.50	45.75	.25	.....	No explanation given for increase in mileage.
Minneapolis, St. P. & S. Ste. M.	355.66	355.66	.....	.....	.....
Northern Pacific	145.97	145.42	.....	.55	Decrease in spurs to industries .55 mile.
Northwestern Coal Ry. Co.....	8.00	8.00	.....	.....	.....
Oshkosh Transportation Co.....	.....	.....	.....	.....	Reported by the C. & N. W. Ry. Co.
Robbins Railway Co.....	26.00	30.00	4.00	.....	No explanation given for increase in mileage.
Stanley, Merrill & Phillips....	40.05	52.36	12.31	.....	No explanation given for increase in mileage.
Winona Bridge Ry. Co.....	.....	.....	.....	.....	Reported by C., B. & Q. Ry.
Wisconsin & Michigan.....	45.62	73.98	28.36	.....	Extensions: Line Everett Jct., Mich., west, 31.74 miles; Lake Noquebay Branch 3 miles. Lines straightened and grades reduced.
Whitecomb & Morris.....	6.00	6.00	.....	.....	.....
Wisconsin Central	841.29	841.29	.....	.....	New road. Formerly the Bayfield Transfer.
Wisconsin Western	51.97	51.97	.....	.....	Reported by the Great Northern Ry. Co.
Bayfield, Lake Shore & W.	.....	12.00	12.00	.....	Not reporting in 1904.
Eastern Ry. Co. of Minn.....	.....	.....	.....	.....	New road.
Hillsboro & N. E.....	.....	5.00	5.00	.....	New road.
Roddis Lumber & Veneer Co....	.....	10.00	10.00	.....	Reported by M., St. P. & S. S. M. Ry. in 1905.
Superior & S. E.....	.....	7.79	7.79	.....	New road.
Tony & N. E.....	2.20	.....	.....	2.20	.....
La Crosse & S. E.....	.....	43.81	43.81	.....	.....
Mineral Point & Northern.....	.....	30.60	30.60	.....	New road.
Total	6,923.34	7,073.83	150.49	.....	.....

WISCONSIN MILEAGE, 1905 AND 1906.

Comparative Statement of Railroad Mileage in Wisconsin on June 30, 1905 and on June 30, 1906, as reported to the Railroad Commission.

Name of Company.	Miles of road operated on June 30, 1905	Miles of road operated on June 30, 1906	Increase.	Decrease.	Remarks.
Abbotsford & Northeastern.....	15.16	15.16	.....	.....
Ahnapee & Western	34.00	34.00	.....	.....
Big Falls Railway Co.....	21.00	21.00	.....	.....
Chicago, Milwaukee & St. Paul	1,725.42	1,731.75	6.33	.....	Extension: Gleason S. E. 6.33 miles.
Chicago & Northwestern	1,778.65	1,826.42	47.77	.....	Extensions: Mercer to Fosterville, 19.49 miles; Laona, Wis. to Saunder, Mich., 29.51. Abandonment and straightening of line: Pratt to Harrison, .32 mile.
Chicago, St. P., M. & O.....	747.97	757.97	10.00	.....	Extension: Winter to Draper, 10.00 miles.
Chicago, Burlington & Quincy..	223.10	223.10	.....	.....
Chicago, L. Shore & Eastern..	18.56	19.38	.82	.....	Extension at Bay View Works, Milwaukee, .93 mile; tracks taken up at same place .11 mile.
Chicago & Lake Superior.....	3.00	3.00	.....	.....
Illinois Central	91.31	91.31	.....	.....
Chippewa River & Northern....	24.00	21.00	.....	3.00	Decrease caused by taking up of tracks.
Chicago, Harvard & Geneva L.	5.50	5.50	.....	.....
Chippewa Valley & Northern....	10.00	11.74	1.74	.....	No explanation given for increase in mileage.
Drummond & Southwestern....	8.18	8.18	.....	.....
Duluth, S. Shore & Atlantic...	111.20	114.21	3.01	.....	Increase in mileage caused by changes in branches and spurs.
Duluth, Sup. & W. Term. Co.	.....	.....	.....	.....	Reported by G. N. Ry.
Dunbar & Wausaukee	13.50	13.50	.....	.....
Fairchild & Northeastern.....	33.00	33.00	.....	.....
Great Northern	37.79	37.69	.....	.10	Nemadji Jct. to Minnesota State Line, reported .10 miles less than 1905.
Green Bay & Western.....	225.00	225.00	.....	.....
Glenwood & Northern.....	14.00	.....	.....	14.00	Not operated in 1906.
Hawthorne, Nebagamon & Su..	27.50	33.50	6.00	.....	New branches opened for traffic, 12 miles. Abandoned 6 miles.
Hazelhurst & Southeastern....	11.00	11.00	.....	.....
Holmes & Son Railway	24.00	.....	.....	24.00	No report for 1906.
Iola & Northern	4.70	4.70	.....	.....
Kewaunee, Green Bay & W....	36.70	36.70	.....	.....
Lake Shore & Eastern.....	20.50	20.50	.....	.....

L. Sup. Term. & T. Ry. Co..	16.33	17.51	1.18	.....
Mattoon Railway Co.	29.36	29.36		.....
Marquette, Tomahawk & West.	43.77	43.77		.....
Minneapolis, St. P. & Ashland	45.75			45.75
Minneapolis, St. P. & S. S. M.	355.66	355.66		.....
Northern Pacific	145.42	145.47	.05	.....
Northwestern Coal Ry. Co.....	8.00	8.00		.....
Oshkosh Transportation Co.....				.....
Robbins Railway Co.	30.00	30.00		.....
Stanley, Merrill & Phillips.....	52.36	56.30	3.94	.....
Winona Bridge Ry. Co. ....				.....
Wisconsin & Michigan.....	73.98	73.78		.20
Whitcomb & Morris	6.00	6.00		.....
Wisconsin Central	841.29	841.29		.....
Wisconsin Western	51.97	51.97		.....
Bayfield L. Shore & W.....	12.00	12.00		.....
Hillsboro & N. E.....	5.00	5.00		.....
Roddis Lumber & Veneer Co..	10.00	10.00		.....
Superior & S. E.....	7.79	15.87	8.08	.....
La Crosse & S. E.....	43.81	45.79	1.98	.....
Mineral Point & Northern.....	30.60	30.60		.....
Total	7,073.83	7,077.68	3.85	.....

Increase in trackage, 1.18 miles at Superior.

No report for 1906.

No explanation given for increase in mileage.

Reported by C., B. & Q. Ry.

Extensions: At Everett Jct., .18 mile. Lake Noquebay Branch, .42 mile. Line straightened and grades reduced.

CONDENSED REPORTS OF STREET AND INTERURBAN RAILWAYS IN WISCONSIN, FOR THE YEAR ENDING DECEMBER 31,
1904. REPORTS TO THE RAILROAD COMMISSION.

Stock, Indebtedness, Gross Receipts and Disbursements.

Name of Company.	Amount of Stock.		Indebtedness.		Total gross receipts from railway business.	Total disbursements on account of railway business.	Charged to construction.	Charged to operating expenses.
	Common	Preferred.	Bonded.	All other.				
Ashland Light, Power & St. Ry Co. Chicago, Harvard & Geneva Lake Ry. Co. ¹	\$200,000		\$94,000	\$8,880 00	\$22,256 07	\$20,383 98		\$19,965 63
Chipewa Valley Electric R. R. Co.	150,000		125,000	1,000 00	24,566 66	18,542 98	\$7,484 21	18,542 98
Duluth, Street Ry Co. ²	200,000	\$6,800	700,000		70,301 06	43,457 23	13,669 05	43,457 23
Eastern Wis. Ry. & Light Co.	2300,000		21,333,333	216,187 07	2141,656 27	2 4160,035 95	216,030 04	279,555 08
Fox River Electric Ry. & Power Co.	450,200		573,500	157,289 71	84,084 59	79,567 92	6,753 26	72,814 66
Janesville Street Ry. Co.	20,600	124,900	120,050	134,400 00	78,931 90	6155,952 63	70,546 20	68,091 66
La Crosse City Ry. Co.	50,000		75,000	43,348 92	15,031 85	12,775 98	832 40	11,643 38
Madison Traction Co.	242,000		136,000	3,750 00	95,156 77			72,866 97
Manitowoc & Northern Traction Co.		200,000		5,000 00	98,664 00	99,962 00	38,020 00	61,942 00
Menomonie & Marinette Light & Traction Co.	100,000			100,000 00	32,862 75	25,951 48	3,256 52	22,694 96
Merrill Ry. & Lighting Co.	560,000		203,500	27,902 47	31,526 06	57,870 52	5,552 49	52,318 08
Milwaukee Light, Heat & Traction Co.	102,000			62,588 06	7,023 47	6,833 33	903 75	5,929 58
Milwaukee Elec. Ry. & Light Co.	500,000		3,223,000	209,575 94	383,986 67	214,494 28	504,252 05	172,255 72
Rockford, Beloit & Janesville R. R. Co.	9,000,000	4,500,000	8,000,000	2,146,209 11	2,698,640 79	1,790,589	1,156,421 71	1,372,299 71
Sheboygan Light, Power & Traction Co.	1,000,000		610,000	23,577 42	52,274 52	47,563 67	2,004 77	30,735 29
Twin City General Electric Co.	373,000		900,000	17,584 32	62,296 18	³	³	572,807 47
Waupaca Elec. Light & Ry Co.	400,000			150,000 00	13,510 50	18,135 66	1,688 89	16,446 77
Winnebago Traction Co.	76,000		30,000		9,449 10	7,352 57	636 46	5,727 05
Wis. Traction, Light, Heat & Power Co.	650,000		629,000	194,678 67	135,046 22	142,707 36	7,469 80	93,163 00
	698,500		1,275,100	89,629 76	87,002 52	652,434 28	605,614 72	46,819 56
Total	\$15,072,300	\$4,831,700	\$18,237,433	\$3,391,601 45	\$4,144,267 96	\$3,554,610 84	\$2,441,136 32	\$2,340,081 82

¹ Whole line.

² Wisconsin proportion given only.

⁵ Lighting Dept., "General Expenses" and "Cost of Power" are not separated.

³ Not given.

⁴ Including taxes and interest.

⁶ Including construction and new equipment.

CONDENSED REPORTS OF STREET AND INTERURBAN RAILWAYS IN WISCONSIN FOR THE YEAR ENDING DECEMBER 31, 1905. REPORTS TO THE RAILROAD COMMISSION.

Stock, Indebtedness, Gross Receipts and Disbursements.

Name of Company.	Amount of Stock.		Indebtedness.		Total gross receipts from railway business.	Total disbursements on account of railway business.	Charged to construction.	Charged to operating expenses.
	Common.	Preferred.	Bonded.	All other.				
Ashland Light, Power & St. Ry. Co.	\$200,000		\$90,000	\$6,880 00	\$23,648 22	\$21,756 01	²	\$21,260 01
Chicago, Harvard & Geneva Lake Ry. Co.	150,000		125,000	27,500 00	23,842 09	22,001 50	\$27,207 67	22,001 59
Chippewa Valley Elec. R. R. Co.	200,000	\$6,800	700,000	4,364 27	69,170 06	48,162 76	2,089 11	48,162 76
Duluth Street Ry. Co.	300,000		1,300,000	14,095 10	149,627 81	185,022 57	10,853 86	90,496 99
Eastern Wisconsin Ry. & Light Co.	450,200		871,500	29,918 15	82,140 94	139,032 39	63,716 72	75,365 67
Green Bay Traction Co.	1,000,000		650,000	197,738 94	112,987 75	478,491 28	50,689 88	78,594 86
Janesville Street Ry. Co.	50,000		75,000	43,348 92	15,448 85	18,710 23	1,029 45	17,170 22
La Crosse City Ry. Co.	242,000		136,000	2,750 00	103,741 94			75,060 50
Madison & Interurban Traction Co.	500,000		360,000		111,389 00	118,939 00	45,044 00	73,945 00
Manitowoc & Northern Traction Co.	100,000		118,000		32,162 86	4,697 18	2,408 76	22,887 42
Menominee & Marinette Light & Traction Co.	560,000		208,000	58,183 44	33,802 53	²	49,610 28	52,170 06
Merrill Ry. & Lighting Co.	102,000		75,000	17,125 00	7,848 43	5,292 69		5,292 69
Milwaukee Electric Ry. & Light Co.	9,000,300	4,500,000	8,000,000	4,313,804 78	2,669,846 60	51,740,226 89	833,289 71	1,313,051 42
Milwaukee Light, Heat & Traction Co.	1,000,000		3,223,000	1,066,827 47	523,576 31	1276,904 95	968,409 30	208,840 05
Rockford, Beloit & Janesville R. R. Co.	1,000,000		610,000	5,956 17	56,291 36	47,346 34	7,873 98	32,216 75
Sheboygan Light, Power & Ry. Co.	400,000		1,000,000	85,795 98	63,162 85	²	²	⁶
Twin City Gen. Elec. Co.	²	²	²	²	7,312 95	9,261 51	1,083 18	8,178 33
Waupaca Elec. Light & Ry. Co.	76,000		28,000	2,700 00	10,551 97	12,142 11	4,792 75	6,183 68
Winnebago Traction Co.	650,000		645,000	197,678 67	126,746 33	170,179 88	12,980 78	86,940 08
Wisconsin Traction, Light, Heat & Power Co.	699,400		910,000	7450,962 00	93,578 23	855,594 43	53,882 97	51,851 32
Total	\$16,679,600	\$4,506,800	\$19,124,500	\$6,525,628 89	\$4,321,876 58	\$3,053,861 72	\$2,184,967 40	\$2,289,269 40

¹ Excluding interest.

² Not given.

³ Including interest and taxes.

⁴ Including construction and new equipment.

⁵ Excluding interest \$331,816.73.

⁶ See table of itemized operating expenses.

⁷ Including bonds of underlying companies.

⁸ Excluding interest \$23,421.10.

CONDENSED REPORTS OF STREET AND INTERURBAN RAILWAYS. REPORTS TO THE RAILROAD COMMISSION, YEAR ENDING DECEMBER 31, 1904.

ITEMS FOR OPERATING EXPENSES FOR YEAR ENDING DEC. 31, 1904.

Name of Company.	General expenses.	Legal expenses.	Injuries and damages.	Rentals paid.	Conducting transportation.	Maintenance of way and structures.	Maintenance of rolling stock.	For producing power.	Amount set aside for depreciation or reserve.	Amount expended for miscellaneous purposes.
Ashland Light, Power & St. Ry. Co..	\$1,414 88	\$25 42	\$776 00	\$80 00	\$8,480 41	\$2,014 40	\$1,547 78	\$5,330 18		\$297 16
Chi., Harvard & Geneva L. Ry. Co..	⁸ 563 71		131 20	508 61	6,909 26	1,844 48	1,029 71	7,416 83		139 18
Chippewa Valley Elec. R. R. Co.....	3,889 67	3,957 07	445 28		20,053 09	4,231 93	3,580 90	7,749 29		
Duluth Street Ry. Co.....	⁵⁷ 7,719 28	2,750 00	2,459 07	783 33	41,203 39	2,076 35	7,026 44	15,537 22		
Eastern Wisconsin Ry. & Light Co.	9,595 86	725 77	4,311 84	2,485 01	19,052 32	3,763 06	8,106 73	14,127 20	\$8,408 45	2,238 42
Fox River Elec. Ry. & Power Co.....	7,030 61	200 00	440 25	151 00	28,589 80	9,318 72	5,431 26	17,130 02		
Janesville Street Ry. Co.....	333 03		552 01		5,193 93	216 08	1,542 78	3,805 55		
La Crosse City Ry. Co.....										72,866 97
Madison Traction Co.....	4,280 00	326 00	661 00	100 00	21,299 00	9,894 00	7,907 00	13,590 00	10,000 00	3,885 00
Manitowoc & Northern Traction Co.	7,204 01	43 00			5,035 70	941 64	3,302 30	6,168 31		
Menominee & Marinette L. & T. Co.	⁶⁷ 2,297 89	150 00	450 00		10,745 18	4,797 94	2,972 90	18,336 33	5,937 13	
Merrill Railway & Lighting Co.....	495 05	24 76	64 08		2,135 33	1,705 93	1,117 44	386 99		
Milwaukee Elec. Ry. & Light Co.....	96,549 04	26,986 41	107,945 62	1,478 48	906,076 62	111,207 82	¹ 122,055 72	¹ 321,869 42		133,051 47
Milwaukee Light, Heat & Trac. Co.	15,273 22	3,839 87	15,359 47	202 80	105,427 61	15,458 16	16,689 59	³ 27,717 30		8,195 49
Rockford, Beloit & Janesv'e R. R. Co.	⁶⁴ 4,055 56	187 68	1,167 96	424 24	9,468 12	3,625 00	1,760 59	8,895 84		1,150 30
Sheboygan Light, Power & Ry. Co..	²¹⁴ 885 93	421 16	842 89		20,361 52	3,185 41	7,301 61	² 24,691 57		1,117 38
Twin City General Electric Co.....	⁶² 880 55	175 95			4,882 80	3,571 25	1,141 35	3,794 87		
Waupaca Elec. Light & Ry. Co.....	558 92			20 00	2,588 61	507 62	482 03	1,272 32		297 55
Winnebago Traction Co.....	14,361 14	3,145 69	1,772 10	798 72	30,275 49	6,068 27	9,379 38	27,367 30		
Wisconsin Traction, L., H. & P. Co.	5,744 26	870 03	1,740 03		26,205 43	7,645 69	4,614 12	⁴		
Total	\$204,137 11	\$43,828 81	\$139,118 80	\$7,032 19	\$1,273,783 61	\$192,073 75	\$206,989 63	\$175,599 82	\$373,932 30	\$223,238 92

¹Included in Conduction Transportation, \$295,483.16, and Lighting Dept. Expenses, \$119,193.88.

²Railway and Lighting Plant.

³Included in Conduction Transportation, \$40,347.41; and Lighting Dept. Expenses, \$25,431.63.

⁴Included in Conducting Transportation, \$3,692.59.

⁵Report for Wisconsin only.

⁶Report for Whole Line.

CONDENSED REPORTS OF STREET AND INTERURBAN RAILWAYS. REPORTS TO THE RAILROAD COMMISSION, YEAR
ENDING DECEMBER 31, 1905.

Name of Company.	General expenses.	Legal expenses.	Injuries and damages.	Rentals paid.	Conducting transportation.	Maintenance of way and structures.	Maintenance of rolling stock.	For producing power.	Amount set aside for depreciation or reserve.	Amount expended for miscellaneous purposes.
Ashland Light, Power & St. Ry. Co..	\$1,808 13	\$8 00	\$55 63	\$80 00	\$8,340 74	\$2,338 04	\$3,002 10	\$5,424 97	.....	\$202 40
Chi., Harvard & Geneva L. Ry. Co...	12,963 11	.....	73 40	688 72	5,906 77	2,671 77	1,612 25	8,085 57	.....	.....
Chippewa Valley Elec. R. R. Co.....	8,293 24	5,518 42	57 75	.....	21,154 61	1,856 42	2,958 89	6,944 64	.....	1,378 79
Duluth Street Ry. Co. ²	8,563 63	2,499 96	12,090 46	20 00	38,597 38	5,541 25	8,084 19	15,100 12	\$17,750 00	.....
Eastern Wis. Ry. & Light Co.....	10,488 76	1,377 10	2,868 22	2,196 13	20,628 46	4,649 55	9,359 78	12,917 67	8,214 10	2,665 90
Green Bay Traction Co.....	6,349 98	816 47	936 79	21 00	38,135 18	7,927 99	4,852 04	19,555 41	.....	.....
Janesville Street Ry. Co.....	421 07	378 00	6 75	.....	5,513 61	5,418 61	1,377 18	4,055 00	.....	.....
La Crosse City Ry. Co.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75,060 50
Madison & Interurban Traction Co...	3,062 00	1,752 00	1,667 00	.....	23,062 00	10,076 00	7,600 00	16,726 00	10,000 00	.....
Manitowoc & Northern Traction Co..	6,127 31	97 00	.....	.....	5,727 96	920 26	4,091 75	5,923 14	.....	.....
Menominee & Marinette L. & T. Co.	7,936 93	150 00	450 00	.....	11,207 34	4,482 30	2,717 36	18,274 40	\$6,385 55	.....
Merrill Ry. & Lighting Co.....	604 16	.....	.....	.....	2,387 53	247 70	911 17	808 68	1,500 00	333 45
Milwaukee Elec. Ry. & Light Co.....	102,967 87	26,698 47	106,793 87	834 48	877,717 85	84,825 66	113,213 22	4	\$322,653 49	421,939 70
Milwaukee, Light, Heat & Trac. Co.	23,094 41	5,235 76	20,943 06	133 55	126,476 70	14,197 75	18,758 82	6	\$42,630 02	12,403 34
Rockford, Beloit & Janes'v'e Ry. Co.	7,093 58	192 45	1,259 33	430 21	10,085 42	3,280 13	1,625 84	8,072 98	.....	176 78
Sheboygan Light, Power & Ry. Co....	\$17,050 89	995 65	948 12	1,140 00	17,021 01	3,515 71	9,290 97	\$28,357 28	.....	800 80
Twin City General Elec. Co.....	919 74	.....	.....	14 50	818 63	3,642 78	856 59	1,800 00	.....	126 09
Waupaca Elec. Light & Ry. Co.....	623 50	.....	.....	135 00	4,110 16	636 77	\$528 91	\$1,315 02	.....	.....
Winnebago Traction Co.....	13,633 72	1,963 82	.....	632 66	29,028 00	6,567 68	10,144 60	24,569 60	.....	.....
Wis. Traction, Light, Heat & P. Co.	6,625 26	935 77	1,871 55	43 67	26,213 02	9,257 90	6,904 06	7	.....	.....
Total	\$228,627 29	\$48,618 90	\$150,021 93	\$6,369 92	\$1,272,132 37	\$172,054 36	\$207,889 72	\$177,930 48	\$409,133 16	\$515,087 75

¹Whole Line.

²Wisconsin Only.

³Not included in Total operating expenses.

⁴Included in Conducting Transportation, \$257,367.27; and Lighting Dept. Expenses, \$129,672.88.

⁵Railway and Lighting Plant.

⁶Included in Conducting Transportation, \$42,647.40, and Lighting Dept. Expenses, \$42,630.02.

⁷Included in Conducting Transportation, \$7,076.54.

CONDENSED REPORTS OF STREET AND INTERURBAN RAILWAYS. REPORTS TO THE RAILROAD COMMISSION FOR THE YEAR ENDING DECEMBER 31, 1904.

Mileage.

Name of Company.	Miles of road operated in Wisconsin.	Miles of Track.			Mileage.	
		Single.	Double.	Total single track.	In city.	In town or village.
Ashland Light, Power & Street Ry. Co.....	7.00	5.50	1.50	8.50	7.00	.....
Chicago, Harvard & Geneva Lake Ry. Co.....	5.50	5.50	.....	5.50	.....	5.50
Chippewa Valley Electric R. R. Co.....	22.00	22.00	.....	22.00	14.00	8.00
Duluth Street Ry. Co.....	14.39	7.22	7.17	21.55	14.39	.....
Eastern Wisconsin Railway & Light Co.....	19.98	17.94	2.04	22.02	5.50	14.48
Fox River Electric Railway & Power Co.....	38.45	36.12	2.33	40.78	10.94	127.51
Janesville Street Ry. Co.....	7.00	7.00	.....	7.00	7.00	.....
La Crosse City Ry. Co.....	12.19	9.67	2.52	14.71	12.19	.....
Madison Traction Co.....	9.53	8.87	.66	10.19	9.53	.....
Manitowoc & Northern Traction Co.....	8.71	8.71	.....	8.71	4.71	4.00
Menominee & Marinette Light & Traction Co.....	6.53	5.18	1.35	7.88	6.53	.....
Merrill Railway & Lighting Co.....	1.51	1.51	.....	1.51	1.51	.....
Milwaukee Electric Ry. & Light Co.....	74.45	6.90	67.55	142.00	59.84	14.61
Milwaukee Light, Heat & Traction Co.....	86.68	63.57	23.11	109.79	23.12	63.56
Rockford, Beloit & Janesville R. R. Co.....	14.57	14.57	.....	14.57	4.40	10.17
Sheboygan Light, Power & Traction Co.....	30.90	2	2	2	17.55	13.35
Twin City General Electric Co.....	2.50	.....	.....	2	2.50	.....
Waupaca Electric Light & Railway Co.....	4.75	4.75	.....	4.75	1.34	3.41
Winnebago Traction Co.....	39.91	39.91	.....	39.91	13.20	26.71
Wisconsin Traction, Light, Heat & Power Co.....	18.79	2	2	2	10.20	8.59
Total	415.34	264.92	108.23	481.37	225.45	199.89
Total number of roads reporting.....	20	17	17	17	20	20

¹Including City of De Pere; mileage not being given.
²Not given.

CONDENSED REPORTS OF STREET AND INTERURBAN RAILWAYS. REPORTS TO THE RAILROAD COMMISSION FOR THE YEAR ENDING DECEMBER 31, 1905.

Mileage.

Name of Company.	Miles of road operated in Wisconsin.	Miles of track.			Mileage.	
		Single.	Double.	Total single track.	In city.	In town or village.
Ashland Light, Power & Street Ry. Co.....	7.00	5.50	1.50	8.50	7.00	.....
Chicago, Harvard & Geneva Lake Ry. Co.....	5.50	5.50	.....	5.50	.....	5.50
Chippewa Valley Electric R. R. Co.....	22.00	22.00	.....	22.00	14.00	8.00
Duluth Street Ry. Co.....	14.39	7.22	7.17	21.55	14.39	.....
Eastern Wisconsin Ry. & Light Co.....	19.98	17.94	2.04	22.02	5.50	14.48
Green Bay Traction Co. ²	40.78	1	1	1	19.75	21.03
Janesville Street Ry. Co.....	7.00	7.00	.....	7.00	7.00	.....
La Crosse City Ry. Co.....	12.19	9.67	2.52	14.71	12.19	.....
Madison & Interurban Traction Co.....	9.74	8.80	94	10.68	9.74	.....
Manitowoc & Northern Traction Co.....	8.71	8.71	.....	8.71	4.71	4.00
Menominee & Marinette Light & Traction Co.....	6.53	5.18	1.35	7.88	6.53	.....
Merrill Railway & Lighting Co.....	1.51	1.51	.....	1.51	1.51	.....
Milwaukee Elec. Ry. & Light Co.....	63.57	4.09	59.48	123.05	58.85	4.72
Milwaukee Light, Heat & Traction Co.....	97.84	64.23	33.56	131.41	24.35	73.49
Rockford, Beloit & Janesville R. R. Co.....	14.57	14.57	.....	14.57	4.40	10.17
Sheboygan Light, Power & Traction Co.....	30.27	1	1	1	17.55	12.72
Twin City General Electric Co.....	2.00	1	1	1	2.00	.....
Waupaca Electric Light & Railway Co.....	4.75	4.75	.....	4.75	1.34	3.41
Winnebago Traction Co.....	39.93	39.74	19	40.12	13.22	26.71
Wisconsin Traction, Light, Heat & Power Co.....	18.79	1	1	1	10.20	8.59
Total	427.05	226.46	108.75	443.96	234.23	192.82
Total number of roads reporting.....	20	16	16	16	20	20

¹Not given.

²Successor to Fox River Elec. Ry. & Power Co.

NEW RAILROAD CORPORATIONS.

Extensions of Existing Lines and Changes in
Routes. Stock and Bond Issues, Etc.

From June 30, 1904, to June 30, 1906.

As shown by the Records in the Office of the
Secretary of State.

NEW RAILROAD CORPORATIONS.

LINCOLN & ONEIDA COUNTY RAILROAD COMPANY.

Organized August 22, 1904.

Articles of incorporation filed August 31, 1904.

Incorporators and directors:

J. H. Worden, Jeffris, Wis.
E. N. Morrill, Jeffris, Wis.
Edward Faust, Jeffris, Wis.
John Eisberg, Jeffris, Wis.
Geo. Magoon, Jeffris, Wis.

To build a railroad from a point near Jeffris, Wisconsin, running in an easterly direction twelve miles to a point near the center of section 8, township 35 north, of range 10 east, in Oneida county, Wisconsin.

LA CROSSE & SOUTHEASTERN RAILWAY COMPANY.

Organized September 3, 1904.

Articles filed September 14, 1904.

Capital stock \$1,000,000.

Incorporators and directors:

W. S. Cargill.
H. C. Wood.
James B. Taylor.
E. J. Tull.
Peter Vallier.

To build a railroad from a point in the city of La Crosse, Wisconsin, to a point in the city of Viroqua, Vernon county, Wisconsin.

LAKE SUPERIOR & SOUTHEASTERN RAILWAY COMPANY.

Organized October 3, 1904.

Articles of incorporation filed October 8, 1904.

Capital stock \$25,000.

Incorporators and directors:

Robert T. Merrill.
George D. Van Dyke.
William E. Carter.
Carl Muskat
W. G. Van Dyke.

To build a railroad from the city of Superior, Wisconsin, to the city of Marshfield, Wisconsin.

WISCONSIN & ILLINOIS RAILWAY COMPANY.

Organized October 13, 1904.

Articles of incorporation filed October 15, 1904.

Capital stock \$25,000.

Incorporators and directors:

Morton Eastman.
M. S. Sickle.
F. Crog.
James Dolan.
A. W. Kopf.

To build a railroad from the city of Warren, Jo Daviess county, Illinois, to Platteville, Wisconsin.

MANITOWOC, GREEN BAY & NORTHWESTERN RAILWAY COMPANY.

Organized November 17, 1904.

Articles of incorporation filed November 22, 1904.

Capital stock \$25,000.

Incorporators and directors:

Marvin Hughitt.
 J. M. Whitman.
 W. A. Gardner.
 M. M. Kirkman.
 J. B. Redfield.

To construct a line of railroad from a connection with the Chicago & Northwestern Railway at or near Manitowoc to run in a northwesterly direction through Brown county to a connection with the Chicago & Northwestern Railway at or near Eland Junction in Shawano county, with a branch from a point on said proposed line at or near Pulaski in Brown county, running in a northerly direction through or into the counties of Oconto and Shawano to a connection with the Chicago & Northwestern Railway at or near Gillette in Oconto county, Wisconsin; a total distance of 123 miles.

RACINE & SOUTHWESTERN RAILWAY COMPANY.

Organized November 14, 1904.

Articles of incorporation filed December 2, 1904.

Capital stock, \$100,000.

Incorporators and directors:

Herbert E. Miles, Racine, Wis.
 Jacob C. Lund, Racine, Wis.
 John T. Monson, Racine, Wis.
 William H. Richardson, Racine, Wis.
 Theodore Starks, Racine, Wis.

CHIPPEWA RIVER & NORTHERN RAILWAY COMPANY.

Organized September 5, 1902.

Articles of incorporation filed December 2, 1904.

Capital stock \$50,000.

Incorporators and directors:

William H. Phipps.
 C. P. Coon.
 Watson F. Pierpont.
 Steven C. Phipps.
 David Humbird.

To build a railroad from Apolonia, Wisconsin, running in a northerly direction 24 miles.

MILWAUKEE & STATE LINE RAILWAY COMPANY.

Organized on February 4, 1905.

Articles of incorporation filed February 11, 1905.

Capital stock \$10,000.

Incorporators and directors:

Charles L. Lowe, Chicago, Ill.
 Clarence B. Hale, Chicago, Ill.
 John M. Mariga, Chicago, Ill.
 N. J. Fitzgerald, Chicago, Ill.
 Thorwald Oas, Chicago, Ill.

This company is organized to build a railroad from a connection with the Chicago & Northwestern Railway at or near Milwaukee, Wisconsin, in a southerly direction to the southern boundary of the state of Wisconsin at or near section 33, township 7 north, of range 22, east.

BERLIN, PRINCETON & WESTERN RAILROAD COMPANY.

Organized February 20, 1905.

Articles of incorporation filed February 27, 1905.

Incorporators and directors:

Henry Vehn, Chicago, Ill.
 Frederick G. Gele, Chicago, Ill.
 J. Morey, Chicago, Ill.
 Edward M. Kimball, Chicago, Ill.
 Thomas J. Cochrane, Chicago, Ill.

To build a railroad from Berlin, Green Lake county, Wisconsin, to a point within the limits of the village of Necedah, Juneau county, Wisconsin, with branches from the main line to such place or places as shall be accessible together with such extensions as hereinafter may be determined upon.

MISCAUNO & NORTHWESTERN RAILWAY COMPANY.

Organized May 31, 1905.

Articles of incorporation filed with the secretary of state June 8, 1905.

Capital stock \$250,000.

Incorporators and directors:

Samuel H. Harrison, Peshtigo, Wis.
 William T. Fitzgerald, Peshtigo, Wis.
 Everett C. Eastman, Marinette, Wis.
 Jesse B. Barton, Hinsdale, Ill.
 Thomas M. Butters, Chicago, Ill.
 Otto A. Koss, Chicago, Ill.
 James C. Fitzgerald, Chicago, Ill.

To build a railroad from Miscauno Island in the Menomonee river, township 36 north, of range 21 east, Marinette county, Wisconsin; thence in a general northwesterly direction to the state line in the St. Louis river between the states of Minnesota and Wisconsin in the city of Superior, Wisconsin, and thence to the city of Duluth, Minnesota; the length of such railroad to be 260 miles and to be constructed through the counties of Marinette, Florence, Forest, Oneida, Iron, Pierce, Ashland, Sawyer, Bayfield, Washburn and Douglas county, Wisconsin, and St. Louis county, Minnesota.

ASHLAND, ODANAH & MARENGO RAILWAY COMPANY.

Organized August 14, 1905.

Articles of incorporation filed August 17, 1905.

Capital stock \$10,000.

Incorporators and directors:

L. K. Baker, Ashland, Wis.
 Geo. F. Merrill, Ashland, Wis.
 J. D. Stearns, Ludington, Michigan.
 J. W. Gary, Chicago, Ill.
 C. B. Hill, Odanah, Wis.

Organized to build a railroad from a point in or near the village of Odanah in the county of Ashland, thence in a southeasterly direction ten miles; thence westerly to Bad River at a point near what is known as Sedgwick on the Duluth, South Shore & Atlantic Railway in Ashland county, Wisconsin.

VALLEY RAILWAY COMPANY.

Organized August 10, 1905.

Articles of incorporation filed August 17, 1905.

Capital stock \$25,000.

Incorporators and directors:

Thomas W. Oberson, Appleton, Wis.
 John Hackworthy, Appleton, Wis.
 Edward O'Keefe, Appleton, Wis.
 Robert F. Hackworthy, Appleton, Wis.
 Oliver C. Smith, Appleton, Wis.

To build a railroad from some point in the city of Green Bay, Wisconsin; thence in a southerly and southwesterly direction through the cities of De Pere, Kaukauna and Appleton to some point in the city of Menasha.

DUBUQUE & WESTERN RAILWAY COMPANY.

Organized September 14, 1905.

Articles of incorporation filed September 21, 1905.

Capital stock \$50,000.

Incorporators and directors:

J. M. McFadden, Dubuque, Iowa.
 A. W. Tredway, Dubuque, Iowa.
 F. J. Pickenbrock, Dubuque, Iowa.
 H. H. Blish, Dubuque, Iowa.
 J. E. Hedly, Dubuque, Iowa.
 C. A. Noyes, Dubuque, Iowa.
 W. B. Martin, Dubuque, Iowa.

To build a railroad from a point on the line between Wisconsin and Illinois in Jamestown township, Grant county, Wisconsin, near the village of Fairplay, to Bloomington, Wisconsin.

MILWAUKEE TERMINAL RAILWAY COMPANY.

Organized December 9, 1905.

Articles of incorporation filed December 11, 1905.

Capital stock \$150,000.

Incorporators and directors:

Geo. D. Van Dyke, Milwaukee, Wis.

W. D. Van Dyke, Milwaukee, Wis.

Charles Muskat, Milwaukee, Wis.

E. W. Howland, Milwaukee, Wis.

Howard Green, Milwaukee, Wis.

To build a road from some convenient terminus in the city of Milwaukee running thence in a westerly, southwesterly and southerly direction to a point of intersection within the city limits of Milwaukee, thereafter to be definitely located. The length of said road to be 3 miles.

LAKE SUPERIOR SOUTHERN RAILWAY COMPANY.

Organized April 10, 1906.

Articles of incorporation filed April 11, 1906.

Capital stock \$250,000.

Incorporators and directors:

W. K. Rideout, Oshkosh, Wis.

J. M. Pereles, Milwaukee, Wis.

M. C. Phillips, Oshkosh, Wis.

J. O. Maxey, Marquette, Mich.

D. J. Phillips, Oshkosh, Wis.

R. H. Edwards, Oshkosh, Wis.

C. F. Clendening, New York, N. Y.

James R. Thompson, Ironwood, Mich.

R. P. Bronson, Ishpeming, Mich.

To build a line of railroad from a point on the state line between Michigan and Wisconsin connecting with a line now under construction by the Lake Superior Southern Railway Company, a corporation of Michigan. The line is to run from said point through the counties of Florence, Forest, Marinette, Oconto, Shawano, Outagamie, Brown, Winnebago, Waupaca, Green Lake, Fond du Lac, Dodge, Columbia and Dane, to the city of Madison, a distance of about 200 miles.

MILWAUKEE, ROCKFORD & EASTERN RAILWAY COMPANY.

Organized April 30, 1906.

Articles of incorporation filed May 2, 1906.

Capital stock \$100,000.

Incorporators and directors:

H. N. Seaman, Clinton, Iowa.

B. H. Harris, Chicago, Ill.

Frank M. Clark, Chicago, Ill.

W. F. McSwiney, Chicago, Ill.

J. C. Duffin, Rockford, Ill.

To build a railroad from some point in or near the city of Milwaukee; running thence in a general westerly or southwesterly direction through the counties of Milwaukee, Oshkosh, Walworth and Rock to some point in or near the city of Beloit.

WISCONSIN & NORTHERN RAILROAD COMPANY.

Organized May 22, 1906.

Articles of incorporation filed with the secretary of state May 23, 1906.

Capital stock \$1,000,000.

Incorporators and directors:

Charles R. Smith, Neenah, Wis.

Leander Choate, Oshkosh, Wis.

L. R. Wall, Oshkosh, Wis.

C. H. Hartley, Oshkosh, Wis.

R. H. Edwards, Oshkosh, Wis.

F. H. Josslyn, Oshkosh, Wis.

M. D. Keith, Crandon, Wis.

Samuel Shaw, Crandon, Wis.
 E. H. Van Ostrand, Antigo, Wis.
 J. S. Jones, Chicago, Ill.
 M. J. Walrich, Shawano, Wis.
 H. C. Adams, Chicago, Ill.

To build a railroad from a point in the city of Menasha, Wisconsin, running in a northerly direction to some point on the line of the Minneapolis, St. Paul & Sault Ste. Marie Railway Company in township 37 north, of range 13 east.

MILWAUKEE JUNCTION RAILWAY COMPANY.

Organized June 8, 1906.
 Articles of incorporation filed June 12, 1906.
 Capital stock \$25,000.
 Incorporators and directors:
 Henry C. Wood, Chicago, Ill.
 E. M. Spaulding, Milwaukee, Wis.
 Fred W. Rogers, Milwaukee, Wis.
 Lawrence Knauf, Milwaukee, Wis.
 Samuel E. Hall, Milwaukee, Wis.

To build a railroad from a point in the fourth ward in the city of Milwaukee, running thence in a general westerly and southwesterly direction to a point in section 1, township 6 north, of range 21, Milwaukee county, Wisconsin.

WOLF RIVER VALLEY RAILWAY COMPANY.

Organized June 11, 1906.
 Articles of incorporation filed with the secretary of state June 14, 1906.
 Capital stock \$10,000.
 Incorporators and directors:
 Marvin Hughitt, Chicago, Ill.
 W. A. Gardner, Evanston, Ill.
 J. B. Redfield, Chicago, Ill.
 J. M. Whitman, Chicago, Ill.
 M. M. Kirkman, Evanston, Ill.

To build a line of railroad from a connection with the Chicago & Northwestern Railway at or near Crandon, in Forest county, Wisconsin, in a southeasterly direction through the counties of Forest, Oconto, Langlade and Shawano to a connection with the Manitowoc, Green Bay & Western Railway in or near township 28, range 13 east.

EXTENSIONS AND CHANGES OF EXISTING LINES.

BAYFIELD, LAKE SHORE & WESTERN RAILROAD COMPANY.

On July 1, 1904, the Bayfield, Lake Shore & Western Railroad Company filed a copy of the resolution authorizing a change in its route so that the eastern terminus of said railroads to be constructed shall begin at a point at or near the south line of section 23, township 51 north, of range 5 west, to which the steel rails of the Bayfield, Superior & Minneapolis Railroad Company are now laid; and thence extending in a southwesterly direction to a point on section 34, township 51 north, of range 6 west, at or near the village of Cornacopia; and thence extending southwesterly through the counties of Bayfield and Douglas to the west line of Douglas county. Also authorizing the building of a branch from the point near the village of Cornacopia running in a southwesterly direction to the Washburn branch of the Northern Pacific.

MINERAL POINT & NORTHERN RAILWAY COMPANY.

On July 14, 1906, the Mineral Point & Northern Railway Company filed with the secretary of state a copy of a resolution authorizing a change of route in its proposed line of road so that it should pass through a part of Lafayette county, instead of running entirely within the boundaries of Iowa county as originally contemplated.

LAKE SUPERIOR & SOUTHEASTERN RAILROAD COMPANY.

A resolution authorizing the extension of the line of its railroad from Superior, Wisconsin, to Duluth, Minnesota, a distance of 6.56 miles.
Resolution filed March 21, 1905.

GREAT NORTHERN RAILWAY COMPANY.

Copy of a resolution filed with the secretary of state on March 13, 1905, passed by the board of directors of the Great Northern Railway Company on September 16, 1889, changing the name of the Minneapolis & St. Croix Railroad Company to Great Northern Railway Company. Filed with this resolution is a copy of the laws of the state of Minnesota constituting the charter of the Great Northern Railway Company.

GREEN BAY, OSHKOSH, MADISON & SOUTHWESTERN RAILROAD COMPANY.

Copy of a resolution of the Board of Directors made on the 3d day of October, 1905, authorizing the building of a branch road from a point on its line of road in the city of Menasha, Wisconsin, to a point in the village of North Crandon, Forest county, Wisconsin; running through the counties of Winnebago, Outagamie, Waupaca, Shawano, Langlade and Forest.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY COMPANY.

Copy of a resolution made on June 23, 1905, filed with the secretary of state on June 27, 1905, by which the route of its main line in St. Croix county, Wisconsin, is altered, eliminating certain curves.

CHICAGO & NORTH WESTERN RAILWAY COMPANY.

Copy of resolution passed by the Board of Directors on October 30, 1905 and filed with the Secretary of State on November 28, 1905, authorizing the building of a branch line as follows:

Beginning at a point of connection with the main line of the Chicago & North Western Railway near Lakewood, Oconto county, Wisconsin; running thence in a south-easterly direction to a point near the North-east quarter of the South-east quarter of section 35, township 33, range 16; a distance of 6 miles.

MILWAUKEE SOUTHERN RAILWAY COMPANY.

Copy of resolution passed by the Board of Directors on December 9, 1905, filed with the Secretary of State on December 11, 1905, authorizing the building of a branch line of said road as follows: Beginning at a point South of National Avenue and running to a point on Thirteenth Street between Clyburn Street and St. Paul Avenue, all in the city of Milwaukee, Wis.

CHIPPEWA VALLEY & NORTHERN RAILWAY COMPANY.

A copy of resolution passed by the Board of Directors on January 13, 1906, filed with the Secretary of State on February 5, 1906, authorizing the extension of the above line of road from the village of Hayward, Sawyer county, Wisconsin, to the city of Ashland, Wisconsin.

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

Copy of resolution passed by the Board of Directors on April 13, 1906 and filed with the Secretary of State on April 14, 1906, authorizing a change in its line in Milwaukee county, near Oakwood, eliminating a curve and bettering its alignment near the said village.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RAILWAY COMPANY.

A copy of resolution passed by the Board of Directors of the Chicago, St. Paul, Minneapolis & Omaha Railway Company on June 22, 1906 and filed with the Secretary of State on June 23, 1906 authorizing a change in its main line in Barron county, Wisconsin, to eliminate certain curves in lot 7 of section 7, township 35, north of range 13 west.

INCREASE OF CAPITOL STOCK.**MINERAL POINT & NORTHERN RAILWAY COMPANY.**

Increasing capital stock of the Mineral Point & Northern Railway Company to \$550,000.

CHICAGO & NORTH WESTERN RAILWAY COMPANY.

Increase of capital stock. The Chicago & North Western Railway Company reports that it has issued a portion of the new capital stock authorized by its stockholders on February 10, 1903; that the amount so issued is \$10,609,230.; that the proceeds of this issue of stock will be devoted to the construction and extension of railroad additions and to the improvement of the company's railroad and property in the purchase of additional equipment and of such real estate as is needed for railway purposes.

MORTGAGES, TRUST DEEDS, Etc., FILED IN THE OFFICE OF THE SECRETARY OF STATE, FROM JUNE 30, 1904, TO JUNE 30, 1906.

By whom given.	To whom given.	Kind of instrument, etc.	Amount of consideration.	Date of instrument.	Date of filing.
Kewaunee, Green Bay & Western Ry Co.	Haskell & Barker Car Co	Contract 100 box cars	\$59,700 00	July 8, 1904	July 20, 1904
Royal Trust Co	Ahnapee & Western Ry. Co	Release of trust deed	1 00	June 30, 1904	July 26, 1904
Illinois Central R. R. Co	United States Trust Co. and Joel E. Williamson.	Trust deed—funding indebtedness, etc., not to exceed \$20,000,000.	.....	June 30, 1904	July 29, 1904
R. & S. W. Division of the Western Union R. R. Co	Chicago, Milw. & St. Paul Ry ..	Deed on entire road (Racine, Wis., to Port Byron, Ill.).	1 00	Sept. 1, 1904	Sept. 16, 1904
Morton Trust Co	Minneapolis, St. Paul & Ashland Ry. Co	Appointment of new trustee.....	.....	.....	Oct. 18, 1904
Chippewa Valley & Northwestern Ry. Co.	Chicago, St. Paul, Minneapolis & Omaha Ry. Co.	Deed on entire road.....	766,209 41	Oct. 1, 1904	Nov. 16, 1904
Eau Claire, Chippewa Falls & N. E. Ry. Co.	Chicago, St. Paul, Minneapolis & Omaha Rv. Co.	Deed on entire road.....	759,578 75	Oct. 1, 1904	Nov. 16, 1904
La Crosse & Southeastern Ry. Co.	Wisconsin Trust & Security Co.	Trust deed—security mortgage bonds, to \$1,000,000	.....	Oct. 1, 1904	Dec. 5, 1904
Wisconsin Central Ry Co	Haskell & Barker Car Co	Contract—700 cars.	293,175 00	Dec. 1, 1904	Dec. 15, 1904
Owen & Northern Ry. Co	Wm. L. Bull	Trust deed—security mortgage bonds, to \$1,500,000.	.....	Dec. 1, 1904	Jan. 26, 1905
Pullman Company	Wisconsin Central Ry. Co	Contract—lease of certain cars.....	.....	Jan 24, 1905	Feb. 23, 1905
Lake Superior & Southeastern R. R. Co.	Wm. L. Bull	Trust deed—security of mortgage bonds, not to exceed \$6,000,000.	.....	Apr. 1, 1905	Apr. 4, 1905
Chicago & Milwaukee Electric Ry. Co.	Western Trust & Savings Bank et al.	Trust deed—security of mortgage bonds, not to exceed \$10,000,000.	.....	Jan. 1, 1905	Apr. 25, 1905
Wisconsin & Michigan Ry. Co ...	The Equitable Trust Co.	Trust deed—security of mortgage bonds, not to exceed \$1,200,000.	.....	Feb. 1, 1905	Aug. 1, 1905
Wm. L. Bull	Owen & Northern Ry. Co	Resignation and transfer of trustee to Old Colony Trust Company.	.....	July 14, 1905	Aug. 1, 1905
Wm. L. Bull	Owen & Northern Ry. Co	Appointment of Old Colony Trust Co., trustee, by Wisconsin Central Ry. Co.	.....	July 14, 1905	Aug. 1, 1905
Wm. L. Bull	Superior & Southeastern Ry. Co.	Resignation and transfer of trustee to Old Colony Trust Co.	.....	July 14, 1905	Aug. 1, 1905
Wm. L. Bull	Superior & Southeastern Ry. Co.	Acceptance of trusteeship by Old Colony Trust Co., etc.	.....	July 14, 1905	Aug. 8, 1905
Mineral Point & Northern Ry. Co.	Farmers Loan & Trust Co	Trust deed—security mortgage bonds, not to exceed \$450,000.	.....	May 1, 1905	Aug. 1, 1905
Illinois Central R. R. Co	United States Trust Co. et al ...	Trust deed—security mortgage bonds, not to exceed \$2,500,000. (Peoria, Decatur & Mattoon Ry.)	.....	Apr. 19, 1905	Aug. 10, 1905

Oscar Kroessing, special master.	Jay M. Smith.....	Confirmation of sale of Milwaukee & Beloit R. R. Co.	July 25, 1905	Sept. 27, 1905
Chicago & Northwestern Ry.....	Manitowoc, Green Bay & N. W. Ry.	Lease of certain tracks in Shawano Co, Wis.	Oct. 1, 1905	Nov. 20, 1905
Chicago & Northwestern Ry.....	Manitowoc, Green Bay & N. W. Ry.	Lease of certain tracks at Brien Bay, Wis.	Oct. 31, 1905	Nov. 20, 1905
Wisconsin Central Ry. Co.....	John A. Stewart et al.....	Satisfaction of mortgage.	July 1, 1905	Nov. 18, 1904
Farmers Loan & Trust Co.....	Chicago & N. W. Ry. Co.....	Release of all claims on Chicago, Milw. & N. W. Ry. (Galena, Ill., to Woodman, Wis., and Montfort, to Madison, Wis.).	Dec. 5, 1905	Dec. 8, 1905
Farmers Loan & Trust Co.....	Chicago & N. W. Ry. Co.....	Release of all claims on Milwaukee & Madison Ry. (Milwaukee to Madison, Wis.).	Dec. 6 1905	Dec. 12, 1905
Farmers Loan & Trust Co.....	Chicago & N. W. Ry. Co.....	Release of all claims on Chicago & Tomah Ry. (Galena, Ill., to Woodman, Wis., and Montfort to Madison, Wis.).	Dec. 6. 1905	Dec. 12, 1905
First Trust Savings Bank.....	Duluth, South Shore & Atl. Ry.	Lease—500 cars.....	Jan. 1, 1906	Jan. 3, 1906
Wisconsin Rapid Transit Co. (Fond du Lac).	Citizens Trust Co.....	Trust deed—security mortgage bonds, not to exceed \$1,500,000.	Dec. 15, 1905	Jan. 4, 1906
Manitowoc, Green Bay & N. W. Ry. Co.	Farmers Loan & Trust Co.....	Trust deed—security mortgage bonds, not to exceed \$3,750,000.	Jan. 2, 1906	Jan. 9, 1906
Milwaukee & State Line Ry.....	Farmers Loan & Trust Co....	Trust deed—security mortgage bonds, not to exceed \$2,500,000.	Jan. 2, 1906	Jan. 2, 1906
Milwaukee Electric Ry. & Light Co.	Trust Company of America. ...	Trust deed—refunding and extending mortgaged obligations, not to exceed \$20,000,000.	Jan. 1, 1906	Jan. 30, 1906
Miscauno & Northwestern Ry. Co.	Wisconsin & Michigan Ry. Co..	Deed on entire line.....	June 14, 1905	Feb. 6, 1906
Georgia Car Co.....	Wisarkana Lumber Co.....	Contract—60 cars.....	200,000 00 Jan. 29, 1906	Feb. 19, 1906
Owen & Northern Ry.....	Wisconsin Central Ry. Co.....	Deed on entire line.....	June 11, 1906	June 29, 1906
Superior & Southeastern Ry.....	Wisconsin Central Ry. Co.....	Deed on entire line.....	June 11, 1906	June 29, 1906
Wisconsin Central Ry. Co.....	United States Trust Co. of New York.	Trust deed—security mortgage bonds, not to exceed \$8,500,000 (Superior & Duluth Division)	May 1, 1906	June 23, 1906

CONTRACTS AND AGREEMENTS, WISCONSIN, 1906.

Names of Companies with which Railroads Operating in Wisconsin Have Existing Contracts, Agreements or Arrangements Affecting Business Within the State of Wisconsin, as Reported to the Railroad Commission for the Year Ending June 30, 1906.

Name of Company.	Express companies.	Mails.	Sleeping, parlor or dining car companies.	Other railroad, freight or transportation companies.	Telegraph companies.	Other contracts.
Abbotsford & Northeastern.....	National.....	U. S. Mail.....	.....	Wisconsin Central Ry.....	.....	.....
Ahnapee & Western.....	United States...	U. S. Mail.....	.....	.....	Western Union..	.....
Chicago, Milwaukee & St. Paul	United States...	U. S. Mail.....	.....	.....	Western Union..	.....
Chicago & Northwestern.....	American.....	U. S. Mail.....	Pullman Co....	C., St. P., M. & O., (2) G. B. & W. Ry.; Oshkosh Trans. Co.; C. M. & St. P. Ry.; (2) Wis. Central Ry.; K., G. B. & W. Ry.; Allis-Chalmer Co. and N. P. Ry.	.....	.....
Chicago, St. Paul, Minneap. & O.	American.....	U. S. Mail.....	Pullman Co....	.....	Western Union..	.....
Chicago, Burlington & Quincy...	Adams.....	U. S. Mail.....	Pullman Co....	.....	North American..	.....
Chicago, Harvard & Geneva L.	American.....	U. S. Mail.....	Pullman Co....	.....	Western Union..	.....
Illinois Central.....	.....	U. S. Mail.....	.....	.....	Western Union..	.....
Chippewa Valley & Northern	.....	U. S. Mail.....	.....	M., St. P. & S. S. M. Ry.....	.....	.....
Duluth, South Shore & Atlantic.	Western.....	U. S. Mail.....	.....	Lake Sup. T. & T. Ry.; N. P. Ry., and C., St. P., M. & O. Ry. Co.	Western Union..	.....
Dunbar & Wausaukee.....	.....	.....	.....	C., M. & St. P. Ry.....	.....	.....
Fairchild & North Eastern.....	American.....	U. S. Mail.....	.....	.....	.....	.....
Green Bay & Western.....	United States....	U. S. Mail.....	.....	C. & N. W. Ry.; Winona Bridge Co., and C., B. & Q. Ry.	Western Union..	.....
Great Northern Ry.....	Great Northern..	U. S. Mail.....	.....	.....	.....	.....
Hillsboro & North Eastern.....	American.....	U. S. Mail.....	.....	C. & N. W. Ry.....	.....	.....
Iola & Northern.....	United States....	U. S. Mail.....	.....	.....	.....	.....
Kewaunee, Green Bay & Western	United States....	U. S. Mail.....	.....	.....	Western Union..	.....
Mineral Point & Northern.....	United States....	.....	.....	C., M., & St. P. Ry.....	.....	.....
Marinette, Tomahawk & West...	American.....	U. S. Mail.....	.....	.....	.....	.....
Minneapolis, St. Paul, & S. S. M.	Western.....	U. S. Mail.....	.....	.....	.....	.....
Northern Pacific.....	Northern Pacific	U. S. Mail.....	Pullman Co....	Lake Sup. Term. & Tr. ns. Co.; C., St. P., M. & O. Ry. and D. S. & A. Ry.	Western Union..	.....

Oshkosh Transp. Co., op by C. & N. W.	National	U. S. Mail.		C. & N. W. Ry. C., St. P., M. & O. Ry.		Northwestern Lbr Co.
Stanley, Merrill & Phillips						
Winona Bridge Ry. Co.				Green Bay, Winona and St. P. Ry. and C., B. & N. Ry.		
Wisconsin & Michigan	American	U. S. Mail.		M., St. P. & S. S. M. Ry.; Ann Arbor R. R. and C., M. & St. P. Ry.	Western Union..	Lake Mich. Car Ferry Transp. Co.
Wisconsin Central	National	U. S. Mail.	Pullman Co.		Western Union..	
Wis. Western (suc. to K. V. & N)		U. S. Mail.				

STATEMENT OF PASSENGER TRANSPORTATION ISSUED BY RAILWAY COMPANIES IN WISCONSIN TO NEWSPAPERS IN THE STATE IN EXCHANGE FOR ADVERTISING—IN DOLLARS.

Names of Railway Companies by Whom Transportation is Issued.

Location.	Names of Newspapers.	C., M. & St. P.	C. & N. W.	Wis. Cent.	N. P.	M. St. P. & S. S. M.	G. R. & W.	C., S. P., M. & O.	D. S. & A.	C. B. & Q.	Ill. Cent.	S. M. & P.	C. H. & G. L.	L. & S. E.	Total.
Abbotsford.....	Clarion.....			\$50 00	\$75 00										\$125 00
Albany.....	Vindicator.....	\$75 14													75 14
Algoma.....	Record.....		25 00				\$27 50								52 50
Alma.....	Journal.....									\$1 05					1 05
Amery.....	Free Press.....					\$29 00									29 00
Alma Center.....	News.....			50 00			67 44	\$15 00							132 44
Almond.....	Press.....		50 00												50 00
Amherst.....	Advocate.....	2 25		50 24			15 00								67 49
Amherst.....	Premium List.....						12 50								12 50
Aniwa.....	Advocate.....		6 60												6 60
Antigo.....	Herald.....		94 30												94 30
Antigo.....	Journal.....		144 06		80 00										224 06
Antigo.....	Republic.....		75 00												75 00
Antigo.....	Railway Record.....		50 00												50 00
Appleton.....	Bottschafter.....	60 00													60 00
Apalonia.....	Cause.....					6 58									6 58
Appleton.....	Cresent.....	215 00	482 26	16 05	16 00										729 31
Appleton.....	Fair Premium List.....	15 00	15 00												30 00
Appleton.....	Fox River Journal.....		25 00		23 00										48 00
Appleton.....	Eagenwart.....	45 00	109 00	12 50	180 00		15 00				\$25 00				377 50
Appleton.....	Journal.....	40 00	156 92	50 00											246 92
Appleton.....	Post.....	190 85	436 00	258 00	62 00										946 85
Appleton.....	Volksfreund.....	15 00	210 90	81 20			55 00								362 10
Appleton.....	Volksblatt.....		25 00												25 00
Appleton.....	Wecker.....	30 00	196 56	26 82											253 38
Appleton.....	Presbyterian Review.....						15 00								15 00
Antigo.....	News.....		50 00												50 00
Arcadia.....	Arcadian.....	8 00					65 00								73 00
Arcadia.....	Anzeiger.....						90 78								90 78
Arcadia.....	Fair Premium List.....						9 00								9 00
Arcadia.....	Leader.....						65 00								65 00
Ashland.....	Bladet and Poster.....	25 00	25 00	25 00	50 00				\$25 00						150 00
Ashland.....	Critic.....		144 30	50 00											236 80
Ashland.....	News.....		29 89	65 48	11 00			42 50							236 80
								86 00							192 37

Ashland	Press		200 69	199 00	260 10		166 50												
Athens	Record			62 50															
Augusta	Eagle								42 90										
Baldwin	Bulletin				180 00				64 80										
Balsam Lake	Ledger								40 01										
Bangor	Independent	65 00	88 06		180 00						50 00								
Baraboo	Democrat		150 00																
Baraboo	News		190 63																
Baraboo	Reporter		30 00																
Baraboo	Republic		180 00		150 00														
Baraboo	Fair Premium List		60 00																
Barron	Shield					35 24				50 00									
Barron	News																		
Barron	Hatchkis w. W					12 50													
Bayfield	Press									48 80									
Bear Creek	Independent		75 00																
Beaver Dam	Argus	80 00																	
Beaver Dam	Citizen	80 00																	
Beaver Dam	Farmer	59 62			76 20														
Belmont	Success	30 00	30 00																
Beloit	Free Press	40 00	119 34																
Beloit	Int. State Fair Program	15 00									75 00								
Beloit	News	200 87	140 60																
Beloit	Roundtable		15 00									50 00							
Belleville	Recorder		25 00																
Penton	Advocate		50 00																
B-rlin	Currant	65 00																	
Berlin	Journal	85 20	75 00	10 60	180 00														
Birchwood	Press					7 10				17 30									
Birnamwood	News		50 00																
Blk. Riv. Falls	Journal									74 85									
Bloomer	Advance				200 00					2 60									
Bloomer	Advocate									54 60									
Blair	Press								91 49										
Black Creek	Times								30 00										
Black Earth	Times	44 36																	
Blk. River Falls	Banner									37 70									
Bloomington	Record	25 00																	
Boscobel	Dial-Enterpris	25 00																	
Boscobel	Sentinel	64 08																	
Boyd	Times-Herald			40 05															
Brandon	Times	68 58																	
Bruce	News Letter			25 00	90 01					51 98									
Brillion	News		100 05																
Brodhead	Independent	108 40											4 34						
Brodhead	Register	100 00																	
Burlington	Democrat	40 00		72 60															

286 29
62 50
42 00
244 80
40 01
333 06
200 00
190 63
30 00
360 00
60 00
35 24
50 00
12 50
48 80
75 00
80 00
80 00
135 82
60 00
159 34
15 00
416 47
15 00
75 00
50 00
65 00
350 80
24 40
50 00
74 85
202 60
54 60
91 49
30 00
44 36
37 70
25 00
25 00
64 08
40 05
68 58
166 99
100 05
112 74
100 00
112 60

STATEMENT OF PASSENGER TRANSPORTATION ISSUED BY RAILWAY COMPANIES IN WISCONSIN TO NEWSPAPERS IN THE STATE IN EXCHANGE FOR ADVERTISING—IN DOLLARS.

Names of Railway Companies by Whom Transportation is Issued.

Location.	Names of Newspapers.	C. M. & St. P.	C. & N. W.	W. C.	N. P.	M., St. P. & S. S. M.	G. B. & W.	C., St. P., M. & O.	D., S. S. & At.	C., B. & Q.	I. C.	S., M. & P.	C., H. & G. L.	L. & S. E.	Total.
Bur ington.....	Free Press.....	40 00		75 00											115 00
Cadott.....	Blade.....	18 44		50 00											68 44
Cambria.....	News.....	54 92													54 92
Cambridge.....	Cedar Lodge.....		15 68												15 68
Cambridge.....	News.....		50 00												50 00
Cameron.....	Review.....				32 90	76 49		35 00							144 39
Cameron.....	Star Lecture Course P ^m		190 00												190 00
Cashton.....	Record.....	40 00													40 00
Cassville.....	Index.....	40 00													44 62
Cassville.....	Record.....	40 57												\$4 62	40 57
Cedarburg.....	News.....	100 00													100 00
Centuria.....	Outlook.....				2 70	78 22									80 92
Chicago.....	American Field.....	4 50													4 50
Chicago.....	Interior.....		12 00												12 00
Chicago.....	Kellogg's Lists.....		25 00												25 00
Chippewa Falls	Catholic Sentinel.....	25 00		72 20				65 00							162 20
Chippewa Falls	City Directory.....							5 50							5 50
Chippewa Falls	N. Wis. State Fair Pro.....	9 00													9 00
Chippewa Falls	Herald.....	124 15		131 20				88 70							344 05
Chippewa Falls	Independent.....	34 14		18 70	85 00			34 60							172 44
Chippewa Falls	Times.....		10 30												10 30
Clear Lake.....	Star.....							27 80							27 80
Clinton.....	Banner.....	79 00	67 46		180 00										326 46
Clinton Jct.....	Herald.....	73 53	151 95												225 48
Clinton Jct.....	Farmer.....		37 48												37 48
Clintonville.....	Sun.....		25 00												25 00
Clintonville.....	Town Talk.....		12 64												12 64
Clintonville.....	News.....		21 40												21 40
Clintonville.....	Tribune.....		150 54												150 54
Colby.....	Phonograph.....			75 00											75 00
Colfax.....	Messenger.....			65 54											65 54
Columbus.....	Democrat.....	80 00													80 00
Columbus.....	Echo.....	40 00													40 00

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Elroy	Tribune	2 49	95 00		90 00			59 55							247 04
Elroy	Leader		84 54					15 00							99 54
Endeavor	Epitome	5 02		25 00											30 02
Ellsworth	Herald							68 10							68 10
Ellsworth	Record							101 15							101 15
Evansville	Badger		120 76												120 76
Evansville	Courier		23 00												23 00
Evansville	Enterprise		15 00		180 00						230 00				425 00
Evansville	Review		92 86												92 86
Fairchild	Observer							45 00							45 00
Fennimore	Times	40 00	127 18												167 18
Florence	Mining News		75 00						25 00						100 00
Fond du Lac	Bulletin	55 30	238 77	191 76											485 83
Fond du Lac	Cresent			25 00											25 00
Fond du Lac	Commonwealth		531 31	366 30											897 61
Fond du Lac	N. W. Courier	155 00	408 90	200 00	6 42						150 00				920 32
Fond du Lac	Reporter	35 10	499 77	371 30											906 17
Forest	Advance		25 00												25 00
Ft. Atkinson	Democrat		80 00												80 00
Ft. Atkinson	Hoard's Dairyman	282 74	433 78		180 00										946 52
Ft. Atkinson	Union		25 00												25 00
Fountain City	Republican	48 96					21 12								70 08
Fox Lake	Representative	95 80			21 84										117 64
Fountain City	J. Landahier								3 90						3 90
Frederick	Times														54 78
Friendship	Press	22 08				54 78									22 08
Galesville	Indepe dent		199 12		86 70										285 82
Galesville	Republican		50 00												50 00
Gays Mills	Fair Program	15 00													15 00
Gays Mills	Independent	25 00													25 00
Geneva Jct	Times		55 00												55 00
Gillette	Times		71 75												71 75
Glenwood	Gleaner			42 36				18 00							60 36

REPORT OF THE RAILROAD COMMISSION. 881

Menomonie	Dunn Co. Fair Prem. List																			15 00
Menomonie	News	107 08																		110 40
Menomonie	Times	123 00																		120 90
Menomonee Falls	News	62 08																		
Menomonee Falls	Wis. Sugar Beet		31 00	25 00	190 00															
Merrill	Advocate	114 54			23 25															
Merrill	News	94 72																		
Merrill	Star	75 00																		
Merrill	Thalbote	25 00																		
Merrillan	Leader				197 60					30 00	45 00									
Mi ton Junction	Telephone	105 00	15 00																	
Milton	Herald		4 88																	
Milton	Rock Co. Journal	55 66	132 40																	
Milwaukee	Acker-Staatz Zeitung	125 00																		
Milwaukee	Alhambra Theater Prog.	9 00																		
Milwaukee	American Journal of Ed.											25 00								
Milwaukee	American Turn Zeitung	31 50	28 10																	
Milwaukee	Badger	50 00	29 50																	
Milwaukee	Bijou Theater Prog.	25 00	109 00																	
Milwaukee	Bright Spots		25 00																	
Milwaukee	Catholic Citizen	89 48	116 88	47 96								62 50								
Milwaukee	Catholic Directory			26 50																
Milwaukee	Columbia	61 84	148 46	44 40								25 00								
Milwaukee	Davidson Theater Prog.	25 00	50 00																	
Milwaukee	Dziennik	25 00																		
Milwaukee	Mr. and Mrs. J. M. Turner & Sons				4 80															
Milwaukee	Catherine Withans				378 06															
Milwaukee	R. G. Dunn & Co.			168 63	106 90															
Milwaukee	Eagledom	56 58																		
Milwaukee	Evening Wisconsin	3,531 54	3,396 46	799 97	663 73					27 50		25 00								8,444 20
Milwaukee	Excelsior	50 88	70 00	105 46								62 50								
Milwaukee	Farmers Record		47 00																	
Milwaukee	Free Press	1,793 22	2,087 59	675 66	292 50	12 50				55 00		12 50								
Milwaukee	Germania	1,681 01	1,509 25	191 26	252 35															
Milwaukee	Good Templar	25 68		19 40																
Milwaukee	Herold	678 70	650 25	238 30	40 00								25 00							
Milwaukee	Hotel Register	16 14																		
Milwaukee	Journal	1,716 94	2,078 42	327 94	100 00								35 83							
Milwaukee	J. C. Karel				90 00															
Milwaukee	Kuryer Polski	44 18	139 80	48 54	181 94															
Milwaukee	Letters on Brewing			25 00																
Milwaukee	Living Church	105 00	73 00																	
Milwaukee	Masonic Tidings	25 00		12 50																
Milwaukee	Midland Review	7 56																		
Milwaukee	National Reform	4 50																		
Milwaukee	News	1,210 48	1,595 19	327 39	328 24															
																				3,461 30

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Rio.....	Badger-Blade.....	9 76													9 76
Rio.....	Reporter.....	85 00			100 00										185 00
Ripon.....	Commercial.....		15 00												15 00
Ripon.....	Commonwealth.....	70 00	85 00												155 00
Ripon.....	Press.....	100 00	140 00												240 00
River Falls.....	Journal.....							50 00							50 00
River Falls.....	Times.....							50 00							50 00
Rosendale.....	Journal.....		30 00												30 00
St. Croix Falls.....	Press.....				22 50	39 88									62 48
Sauk City.....	Pioneer Press.....	8 54													8 54
Schleisingsville.....	Bottschafter.....	40 00		38 48											78 48
Seymour.....	Fair Pamphlet.....						15 00								15 00
Seymour.....	Press.....						65 50								65 50
Sharon.....	Reporter.....		191 98												191 98
Shawano.....	Advocate.....		109 00												109 00
Shawano.....	Journal.....		38 52												38 52
Shawano.....	Volksvlatt.....		108 40												108 40
Sheboygan.....	America.....		17 04												17 04
Sheboygan.....	Democrat.....		150 05												150 05
Sheboygan.....	Germania.....		7 60												7 60
Sheboygan.....	Herald.....		223 82	180 00											403 82
Sheboygan.....	Journal.....		106 59												106 59
Sheboygan.....	Star.....		90 00												90 00
Sheboygan.....	Natl. Democrat.....		30 00												30 00
Sheboygan.....	News and D. R.....		50 00												50 00
Sheboygan.....	Telegram.....	25 50	205 32		65 00										295 82
Sheboygan.....	Volkblatt.....		61 30												61 30
Sheboygan.....	Zeitung.....		43 10												43 10
Sheboygan Falls.....	News.....			12 50											12 50
Shell Lake.....	Watchman.....							50 00							50 00
Shiocton.....	News.....	67 40					30 00								97 40
Shullsburg.....	Pick and Gad.....	15 00								50 00					65 00

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La Crosse.....	W. E. Burber.....	*
La Crosse.....	M. R. Husting.....	*
Lancaster.....	T. H. Rundle.....	*
Viroqua.....	Mr. & Mrs. T. H. Graves.....	*
Viroqua.....	J. L. Griffin.....	*
Total.....	37,265 63	47,324 49	12,724 18	14,812 32	1,205 56	2,426 13	5,124 01	695 66	171 15	2,540 04	25 00	20 00	56 11	124,390 28

* Mileage. Amount not given.

† Some cases in the D. S. S. A. reports the value of mileage books is not given. In all such cases such mileage is estimated as being for 1,000 miles and worth \$25.00.

**DETAILED STATEMENTS OF THE BOND
ISSUES OF CERTAIN RAILWAYS.**

FUNDED DEBT OF THE CHICAGO AND NORTHWESTERN RY. CO., JUNE 30, 1906.

CLASS OF BOND OR OBLIGATION.	TIME.		Amount of authorized issue.	Amount issued.	Amount Outstanding.	Cash realized on amount issued.	INTEREST.			
	Date of issue.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.
MORTGAGE BONDS.										
Milwaukee & Madison Ry., 1st Mtge.....	Sep. 1, 1880	Sep. 1, 1905	\$1,600,000 00	\$1,600,000 00	None		6	Mar. 1, Sep. 1	\$16,000 00	\$48,840 00
Chicago & Tomah R. R. 1st Mtge.....	Sep. 1, 1880	Nov. 1, 1905	1,528,000 00	1,528,000 00	None		6	May 1, Nov. 1	30,560 00	47,770 00
Chi., Milw., & No. Western Ry., Construction.....	May 1, 1882	Nov. 1, 1905	750,000 00	750,000 00	None		6	May 1, Nov. 1	15,000 00	22,500 00
Menominee River R. R. 1st Mtge.....	July 1, 1876	July 1, 1906	400,000 00	400,000 00	400,000 00		7	Jan. 1, July 1	28,000 00	28,175 99
Menominee River R. R. Extension, 1st Mtge.....	Jan. 1, 1880	July 1, 1906	160,000 00	160,000 00	160,000 00		7	Jan. 1, July 1	11,200 00	11,025 00
Des Moines & Minneapolis R. R., 1st Mtge.....	Feb. 1, 1882	Feb. 1, 1907	600,000 00	600,000 00	600,000 00		7	Feb. 1, Aug. 1	42,000 00	42,000 00
Dakota Central Ry., 1st Mtg. (W. & St. P. Conn).....	May 1, 1882	Sep. 1, 1907	1,065,000 00	1,035,000 00	1,065,000 00		6	Mar. 1, Sep. 1	63,900 00	63,900 00
W. & St. P. R. R., Second (now first) Mtge.....	Nov. 1, 1867	Nov. 1, 1907	1,800,000 00	1,650,000 00	1,592,000 00		7	May 1, Nov. 1	111,440 00	112,560 00
Dakota Central Ry., 1st Mtge. (So. East Divn.).....	Nov. 1, 1882	Nov. 1, 1907	2,000,000 00	2,000,000 00	2,000,000 00		6	May 1, Nov. 1	120,000 00	120,000 00
Rochester & Northern Minnesota Ry., 1st Mtge.....	Sep. 1, 1878	Sep. 1, 1908	200,000 00	200,000 00	200,000 00		7	Mar. 1, Sep. 1	14,000 00	14,000 00
Plainview R. R., 1st Mtge.....	Sep. 1, 1878	Sep. 1, 1908	100,000 00	100,000 00	100,000 00		7	Mar. 1, Sep. 1	7,000 00	6,930 00
Minnesota Valley Ry., 1st Mtge.....	Oct. 1, 1878	Oct. 1, 1908	150,000 00	150,000 00	150,000 00		7	Apr. 1, Oct. 1	10,500 00	10,500 00
Ottumwa, Cedar Falls & St. Paul Ry., 1st Mtge.....	Mar. 1, 1884	Mar. 1, 1909	1,600,000 00	1,600,000 00	1,600,000 00		5	Mar. 1, Sep. 1	80,000 00	80,225 00
Cedar Rapids & Mo. River R. R., 1st Mtge. of 1884.....	June 1, 1884	June 1, 1909	769,000 00	769,000 00	769,000 00		7	June 1, Dec. 1	53,830 00	54,635 00
Northern Illinois Ry., 1st Mtge.....	Apr. 1, 1885	Mar. 1, 1910	1,600,000 00	1,500,000 00	1,500,000 00		5	Mar. 1, Sep. 1	75,000 00	74,050 00
Madison Extension, 1st Mtge., Sinking Fund.....	Apr. 1, 1871	Apr. 1, 1911	3,150,000 00	3,150,000 00	3,150,000 00		7	Apr. 1, Oct. 1	220,500 00	220,080 00
Menominee Extension, 1st Mtge., Sinking Fund.....	June 1, 1871	June 1, 1911	2,700,000 00	2,700,000 00	2,695,000 00		7	June 1, Dec. 1	188,790 00	188,755 00
C. & N. W. Ry., Consolidated Skg. Fund Currency.....	Jan. 16, 1865	Feb. 1, 1915	12,900,000 00	12,832,000 00	12,832,000 00		7	Feb. 1, May 1, Aug. 1, Nov. 1	898,240 00	899,220 00
Cedar Rapids & Mo. River. 3d Div., 1st Mtge.....	May 1, 1866	May 1, 1916	2,500,000 00	2,332,000 00	2,332,000 00		7	May 1, Nov. 1	163,240 00	162,715 00
W. & St. P. R. R. Extension, West Div., 1st Mtge.....	Dec. 1, 1871	Dec. 1, 1916	4,375,000 00	4,375,000 00	4,241,000 00		7	June 1, Dec. 1	296,870 00	298,718 00
North Western Union Ry., 1st Mtge.....	June 1, 1872	June 1, 1917	3,500,000 00	3,500,000 00	3,500,000 00		7	Mar. 1, Sep. 1	245,000 00	244,685 00
M., L. S. & W. Ry., Consolidated, 1st Mtge.....	May 2, 1881	May 1, 1921	5,000,000 00	5,000,000 00	5,000,000 00		6	May 1, Nov. 1	300,000 00	300,210 00
M., L. S. & W. Ry., Marshfield Extension, 1st Mtge.....	Oct. 1, 1892	Oct. 1, 1922	600,000 00	600,000 00	400,000 00		5	Apr. 1, Oct. 1	20,000 00	20,000 00
M., L. S. & W. Ry. 1st Mtg. (Michigan Divn.).....	June 20, 1884	July 1, 1924	3,000,000 00	1,281,000 00	1,281,000 00		6	Jan. 1, July 1	76,660 00	76,860 00
M., L. S. & W. Ry. 1st Mtge (Ashland Divn.).....	Mar. 2, 1885	Mar. 1, 1925	1,000,000 00	1,000,000 00	1,000,000 00		6	Mar. 1, Sep. 1	60,000 00	59,700 00
M., L. S. & W. Ry. Extn. & Imp. Skg. Fund Mtge.....	Feb. 1, 1889	Feb. 1, 1929	5,000,000 00	4,564,000 00	4,188,000 00		5	Feb. 1, Aug. 1	207,400 00	206,050 00
Wisconsin Northern Ry., 1st Mtge.....	July 15, 1896	July 15, 1931	1,725,000 00	660,000 00	440,000 00		4	Jan. 15, July 15	17,600 00	17,600 00
Boyer Valley Ry., 1st Mtge.....	Dec. 1, 1898	Dec. 1, 1923	1,440,000 00	1,440,000 00	1,440,000 00		3 1/2	June 1, Dec. 1	50,400 00	52,675 00
Minnesota & Iowa Ry., 1st Mtge.....	June 1, 189	June 1, 1924	1,904,000 00	1,904,000 00	1,904,000 00		3 1/2	June 1, Dec. 1	6,640 00	67,655 00
Southern Iowa Ry., 1st Mtge.....	Sep. 1, 1900	Sep. 1, 1925	1,120,000 00	431,000 00	431,000 00		3 1/2	Mar. 1, Sep. 1		
Princeton & Northwestern Ry. 1st Mtge.....	Jan. 1, 1901	Jan. 1, 1926	2,100,000 00	2,100,000 00	2,100,000 00		3 1/2	Jan. 1, July 1	73,500 00	73,587 50
Peoria & North Western Ry., 1st Mtge.....	Mar. 1, 1901	Mar. 1, 1926	2,125,000 00	2,125,000 00	2,125,000 00		3 1/2	Mar. 1, Sep. 1	74,375 00	74,165 00
Mankato & New Ulm Ry., 1st Mtge.....	Apr. 1, 1899	Oct. 1, 1929	416,000 00	416,000 00	416,000 00		3 1/2	Apr. 1, Oct. 1	14,560 00	14,560 00
Fremont, Elkhorn & Mo. Valley R. R., Consoltd.....	Oct. 1, 1883	Oct. 1, 1933	\$20,000 per mi.	7,725,000 00	7,725,000 00		6	Apr. 1, Oct. 1	463,500 00	465,060 00
Minnesota & South Dakota Ry., 1st Mtge.....	Jan. 1, 1900	Jan. 1, 1935	528,000 00	528,000 00	528,000 00		3 1/2	Jan. 1, July 1	18,480 00	18,480 00
Iowa, Minnesota & No. Western Ry., 1st Mtge.....	Jan. 1, 1900	Jan. 1, 1935	3,900,000 00	3,900,000 00	3,900,000 00		3 1/2	Jan. 1, July 1	136,500 00	136,500 00
Sioux City & Pacific R. R., 1st Mtge.....	Aug. 1, 1901	Aug. 1, 1936	4,000,000 00	4,000,000 00	4,000,000 00		3 1/2	Feb. 1, Aug. 1	140,000 00	139,790 00
C. & N. W. Ry., General Mtge., Gold of 1887.....	Nov. 1, 1897	Nov. 1, 1987	165,000,000 00	30,860,000 00	30,860,000 00		3 1/2	Feb. 1, May 1, Aug. 1, Nov. 1	723,064 99	722,312 50
MISCELLANEOUS OBLIGATIONS.										
C. & N. W. Ry., Sinking Fund of 1875-6 per cent.....	Oct. 1, 1879	Oct. 1, 1929	15,000,000 00	6,440,000 00	5,615,000 00		6	Apr. 1, Oct. 1	333,340 00	335,400 00
C. & N. W. Ry., Sinking Fund of 1879-5 per cent.....	Oct. 1, 1879	Oct. 1, 1929	15,000,000 00	8,560,000 00	8,705,000 00		5	Apr. 1, Oct. 1	332,737 50	332,100 00
C. & N. W. Ry., Extension of 1886.....	Apr. 15, 1886	Aug. 15, 1926	20,000,000 00	18,632,000 00	18,632,000 00		4	Feb. 1, Aug. 15	745,280 00	745,340 00
INCOME BONDS.										
M. L. S. & W. Ry., Income Bonds.....	May 2, 1881	May 1, 1911	500,000 00	500,000 00	500,000 00		6	May 1, Nov. 1	\$30,000 00	29,380 00
DEBENTURE BONDS.										
M., L. S. & W. Ry., 20 yr. Convertible Debentures.....	Feb. 1, 1887	Feb. 1, 1907	2,000,000 00	2,000,000 00	436,000 00		5	Feb. 1, Aug. 1	\$21,800 00	\$20,675 00
C. & N. W. Ry., 25 yr. Debentures of 1909.....	July 1, 1884	Nov. 1, 1909	6,000,000 00	6,000,000 00	5,900,000 00		5	May 1, Nov. 1	294,500 00	294,375 00
C. & N. W. Ry., 30 yr. Debentures.....	Feb. 28, 1891	Apr. 15, 1921	10,000,000 00	10,000,000 00	10,000,000 00		5	Apr. 15, Oct. 15	500,000 00	499,200 00
C. & N. W. Ry., Skg. Fund Debentures of 1933.....	May 1, 1883	May 1, 1933	10,000,000 00	10,000,000 00	9,800,000 00		5	May 1, Nov. 1	490,000 00	491,975 00
Total Mortgage Bonds.....				\$111,485,000 00	\$106,626,000 00				\$5,133,949 99	\$5,196,418 00
Total Miscellaneous Obligations.....				33,632,000 00	30,952,000 00				1,411,857 50	1,412,840 00
Total Income Bonds.....				500,000 00	500,000 00				30,000 00	29,880 00
Total Debenture Bonds.....				28,000,000 00	26,136,000 00				1,305,300 00	1,306,225 00
Grand Total.....				\$173,627,000 00	\$164,214,000 00				\$7,882,107 49	\$7,945,363 00

Add interest coupons paid during year from bonds that matured in previous years.....

Total included in income account, page 31.....

\$1,120 00
\$7,882,107 49
\$7,946,483 00

a In addition to this amount \$10,675,000 00 bonds of this issue are held in trust, for which an equal amount of C. & N. W. Ry. Extension bonds of 1886 were issued.
b \$40,000 00 of these bonds are on hand in the treasury of the company.
c All of these bonds are on hand in the treasury of the company.
d \$10,201,000 00 of these bonds are on hand in the treasury of the company.
e \$67,000 00 of these bonds are on hand in the treasury of the company.
f \$64,000 00 of these bonds are on hand in the treasury of the company.
g \$10,000 00 of these bonds are on hand in the treasury of the company.

FUNDED DEBT OF THE CHICAGO, MILWAUKEE & ST. PAUL RY. CO, JUNE 30, 1906.

Description of Bonds.	Date of maturity.	Interest.				Amount of bonds outstanding.
		Rate.	Payable.	Accrued during year.	Paid during year.	
Iowa & Dakota Division Extension	July 1, 1908	7	Jan. and July	\$35,280 00	\$35,175 00	\$504,000 00
Southwestern Division	July 1, 1909	6	do	240,000 00	239,670 00	4,000,000 00
Hastings & Dakota Division Extension	Jan. 1, 1910	7	do	397,600 00	397,215 00	5,680,000 00
Chicago & Pacific Division	Jan. 1, 1910	5	do	49,500 00	49,775 00	990,000 00
Southern Minnesota Division	Jan. 1, 1910	6	do	180,000 00	179,580 00	3,000,000 00
Mineral Point Division	Jan. 1, 1910	6	do	445,920 00	445,080 00	7,432,000 06
Terminal mortgage	July 1, 1910	5	do	142,000 00	141,925 00	2,840,000 00
La Crosse & Davenport Division	July 1, 1914	5	do	237,400 00	237,500 00	4,748,000 00
Dubuque Division	July 1, 1919	5	do	125,000 00	125,875 00	2,500,000 00
Wisconsin Valley Division	July 1, 1920	6	do	322,020 00	321,630 00	5,367,000 00
Chicago & Pacific Western Division	July 1, 1920	6	do	120,120 00	119,940 00	2,002,000 00
Wisconsin & Minnesota Division	Jan. 1, 1921	5	do	1,267,000 00	1,266,350 00	25,340,000 00
Chicago & Lake Superior Division	July 1, 1921	5	do	237,750 00	237,150 00	4,755,000 00
Chicago & Missouri River Division	July 1, 1921	5	do	68,000 00	67,975 00	1,360,000 00
General mortgage	July 1, 1926	5	do	154,150 00	154,575 00	3,083,000 00
General mortgage	May 1, 1926	4	do	1,073,160 00	953,950 00	26,829,000 00
General mortgage	May 1, 1926	3½	do	313,250 00	230,781 25	8,950,000 00
General mortgage	Jan. 1, 1909	7	do	77,455 00	78,487 50	1,106,500 00
Wisconsin Valley R. R. Co	June 1, 1910	6	June and Dec.	129,300 00	129,660 00	2,155,000 00
Milwaukee & Northern R. R. Co, 1st mortgage	June 1, 1913	6	do	305,520 00	239,880 00	5,092,000 00
Milwaukee & Northern R. R. Co, consolidated	Jan. 1, 1916	5	Jan. and July	142,800 00	142,325 00	2,856,000 00
Dakota & Great Southern Ry. Co	Jan. 1, 1924	6	do	75,000 00	74,970 00	1,250,000 00
Fargo & Southern Ry. Co					700 00	10,000 00
*Consolidated mortgage				3,480 00	37,132 50	.....
Interest on bonds retired .....						.....
Less amount of interest on bonds in the treasury of the company and in the hands of trustees—not payable—included above				\$6,141,705 00	227,855 00	.....
Total				\$5,913,850 00	\$5,907,301 25	\$121,849 500 00

FUNDED DEBT OF THE CHICAGO, BURLINGTON AND QUINCY RAILWAY COMPANY—JUNE 30, 1906.

Class of Bond or Obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Interest.			
	Date of issue.	When due.				Rate.	When payable.	Amount accrued during year.	Amount paid during year.
C. B. & Q., Iowa Division.....	1879	1919	\$3,000,000 00	\$3,000,000 00	\$2,329,000 00	Per ct.			
C. B. & Q., Iowa Division.....	1879	1919	12,502,000 00	12,502,000 00	7,712,000 00	5	Apr., Oct.	\$118,662 50	\$119,400 00
C. B. & Q., 4s of 1921.....	1881	1921	4,300,000 00	4,300,000 00	4,300,000 00	4	Apr., Oct.	313,580 00	315,280 00
C. B. & Q., Denver Extension.....	1882	1922	7,968,000 00	7,968,000 00	7,968,000 00	4	Mar., Sept.	172,000 00	172,000 00
C. B. & Q., plain 5s.....	1883	1913	9,000,000 00	9,000,000 00	9,000,000 00	4	Feb., Aug.	318,720 00	323,720 00
C. B. & Q., Nebraska Extension.....	1887	1927	29,441,000 00	29,441,000 00	24,791,000 00	5	May, Nov.	450,000 00	450,000 00
C. B. & Q., Illinois Division.....	1899	1949	50,835,000 00	50,835,000 00	50,835,000 00	4	May, Nov.	1,001,502 20	1,002,840 00
C. B. & Q., Illinois Division.....	1899	1945	34,165,000 00	34,165,000 00	34,165,000 00	3½	Jan., July.	1,779,225 00	1,779,225 00
B. & M. Nebraska Consol. Mortgage	1878	1918	13,650,000 00	13,650,000 00	13,650,000 00	4	Jan., July.	1,203,206 33	1,203,206 33
B. & M. 4s of 1910.....	1880	1910	3,347,000 00	3,347,000 00	3,347,000 00	6	Jan., July.	818,460 00	818,460 00
Rep. Valley Railroad.....	1879	1919	2,643,000 00	2,643,000 00	2,643,000 00	4	Jan., July.	133,880 00	133,880 00
H. & St. Joe Consolidated Mortgage	1881	1911	8,000,000 00	8,000,000 00	8,000,000 00	6	Jan., July.	64,680 00	64,680 00
K. C. & St. Joe & C. B. R. R.....	1877	1907	5,000,000 00	5,000,000 00	5,000,000 00	6	Mar., Sept.	480,000 00	480,000 00
Tarkio Valley R. R.....	1880	1920	430,000 00	430,000 00	430,000 00	7	Jan., July.	350,000 00	350,000 00
Nodaway Valley R. R.....	1880	1920	388,000 00	388,000 00	144,000 00	7	June, Dec.	10,785 83	10,850 00
					128,000 00	7	June, Dec.	9,601 67	9,660 00
Contingent Liabilities for Branch Roads.									
Atchison & Neb. R. R.....	1878	1908	1,125,000 00	1,125,000 00	1,125,000 00	7	Mar., Sept.	78,750 00	78,750 00
Lincoln & Northwestern.....	1880	1910	600,000 00	600,000 00	600,000 00	7	Jan., July.	42,000 00	42,000 00
Grand total.....			\$186,394,000 00	\$186,394,000 00	\$174,172,000 00			\$7,345,053 53	\$7,353,951 33

FUNDED DEBT OF THE MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY CO—JUNE 30, 1906.

Class of bond or obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Cash realized on amount issued.	Interest.			
	Date of issue.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.
M. & P. Ry. first mortgage bonds.....	Jan. 1, 1886	Jan. 1, 1936	\$4,290,000 00	\$4,290,000 00	\$306,000 00	\$236,337 83	Per ct. 4	Jan., July	\$12,400 00	\$12,835 00
M., S. S. M. & A. Ry. first mortgage bonds	Jan. 1, 1896	Jan. 1, 1926	10,000,000 00	10,000,000 00	8,204,000 00	6,979,759 60	4 & 5	Jan., July	328,200 00	329,720 00
M., S. P. & S.S. Marie consolidated bonds.	July 1, 1888	July 1, 1938	40,615,000 00	38,105,000 00	38,105,000 00	32,418,778 88	4	Jan., July	1,466,840 00	1,347,400 00
M., St. P. & S.S. Marie second mtg. bonds..	Jan. 1, 1899	Jan. 1, 1949	\$60,905,000 00	\$52,395,000 00	\$46,615,000 00	\$39,658,886 31	4	Jan., July	\$1,807,440 00	\$1,689,955 00
			5,000,000 00	3,500,000 00	3,500,000 00	3,334,264 78			140,000 00	140,840 00
Grand total.....			\$85,905,000 00	\$55,895,000 00	\$50,115,000 00	\$42,998,151 09			\$1,947,440 00	\$1,830,795 00

FUNDED DEBT OF THE GREAT NORTHERN RAILWAY COMPANY — JUNE—30, 1906.

Class of bond or obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Cash realized on amount issued.	Interest.			
	Date of issue.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.
N. P., G. N. joint, C. B. & Q. collateral trust bonds.	July 1, 1901	July 1, 1921	\$222,000,000 00	\$215,225,200 00	\$215,225,200 00	Issued in ex. for C. B. & Q. R.R. stock.	Per ct.	On coupon bonds July 1 & Jan. 1.	.....	Int. paid by C., B. & Q. Ry. Co.
G. N. Ry. Cos. proportion.					107,612,600 00			July 1-Oct. 1 Jan. 1-Apr. 1		
Sterling loan	Nov. 19, 1903	Dec. 1, 1905	£1,500,000 00	£1,500,000 00					\$151,875 00	\$195,602 35
Grand total.....					\$107,612,600 00				\$151,875 00	\$195,602 85

FUNDED DEBT OF THE WISCONSIN CENTRAL RAILWAY COMPANY—JUNE 30, 1906.

Class of Bond or Obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Cash realized on amount issued.	Interest.			
	Date issued.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.
Wis. Cent. Ry. Co. First General Mortgage Bonds	July 13, 1899.	July 1, 1949.	\$27,000,000 00	\$24,640,000 00	\$23,748,000 00	Per ct. 4	Jan. July.	\$949,920 00	\$949,920 00	
Wis. Cent. R. R. Co. First Series Bonds	Jan. 1, 1879.	Jan. 1, 1909.	764,500 00	764,500 00	656,000 00	5	Jan., July.	32,800 00	32,800 00	
C. W. & M. R. R. First Mortgage Bonds	Sept. 1, 1885.	Mar. 1, 1916.	835,000 00	835,000 00	776,000 00	6	Mar., Sept.	46,560 00	46,560 00	
M. & L. W. R. R. First Mortgage Bonds	Mar. 27, 1882.	July 1, 1912.	639,000 00	639,000 00	604,000 00	6	Jan., July.	36,240 00	36,240 00	
M. & S. E. Div. P. M. Mortgage Bonds	May 1, 1901.	May 1, 1951.	450,000 00	450,000 00	422,000 00	4	May, Nov.	17,100 00	17,140 00	
Minneapolis Terminal P. M. Mortgage Bonds	Jan. 1, 1900.	Jan. 1, 1950.	500,000 00	500,000 00	500,000 00	3½	Jan., July.	17,500 00	17,500 00	
Superior & Duluth Div. & Terminal First Mtge. B'ds.	May 1, 1906.	May 1, 1936.	8,500,000 00	3,485,000 00	3,485,000 00	\$2,979,675 00	4	May, Nov.	23,233 33	
Grand total			\$38,688,500 00	\$31,313,500 00	\$30,191,000 00	\$2,979,675 00		\$1,123,353 33	\$1,100,160 00	

The amounts shown under columns "Amount of Authorized Issue" and "Amount Issued" opposite Wisconsin Central Railroad Company First Series Bonds (\$764,700), C. W. & M. R. R. First Mtge. Bonds (\$835,000), M. & L. W. R. R. First Mtge. Bonds (\$639,000), are the amounts of such bonds in the hands of the public outstanding at the date of the issue of Wisconsin Central Railway Company First Gen. Mtge. Bonds, namely, July 13, 1899, and for the purchase, exchange or retirement thereof, there were re-issued \$2,463,000 of the First Gen. Mtge. Bonds.

The Minneapolis Terminal Purchase Mortgage bonds are secured by first mortgage on sundry real estate in Minneapolis together with tracks, round-house, freight house and other structures constituting the company's terminal facilities in Minneapolis, but said mortgage is not a lien on the main line or its franchises.

FUNDED DEBT OF THE CHICAGO, LAKE SHORE & EASTERN RAILWAY COMPANY—JUNE 30, 1906.

Class of Bond or Obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Interest.			
	Date of issue.	When due.				Rate.	When payable.	Amount accrued during year.	Amount paid during year.
C. L. S. & E. Ry. First Mortgage 5 per cent. Gold Bonds.....	Mar. 1, 1897	Mar. 1, 1917	\$1,200,000 00	\$1,200,000 00	\$1,200,000 00	Per ct. 5	Mar. & Sept.	\$60,000 00	\$60,000 00
C. L. S. & E. Ry. Equipment Gold Sinking Fund.....	July 1, 1897	July 1, 1917	1,310,000 00	1,310,000 00	1,310,000 00	5	Jan. & July	65,500 00	65,500 00
Joliet & Blue Island Ry. First Mortgage Bonds.....	July 1, 1894	July 1, 1914	200,000 00	200,000 00	200,000 00	6	Jan. & July	12,000 00	12,000 00
Milwaukee, Bay View & Chicago Ry. First Mortgage Bonds.....	July 1, 1894	July 1, 1914	130,000 00	130,000 00	130,000 00	6	Jan. & July	7,800 00	7,800 00
Chicago & Kenosha Ry. First Mortgage Bonds.....	July 1, 1894	July 1, 1914	120,000 00	120,000 00	120,000 00	6	Jan. & July	7,200 00	7,200 00
Chicago & Southeastern Ry. First Mortgage Bonds.....	July 1, 1894	July 1, 1914	270,000 00	270,000 00	270,000 00	6	Jan. & July	16,200 00	16,200 00
Grand total.....			\$3,230,000 00	\$3,230,000 00	\$3,230,000 00			\$168,700 00	\$168,700 00

FUNDED DEBT OF THE NORTHERN PACIFIC RAILWAY CO.—JUNE 30, 1

Class of Bond or Obligation.	Time.		Amount of authorized issue.	Amount outstanding.	Interest.			
	Date of issue.	When due.			Rate.	When payable.	Amount accrued during year.	Amount paid during year.
St. Paul & Northern Pacific general mortgage	1883	1923	.....	\$8,021,000 00	6	Feb., Aug.....	\$481,260 00	\$483,420 00
Western Railroad of Minnesota, mortgage.....	1877	1907	.....	326,000 00	7	May, Nov.....	22,866 67	22,900 00
Northern Pacific Ry. Co., prior lien.....	1897	1997	\$130,000,000 00	104,961,500 00	4	{ Jan., Apr... } { July, Oct... }	4,128,240 00	4,122,095 00
Northern Pacific Ry. Co., general lien.....	1897	2047	60,000,000 00	60,000,000 00	3	{ Feb., May... } { Aug., Nov... }	800,000 00	1,796,143 75
Northern Pacific Ry. Co., St. Paul & Duluth division..	1900	1996	20,000,000 00	7,977,000 00	4	June, Dec.....	306,573 33	306,380 00
St. Paul & Duluth R. R. Co., first mortgage.....	1881	1931	1,000,000 00	1,000,000 00	5	Feb., Aug.....	50,000 00	50,100 00
St. Paul & Duluth R. R. Co., second mortgage.....	1887	1917	2,000,000 00	2,000,000 00	5	Apr., Oct.....	100,000 00	99,125 00
St. Paul & Duluth R. R. Co., first consol. mortgage....	1898	1968	5,000,000 00	1,000,000 00	4	June, Dec.....	40,000 00	40,060 00
Taylor Falls & Lake Superior R. R., mortgage.....	1884	1914	210,000 00	210,000 00	6	Jan., July.....	12,600 00	12,600 00
Duluth Short Line Ry. mortgage.....	1885	1916	500,000 00	500,000 00	5	Mch., Sept....	25,000 00	24,625 00
Minneapolis & Duluth R. R., first mortgage.....	1877	1907	.....	280,000 00	7	May, Nov.....	19,600,000	19,215 00
Northern Pacific, Gt Nor. joint C., B. & Q. collateral bonds, N. P. proportion	} 1901	1921	.....	107,612,600 00	4	{ Jan., Apr... } { July, Oct... }	*	*
Total.....				293,888,100 00			\$6,986,140 00	\$6,976,663 75

* Interest paid by C. B. & Q. Ry. Co.

Class of bond or obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Cash realized on amount issued.	Interest.				
	Date of issue.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.	
1st Mtge. sterling extended.	4-1-75	4-1-51	\$2,500,000 00	\$2,500,000 00	\$2,500,000 00	\$2,500,000 00	4	Apr.,	O.	\$100,000 00	\$99,800 00
Sterling 3s, 1st Mtge.	8-31-95	3-1-51	2,500,000 00	2,500,000 00	2,500,000 00	2,500,000 00	3	Mch.,	Sep.	75,000 00	75,000 00
Gold 4s, 1st Mtge.	1-1-86	1-1-51	1,500,000 00	1,500,000 00	1,500,000 00	1,500,000 00	4	Jan.,	July	60,000 00	59,400 00
Gold 3½s, 1st Mtge.	1-1-86	1-1-51	2,500,000 00	2,499,000 00	2,499,000 00	2,499,000 00	3½	Jan.,	July	87,465 00	87,710 00
Gold 3½s, 1st Mtge. ext'd	8-30-03	4-1-51	3,000,000 00	3,000,000 00	3,000,000 00	3,000,000 00	3½	Apl.,	Oct.	105,000 00	104,335 00
Gold 3½s, 1st Mtge. ext'd	12-1-05	12-1-50	1,000,000 00	1,000,000 00	1,000,000 00	1,000,000 00	3½	June,	Dec.	20,416 67	17,430 00
Sterling 5s, 1st Mtge.	2-16-76	12-1-05	.....	.....	.....	.....	5	June,	Dec.	20,833 33	49,225 00
7 per cent. construction.		Past due	.....	1,000 00	1,000 00	1,000 00	.....	.....	.....	.....	.....
1st Mtge. on K. & S. W.	8-1-81	8-1-21	\$13,000,000 00	\$13,000,000 00	\$13,000,000 00	\$13,000,000 00	.....	.....	.....	\$468,715 00	\$492,900 00
1st Mtge. on Springfield Div.	1-1-48	1-1-51	1,000,000 00	968,000 00	968,000 00	968,000 00	5	Feb.	Aug.	48,400 00	48,400 00
1st Mtge. on D. & S. C.	2-1-95	8-1-51	2,000,000 00	2,000,000 00	2,000,000 00	2,000,000 00	3½	Jan.,	July	70,000 00	70,237 50
1st Mtge. on St. Louis Div.	7-1-97	7-1-51	10,000,000 00	5,425,000 00	5,425,000 00	5,425,000 00	4	Feb.	Aug.	217,000 00	216,360 00
1st Mtge. on St. Louis Div.	7-1-97	7-1-51	5,000,000 00	4,998,275 00	4,998,275 00	4,998,275 00	3	Jan.,	July	149,940 00	148,965 00
1st Mtge. on St. Louis Div.	7-1-97	7-1-51	10,000,000 00	8,377,000 00	8,377,000 00	8,377,000 00	3½	Jan.,	July	293,195 00	293,466 25
1st Mtge. on Louisville Div.	9-15-97	7-1-53	25,000,000 00	22,729,000 00	22,729,000 00	22,729,000 00	3½	Jan.,	July	779,047 50	779,415 00
1st Mtge. on Omaha Div.	7-20-00	8-1-51	5,000,000 00	5,000,000 00	5,000,000 00	5,000,000 00	3	Feb.	Aug.	150,000 00	150,315 00
1st Mtge. on Litchfield Div.	10-1-00	1-1-51	4,000,000 00	3,235,000 00	3,235,000 00	3,235,000 00	3	Jan.,	July	95,745 00	95,490 00
Purchased lines, 1st Mtge.	6-30-04	7-1-52	20,000,000 00	14,662,000 00	14,662,000 00	14,662,000 00	3½	Jan.,	July	513,170 00	512,750 00
			\$95,000,000 00	\$80,394,275 00	\$80,394,275 00	\$80,394,275 00	.....	.....	.....	\$2,785,212 50	\$2,808,358 75
Miscellaneous obligations:											
Collateral trust bonds	3-31-88	4-1-52	\$15,000,000 00	\$15,000,000 00	\$15,000,000 00	\$15,000,000 00	4	Apl.,	Oct.	600,000 00	596,310 00
Collateral trust bonds (L. N. O. & T.)	9-1-92	11-1-53	25,000,000 00	25,000,000 00	25,000,000 00	25,000,000 00	4	May,	Nov.	1,000,000 00	1,001,050 00
Sterling*	7-21-86	7-1-50	9,000,000 00	5,266,000 00	5,266,000 00	5,266,000 00	3½	Jan.,	July	184,310 00	184,082 50
Cairo bridge†	6-1-92	12-1-50	3,000,000 00	3,000,000 00	3,000,000 00	3,000,000 00	4	June,	Dec.	120,000 00	118,860 00
			\$52,000,000 00	\$48,266,000 00	\$48,266,000 00	\$48,266,000 00	.....	.....	.....	\$1,904,310 00	\$1,900,302 50
Total:											
Mortgage bonds			\$95,000,000 00	\$80,394,275 00	\$80,394,275 00	\$80,394,275 00	.....	.....	.....	\$2,785,212 50	\$2,808,358 75
Miscellaneous obligations			52,000,000 00	48,266,000 00	48,266,000 00	48,266,000 00	.....	.....	.....	1,904,310 00	1,900,302 50
Income bonds			.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand total			\$147,000,000 00	\$128,660,275 00	\$128,660,275 00	\$128,660,275 00	.....	.....	.....	\$4,689,522 50	\$4,708,661 25

*Issued against \$5,266,000 C., St. L. & N. O. R. R. Co.'s bonds of 1951.

†Issued against \$3,000,000 C., St. L. & N. O. R. R. Co.'s bridge bonds of 1950.

FUNDED DEBT OF THE CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RY. CO—JUNE 30, 1906.

Class of bond or obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Cash realized on amount issued.	Interest.			
	Date of issue.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.
First mortgage	1878	1918	\$3,000,000 00	\$3,000,000 00	\$1,572,000 00	As'd with road.	Per ct.	May 1, Nov. 1	\$102,000 00	\$102,005 00
First mortgage	1880	1930	800,000 00	800,000 00	641,000 00	As'd with road.	6	Jan. 1, July 1	38,850 00	39,175 00
First mortgage	1878	1908	125,000 00	125,000 00	125,000 00	As'd with road.	8	Jan. 1, July 1	10,000 00	10,260 00
First mortgage	1879	1919	6,070,000 00	6,070,000 00	6,070,000 00	As'd with road.	6	Apr. 1, Oct. 1	364,200 00	364,740 00
First mortgage	1878	1908	334,800 00	334,800 00	334,800 00	As'd with road.	7	Jan. 1, July 1	23,435 00	23,558 50
Consolidated mortgage	1880	1930	30,000,000 00	9,791,625 00	9,791,625 00	Issued in exch.	6	Dec. 1, June 1	987,809 59	988,677 50
First mortgage	1890	1915	400,000 00	5,208,375 00	5,208,375 00	As'd with road.	3½	May 1, Nov. 1	17,500 00	17,475 00
First mortgage	1895	1930	1,500,000 00	3,734,000 00	3,734,000 00	As'd with road.	5	Mch. 1, Sept. 1	.....	.....
Grand total .....	.....	.....	\$42,229,800 00	\$30,963,800 00	\$29,376,800 00	\$12,642,250 08	.....	.....	\$1,543,795 59	\$1,545,891 00

In addition to the bonds shown hereon this company guarantees the payment of principal and interest of \$75,000 of the bonds of the Minneapolis Eastern Ry. Co.

FUNDED DEBT OF THE EASTERN RAILWAY CO. OF MINNESOTA—JUNE 30, 1906.

Class of bond or Obligation.	Time.		Amount of authorized issue.	Amount issued.	Amount outstanding.	Cash realized on amount issued.	Interest.			
	Date of Issue.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.
First Mortgage, First Division	April 1, 1888	April 1, 1908	\$5,000,000 00	\$4,700,000 00	\$4,700,000 00	\$1,456,412 50	5	April 1—Oct. 1	\$235,000 00	\$236,100 00
Northern Division.....	April 1, 1898	April 1, 1948	15,000,000 00	5,000,000 00	5,000,000 00	4,950,000 00	4	April 1—Oct. 1	200,000 00	199,900 00
Grand total.....			\$20,000,000 00	9,700,000 00	9,700,000 00	9,406,412 50			\$435,000 00	\$436,000 00

FUNDED DEBT OF THE DULUTH, SOUTH SHORE & ATLANTIC RAILWAY CO.—JUNE, 30, 1906.

Class of Bond or Obligation.	Time.		Amount of authorized issue.	Amount Issued.	Amount outstanding	Cash realized on amount issued.	Interest.			
	Date of Issue.	When due.					Rate.	When payable.	Amount accrued during year.	Amount paid during year.
First Mortgage.....	April 15, 1887	Jan. 1, 1937	\$4,000,000 00	\$4,000,000 00	\$3,816,000 00	.....	Per ct. 5	Jan. 1—July 1	\$190,800 00	\$190,800 00
First consol.....	July 17, 1890	Aug. 1, 1990	20,000,000 00	15,107,000 00	15,107,000 00	12,552,000 00	4	Feb. 1—Aug. 1	604,280 00	604,280 00
M. H. & O. 6 per cent. Mortgage Bonds.....	April 1, 1885	April 1, 1925	1,400,000 00	1,400,000 00	1,077,000 00	.....	6	April 1—Oct. 1	64,620 00	64,620 00
Income Certificate.....	Dec. 31, 1892	Dec. 31, 1912	3,000,000 00	3,000,000 00	3,000,000 00	.....*	4	Dec. 31	.....	.....
Grand total.....			\$28,400,000 00	\$23,507,000 00	\$23,000,000 00				\$859,700 00	\$859,700 00

*Accepted at par by holders of an equal amount of unfunded debt.

PART V.

The Railroad Commission Law as Amended.

Chapter 362 of the laws of 1905, as amended by chapter 13 and chapter 17 of the laws of the special session of 1905.*

AN ACT, to regulate railroads and other common carriers in this state, create a board of railroad commissioners, fix their salaries, define their duties, prevent the imposition of unreasonable rates, prevent unjust discriminations, insure an adequate railway service, prescribe the mode of procedure and the rules of evidence in relation thereto, prescribe penalties for violations, and making an appropriation therefor.

The People of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

Comm'ssion, how created; qualifications, etc. SECTION 1. A railroad commission is hereby created to be composed of three commissioners. Immediately after the passage of this act the governor shall, by and with the advice and consent of the senate, appoint such commissioners, but no commissioner so appointed shall be qualified to act until so confirmed. The term of one such appointee shall terminate on the first Monday in February, 1909; the term of the second such appointee shall terminate on the first Monday in February, 1911; and the term of the third such appointee shall terminate on the first Monday in February, 1913. In January, 1909, and biennially thereafter, there shall be appointed and confirmed,

in the same manner, one commissioner for the term of six years from the first Monday in February of such year. Each commissioner so appointed shall hold his office until his successor is appointed and qualified. Any vacancy shall be filled by appointment by the governor for the unexpired term, subject to confirmation by the senate, but any such appointment shall be in full force until acted upon by the senate.

a. The said commissioners shall have the following qualifications: One shall have a general knowledge of railroad law; each of the others shall have a general understanding of matters relating to railroad transportation.

b. The governor may at any time remove any commissioner for inefficiency, neglect of duty or malfeasance in office. Before such removal he shall give such commissioner a copy of the charges against him and shall fix a time when he can be heard in his own defense, which shall not be less than ten days thereafter, and said hearing shall be open to the public. If he shall be removed the governor shall file in the office of the secretary of state a complete statement of all charges made against such commissioner and his findings thereon with the record of the proceedings.

c. No person so appointed shall be pecuniarily interested in any railroad in this state or elsewhere, and if any such commissioner shall voluntarily become so interested, his office shall *ipso facto* become vacant; and if he shall become so interested otherwise than voluntarily he shall within a reasonable time divest himself of such interest; failing so to do, his office shall become vacant.

d. No commissioner, nor the secretary, shall hold any other office or position of profit, or pursue any other business or vocation, or serve on or under any committee of any political party, but shall devote his entire time to the duties of his office.

e. Before entering upon the duties of his office, each of said commissioners shall take and subscribe the constitutional oath of office, and shall in addition thereto swear (or affirm) that he is not pecuniarily interested in any railroad in this state or elsewhere, and that he holds no other office of profit, nor any position under any political committee or party; which oath or affirmation shall be filed in the office of the secretary of state.

f. Each of said commissioners shall receive an annual salary of five thousand dollars, payable in the same manner as salaries of other state officers are paid.

g. The commissioners appointed under this act shall within

twenty days after their appointment and confirmation meet at the state capitol and organize by election one of their number chairman, who shall serve until the second Monday of February, 1907. On the second Monday of February in each odd numbered year the commissioners shall meet at the office of the commissioner and elect a chairman, who shall serve for two years and until his successor is elected. A majority of said commissioners shall constitute a quorum to transact business, and any vacancy shall not impair the right of the remaining commissioners to exercise all the powers of the commission.

h. Said commission may appoint a secretary at a salary of not more than twenty-five hundred dollars per annum, and may appoint not more than three clerks, two of whom shall receive an annual salary not exceeding one thousand dollars each, and one of whom shall be an expert stenographer and receive an annual salary not exceeding fifteen hundred dollars, and may employ such other experts as may be necessary to perform any service it may require of them, and shall fix their compensation.

i. The secretary shall take and subscribe to an oath similar to that of the commissioners, and shall keep full and correct records of all transactions and proceedings of the commission, and shall perform such other duties as may be required by the commission. Any person ineligible to the office of commissioner shall be ineligible to the office of secretary.

j. The commissioners shall be known collectively as "Railroad Commission of Wisconsin," and in that name may sue and be sued. It shall have a seal with the words "Railroad Commission of Wisconsin," and such other design as the commission may prescribe engraved thereon, by which it shall authenticate its proceedings and of which the courts shall take judicial notice.

k. The commission shall keep its office at the capitol, and shall be provided by the superintendent of public property with suitable room or rooms, necessary office furniture, supplies, stationery, books, periodicals, maps, and all necessary expenses shall be audited and paid as other state expenses are audited and paid. The commission may hold sessions at any place other than the capitol when the convenience of the parties so requires. The commissioners, secretary and clerks, and such experts as may be employed shall be entitled to receive from the state their actual necessary expenses while traveling on the business of the commission. Such expendi-

tures to be sworn to by the person who incurred the expense and approved by the chairman of the commission.

l. The commission shall have power to adopt and publish rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings of railroads and other parties before it, and all hearings shall be open to the public.

m. The commission may confer by correspondence, or by attending conventions, or otherwise, with the railroad commissioners of other states, and with the interstate commerce commission, on any matters relating to railroads.

The term "railroad" defined. SECTION 2. The term "railroad" as used herein shall mean and embrace all corporations, companies, individuals, associations of individuals, their lessees, trustees or receivers (appointed by any court whatsoever) that now, or may hereafter, own, operate, manage or control any railroad or part of a railroad as a common carier in this state, or cars, or other equipment used thereon, or bridges, terminals, or side tracks, used in connection therewith, whether owned by such railroad or otherwise. The term "railroad" whenever used herein shall also mean and embrace express companies, and all duties required of and penalties imposed upon any railroad or any officer or agent thereof shall, in so far as the same are applicable, be required of and imposed upon express companies and their officers and agents, and the commission shall have the power of supervision and control of express companies to the same extent as railroads.

a. The provisions of this act shall apply to the transportation of passengers and property between points within this state, and to the receiving, switching, delivering, storing and handling of such property, and to all charges connected therewith, and shall apply to all railroad corporations, express companies, car companies, sleeping car companies, freight and freight line companies, and to all associations of persons, whether incorporated or otherwise, that shall do business as common carriers upon or over any line of railroad within this state, and to any common carrier engaged in the transportation of passengers and property wholly by rail or partly by rail and partly by water.

b. This act shall not apply to street and electric railroads engaged solely in the transportation of passengers within the limits of cities, nor to logging or other private railroads not doing business as common carriers.

Service, rates, etc. SECTION 3. Every railroad is hereby required to furnish reasonably adequate service and facilities, and the charges made for any service rendered or to be rendered in the transportation of passengers or property or for any service in connection therewith, or for the receiving, switching, delivering, storing or handling of such property, shall be reasonable and just, and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful.

Schedules. SECTION 4. Every railroad shall print in plain type and file with the commission within a time to be fixed by the commission, schedules which shall be open to public inspection, showing all rates, fares and charges for the transportation of passengers and property, and any service in connection therewith, which it has established and which are in force at the time between all points in this state upon its line, or any line controlled or operated by it, and the rates, fares and charges shown on such schedules which are to take effect prior to January 1, 1906, shall not exceed the rates, fares and charges shown on the schedules filed under the provisions of section 35 of this act. The schedules printed as aforesaid shall plainly state the places upon its line or any line controlled or operated by it in this state between which passengers and property will be carried, and there shall be filed therewith the classification of freight in force. Every railroad shall publish with and as a part of such schedules all rules and regulations that in any manner affect the rates charged or to be charged for the transportation of passengers or property, also its charges for delay in loading or unloading cars, for track and car service or rental and for demurrage, switching, terminal or transfer service, or for rendering any other service in connection with the transportation of persons or property. Two copies of said schedules for the use of the public shall be filed and kept on file in every depot, station and office of such railroad where passengers or freight are received for transportation in such form and place as to be accessible to the public and can be conveniently inspected. When passengers or property are transported over connecting lines in this state operated by more than one railroad, and the several railroads operating such lines establish joint rates, fares and charges, a schedule of joint rates shall also in like manner be printed and filed with the commission and in every depot, station

and office of such railroads where such passengers or property are received for transportation.

a. No change shall thereafter be made in any schedule, including schedule of joint rates, or in any classification, except upon ten days' notice to the commission, and all such changes shall be plainly indicated upon existing schedules, or by filing new schedules in lieu thereof ten days prior to the time the same are to take effect; provided, that the commission, upon application of any railroad, may prescribe a less time within which a reduction may be made. Copies of all new schedules shall be filed as hereinbefore provided in every depot, station and office of such railroad, ten days prior to the time the same are to take effect unless the commission shall prescribe a less time.

b. Whenever a change is made in any existing schedule, including schedule of joint rates, a notice shall be posted by the railroad in a conspicuous place in every depot, station and office, stating that changes have been made in the schedules on file, specifying the class or commodity affected and the date when the same will take effect.

c. It shall be unlawful for any railroad to charge, demand, collect or receive a greater or less compensation for the transportation of passengers or property or for any service in connection therewith than is specified in such printed schedules, including schedules of joint rates, as may at the time be in force, and the rates, fares and charges named therein shall be the lawful rates, fares and charges until the same are changed as herein provided.

d. The commission may prescribe such changes in the form in which the schedules are issued by the railroad as may be found expedient.

Joint rates. SECTION 5. Whenever passengers or property are transported over two or more connecting lines of railroad between points in this state, and the railroad companies have made joint rates for the transportation of the same, such rates and all charges in connection therewith shall be just and reasonable, and every unjust and unreasonable charge is prohibited and declared to be unlawful; provided, that a less charge by each of said railroads for its proportion of such joint rates than is made locally between the same points on their respective lines shall not for that reason be construed as a violation of the provisions of this act, nor render such railroads liable to any of the penalties hereof.

Commodity rates. SECTION 6. Nothing in this act shall be construed to prevent concentration, commodity, transit and other special contract rates, but all such rates shall be open to all shippers for a like kind of traffic under similar circumstances and conditions, and shall be subject to the provisions of this act as to the printing and filing of the same: Provided, all such rates shall be under the supervision and regulation of the commission.

Classification. SECTION 7. There shall be but one classification of freight in the state which shall be uniform on all railroads.

Reduced rates and free transportation. SECTION 8. Nothing herein shall prevent the carriage, storage, or handling of freight free or at reduced rates for the United States, the state, or any municipality thereof, or for charitable purposes, or to and from fairs and expositions for exhibition thereat, or household goods the property of railway employes, or *commodities shipped by employes for their own exclusive use or consumption*; or the issuance of mileage, commutation, or excursion passengers' tickets, provided the same shall be obtainable by any person applying therefor, without discrimination, or of party tickets, provided the same shall be obtainable by all persons applying therefor under like circumstances and conditions; or *the sale of such tickets as were usually and customarily sold at reduced rates prior to June 15, 1905, provided the same are sold without discrimination to all persons applying therefor under like circumstances and conditions.* This act shall not be construed as preventing railroads from giving free transportation or reduced rates therefor to any minister of the gospel, officers or agents of incorporated colleges, *inmates of soldiers' homes*, regular agents of charitable societies when traveling upon the business of the society only, destitute and homeless persons, railroad officer, attorney, director, employe, or members of their families, or *to former railroad employes or members of their families where such employes have become disabled in the railway service, or are unable from physical disqualification to continue in the service, or to members of families of deceased railroad employes*; or to prevent the exchange of passes with officers, attorneys or employes of other railroads and members of their families; provided that no person holding any public office or position under the laws

of this state shall be given free transportation or reduced rates not open to the public. Upon any shipment of live stock or other property of such nature as to require the care of an attendant, the railroad may furnish to the shipper or some person or persons designated by him, free transportation for such attendant, including return passage to the point at which the shipment originated; provided, there shall be no discrimination in reference thereto between such shippers, and the commission shall have power to prescribe regulations in relation thereto. *Except as provided in this section no free transportation for intrastate traffic shall be given to any person by any railroad.*

Depots. SECTION 9. It shall be the duty of every railroad to provide and maintain adequate depots and depot buildings at its regular stations for the accommodation of passengers, and said depot buildings shall be kept clean, well lighted and warmed, for the comfort and accommodation of the traveling public. All railroads shall keep and maintain adequate and suitable freight depots, buildings, switches and side tracks for the receiving, handling and delivering of freight transported or to be transported by such railroads; provided, that this shall not be construed as repealing any existing law on the subject.

Distribution of cars. SECTION 10. Every railroad shall, when within its power so to do, and upon reasonable notice, furnish suitable cars to any and all persons who may apply therefor, for the transportation of any and all kinds of freight in car load lots. In case of insufficiency of cars at any time to meet all requirements, such cars as are available shall be distributed among the several applicants therefor in proportion to their respective immediate requirements without discrimination between shippers or competitive or non-competitive places; provided, preference may be given to shipments of live stock and perishable property.

a. The commission shall have power to enforce reasonable regulations for furnishing cars to shippers and switching the same, and for the loading and unloading thereof, and the weighing of cars and freight offered for shipment over any line of railroad.

Interchange of traffic. SECTION 11. All railroads shall afford all reasonable and proper facilities for the interchange of traffic between their respective lines for forwarding and deliv-

ering passengers and property, and shall transfer, *switch for a reasonable compensation*, and deliver without unreasonable delay or discrimination any freight or cars, loaded or empty, *destined to any point on its tracks or any connecting lines*; provided, that precedence over other freight shall be given to live stock and perishable freight.

a. The commission shall have control over private tracks in so far as the same are used by common carriers, in connection with any railroad for the transportation of freight, in all respects the same as though such tracks were a part of the track of said railroad.

Complaints and investigations. SECTION 12. Upon complaint of any person, firm, corporation or association, or of any mercantile, agricultural or manufacturing society, or of any body politic or municipal organization, that any of the rates, fares, charges or classifications, or any joint rate or rates are in any respect unreasonable or unjustly discriminatory, or that any regulation or practice whatsoever affecting the transportation of persons or property, or any service in connection therewith, are in any respect unreasonable or unjustly discriminatory, or that any service is inadequate, the commission may notify the railroad complained of that complaint has been made, and ten days after such notice has been given the commission may proceed to investigate the same as hereinafter provided. Before proceeding to make such investigation the commission shall give the railroad and the complainant ten days' notice of the time and place when and where such matters will be considered and determined, and said parties shall be entitled to be heard and shall have process to enforce the attendance of witnesses. If upon such investigation the rate or rates, fares, charges or classifications, or any joint rate or rates, or any regulation, practice or service complained of shall be found to be unreasonable or unjustly discriminatory, or the service shall be found to be inadequate, the commission shall have power to fix and order substituted therefor such rate or rates, fares, charges or classification as it shall have determined to be just and reasonable and which shall be charged, imposed and followed in the future, and shall also have power to make such orders respecting such regulation, practice or service as it shall have determined to be reasonable and which shall be observed and followed in the future.

a. The commission may, when complaint is made of more

than one rate or charge, order separate hearings thereon, and may consider and determine the several matters complained of separately, and at such times as it may prescribe. No complaint shall at any time be dismissed because of the absence of direct damage to the complainant.

b. Whenever the commission shall believe that any rate or charge may be unreasonable or unjustly discriminatory, or *that any service is inadequate*, and that an investigation relating thereto should be made, it may upon its own motion investigate the same. *If after making such investigation the commission becomes satisfied that sufficient grounds exist to warrant a hearing being ordered to determine whether the rate so investigated is unreasonable or unjustly discriminatory, or whether the service investigated is inadequate, it shall furnish the railroad or railroads interested a statement setting forth the rate or service investigated, which said statement shall be accompanied by a notice fixing a time and place for hearing on such rate or service, as the case may be. Notice may likewise be given to other parties in interest, and shall be given at least ten days in advance of any hearing, and thereafter proceedings shall be had and conducted in reference to the matter investigated in like manner as though complaint was filed with the commission relative to the matter investigated, pursuant to the provisions of section 12 of chapter 362 of the laws of 1905, and the same order or orders may be made in reference thereto as if such investigation had been made on complaint.*

c. This section shall be construed to permit any railroad to make complaint with like effect as though made by any person, firm, corporation or association, mercantile, agricultural or manufacturing society, body politic or municipal organization.

d. *Whenever a complaint is lodged with the railroad commission by the common council of any city, the village board of any village, a member of a town board, or an overseer of highways, or by five or more freeholders and taxpayers in any town to the effect that a public highway and a railroad cross one another in such city, village or town at the same level, and that such grade crossing is unsafe and dangerous to travelers over such highway or railroad, it shall be the duty of said commission to give notice to the railroad company in interest of the filing of such complaint, and to furnish a copy of the same to the railroad company, and to order a hearing thereon in the manner provided for hearings in section 12 of chapter 362 of the laws of 1905. If upon such hearing it shall appear*

to the satisfaction of the commission that the crossing complained of is unsafe and dangerous to human life, said commission may order and direct the railway company to erect gates at said crossing and place an agent in charge to open and close the same when an engine or train passes, or that a flagman be stationed at such crossing who shall display a flag when an engine or train is about to pass, or that such crossing shall be provided with an electric signal, or other suitable device, as the commission determines the better security of human life and the public travel requires; and such railroad company shall comply with the terms of such order.

Witnesses, depositions, etc. SECTION 13. Each of the commissioners, for the purposes mentioned in this act, shall have power to administer oaths, certify to official acts, issue subpoenas, compel the attendance of witnesses, and the production of papers, way-bills, books, accounts, documents and testimony. In case of disobedience on the part of any person or persons to comply with any order of the commission or any commissioner or any subpoena, or on the refusal of any witness to testify to any matter regarding which he may be lawfully interrogated, it shall be the duty of the circuit court of any county, or the judge thereof, on application of a commissioner, to compel obedience by attachment proceedings for contempt, as in the case of disobedience of the requirements of a subpoena issued from such court, or a refusal to testify therein.

a. Each witness who shall appear before the commission by its order shall receive for his attendance the fees and mileage now provided for witnesses in civil cases in courts of record, which shall be audited and paid by the state in the same manner as other expenses are audited and paid, upon the presentation of proper vouchers sworn to by such witnesses and approved by the chairman of the commission; provided, that no witness subpoenaed at the instance of parties other than the commission shall be entitled to compensation from the state for attendance or travel unless the commission shall certify that his testimony was material to the matter investigated.

b. The commission or any party may in any investigation cause the depositions of witnesses residing within or without the state to be taken in the manner prescribed by law for like depositions in civil actions in circuit courts.

c. A full and complete record shall be kept of all proceedings had before the commission on any investigation had un-

der section 12 of this act, and all testimony shall be taken down by the stenographer appointed by the commission. Whenever any complaint is served upon the commission under the provisions of section 16 of this act the commission shall, before said action is reached for trial, cause a certified transcript of all proceedings had and testimony taken upon such investigation to be filed with the clerk of the circuit court of the county where the action is pending. A transcribed copy of the evidence and proceedings, or any specific part thereof, on any investigation, taken by the stenographer appointed by the commission, being certified by such stenographer to be a true and correct transcript in long hand of all the testimony on the investigation, or of a particular witness, or of other specific part thereof, carefully compared by him with his original notes, and to be a correct statement of the evidence and proceedings had on such investigation so purporting to be taken and transcribed, shall be received in evidence with the same effect as if such reporter were present and testified to the facts so certified. A copy of such transcript shall be furnished on demand, free of cost, to any party to such investigation.

Substitution and enforcement of rates. SECTION 14. Whenever, upon an investigation made under the provisions of this act, the commission shall find any existing rate or rates, fares, charges or classifications, or any joint rate or rates, or any regulation or practice whatsoever affecting the transportation of persons or property, or any service in connection therewith, are unreasonable or unjustly discriminatory, or any service is inadequate, it shall determine and by order fix a reasonable rate, fare, charge, classification or joint rate to be imposed, observed and followed in the future in lieu of that found to be unreasonable or unjustly discriminatory, and it shall determine and by order fix a reasonable regulation, practice or service to be imposed, observed and followed in the future, in lieu of that found to be unreasonable or unjustly discriminatory, or inadequate, as the case may be, and it shall cause a certified copy of each such order to be delivered to an officer or station agent of the railroad affected thereby, which order shall of its own force take effect and become operative twenty days after the service thereof. All railroads to which the order applies shall make such changes in their schedule on file as may be necessary to make the same conform to said order, and no change shall thereafter be made by any railroad in

any such rates, fares or charges, or in any joint rate or rates, without the approval of the commission. Certified copies of all other orders of the commission shall be delivered to the railroads affected thereby in like manner, and the same shall take effect within such time thereafter as the commission shall prescribe.

a. The commission may at any time, upon notice to the railroad, and after opportunity to be heard as provided in section 12, rescind, alter or amend any order fixing any rate or rates, fares, charges or classification, or any other order made by the commission, and certified copies of the same shall be served and take effect as herein provided for original orders.

b. Whenever the rate ordered substituted by the commission shall be a joint rate or charge, and the railroads party thereto shall fail to agree upon the apportionment thereof within twenty days after the service of such order, the commission may, after a like hearing, issue a supplemental order declaring the apportionment of such joint rate or charge and the same shall take effect of its own force as part of the original order.

c. Whenever the railroads shall refuse or neglect to establish a joint rate or rates for the transportation of persons or property, the commission may, upon notice to the railroads and after opportunity to be heard as in section 12 of this act provided, fix and establish such joint rate or rates and if the railroads party thereto shall fail to agree upon the apportionment thereof within twenty days after service of such order, the commission may, upon a like hearing, issue a supplemental order declaring the apportionment of such joint rate or rates and the same shall take effect of its own force as part of the original order.

Orders reasonable. SECTION 15. All rates, fares, charges, classifications and joint rates fixed by the commission shall be in force and shall be *prima facie* lawful, and all regulations, practices and service prescribed by the commission shall be in force and shall be *prima facie* reasonable, until finally found otherwise in an action brought for that purpose pursuant to the provisions of section 16 of this act.

Complaints and actions against substituted rates. SECTION 16 Any railroad or other party in interest being dissatisfied with any order of the commission fixing any rate or rates, fares, charges, classifications, joint rate or rates, or any order

fixing any regulations, practices or service, may commence an action in the circuit court against the commission as defendant to vacate and set aside any such order on the ground that the rate or rates, fares, charges, classifications, joint rate or rates, fixed in such order, is unlawful, or that any such regulation, practice or service, fixed in such order is unreasonable, in which action the complaint shall be served with the summons. The commission shall serve and file its answer to said complaint within ten days after the service thereof, whereupon said action shall be at issue and stand ready for trial upon ten days' notice by either party. All actions brought under this section shall have precedence over any civil cause of a different nature pending in said court, and the circuit court shall always be deemed open for the trial thereof and the same shall be tried and determined as other civil actions.

a. No injunction shall issue suspending or staying any order of the commission except upon application to the circuit court or presiding judge thereof, notice to the commission, and hearing.

b. If, upon the trial of such action, evidence shall be introduced by the plaintiff which is found by the court to be different from that ordered upon the hearing before the commission, or additional thereto, the court before proceeding to render judgment, unless the parties to such action stipulate in writing to the contrary, shall transmit a copy of such evidence to the commission, and shall stay further proceedings in said action for fifteen days from the date of such transmission. Upon the receipt of such evidence the commission shall consider the same, and may alter, modify, amend or rescind its order relating to such rate or rates, fares, charges, classification, joint rate or rates, regulation, practice or service complained of in said action, and shall report its action thereon to said court within ten days from the receipt of such evidence.

c. If the commission shall rescind its order complained of, the action shall be dismissed; if it shall alter, modify or amend the same, such altered, modified or amended order shall take the place of the original order complained of, and judgment shall be rendered therein, as though made by the commission in the first instance. If the original order shall not be rescinded or changed by the commission, judgment shall be rendered upon such original order.

d. Either party to said action, within sixty days after service of a copy of the order or judgment of the circuit court, may appeal to the supreme court. Where an appeal is taken

the cause shall, on the return of the papers to the supreme court, be immediately placed on the state calendar of the then pending term, and shall be signed and brought to a hearing in the same manner as other causes on the state calendar.

e. In all trials under this section the burden of proof shall be upon the plaintiff to show by clear and satisfactory evidence that the order of the commission complained of is unlawful, or unreasonable, as the case may be. .

Rules of evidence and practice. SECTION 17. In all actions and proceedings in court arising under this act all processes shall be served, and the practice and rule of evidence shall be the same as in civil actions, except as otherwise herein provided. Every sheriff or other officer empowered to execute civil processes shall execute any process issued under the provisions of his act, and shall receive such compensation therefor as may be prescribed by law for similar services.

a. No person shall be excused from testifying or from producing books and papers in any proceedings based upon or growing out of any violation of the provisions of this act on the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him may tend to incriminate him or subject him to penalty or forfeiture, but no person having so testified shall be prosecuted or subjected to any penalty or forfeiture for, or on account of, any transaction, matter or thing concerning which he may have testified or produced any documentary evidence; provided, that no person so testifying shall be exempted from prosecution or punishment for perjury in so testifying.

b. Upon application of any person the commission shall furnish certified copies, under the seal of the commission, of any order made by it, which shall be *prima facie* evidence of the facts stated therein. .

Inquiry, etc., by commission. SECTION 18. The commission shall have authority to inquire into the management of the business of all railroads, and shall keep itself informed as to the manner and method in which the same is conducted, and shall have the right to obtain from any railroad all necessary information to enable the commission to perform the duties and carry out the objects for which it was created.

a. The commission shall cause to be prepared suitable blanks for the purposes designated in this act, which shall conform as nearly as practicable to the **forms** prescribed by the interstate

commerce commission, and shall, when necessary, furnish such blanks to each railroad. Any railroad receiving from the commission any such blanks, shall cause the same to be properly filled out so as to answer fully and correctly each question therein propounded, and in case it is unable to answer any question it shall give a good and sufficient reason for such failure; and said answer shall be verified under oath by the proper officer of said railroad and returned to the commission at its office within the time fixed by the commission.

b. The commission or any commissioner, or any person or persons employed by the commission for that purpose, shall, upon demand, have the right to inspect the books and papers of any railroad and to examine under oath any officer, agent or employe of such railroad in relation to its business and affairs; provided, that any person other than one of said commissioners who shall make such demand shall produce his authority to make such inspection under the hand of the commissioner, or of the secretary, and under the seal of said commission.

c. The commission may require, by order or subpoena, to be served on any railroad, in the same manner that a summons is served in a civil action in the circuit court, the production within this state, at such time and place as it may designate, of any books, papers or accounts kept by said railroad in any office or place without the state of Wisconsin, or verified copies in lieu thereof, if the commission shall so order, in order that an examination thereof may be made by the commission or under its direction. Any railroad failing or refusing to comply with any such order or subpoena shall, for each day it shall so fail or refuse, forfeit and pay into the state treasury a sum of not less than one hundred dollars nor more than one thousand dollars.

d. *The railroad commission may in its discretion prescribe a uniform system of rendering accounts of business transacted in Wisconsin by all railroads within the meaning of section 2 (including subdivisions a and b) of chapter 362, laws of 1905. Said commission may also prescribe the manner in which such accounts shall be kept, and the time within which such railroad shall adopt such system; provided that all forms of accounts which may be prescribed by the commission shall conform as nearly as practicable to similar forms prescribed by federal authority. Any railroad within the meaning of section 2 (including subdivisions a and b) of chapter 362 of the*

laws of 1905 failing to comply with the provisions of this act shall be liable to the penalty provided for in section 27 of chapter 362 of the laws of 1905.

Contracts, etc., filed. SECTION 19. Every railroad whenever required by the commission shall, within a time to be fixed by the commission, deliver to the commission for its use copies of all contracts which relate to the transportation of persons or property, or any service in connection therewith, made or entered into by it with any other railroad company, car company, equipment company, express or other transportation company, or any shipper or shippers, or other person or persons doing business with it.

a. Every railroad shall, on the first Monday in February in each year, and oftener if required by the commission, file with the commission a verified list of all railroad tickets, passes and mileage books issued free or for other than actual *bona fide* money consideration at full established rates during the preceding year, together with the names of the recipients thereof, the amounts received therefor and the reasons for issuing the same. This provision shall not apply to the sale of tickets at reduced rates open to the public, nor to tickets, passes or mileage books issued to persons not residents of this state, nor to tickets, passes or mileage books issued prior to the passage of this act.

Amounts expended in construction. SECTION 20. The commission shall ascertain, as nearly as practicable, the amount of money expended in the construction and equipment of every railroad, the amount of money expended to procure the right of way, also the amount of money it would require to secure the right of way, reconstruct the roadbed, track, depots and other facilities for transportation, and to replace all the physical properties belonging to the railroad. It shall ascertain the outstanding bonds, debentures and indebtedness and the amounts respectively thereof, the date when issued, to whom issued, to whom sold, the price paid in cash, property or labor therefor, what disposition was made of the proceeds, by whom the indebtedness is held, so far as ascertainable, the amount purporting to be due thereon, the floating indebtedness of the railroad, the credits due the railroad, other property on hand belonging to it, the judicial or other sales of said road, its property or franchises, and the amounts purporting to have been paid and in what manner paid therefor. The commission

shall also ascertain the gross and net income of the railroad from all sources in detail; the amounts paid for salaries to the officers of the road, and the wages paid to its employes and the maximum hours of continuous service required of each class. Whenever the information required by this section is obtained, it shall be printed in the annual report of the commission. In making such investigation the commission may avail itself of any information in possession of the state board of assessment.

Interstate Rates. SECTION 21. The commission shall have power, and it is hereby made its duty, to investigate all freight rates on interstate traffic on railroads in this state, and when the same are, in the opinion of the commission, excessive or discriminatory or are levied or laid in violation of the interstate commerce law, or in conflict with the rulings, orders or regulations of the interstate commerce commission, the commission shall present the facts to the railroad, with a request to make such changes as the commission may advise, and if such changes are not made within a reasonable time the commission shall apply by petition to the interstate commerce commission for relief. All freight tariffs issued by any such railroad relating to interstate traffic in this state shall be filed in the office of the commission within thirty days after the passage and publication of this act, and all such tariffs thereafter issued shall be filed with the commission when issued.

Discrimination prohibited. SECTION 22. If any railroad, or any agent or officer thereof, shall directly or indirectly, by any special rate, rebate, drawback, or by means of false billing, false classification, false weighing or by any other device whatsoever, charge, demand, collect or receive from any person, firm or corporation a greater or less compensation for any service rendered or to be rendered by it for the transportation of persons or property or for any service in connection therewith, than that prescribed in the published tariffs then in force, or established as provided herein, or than it charges, demands, collects or receives from any other person, firm or corporation for a like and contemporaneous service, such railroad shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared to be unlawful, and upon conviction thereof shall forfeit and pay into the state treasury not less than one hundred dollars nor more than ten thousand dollars for each offense; and any agent or officer so offending shall be

deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than fifty dollars nor more than one hundred dollars for each offense.

a. It shall be unlawful for any railroad to demand, charge, collect or receive from any person, firm or corporation a less compensation for the transportation of property or for any service rendered or to be rendered by said railroad, in consideration of said person, firm or corporation furnishing any part of the facilities incident thereto; provided, nothing herein shall be construed as prohibiting any railroad from renting any facilities incident to transportation and paying a reasonable rental therefor.

Preference Prohibited. SECTION 23. If any railroad, shall make or give any undue or unreasonable preference or advantage to any particular person, firm or corporation, or shall subject any particular person, firm or corporation to any undue or unreasonable prejudice or disadvantage in any respect whatsoever, such railroad shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared unlawful.

Unlawful to accept rebates. SECTION 24. It shall be unlawful for any person, firm or corporation knowingly to accept or receive any rebate, concession or discrimination in respect to transportation of any property wholly within this state, or for any service in connection therewith, whereby any such property shall, by any device whatsoever, be transported at a less rate than that named in the published tariffs in force as provided herein, or whereby any service or advantage is received other than is therein specified. Any person, firm or corporation violating the provisions of this section shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than fifty dollars nor more than one thousand dollars for each offense..

Treble damages. SECTION 25. If any railroad shall do or cause to be done or permit to be done any matter, act or thing in this act prohibited or declared to be unlawful, or shall omit to do any act, matter or thing required to be done by it, such railroad shall be liable to the person, firm or corporation injured thereby in treble the amount of damages sustained in consequence of such violation; provided, that any recovery as in this section provided shall in no manner affect a recovery by the state of the penalty prescribed for such violation. .

Penalty for violations by officers, agents or employes. SECTION 26. Any officer, agent or employe of any railroad who shall fail or wilfully refuse to fill out and return any blanks as required by this act, or shall fail or refuse to answer any questions therein propounded, or shall knowingly or wilfully give a false answer to any such question, or shall evade the answer to any such question, where the fact inquired of is within his knowledge, or who shall, upon proper demand, fail or wilfully refuse to exhibit to the commission or any commissioner, or any person authorized to examine the same, any book, paper or account of such railroad, which is in his possession or under his control, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred dollars nor more than one thousand dollars for each such offense; and a penalty of not less than five hundred dollars nor more than one thousand dollars shall be recovered from the railroad for each such offense when such officer, agent or employe acted in obedience to the direction, instruction or request of such railroad or any general officer thereof.

General penalty for violation by railroads. SECTION 27. If any railroad shall violate any provision of this act, or shall do any act herein prohibited, or shall fail or refuse to perform any duty enjoined upon it, for which a penalty has not been provided, or shall fail, neglect or refuse to obey any lawful requirement or order made by the commission, or any judgment or decree made by any court upon its application, for every such violation, failure or refusal, such railroad shall forfeit and pay into the state treasury a sum of not less than one hundred dollars nor more than ten thousand dollars for each offense. In construing and enforcing the provisions of this section, the act, omission or failure of any officer, agent or other person acting for or employed by any railroad, acting within the scope of his employment, shall in every case be deemed to be the act, omission or failure of such railroad.

Emergency rates. SECTION 28. The commission shall have power, when deemed by it necessary to prevent injury to the business or interests of the people or railroads of this state in consequence of interstate rate wars, or in case of any other emergency to be judged of by the commission, to temporarily alter, amend, or, with the consent of the railroad company concerned, suspend any existing passenger rates, freight

rates, schedules and orders on any railroad or part of railroad in this state. Such rates so made by the commission shall apply on one or more of the railroads in this state or any portion thereof as may be directed by the commission, and shall take effect at such time and remain in force for such length of time as may be prescribed by the commission. .

Rates not specifically designated. SECTION 29. Whenever, after hearing and investigation as provided by this act, the commission shall find that any charge, regulation or practice affecting the transportation of passengers or property, or any service in connection therewith, not hereinbefore specifically designated, is unreasonable or unjustly discriminatory, it shall have the power to regulate the same as provided in sections 12 and 14 of this act.

Accidents. SECTION 30. Every railroad shall, whenever an accident attended with loss of human life occurs within this state, upon its line of road or on its depot grounds or yards, give immediate notice thereof to the commission. In the event of any such accident the commission, if it deem the public interest requires it, shall cause an investigation to be made forthwith, which investigation shall be held in the locality of the accident, unless, for greater convenience of those concerned, it shall order such investigation to be held at some other place, and said investigation may be adjourned from place to place as may be found necessary and convenient. The commission shall seasonably notify an officer or station agent of the company of the time and place of the investigation. The cost of such investigation shall be certified by the chairman of the commission, and the same shall be audited and paid by the state in the same manner as other expenses are audited and paid.

Inquiry into violations. SECTION 31. The commission shall inquire into any neglect or violation of the laws of this state by any railroad corporation doing business therein, or by the officers, agents or employes thereof, or by any person operating a railroad, and shall have the power, and it shall be its duty, to enforce the provisions of this act as well as all other laws relating to railroads and report all violations thereof to the attorney general; upon request of the commission it shall be the duty of the attorney general or the district attorney of the proper county to aid in any investigation, hearing or trial

had under the provisions of this act, and to institute and prosecute all necessary actions or proceedings for the enforcement of this act and of all other laws of this state relating to railroads and for the punishment of all violations thereof. Any forfeiture or penalty herein provided shall be recovered and suit thereon shall be brought in the name of the state of Wisconsin in the circuit court for Dane county. The commission shall have authority to employ counsel in any proceeding, investigation, hearing or trial.

Investigations of claims. SECTION 32. All claims against any railroad for loss of or damage to property from any cause, or for overcharge upon any shipments, or for any other service, if not acted upon within ninety days from the date of the filing of such claim with the railroad, may be investigated by the commission, in its discretion, and the results of such investigation shall be embodied in a special report which shall be open to public inspection and may be included in the next annual report of the commission.

Technicality not to invalidate. SECTION 33. A substantial compliance with the requirements of this act shall be sufficient to give effect to all the rules, orders, acts and regulations of the commission, and they shall not be declared inoperative, illegal or void for any omission of a technical nature in respect thereto.

Rights of action not waived. SECTION 34. This act shall not have the effect to release or waive any right of action by the state or by any person for any right, penalty or forfeiture which may have arisen or which may hereafter arise under any law of this state; and all penalties and forfeitures accruing under this act shall be cumulative and a suit for, and recovery of one, shall not be a bar to the recovery of any other penalty.

Present schedule in force. SECTION 35. Until December 31st, 1905, unless the commission shall otherwise order, after application and hearing as hereinafter provided, it shall be unlawful for any railroad within this state to demand, collect, or receive a greater compensation for the transportation of property between points in this state than the charge fixed in the lowest published schedule of rates for the same service between the same points, in force on the 1st day of April,

1905. Every railroad in this state shall, within thirty days after the passage and publication of this act, file in the office of the commission copies of all schedules of rates, including joint rates in force on its line or lines, between points within this state, on the 1st day of April, 1905, and all rates in force between such points at any time subsequent to said date. Any railroad desiring to advance or discontinue any such rate or rates may make application to the commission in writing, stating the advance in or discontinuation of the rate or rates desired, giving the reasons for such advance or discontinuation. Upon receiving such application, the commission shall fix a time and place for hearing, and give such notice to interested parties as it shall deem proper and reasonable. If, after such hearing and investigation, the commission shall find that the change or discontinuation applied for is reasonable, fair and just, it shall grant the application either in whole or in part. Any railroad being dissatisfied with any order of the commission made under the provisions of this section may commence an action against it in the circuit court in the manner provided in section 16 of this act, which action shall be tried and determined in the same manner as is provided in said section.

Office of railroad commissioner abolished. SECTION 36. All powers, duties and privileges imposed and conferred upon the railroad commissioner of this state under existing laws are hereby imposed and conferred upon the commission created under the provisions of this act; provided, that the power and duties conferred and imposed upon the railroad commissioner by chapter 431 of the laws of 1903, and sections 1795a, 1796 and 1797 of the statutes of 1898 shall continue to be exercised by him until the first Monday in January, 1907. The present railroad commissioner, whose term commenced on the first Monday in January, 1905, shall continue in office until the first Monday in January, 1907, at his present salary, on which date the office is hereby abolished.

Inconsistent laws repealed. SECTION 37. So much of section 128 of the statutes of 1898 as provides for the election of a railroad commissioner, also sections 1793 and 1803 of said statutes, and all other acts and parts of acts conflicting with the provisions of this act are hereby repealed in so far as they are inconsistent herewith.

Appropriation. SECTION 38. A sum sufficient to carry out the provisions of this act is hereby appropriated out of any money in the state treasury not otherwise appropriated.

SECTION 39. This act shall take effect and be in force from and after its passage and publication.

Approved June 13th, 1905.

PART VI.

Rules of Practice.

In Cases and Proceedings Under Chapter 362, Laws of Wisconsin for 1905.

I.

PUBLIC SESSIONS.

The general sessions of the Commission for hearing contested cases will be held at its office in the Capitol in the City of Madison, on such days and at such hour as the Commission may designate.

When special sessions are held at other places, such regulations as may be necessary will be made by the Commission.

Sessions for receiving, considering, and acting upon petitions, applications, and other communications, and also for considering and acting upon any business of the Commission other than the hearing of contested cases, will be held at its said office daily when the Commission is in Madison.

II.

PARTIES TO CASES.

Any person, firm, company, corporation, or association, mercantile, agricultural, or manufacturing society, body politic or municipal organization, or railroad, may complain to the Commission by petition, of anything done, or omitted to be done, in violation of the provisions of Ch. 362, Laws of Wisconsin for 1905, as well as other laws of said state by any common

carrier or carriers subject to the provisions of said act or other acts. Where a complaint relates to the rates or practices of a single carrier, no other carrier need to be made a party, but if it relates to matters in which two or more carriers, engaged in transportation by continuous carriage or shipment, are interested, the several carriers participating in such carriage or shipment are proper parties defendant.

Where a complaint relates to rates or practices of carriers operating different lines, and the object of the proceeding is to secure correction of such rates or practices on each of said lines, all the carriers operating such lines must be made defendants.

When the line of a carrier is operated by a receiver or trustee, both the carrier and its receiver or trustee should be made defendants in cases involving transportation over such line.

Persons or carriers not parties may petition in any proceeding for leave to intervene and be heard therein. Such petition shall set forth the petitioner's interest in the proceeding. Leave granted on such application shall entitle the intervener to appear and be treated as a party to the proceeding, but no person, not a carrier, who intervenes in behalf of the defense, shall have the right to file an answer or otherwise become a party, except to have notice of and appear at the taking of testimony, produce and cross-examine witnesses, and be heard in person or by counsel on the argument of the case.

III.

COMPLAINTS.

Complaints of unlawful acts or practices by any common carrier, made in pursuance of section 12 of chapter 362, Laws of Wisconsin for the year 1905, must be by petition or complaint, setting forth briefly the facts claimed to constitute a violation of the law. The name of the carrier or carriers complained against must be stated in full, and the address of the petitioner, with the name and address of his attorney or counsel, if any, must appear upon the petition. The complainant must furnish as many copies of the petition as there may be parties complained against to be served.

The Commission will cause a copy of the petition, with notice to satisfy or answer the same within a specified time, to be served, personally or by mail in its discretion, upon each carrier complained against.

ANSWERS.**IV.**

A carrier complained against must answer within eight days from the date of the notice above provided for, but the Commission may, in a particular case, require the answer to be filed within a shorter time. The time prescribed in any case may be extended, upon good cause shown, by special order of the Commission. The original answer must be filed with the Secretary of the Commission at its office in the City of Madison, and a copy thereof at the same time served, personally or by mail, upon the complainant, who must forthwith notify the Secretary of its receipt. The answer must specifically admit or deny the material allegations of the petition, and also set forth the facts which will be relied upon to support any such denial. If a carrier complained against shall make satisfaction before answering, a written acknowledgement thereof, showing the character and extent of the satisfaction given, must be filed by the complainant, and in that case the fact and manner of satisfaction, without other matter, may be set forth in the answer. If satisfaction be made after the filing and service of an answer, such written acknowledgement must also be filed by the complainant, and a supplemental answer setting forth the fact and manner of satisfaction must be filed by the carrier.

NOTICE IN NATURE OF DEMURRER.**V.**

A carrier complained against who deems the petition or complaint insufficient to show a breach of legal duty, may instead of answering, or formally demurring, serve on the complainant notice of hearing on the petition; and in such case the facts stated in the petition will be deemed admitted. A copy of the notice must at the same time be filed with the Secretary of the Commission. The filing of an answer, however, will not be deemed an admission of the sufficiency of the petition, but a motion to dismiss for insufficiency may be made at the hearing.

SERVICE OF PAPERS.**VI.**

Copies of notices or other papers must be served upon the

adverse party or parties, personally or by mail; and when any party has appeared by attorney, service upon such attorney shall be deemed proper service upon the party.

VII.

AFFIDAVITS.

Affidavits to any pleading or application may be made before any officer of the United States, or of any State or Territory, authorized to administer oaths.

VIII.

AMENDMENTS.

Upon application of any party, amendments to any petition or answer, in any proceeding or investigation, may be allowed by the Commission in its discretion.

IX.

ADJOURNMENTS AND EXTENSIONS OF TIME.

Adjournments and extensions of time may be granted upon the application of any party in the discretion of the Commission.

X.

STIPULATIONS.

The parties to any proceeding or investigation before the Commission may, by stipulation in writing filed with the Secretary, agree upon the facts, or any portion thereof involved in the controversy, which stipulation shall be regarded and used as evidence on the hearing. It is desired that the facts be thus agreed upon whenever practicable.

XI.

HEARINGS.

Upon issue being joined by the service of an answer or notice of hearing on the petition, the Commission will assign a time and place for hearing the case, which will be at its office

in the City of Madison, unless otherwise ordered. Witnesses will be examined orally before the Commission, unless their testimony be taken or the facts be agreed upon as provided for in these rules. The complainant must in all cases establish the facts alleged to constitute a violation of the law, unless the carrier complained against admits the same or fails to answer the petition. The carrier must also prove facts alleged in the answer, unless admitted by the petitioner, and fully disclose its defense at the hearing.

In case of failure to answer, the Commission will take such proof of the facts as may be deemed proper and reasonable, and make such order thereon as the circumstances of the case appear to require.

Cases shall be argued orally upon submission of the testimony, unless a different time shall be agreed upon by the parties or directed by the Commission, but oral argument may be omitted in the discretion of the Commission.

XII.

DEPOSITIONS.

The testimony of any witness may be taken by deposition, at the instance of a party, in any proceeding or investigation before the Commission, and at any time after the same is at issue. The Commission may also order testimony to be taken by deposition, in any proceeding or investigation pending before it, at any stage of such proceeding or investigation. Such depositions may be taken before any judge of any court of the United States, or any commissioner of a circuit, or any clerk of a district or circuit court, or any chancellor, justice or judge of a supreme or superior court, mayor or chief magistrate of a city, judge of a county court, or court of common pleas of any of the United States, or any notary public, not being of counsel or attorney to either of the parties, or otherwise interested in the proceeding or investigation. The same notice of taking depositions that is required by the laws of Wisconsin in taking depositions in civil cases must be given in writing by the party or his attorney proposing to take such deposition to the opposite party or his attorney of record, which notice shall state the name of the witness and the time and place of the taking of his deposition, and a copy of such notice shall be filed with the Secretary.

When testimony is to be taken on behalf of a common carrier in any proceeding instituted by the Commission on its own

motion, notice thereof in writing must be given by such carrier to the Commission itself, or to such person as may have been previously designated by the Commission to be served with such notice.

Every person whose deposition is taken shall be sworn (or may affirm, if he so request) to testify the whole truth, and shall be carefully examined. His testimony shall be reduced to writing, which may be typewriting, by the magistrate taking the deposition, or under his direction, and shall, after it has been reduced to writing, be subscribed by the witness.

XIII.

WITNESSES AND SUBPOENAS.

Subpoenas requiring the attendance of witnesses from any place in the State of Wisconsin to any designated place of hearing, for the purpose of taking the testimony of such witnesses orally before one or more members of the Commission, or by deposition before a magistrate authorized to take the same, will, upon the application of either party, or upon the order of the Commission directing the taking of such testimony, be issued by any member of the Commission.

Subpoenas for the production of books, papers, or documents (unless directed to issue by the Commission upon its own motion) will only be issued upon application in writing. Applications to compel a party to the proceeding to produce books, papers, or documents need only set forth in a general way the books, papers, or documents desired to be produced, and that the applicant believes they will be of service in the determination of the case.

XIV.

PROPOSED FINDINGS AND BRIEFS.

Proposed findings embracing the material facts claimed to be established by the evidence, and referring to the particular part of the record relied upon to support each finding proposed, may be filed by each party. Printed or written arguments or briefs may be filed by any party. A copy of the proposed findings, brief, or argument filed on behalf of any party, must at the same time be served upon the adverse party or parties, personally or by mail, and notice of such service thereupon filed with the Secretary of the Commission. The time within which

proposed findings and printed or written arguments or briefs shall be filed in any case will be determined by the Commission upon submission of the testimony.

XV.

REHEARINGS.

Applications for reopening a case after final submission, or for rehearing after decision made by the Commission, must be by petition, and must state specifically the grounds upon which the application is based. If such application be to reopen the case for further evidence, the nature and purpose of such evidence must be briefly stated, and the same must not be merely cumulative. If the application be for a rehearing, the petition must specify the findings of fact and conclusions of law claimed to be erroneous, with a brief statement of the grounds of error; and when any recommendation, decision, or order of the Commission is sought to be reversed, changed, or modified on account of facts and circumstances arising subsequent to the hearing, or of consequences resulting from compliance with such recommendation, decision, or order which are claimed to justify a reconsideration of the case, the matters relied upon by the applicant must be fully set forth. Such petition must be duly verified, and a copy thereof, with notice of the time and place when the application will be made, must be served upon the adverse party at least ten days before the time named in such notice.

XVI.

PRINTING OF PLEADINGS, ETC.

Pleadings, depositions, briefs, and other papers of importance, shall be printed or in typewriting, and when not printed only one side of the paper shall be used.

XVII.

COPIES OF PAPERS OR TESTIMONY.

Copies of any petition, complaint, or answer in any matter or proceeding before the Commission, or of any order, decision, or opinion by the Commission, will be furnished without charge, upon application to the Secretary by any person or carrier party to the proceeding.

One copy of the testimony will be furnished by the Commis-

sion for the use of the complainant, and one copy for the use of the defendant, without charge; and when two or more complainants or defendants have appeared at the hearing, such complainants or defendants must designate to whom the copy for their use shall be delivered.

XVIII.

COMPLIANCE WITH ORDERS AGAINST CARRIERS.

Upon the issuance of an order against any carrier or carriers, after hearing, investigation, and report by the Commission, such carrier or carriers must promptly, upon compliance with its requirements, notify the Secretary that action has been taken in conformity with the order; and when a change in rates is required, such notice must be given in addition to the filing of a schedule or tariff showing such change in rates.

XIX.

INFORMATION TO PARTIES.

The Secretary of the Commission will, upon request, advise any party as to the form of petition, answer, or other paper necessary to be filed in any case, and furnish such information from the files of the Commission as will conduce to a full presentation of facts material to the controversy.

XX.

ADDRESS OF THE COMMISSION.

All complaints concerning anything done or omitted to be done by any common carrier, and all petitions or answers in any proceeding, or applications in relation thereto, and all letters and telegrams for the Commission, must be addressed, Railroad Commission of Wisconsin, Madison, Wisconsin, unless otherwise specially directed. .

FORMS.

- No. 1.—Complaint against carrier.
- No. 2.—Answer.
- No. 3.—Notice by carrier under Rule V.
- No. 4.—Subpena.

FORMS.

These forms may be used in cases to which they are applicable with such alterations as the circumstances may render necessary.

No. 1.

COMPLAINT AGAINST CARRIER.

RAILROAD COMMISSION OF WISCONSIN.

.....
Against

The
Railway Company.

.....
The petition of the above named
respectfully shows:

1. *(State occupation and place of business.)*
.....
.....

2. That the above named Railway Company is a common carrier, engaged in the transportation of persons and property by railroad between points in the State of Wisconsin, and that as such common carrier, said Railway Company is subject to the provisions of Chapter 87, of the Wisconsin Statutes of 1898, and acts amendatory thereto, and is likewise subject to the provisions of Chapter 362, of the laws of Wisconsin, for the year 1905.

3. That *(here state concisely the matters intended to be complained of, numbering each succeeding paragraph).*
.....
.....
.....

Wherefore, petitioner prays that the aforesaid Railway Company be required to answer the charges herein and that after due hearing and investigation an order be made commanding said Railway Company to cease and desist from said violations of the acts referred to in said petition, and for such

other and further order as the Commission may deem necessary and just in the premises. (*Prayer may be varied so as to ask for the ascertainment of lawful rates or practices, and an order requiring the carrier to conform thereto. If reparation for any wrong or injury be desired the petitioner should state the nature and extent of the reparation he deems proper.*)

Dated at, this..... day of,
A. D. 190...

.....,
Petitioner.

No. 2.

ANSWER.

RAILROAD COMMISSION OF WISCONSIN.

.....
against

The Railway Company.

The above named defendant, for answer to the complaint in this proceeding, respectfully states—

I. That (*here follow the usual admissions, denials, and averments. Continue numbering each succeeding paragraph.*)

Wherefore the defendant prays that the complaint in this proceeding be dismissed.

THE RAILWAY COMPANY.

By E. F.,
(*Title of officer.*)

No. 3.

NOTICE BY CARRIER UNDER RULE V.

RAILROAD COMMISSION OF WISCONSIN.

.....
against

The Railway Company.

Notice is hereby given under Rule V of the Rules of Prac-

tice in proceedings before the Commission that a hearing is desired in this proceeding upon the facts as stated in the complaint.

THE RAILWAY COMPANY.

By E. F.,
(Title of officer.)

No. 4.

SUBPOENA.

To,
.....

You are hereby required to appear before in the matter of a complaint of, against, as a witness on the part of, on the day of, 190., at o'clock .. m. at, and bring with you then and there

Dated

(Seal.)

.....,
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BIENNIAL REPORT

OF THE

ADJUTANT GENERAL

OF THE

STATE OF WISCONSIN

For the Two Fiscal Years Ending June 30, 1906.



MADISON

DEMOCRAT PRINTING COMPANY, STATE PRINTER

1906

REPORT

OF THE

ADJUTANT GENERAL.

STATE OF WISCONSIN,
Adjutant General's Office,
MADISON, Wis., July 1, 1906.

To His Excellency, JAMES O. DAVIDSON,
Governor and Commander-in-Chief.

SIR:—I have the honor to submit the following report for the two fiscal years ending June 30th, 1906:

At the present time the strength of the Wisconsin National Guard is as follows: Commissioned officers, 203; enlisted men, 2,848; total, 3,051.

The force still consists of three twelve-company regiments and one four-company battalion of infantry; one troop of cavalry; one battery of field artillery; a medical department consisting of thirteen officers and a hospital corps of forty-five men. This is the maximum strength permitted under the law. The organization specified for the United States army is strictly followed in the formation of the several bodies comprising the state forces.

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LEGISLATION.

During the session of the legislature for 1905 the following laws affecting the state military were enacted:

“The adjutant general, quartermaster general, assistant adjutant general, assistant surgeon general, inspector of small arms practice, quartermaster and officers of the pay and subsistence departments of the Wisconsin National Guard, heretofore appointed and now acting as such officers, shall hold their positions until they shall have reached the age of 64 years unless retired prior to that time by reason of resignation, disability or for cause to be determined by a court martial under the provisions of section 66, chapter 228, laws of Wisconsin, 1901. Vacancies among said officers shall be filled by appointment from the officers of the Wisconsin National Guard.

“In the event of all or part of the Wisconsin National Guard being called into the service of the United States; the governor is hereby authorized to organize and equip a temporary military force equal in size and organization to that called from the state, provided that upon the return to the state of the troops called into the service of the United States, the temporary military force shall be disbanded.

“There is hereby annually appropriated out of any money in the state treasury, not otherwise appropriated, a sum of money, to make all purchases, defray the expenses and pay the allowances of the Wisconsin National Guard during each fiscal year not to exceed one hundred thirty thousand dollars (\$130,000). This limit to apply annually except in case of war, riot or great public calamity. To promote interest and efficiency in rifle practice, not to exceed fifteen hundred dollars (\$1,500) of the annual state military appropriation may be expended annually, on approval of the governor, to defray the expenses of the state participating in the annual national rifle competition between the several states and the army and

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navy of the United States. There is further appropriated for the purpose first above named in this section, the sum of ten thousand dollars per annum for the period of two years, out of any money in the state treasury not otherwise appropriated.

“Once each year a school for all officers of the Wisconsin National Guard shall be held, on approval of the governor, and at such time and place as he may order. This school shall be held not to exceed two days. Attendance shall be compulsory and a per diem allowance shall be paid each officer attending. Payment shall not be made for a period of more than two days nor shall any officer be paid more than the pay of an officer of equal rank in the United States army.

“There shall be paid annually to each band of the Wisconsin National Guard for armory rent the sum of two hundred dollars (\$200) and to Troop ‘A,’ First Cavalry and First Battery Field Artillery, each an additional one thousand dollars (\$1,000) annually for the purchase, care and feed of horses.”

“Section 170, statutes of 1898, is hereby amended by striking out the words ‘fourteen hundred dollars’ where they occur in the first line of page 262 of said statutes, and inserting in lieu thereof the words, “eighteen hundred dollars,” and by inserting after the words ‘twelve hundred dollars’ where they occur in the fifth line of said page 262, the following: ‘a clerk to the quartermaster general with the approval of the governor for duty in his office on the Wisconsin military reservation not to exceed eight hundred forty dollars.’

“The adjutant general, with the approval of the governor, may obtain and pay for out of the annual military appropriation an adequate indemnity bond covering all of the officers of the Wisconsin National Guard responsible to the state for moneys and military property.”

“No state funds shall be used for the purchase of uniforms or equipment for officers except that such equipment may be

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issued by the quartermaster general and chief of ordnance upon the approval of the governor."

"General courts martial legally convened for the trial of members of the Wisconsin National Guard shall have authority, subject to approval by the governor, to impose fines not to exceed twenty-five dollars (\$25) in any one case and to punish by imprisonment in a county jail not to exceed thirty days, and the sheriff or other officers shall aid in the enforcement of such sentences in the same manner as in other cases."

"The officer in charge of the state military reservation shall have on such reservation the police powers possessed by officials at state hospitals as provided in section 609 of the statutes of 1898."

EQUIPMENT.

A steady improvement has been made in the matter of equipment and yet the needs of the organization in this matter aided by constant wear and deterioration due to the effects of time grow apace. The new regulation woolen uniforms both service and dress are needed to replace the now antiquated and practically worn out woolen clothing used by the troops. The one is needed in case of a call for active service in severe weather and the other that the guard may make a presentable appearance when it takes part in public exercises on Memorial Day, Fourth of July and other occasions when called upon to act as escort or contribute service to ceremonies of state or local importance. The cost of this clothing is about \$55,000 for each so that to completely uniform the Guard as it should be clothed will cost about \$110,000. In addition to this the new service overcoat to replace the well worn blue overcoat now in use and the new olive drab blanket should be procured and issued. This would mean a further expenditure of \$50,000 or more. These figures are far beyond the financial provision of the state for its military and it is therefore important and

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greatly to be hoped that the congress of the United States will increase the annual appropriation for the support of the militia. If the proposition for the United States to contribute \$2,000,000 instead of \$1,000,000 annually for the equipment of the militia is enacted into law in a short time all of these necessary supplies can be drawn from the government and state troops in the matter of equipment put on a par with the United States army. At present the Guard has a full supply of summer clothing, flannel shirts, old overcoats and woolen clothing that in an emergency could be made to last for a time. No other winter clothing is kept in stock, for should its use be necessary a sufficient supply of caps, gloves, etc., could be quickly purchased on the open market. It is impracticable to endeavor to keep anything but a very small supply of this kind on hand at the supply depot of the state for there being no ordinary demand for its use, it would quickly deteriorate and soon become valueless.

The question of shoes is a vexatious one to handle in connection with citizen soldiery. To issue a full supply to each company increases the responsibility of the company commander by no small amount and imposes an extra burden in the care of and accounting for this property which would add materially to the amount of work already dangerously near the limit of time and effort that the average officer could give. If used the shoes could only be worn at drills and in camp. If kept unused they would quickly become worse than shelfworn. If a supply be kept at the quartermaster's depot the same difficulty would apply. An effort was made in 1905 to purchase the army shoe from army contractors and sell them to the men at cost price. This gave them a better shoe for the money than could be obtained at retail. Many availed themselves of the privilege but an inspection made eight months later revealed the fact that most of the shoes were worn so much in private

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life as to render them practically unfit for military service. Then too the constantly changing membership makes an endless issue of new sizes necessary. Careful consideration leads me to believe that the best way to handle this question is to buy on the market a sufficient supply of shoes when a call for service comes and then issue free of charge to the men in each company called upon to serve.

Since the last report the First Battery Field Artillery has been issued the complete equipment of a modern battery. This includes four of the latest three-inch rifles, quick firing, long range, and everything to the last small detail that goes with them. It is a very expensive and fine outfit exactly the same as that issued to the batteries in the United States army. It was supplied by the government without cost to the state. Its issue places great responsibility upon the state and the battery officers for its proper care and use. It is expected this responsibility will be met in the proper manner and that the subsequent work of the battery will warrant its retention and use of this splendid equipment.

The method of wearing equipment by the enlisted men has been changed to the following: Blanket roll over left shoulder. Haversack slung from right shoulder to left hip, straps outside of waist belt. Canteen from left shoulder to right hip, rear strap underneath waist belt. Straps of haversack underneath canteen straps. Tin cup on the left strap (the one furthest from the right side) of canteen, mouth of cup toward the body.

INSTRUCTION.

The general course of theoretical instruction for the whole command for 1905 is shown by the following:

In accordance with the provisions of the regulations the following course of theoretical instruction is published for the information and guidance of all concerned:

Battalion commanders will make two tours of inspection. The first

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inspection of each of the companies in their command will be made on dates to be selected by them between March 21st and March 31st, 1905. The second inspection of each company will be made between June 22 and June 30, 1905.

The first inspection will be devoted to ascertaining the condition of each company as regards care and condition of arms and equipment, tidiness in dress, military courtesy, discipline, care of books and papers, and finances; progress in drill in the school of the soldier and school of the squad, the efficiency of non-commissioned officers, sighting and aiming drills and gallery practice.

The second inspection will be devoted to ascertaining the efficiency of the company in the school of the company and in guard duty. The number of men who have fired on the open range, the distances at which they have fired, and the number of shots fired by each will be ascertained.

At both inspections rifles will be carefully examined and a report made on the amount and kind of ammunition expended and on hand.

A report in detail covering these inspections will be made promptly after each tour and forwarded to the Adjutant General through military channels.

One battalion officers' school preceding each of the inspection periods is authorized.

Where it is found advisable instruction should be given and the entire time not devoted merely to a formal inspection.

Visits for purposes of instruction are also authorized.

Regimental commanders are charged with seeing that the provisions of this order are strictly followed and with directing the work of the company commanders so that their commands will be properly prepared for these inspections.

A tour of each command by the colonel commanding or the lieutenant colonel or a division of the duty between both is authorized.

Outdoor drill in guard duty and extended order is recommended.

Troop "A" and First Battery Field Artillery will conform in a general way to the terms of this order and inspections of these two commands will be made in the corresponding periods by such officers as may be detailed by the Post Commander.

That for 1906 is contained in what follows:

Beginning with the first regular drill night after the receipt of this order, active instruction must begin in preparation for the annual armory

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inspections. These will be both national and state of substantially the same scope of those in 1905.

Company commanders in their work must systematically cover the drill regulations from the beginning up to and including the school of the company.

Battalion commanders will make two visits for instruction to each of their commands—the first between March 21st and 31st, and the second between June 20th and 30th, 1906.

The first visit will be devoted to instruction in extended order drill both for officers, non-commissioned officers and the entire command acting as a company.

The second visit will be for the purpose of instruction in guard duty, at which time particular attention will be given to the work of the non-commissioned officers of the guard and the day and night duties of sentinels on post.

On both visits inquiry will be made as to the kind and amount of instruction received by each company up to that time, in small arms practice, and the condition of all arms will be carefully ascertained.

Reports of these visits will be made promptly after each and forwarded to the Adjutant General through military channels.

Out door work in extended order and guard duty is again recommended.

Visits of instruction between the dates named for the infantry will be made to Troop "A," 1st Cavalry, and First Battery Field Artillery by General Charles King, W. N. G., retired.

Under the provisions of the law enacted in 1905 and which appears herein under the head of "Legislation," an officers' school was inaugurated that year. It began with a Correspondence School. This school was conducted by the Adjutant General's Department. It was inaugurated by the following letter:

"By direction of the Governor I have the honor to invite your attention to Section 4, Circular No. 5, A. G. O. c. s., which provides for an annual school for all officers of the Wisconsin National Guard.

The first school under the provisions of the law will probably be held in March, 1906.

The course of instruction will be the same as that prescribed for the first term of Garrison Schools for officers in the U. S. Army and will

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cover the five following subjects:—Administration, Manual of Guard Duty, Field Service Regulations, Drill Regulations, Firing Regulations for Small Arms.

A complete program will be published later and information and questions will be sent each officer, from time to time, during the succeeding months covering these subjects.

In the meantime a careful study, by way of preparation for the course, is recommended.”

This was followed by letters covering a period from August 30, 1905, to February 12, 1906, and the substance of each is herein given in the order in which they were sent.

2.—“As an aid in preparation for the officers’ school to be held in 1906, preliminary notice of which was sent to you August 30, 1905, you are informed that the school will cover a period of two days. This time will be occupied partially by lectures on the subjects named in the letter of August 30 and partly by brief written examinations in the same subjects. Each lecture will cover definitely the scope of the examination.

You are advised to read and study first, pages 9 to 118, both inclusive, of the U. S. Army Regulations, 1904.”

3.—“By direction of the Governor in continuation of the preparatory study of the officers’ school——— is directed to prepare and deliver to the officers and non-commissioned officers of Company —, — Regiment, W. N. G., at some date in October, 1905, the time and place to be arranged by him, a talk on Administration.

This talk will be confined to the matter covered in pages 9 to 118, inclusive, of the U. S. Army Regulations, 1904, and should cover specifically the subjects of Discipline, Command, Regiments and Battalions, Troops, Batteries and Companies, Interior Economy of Companies, Councils of Administration, Honors, Property Accountability and Responsibility, Surveys on Property, and Military Correspondence.

All staff officers below the grade of major stationed in a city where there is a company will ascertain the date of and be present when the talk is delivered.”

3.—Extract J—“You are respectfully informed that the course for the forthcoming officers’ school will for the Artillery cover Administration, Manual of Guard Duty and Field Service Regulations only. The course for Cavalry officers will comprise Administration, Manual of Guard Duty, Field Service Regulations and Firing Regulations for Small Arms.

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4.—“On September 16th a letter was sent you outlining the scope of the subject of Administration for the officers’ school for 1906.

“You are now notified that from the subject matter contained in pages 9 to 118, both inclusive, of the U. S. Army Regulations, 1904, the following will be omitted from your study and will not be covered by the examination: Articles XV, XVI, XX, XXIV, XXVII, XXXIV, XXXV, XXXVI, XLVI, XLVII, XLIX, L and LV.

“The remainder you are requested to give careful attention as specific questions will be sent you at a later date which you will be expected to answer promptly by mail.”

5.—“By direction of the governor you are requested to answer promptly by mail the following questions relative to the subject of Administration. The answers will be found on pages 9 to 115, both inclusive, of the U. S. Army Regulations, 1904. A stamped envelope for reply is enclosed, and if desired answers may be made on this sheet.

1. How should military authority be exercised and to what must punishments conform?
2. What is the duty of an officer in temporary command regarding the standing orders of the permanent commander?
3. Name the regimental and battalion non-commissioned staff officers. How may they be reduced to the ranks?
4. How may company non-commissioned officers be reduced to the ranks?
5. What is a roster and how are details made by roster?
6. What is the rule relating to giving and taking receipts in blank for public money?
7. Upon whom does accountability and responsibility for public property devolve?
8. What property responsibility has the officer in temporary or permanent command of a company?
9. How must public property expended, lost or destroyed be accounted for?
10. An official letter should refer to how many subjects? When will letters of transmittal be used? With what will telegrams be followed?

6.—“By direction of the Governor I have the honor to inform you that Circular Letter No. 5 of this series closed the work on Administration. Any questions or information or assistance on this subject relative to the forthcoming examination at the officers’ school will be answered on application to the Adjutant General.

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“The subject that must be taken up next is Guard Duty.

“Infantry, Cavalry and Artillery officers will study those portions of the Guard Manual that are applicable to their branch of the service.

“That portion of the Guard Manual relating to General Prisoners at Military Posts will be omitted from consideration during this course.”

7.—“As a guide to the study of the Guard Manual you are advised to give especial attention to the subject of rosters, the duties of the officer of the day and the officers of the guard, the responsibility for property and prisoners, the compliments rendered by the guard, the manner of posting and dismissing a relief, the orders for sentinels, the use of the countersign and parole and guard patrols.”

8, Ex. 1.—“By direction of the Governor you are requested to answer promptly by mail the following questions relative to the subject of Guard Duty. A stamped envelope for reply is enclosed and, if desired, answers may be made on this sheet.

1. Name the usual rosters. By whom are they kept?
2. What are the duties of the Officer of the Day in case of any alarm?
3. Give the duties of the Commander of the Guard, the guard having been turned out for a compliment.
4. Who is directly responsible for the property and prisoners in charge of the guard?
5. In case of sickness, desertion or arrest of a member of the guard, what does the Commander of the Guard do?
6. Describe how the old relief is dismissed when it returns to the Guard House?
7. Give the General Orders for sentinels on post.
8. To whose orders are musicians of the guard subject, where do they stay and what is their position?
9. What is a guard patrol?
10. What is a countersign? A parole?”

8, Ex. 2. 1.—“From whom does the stable sergeant receive his orders?

2.—What are the duties of the stable sergeant?

3.—What is done with horses returned to the stables, not from a formation?

4.—When and for what purpose are troop stable guards used?

5.—Of what will the stable guard consist and under whose immediate control will they be?

6.—How will a sentinel of the stable guard challenge and advance persons near his post between retreat and reveille?

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- 7.—What are the duties of the non-commissioned officer of the stable guard?
- 8.—By what regulation will a sentinel of the stable guard be governed?
- 9.—From whom does a sentinel of the stable guard receive his orders?
- 10.—Under what conditions will a sentinel of the stable guard permit a horse and equipment to be removed from the picket line or stables?"
- 8, Ex. 3. 1.—“How are the pieces, caissons, etc., with the ammunition and stores, the horses, harnesses and forage of a battery guarded?
- 2.—Of what does a stable and park guard consist?
- 3.—Under whose orders does the battery and park guard act?
- 4.—What is the habitual armament of a sentinel of the stable and park guard?
- 5.—By what regulations will a sentinel of the stable and park guard be governed?
- 6.—How will a sentinel of the stable and park guard challenge and advance persons near his post, between retreat and reveille?
- 7.—Under what conditions will a sentinel of the stable guard permit a horse and equipment to be removed from the picket line or stables?
- 8.—What are the duties of the stable sergeant?
- 9.—When necessary to leave the stables whom will the stable sergeant notify?
- 10.—What is done with horses returned to the stables, not from a formation?"
- 8, Ex. 2. “By direction of the Governor I have the honor to return here-with your answers submitted in answer to Correspondence School Circular Letter No. 5, Oct. 27, 1905, with the following correct answers transmitted for your information.
- 1.—Military authority should be exercised with firmness, kindness and justice, and punishments must conform to law and follow offenses as promptly as the circumstances will permit. Par. 2, Art. 1.
- 2.—An officer in temporary command shall not, except in urgent cases, alter or amend the standing orders of the permanent commander without authority from the next higher commanding officer. Par. 16, Art. 4.
- 3.—The regimental non-commissioned staff consists of the following: Sergeant-Major, Quartermaster Sergeant, Commissary Sergeant, and two Color Sergeants. The Battalion non-commissioned staff consists of the Battalion Sergeant-Major. Any non-commissioned

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officer may be reduced to the ranks by the sentence of a court-martial or by order of the commander having authority to appoint such non-commissioned officers. Par. 247, Art. 29.

- 4.—Company non-commissioned officers may be reduced to the ranks by sentence of a court-martial, or on the recommendation of the company commander, by order of the commander having authority to appoint such non-commissioned officers. The transfer of a non-commissioned officer from one organization to another should be made by reducing to the ranks, unless otherwise specified in the order by an officer competent to issue a new warrant. Par. 267, Art. 30.
- 5.—A roster is a list of officers or men for duty with a record of the duty performed by each. General details for duty are so made that the one longest off is the first for duty. Details so made are said to be made by roster. Par. 358, Art. 40.
- 6.—The giving or taking of receipts in blank for public money is prohibited, except the receipts to vouchers for publications and advertisements, which will be receipted prior to auditing the same. Par. 641, Art. 53.
- 7.—Accountability and responsibility devolve upon any person to whom public property is intrusted and who is required to make returns therefor. Par. 661, Art. 54.
- 8.—The officer in temporary or permanent command of a company or detachment is responsible for all public property used by, or in possession of the command, whether he receipts for it or not. Par. 666, Art. 54.
- 9.—Public property expended, lost or destroyed in the military service must be accounted for by affidavit, or the certificate of a commissioned officer or other satisfactory evidence. Par. 702, Art. 54.
- 10.—An official letter should refer to one subject only. Letters of transmittal will be used only when necessary, and when used must refer only to the matter transmitted. Telegrams will be followed by official copies sent by first mail. Par. 778, Art. 61.”

9.—“By direction of the Governor the attention of all infantry officers is invited to the study during the month of December of Infantry Drill Regulations. This study should include definitions, general principals, the school of the soldier, the school of the squad, the school of the company and the school of the battalion.

There will be no further reference to guard duty except by request of any officer desiring information.”

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10.—“In some localities where talks have been delivered on the subject of Administration a desire has been expressed to hold more of such local schools. While in no sense obligatory the idea should be encouraged and in all places where officers can assemble for instruction and discussion of the subjects being covered by the correspondence school, without too much interference with other duties, it should be done frequently. This plan applies with particular effect to the subject of Infantry Drill Regulations now under consideration. The attendance of non-commissioned officers may well be left optional and the work should in no way be modified from the standard of officers well advanced in information.”

11.—By direction of the Governor you are requested to answer promptly by mail the following questions relative to the subject of Infantry Drill Regulations. A stamped envelope for reply is inclosed and if desired answers may be made on this sheet.

1. Define deploy and ploy.
2. Define distance and interval.
3. Describe the signals for cease firing and halt.
4. Describe the salute with the hand.
5. Give the commands for the First and Third setting up exercise.
6. Describe “To Fire at Will.” (Squad).
7. The squad marching in line, describe “To deploy as skirmishers, forward.”
8. Squad marching in line, describe “To turn on a moving pivot.”
9. Company being in column of squads, give commands and describe forming line of squads to the right.
10. What are the functions of the line of scouts in the battalion line of battle.”

12.—By direction of the Governor the attention of all infantry, artillery and cavalry officers is invited to the study of the Field Service Regulations, 1905.

In reading the book, especial attention should be given to the following divisions: Orders, Service of Security, Marches, Shelter, Ammunition Supply, and Subsistence.

There will be no further reference to Infantry Drill Regulations except on request of any officer seeking information.

12½.—By direction of the Governor I have the honor to return herewith your answers submitted to correspondence school Circular Letter No. 8, Extract 1. Nov. 29, 1905, with the following correct answers transmitted for your information:

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1. The usual rosters relative to guard duty are:

1. Officers of the day.
2. Officers of the Guard.
3. Sergeants of the Guard.
4. Corporals of the Guard.
5. Musicians of the Guard.
6. Privates of the Guard. Par. 25.

The first two are kept by the Adjutant. The 3d, 4th and 5th by the Sergeant-Major under the supervision of the Adjutant or by the First Sergeants of companies as directed by the commanding officer. The sixth is always kept by the First Ser-

2. In case of an alarm of any kind, the officer of the day will at once take such steps as may be necessary to insure the safety of public property and preserve order in the command, disposing his guard to as best to accomplish this result. Par. 58.
3. Between reveille and retreat, when the guard has been turned out for any person entitled thereto, the commander of the guard if an officer, will receive the report of the Sergeant of the Guard, returning the salute of the latter with the right hand. He will then draw his sword, and place himself two paces in front of the center. When the person for whom the guard has been turned out approaches, the commander of the guard faces his guard, commands: 1. Present, 2. Arms; faces to the front and salutes. When his salute is acknowledged, he resumes the carry, faces about, commands: 1. Order, 2. Arms; and faces to the front. If it be an officer entitled to inspect the guard, after saluting and before bringing his guard to the Order, the officer of the guard reports: "Sir, the guard is present," or, "Sir, the guard and prisoners are present," or, "Sir, the guard is present and the prisoners are secure;" or, "Sir, (so and so) is absent;" except that at guard mounting the commander of the guard presents his guard and salutes without making any report. Between retreat and reveille, the commander of the guard salutes and reports, but does not bring the guard to a present. Par. 79.
4. The Sergeant of the guard is directly responsible for the property under charge of the guard. He has direct charge of the prisoners and is responsible to the commander of the guard for their security Par: 122 and 139.
5. Should a member of the guard be taken sick, or be arrested or
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desert, or leave his guard, the commander of the guard will at once notify the Adjutant. Par. 96.

6. To dismiss the old relief, it is halted and faced to the front at the guard house by the corporal of the new relief, who then falls out; the corporal of the old relief then steps in front of the relief and commands: 1. Port. 2. Arms. 3. Open chambers and magazine. 4. Close chambers and magazine. 5. Dismissed, or 5. Order. 6. Arms. 7. Stack. 8. Arms. 9. Dismissed. Par. 164.

7. My general orders are:

To take charge of this post and all government property in view.

To walk my post in a military manner, keeping constantly on the alert, observing everything that takes place within sight or hearing.

To report every breach of orders or regulations that I am instructed to enforce.

To repeat all calls from posts more distant from the guard house than my own.

To quit my post only when properly relieved.

To receive, transmit, and obey all orders from, and allow myself to be relieved by the commanding officer, officer of the day, or officer or non-commissioned officer of the guard only.

To hold conversation with no one except in the proper discharge of my duty.

In case of fire or disorder to give the alarm.

To allow no one to commit nuisance in the vicinity of my post.

In any case not covered by instructions, to call the corporal of the guard.

To salute all officers and colors or standards not cased.

- At night to exercise the greatest vigilance. Between retreat (or — o'clock, naming the hour designated by the commanding officer) and broad daylight, (or — o'clock, naming the hour designated by the commanding officer) challenge all persons seen on or near my post, and allow no person to pass without proper authority. Par. 215.

8. Musicians of the guard are subject to the orders of none but the commanding officer, the officer of the day, officers and non-commissioned officers of the guard. Par. 189.

Unless otherwise directed by the commanding officer they will remain at the guard house during their tour, and will fall in with

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the guard when it is formed. They form on a line with the front rank of the guard, their left three paces from the right guide. Par. 190.

9. A guard patrol is a small detachment of two or more men detailed to observe and procure information of the enemy, or for the performance of some special service connected with guard duty. Patrols are usually detailed from the guard and receive instructions from the commander of the guard. Par. 369.

10. A countersign is a word sign given daily from the principal headquarters of a command to aid guards and sentinels in identifying persons who may be authorized to pass at night. Par. 372.

A parole is a word used as a check on the countersign in order to obtain more accurate identification of persons.

13.—“By direction of the Governor you are requested to answer the following questions relative to the subject of Field Service Regulations. A stamped envelope for reply is enclosed.

1. You are a regimental commander and wish to issue an order concerning the uniform to be worn at guard mount. Should it be a general or a special order?
2. On March 31st, 1906, at 8:00 A. M. you are in command of the 2nd Infantry, W. N. G., encamped at Fond du Lac. You wish to issue an order, give the proper heading.
3. How is protection afforded for a column on the march?
4. You are in command of a battalion and have 299 miles to march. Describe in brief one day's march.
5. In camp, where should the company kitchens and latrines be placed?
6. Upon arrival in camp, what precautions should the commander take in regard to water supply?
7. When a serious engagement is expected what should be done by a battalion commander in reference to ammunition supply?
8. Name the components of the regular field ration, omitting amounts.
9. You are in the field as a regimental commissary. Your regiment needs rations. How do you get them?
10. What is the assumed minimum ration to be carried in the field?”

14.—“By direction of the Governor the attention of all infantry and cavalry officers is invited to the study of the Firing Regulations, 1904. This study should include the following: Sighting drills, tripod exercises, position and aiming exercises, trigger pull exercise, use of unit of measure

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in estimating distances, gallery practice, motion of bullets, volley fire, and care and cleaning and the method of quick aim with the pistol.

No answers to questions on the Firing Regulations and nothing further will be sent out in reference to this subject.

Every infantry officer is herewith again reminded that at the school to be held at a subsequent date the subjects to be taken up then will be Administration, Guard Duty, Drill Regulations, Field Service Regulations and Firing Regulations.

The opening day of the school will be devoted in part to lectures as follows: Administration, Major W. A. Shunk, 8th Cav. U. S. A.; Guard Duty, Second Lieutenant H. B. Hackett, 27th Inf. U. S. A.; Drill Regulations, General Charles King; Field Service Regulations, Captain W. V. Judson, Corps of Engineers, U. S. A.; Firing Regulations, Colonel George Graham.

Written examinations will be held in each of the five subjects. The number of questions will be ten on each of the subjects. The questions will correspond in a measure with those sent out in this correspondence school. The meetings of the school will be held at Madison, Wis. Attendance will be under orders. A per diem will be paid and transportation issued. Further information on the subject will be contained in General Orders. This letter closes the correspondence school series."

The same plan was followed with the Medical Department under direction of its chief but on a smaller scale.

All the work was voluntary and it was gratifying to note how promptly answers were made, the general interest taken, the reading and study incited and the general degree of knowledge shown. In some cases local schools were organized, regular meetings held and in some cases non-commissioned officers admitted as listeners.

The correspondence school was followed by a two days school with lectures and examinations. The following shows the ground covered and the work done at that time:

Pursuant to the provisions of Section 4, Chapter 434, Laws of 1905, a school for all the officers of the Wisconsin National Guard will be held in the Senate and Assembly Chambers in the Capitol at Madison, Wisconsin, Wednesday and Thursday, March 7th and 8th, 1906.

Under the terms of the law the school period including travel to and

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from the school, must be held to comprise two days and payments will therefore be made for that length of time only.

The school sessions will begin at nine o'clock A. M. Wednesday, March 7th, and the first session will be held in the Assembly Chamber. The hours for subsequent sessions will be announced from time to time during the school by the Adjutant General. Each session will open with a roll call and payments for attendance will be based thereon.

Each officer will be paid for attendance at the school at the rate of \$3.00 per day for two days.

All officers while in attendance at the sessions of the school and during the sessions only, will wear the dress uniform without side arms.

COURSE OF INSTRUCTION.

Administration, Manual of Guard Duty, Field Service Regulations, Drill Regulations, Firing Regulations for Small Arms.

Officers of Cavalry and Field Artillery will not be examined in drill regulations and officers of Artillery will, in addition be excused from examination in the Firing Regulations for Small Arms.

For the Medical Department the course will include Administration, Military Hygiene, Field Service Regulations and Hospital Corps Drill.

The scope of all these subjects will be that covered during the school of correspondence conducted by the Adjutant General from August 30th, 1905, to February 12, 1906.

LECTURES.

The school will open with the following lectures, in which the same scope will be covered as in the correspondence school, and each of which will deal specifically with the examination questions:

Administration, Major William A. Shunk, 8th Cavalry, U. S. A.

Guard Duty, Second Lieutenant Horatio B. Hackett, 27th Infantry, U. S. A.

Field Service Regulations, Captain William V. Judson, Corps of Engineers, U. S. A.

Infantry Drill Regulations, General Charles King, Captain U. S. A., retired; Brigadier General, W. N. G., retired.

Firing Regulations, Colonel George Graham, W. N. G., retired.

Each lecture will be limited to forty minutes in length.

Lectures for the Medical Department will be delivered as the Chief of that Department may direct.

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EXAMINATIONS.

Immediately after the completion of the lectures provided for a written examination for all officers below the rank of major will be held in each subject, with the exceptions as set forth for the Cavalry, Field Artillery and Medical Department. Ten questions will be given in each subject and officers being examined will be permitted to pass from one subject to the other as rapidly as possible and each will be excused as soon as he completes his work. The examination questions will be of the same nature as those sent out on each subject during the term of the correspondence school. These examinations in each regiment and battalion will be under the direct supervision of the field officers in command of such organizations. The examinations for the Medical Department will be such as the Chief of that Department may direct.

All examination papers must be turned in on completion to the battalion commander and by him to the colonel commanding, who will see that all such papers, without alteration, are placed in the hands of the Adjutant General promptly at the close of the school.

All officers who upon these examinations obtain an average of 75 per cent. or more will be given a certificate of proficiency by the Adjutant General and their names will be recorded on records to be kept for that purpose in the office of the Adjutant General.

Any officer attaining 75 per cent. in any subject will be excused from examination in that subject for promotion, so long as no material changes are made in the text book therefor in use in the United States Army.

It is expected there will be sufficient time at some period of the school, announcement of which will be made by the Adjutant General, for an informal convention of all the officers at which brief talks may be expected as follows:

Captain William V. Judson, on some of his experiences while with the Russian Army during the recent war between Russia and Japan; by General Charles King on the work of the Guard during the annual encampments for 1905; and by Charles H. Russell of the 1st Wisconsin Volunteer Cavalry during the civil war on the subject of the "American Soldier of the Past and Present."

The attendance at the school was large, the interest displayed deep, and the effect decidedly beneficial and satisfactory to all concerned. Certificates were issued to eighty-seven officers.

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Correct answers to all examination questions were given to each officer after the school.

In 1905 an order changing somewhat the requirements for the examination of officers for appointment or promotion was published adding "Military Hygiene" to the list of subjects, stiffening the entire examination somewhat and providing a new and more comprehensive list of questions for each of the eight subjects covered. The following order was also published covering the examination of candidates for non-commissioned officers. To it were attached twenty questions for each subject.

Hereafter no warrants will be issued to a company non-commissioned officer until he shall have passed a satisfactory examination before a board composed of the company officers of his own company. The scope of the examination will be as follows.

Definitions, General principles.

School of the Soldier.

School of the Squad.

Duties of non commissioned officers of the Guard.

The Rifle, Cleaning and Care.

Sighting, position and aiming drill.

Estimating distances.

Spelling and Writing.

In order to secure uniformity questions covering the foregoing subjects are furnished by the Adjutant General's office.

Each candidate will be required to answer ten questions under each subject and shall draw numbers from the questions furnished to determine which they shall be.

To obtain a candidate's knowledge in spelling and writing each candidate will be required to answer in writing at least one set of questions.

For the Artillery and Cavalry the scope of the examination will be modified to conform to their service.

An average marking of sixty-five per cent. must be obtained.

All reports, findings and recommendations of examining boards must be forwarded to regimental or post headquarters. For this purpose Form No. 7, A. G. O., will be used.

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INSPECTIONS.

The same system of inspection in vogue in Wisconsin so many years has been continued. Competitive markings on all the work of each command have been carefully made.

In 1904 the Pfister Trophy for the best company in the state was awarded to Company "K," 3rd Infantry, and in 1905 to Company "E," 2nd Infantry.

The inspections for 1905 were conducted by General Charles King and Major Charles G. Woodward, Artillery Corps, U. S. A. The following is a summary of their criticisms and recommendations:

"It was noted that one company on detraining left their overcoats in the coach. These were thrown on the platform by the men in charge and remained there until sent for, to the detriment of the coats and the blocking of traffic.

Some mounted officers did not unhook saber before mounting. "Many instances of careless saber manual were observed."

Much is lacking in promptness in falling in at the prescribed signals for company and other formations. At assembly for guard mount First Sergeants inspect dress and general appearance only. Par. 507. "At assembly for parade companies must be inspected by their captains." Par. 474.

"A number of errors were noted in extended order formations:

1st. In many cases, line of squads, the corporal was not in proper position. Par. 149 and 227, I. D. R., 1904.

2nd. Deployment as skirmishers by the flank was often executed in quick time. Skirmishers should move rapidly. Par. 152, I. D. R.

3rd. Assembling when faced or marching to the rear is not authorized. It was done. Par. 156, I. D. R.

4th. In advancing, all company officers take posts in front of the company. Par. 224, I. D. R.

5th. In advancing to the attack many men fired from positions where they could not possibly see the target. Par. 22, I. D. R.

6th. Volley frings were delivered at all kinds of impossible ranges. Par. 20, I. D. R.

7th. Many skirmishers carried their rifles with muzzles pointed downward to the rear; guns so carried would probably cause nervousness among the supports and reserve. Par. 23, I. D. R.

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8th. The most serious defect noted was the absolute lack of appreciation by many officers of the advantages of natural cover for their men. They would not permit skirmishers to take shelter behind trees or to avail themselves of the protection afforded by a depression in the ground unless such tree or depression chanced to be on the alignment and at two paces interval from the man next toward the guide. A careful reading of Pars. 81, 83, 84, 86, I. D. R., would make it apparent that cover should always be used when such use does not diminish effectiveness of fire. All other considerations give way to this. Par. 24. I. D. R.

9th. Advances of skirmish lines within the zone of effective infantry fire, i. e., while they were presumably under fire, were made in quick time. They should generally be at a run. Par. 23, I. D. R.

10th. The bunching of skirmishers, excepting for the purpose of taking advantage of the same cover is inadvisable. At about 600 yards the line, in normal attack, consists of one skirmisher per yard. Par. 237, I. D. R.

Once deployed it would be a good thing if the fighting line were allowed to forget there was such a thing as a book. More importance seemed to be attached to the two-yard interval and to accurate alignment than to cover. Admitting that one lesson in front of a loaded enemy would eliminate all this nonsense, an inspector likes to see battalion and company commanders who evince some appreciation of the possibilities of modern warfare. Wisconsin has many in both grades who do, but there seem to be a few striking exceptions. The spectacle of a skirmish line marching erect in beautiful order over open ground to the attack of an indicated enemy 700 yards away provokes a shudder, and the sight of a strong flanking command firing volleys up-hill at an enemy safely ensconced in trenches barely fifty yards away is bewildering. Just what the battalion commander expected to hit,—or accomplish, remains a mystery. There were isolated cases to be sure, and very much was done that showed excellent understanding on the part of the commanders. But, as a rule, once out of line of squads, our officers should study the ground and drop the book.

The entrenching of positions by parts of regiments and the attacks of these positions by other troops were all instructive and developed features that were of practical benefit.

When time permits a thorough reconnaissance of a position to be occupied should be made; in all circumstances, the flanks must be fully protected as conditions permit. The battalions of the 2nd Regiment failed to do this; their right flank was exposed; the battalion of the 3rd Regiment

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extended too far to the right without adequate support or reserve. Results in both cases would have been disastrous.

The interest that was displayed in the regimental bivouacs, and the preparation of the meals under field conditions, spoke well for the popularity of these exercises. The marches to and from the bivouac, with formations of advance and rear guard, and the establishment of outposts were well executed.

It is regretable that so many officers and men were obliged to be absent from this important instruction.

Battalion drill in close order has been so simplified that in one session of two hours every movement can readily be executed. As planned this year each battalion had two such sessions of two hours each. These drills are full of instruction for the officers and of fatigue for the men. At every halt the latter were observed in most companies shifting position, slouching, lounging, utterly unrebuked by the file-closers. Battalion commanders should bear this in mind, should never waste time or strength in marching about in column of squads, should move swiftly from one formation to another, should insist on soldierly bearing on part of the men, but should never keep them standing at attention while giving explanations, instructions or criticisms. "At ease" should be ordered every few minutes, but between times the utmost precision should be demanded. File closers should be made to do their duty in this respect. Of all I watched and noted not one in twenty was of the faintest use. When the drill is conducted, as I have indicated, men almost, if not actually, enjoy it, but if they are permitted to dawdle through, as most of them were, school of battalion becomes nothing but a bore, and they carry to the ceremonies themselves the slouch that they are permitted to acquire on drill.

Attention is called to Par. 487, I. D. R. Ranks are opened as the inspector approaches. After saluting, the Captain faces about and commands inspection arms, then faces to the front. Many departures from these instructions were observed. The lieutenants should carry saber at the command "Inspection Arms." About fifty per cent of the lieutenants were at the order arms when inspected. None of the organizations turned out in heavy marching order for these inspections. Quartermaster sergeants should have attended inspection; many were absent. Some companies were without hat cords. Some whole companies were without figures or letters on hats; in other companies several men appeared without figures or letters. In some companies the black shoes, mostly with pointed toes, were worn; they were unsuitable for marching purposes.

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Many campaign hats were shabby, due partly to having been purposely smashed into all manner of ununiform shapes. This remark refers to the headgear of officers, as well as to that of the men. The cartridge belts, while all serviceable, were in many companies much soiled. Leggings the same. Very few leggings were torn or without foot-straps. Application of soap and water would cure noted defects. A majority of the men wear cartridge belts too loose. In some companies the blouses and trousers had been laundered just prior to starting to camp; in others apparently they had never been washed. Many shoes were dirty at inspection. Many men were not shaved. Generally the rifles were fairly clean. With some men the old custom of daubing the receiver and adjacent parts with cosmoline still prevails. When guns so treated were inspected at the company inspection and subsequently on guard, such parts were frequently found covered with sand and dirt. A thin coating of light oil fills all requirements. All the rifles were serviceable.

The policing in the vicinity of sinks, around slop barrels and the sinks provided for burning refuse was not good. The receptacles provided for company streets were not satisfactorily cared for. Bottles and refuse were thrown in the sinks and in these receptacles. A company officer, on daily detail, should be charged with seeing that the police of the company streets and premises pertaining to the company is properly done.

Gunfire is the signal for every man to be up and doing, and from that instant they should be allowed the run of the company streets. In some companies the formation was by squads with something like ten pace intervals. While it is best and quickest to conduct roll-call by squads, the formation should be by company. There is no provision in the drill regulations for roll-call in line of squads.

It is recommended that every company be required to have a stated number of exercises in guard duty at home stations; the exercises to be practical and to include everything pertaining to the duty of officers, non-commissioned officers and privates of the guard, on post, both during the day and night.

That smearing vasoline or cosmoline on any part of the rifle be prohibited. A thin coating is all that is necessary."

The armory inspections for 1906 were conducted by General Charles King, on detail with the state troops under orders from the War Department and whose work throughout his tour of duty has been very thorough and strikingly helpful to

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the entire force. The following are the important extracts from his report of the spring inspections at the home station of each command.

"I have the honor to report completion of the duties assigned me in connection with the annual inspection of the Organized Militia of Wisconsin, and it is a pleasure to record the fact that in attendance, instruction and discipline there is improvement in nearly every unit of the entire force. The individual bearing or "set-up" of officers and men, though not yet what it should be, is also better. I found not to exceed six men whom I deemed physically unfit for hard service, or likely to be rejected by expert examiners. Officers and men impressed me as being hardy and vigorous in physique and, as a rule, zealous and thoroughly reliable.

Armories, lockers and state property are in most cases neat and well cared for.

In spite of the clear and explicit instructions of Circular No. 1, issued from your office in January, and certain verbal instructions last camp, company commanders and clerks have in most cases failed to properly keep the Morning Report book. Some few captains admit not having noticed the circular. In every case I endeavored to show the proper method before quitting the station of the company, but in very few cases did I find the books correct.

In the Descriptive Book the address of nearest relative is often missing.

An effort was made to give each company some idea of its faults in drill observed during inspection, great or small, and to this in almost every case every man paid close attention. While very few companies were poor in drill, certain faults or flaws were observed in almost all—notably in the matter of flinching from pivot, in changing direction in column of squads, in drooping head and dropping eyes, swinging arms, and in the salutes. These points cannot be too carefully corrected as they occur.

Arms of the Cavalry and Infantry were well cared for in most cases, though a few pieces were found cocked in many of the arm racks. Equipments, as a rule, were clean and properly worn, but have a tendency to work to the front instead of the back of the hip. Khaki uniforms are serviceable but in too many cases looked as though carelessly washed and ironed. Belts were generally clean, but in most companies were worn much to loose.

The men were commendably steady both during inspection and drill, and the command, even among weak companies, looked eminently fit for service.

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ENCAMPMENTS.

The work of the Guard during the encampments for 1904 and 1905 showed commendable improvement in many ways. The system of evening lectures found to be so beneficial has been continued with good effect: The subjects covered in 1904 were "First Aid," "Use of the Shelter Tent with Practical Demonstrations," "Guard Duty," and "Hasty Entrenchments." In 1905 the subjects were as follows: "Personal Habits, Reasons for Rigid Police and Sanitary Regulations," "Military Courtesies," "Esprit de Corps," and "How to Keep Books in the Field." In 1904 and 1905 each command was required to bivouac one day in the field. In 1904 they were at this time required to dig lying down, kneeling and standing, trenches and conceal the same. In 1905 each command was required to dig wells, and each man cook his own meals, using only his regular field kit for the purpose. Later one-half of the force took up a position entrenched with use of bayonet, cup and meat pan only and sustained an attack by the remainder of the regiment.

A cook from the United States Army was on detail with the troops during all of the encampments and gave the company cooks and a great many of the men very practical and valuable instruction in handling the army ration and taught them many useful expedients for cooking in the field. Each command was in camp for seven days. Very little of the time was devoted to close order drills or ceremonies, but a maximum amount of time was given to extended order, outpost duty, patrols, advance and rear guard and minor field exercises generally, while each man in addition was required to fire ten rounds at each range of 200, 300 and 500 yards. The time devoted to encampments is too short, but while the law permits a ten days camp for each command, the annual appropriation is not sufficient to cover the additional expense. The attendance at the

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encampments was excellent, the discipline very good and the interest and enthusiasm displayed by officers and men in this work undiminished. Each week was a period of hard, steady work conducted with a seriousness and earnestness that precluded everything trivial and divested the encampments entirely of each and every picnic feature for which in times long past the Guard has been criticised. Every effort has been and will continue to be made to make the annual encampments correspond as closely as possible to the actual conditions that must always obtain in the actual active field service.

All the encampments were remarkably free from all sickness, due largely, in the opinion of medical officers, to the use of the army ration.

SMALL ARMS PRACTICE.

Especial attention both at the home stations and during encampments has been given rifle practice during the past two years. The equipment of companies with two 22-calibre rifles made especially for gallery practice has been found to be of great help in developing good shots and in promoting interest in the work. With hardly an exception companies using them report excellent results both in attendance and shooting. The course of instruction for 1905 is appended:

The following instructions governing small arms practice are published for the information and guidance of all concerned:

Until May 1st the time will be devoted to sighting, position, and aiming drills, instruction in how to estimate distances, gallery practice. All work to be regularly reported on monthly drill reports, giving number of men participating and time engaged.

For gallery practice Targets X, Y, and Z will be used and Course "B," Firing Regulations for Small Arms, will be followed.

May 1st to October 31st, range practice for rifle, carbine in Special Course "C," and pistol practice. Under this course as many men as possible will be required to fire with the rifle and carbine at least two scores of five shots each at 200, 300 and 500 yards. Those men who at the fore-

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going ranges, taking their two best scores, make a total of 120, or better, will be required to fire at 600 yards. Those who make a total of 160 in the four ranges will be required to fire two scores "timed fire" at 200 yards. Those who make a total of 25 or better in two scores "timed fire" will be required to make a skirmish run. All those who with their skirmished run, "timed fire," and scores at 200, 300, 500 and 600 yards make a total of 235 points, will then be given a trial for "expert" at 800 and 1,000 yards.

Firing during the annual regimental camps will be devoted to regimental competition and to qualification in the several grades of marksmanship and under the rules laid down for the United States Army.

The annual rifle camp will be devoted to state competition, firing for various medals offered and qualification under the Army rules.

The dates for the camps and the rules governing the competitions will be announced in subsequent orders.

Careful records will be kept of every shot fired, both at the home station and in the camps. These records will be placed in the record books, which will be issued for the purpose and will be reported to the Adjutant General November 1st, 1905.

The allowance of rifle ball cartridges, Caliber 30, to each infantry company and troop of cavalry for use at home stations during the season of 1905 will be 6,000, 4,000 to be issued prior to June 30th, 1905, and the remainder after that date.

For gallery practice the purchase from state funds of one .22 Caliber barrel arranged to fit the U. S. Magazine rifle, Caliber .30, manufactured by the J. Stevens Arms and Tool Co., Chicopee Falls, Mass., or one .22 Caliber single shot musket, manufactured by the Winchester Repeating Arms Co., New Haven, Conn., is authorized for each company. These can be purchased for about \$15.00 each; the ammunition is much cheaper and the accuracy and reliability much greater.

In both gallery and range practice the utmost care will be taken to prevent accidents.

That for 1906 is as follows:

The following instructions governing small arms practice are announced for the information and guidance of all concerned:

The winter months will be devoted to sighting, position and aiming drills, instruction in estimating distances, and gallery practice.

In gallery practice the 22 calibre rifle will be used. Range fifty feet. Targets "X" and "Y" or the iron target with one inch bull's-eye.

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Range practice for rifle and carbine in Special Course "C" will commence May 1st and continue to October 31st.

Firing during the annual regimental camps will be devoted to battalion and regimental competition and to qualification in the several grades of marksmanship.

The annual rifle camp will be devoted to competition for the state team, firing for various prizes offered and qualification under the United States Army rules.

The dates for the camps and the rules governing the competitions will be announced in subsequent orders.

Careful records will be kept of every shot fired, both at the home stations and in the camps. These records will be placed in the record books, which will be issued for the purpose and which must be returned to the Adjutant General November 1st, 1906.

The allowance of rifle ball cartridges, calibre 30, to each infantry company and troop of cavalry for use at home stations during the season of 1906 will be not less than 6,000 rounds.

In both gallery and range practice the utmost care must be taken to guard against accidents.

The quality of work done by the several companies on the ranges both at the home stations and at camp is indicated by the reports for 1904 and 1905, made to the War Department, and which are herewith reproduced:

REPORT OF SMALL ARMS FIRING OF THE WISCONSIN NATIONAL GUARD, 1904.
Under Course "C."

ORGANIZATION.		RIFLE AND CARBINE FIRING.									
		Classification and Figure of Merit.									Figure of merit previous year.
		Total number classified.	Expert riflemen.	Sharpshooters	Marksmen.	First-class men.	Second-class men.	Third-class men.	Fourth-class men.	Figure of merit.	
Regiment.	Co.										
1st Infantry	A	69	1	4	12	3	4	29	16	39.3	41.6
	B	76	0	4	20	7	5	31	9	48.4	60.6
	C	73	6	6	29	22	3	7	0	94.2	105.8
	D	73	2	6	14	5	10	26	10	52.5	39.4
	E	66	5	2	12	3	2	33	9	47.8	39.3
	F	60	0	2	10	2	2	34	10	31.5	17.5
	G	72	0	3	18	7	10	33	1	50.0	54.0
	H	59	0	0	0	2	5	52	0	15.6	23.8
	I	69	0	6	16	4	9	34	0	52.0	39.9
	K	70	0	1	9	5	5	36	14	29.0	24.3
	L	64	1	2	17	7	4	33	0	50.8	30.8
	M	69	0	10	23	0	1	33	2	60.5	62.6
			820	15	46	180	67	60	381	71	48.5	44.8
2d Infantry	A	74	0	0	23	7	6	29	9	46.1	64.9
	B	74	0	0	0	0	0	57	17	7.7	22.5
	C	64	0	1	12	4	2	34	11	32.6	55.5
	D	68	0	0	8	0	4	48	8	21.7	17.2
	E	75	1	6	24	8	9	26	1	64.1	80.0
	F	75	0	3	7	9	12	40	4	37.6	40.6
	G	67	0	2	1	2	0	55	7	16.4	34.8
	H	75	0	0	6	5	9	49	6	25.5	16.0
	I	57	0	3	16	6	4	11	17	49.3	19.0
	K	70	2	3	17	12	5	28	3	56.8	62.4
	L	67	0	2	26	3	10	17	9	55.1	25.9
	M	80	0	3	21	3	3	31	19	75.3	51.6
			846	3	23	161	59	64	425	111	37.8	40.8
3rd Infantry	A	69	0	3	24	4	3	31	4	52.3	42.2
	B	68	0	8	35	17	7	1	0	93.2	93.0
	C	66	1	9	14	5	4	29	4	57.7	64.1
	D	64	0	14	21	5	2	22	0	76.5	82.6
	E	68	0	2	25	7	4	30	0	56.2	71.3
	F	68	2	1	13	4	4	24	20	38.1	72.6
	G	70	0	3	31	9	7	16	4	67.6	71.8
	H	78	0	0	8	6	1	40	23	21.8	34.3
	I	69	1	1	40	11	1	14	1	77.7	89.5
	K	69	0	2	28	10	9	17	3	64.9	100.9
	L	68	0	4	38	9	4	13	0	79.4	80.3
	M	82	0	10	36	10	4	12	10	75.2	98.2
			839	4	57	313	97	50	249	69	61.8	78.7
10th Sep'ate B't. Inf.	A	70	2	5	25	6	3	25	4	64.2	62.7
	B	69	0	0	12	7	4	46	0	34.5	44.4
	C	55	0	0	4	2	2	27	20	14.9	78.7
	D	67	5	9	14	4	8	25	2	70.1	44.2
			261	7	14	55	19	17	123	26	47.9	56.5
Troop A, 1st Cav		70	0	1	3	3	1	56	6	18.3	19.0
Total		2,836	29	141	712	245	192	1,234	283	47.4	50.5

General Report.

REPORT OF SMALL-ARMS FIRING OF THE WISCONSIN NATIONAL GUARD,
1905.

Under Course "C."

ORGANIZATION.		RIFLE AND CARBINE FIRING.									Figure of merit previous year	
		Classification and Figure of Merit.										
Regiment.	Co.	Total number Classified.	Expert riflemen.	Sharpshooters.	Marksmen.	First class men.	Second-class men.	Third-class men.	Fourth-class men.	Figure of merit.		
1st Infantry	A	75	3	2	13	9	10	25	13	48.33	39.3	
	B	67	2	2	18	6	5	20	11	57.46	48.4	
	C	65	6	6	32	15	6	0	0	103.46	94.2	
	D	74	4	2	19	11	7	20	11	59.12	52.5	
	E	76	3	9	14	7	10	29	4	61.38	47.8	
	F	75	2	2	21	7	9	29	5	51.20	31.5	
	G	66	0	2	20	13	11	20	0	60.98	50.0	
	H	74	0	3	28	8	7	18	10	59.18	15.6	
	I	70	4	6	31	8	13	8	0	87.57	52.0	
	J	66	0	1	17	11	6	28	3	49.31	29.0	
	K	63	1	3	27	7	6	17	2	68.96	50.8	
	L	73	6	8	25	8	12	14	0	85.47	60.5	
	M											
			844	31	49	265	110	102	228	59	65.97	48.5
2d Infantry	A	69	1	0	27	11	6	24	0	61.81	46.1	
	B	70	0	0	14	14	5	23	14	41.85	7.7	
	C	69	3	5	18	7	5	20	11	59.78	32.6	
	D	56	0	0	6	13	10	27	0	41.87	21.7	
	E	69	1	14	17	8	9	20	0	76.08	64.1	
	F	70	1	3	11	7	8	29	11	42.35	37.6	
	G	72	2	2	12	3	10	34	9	41.18	16.4	
	H	70	0	0	16	6	16	32	0	45.28	25.5	
	I	66	0	5	18	8	10	17	8	57.87	49.3	
	J	73	4	5	25	5	6	20	8	67.46	56.8	
	K	65	0	1	23	14	7	17	3	61.84	55.1	
	L	61	0	8	19	9	6	15	7	66.01	75.3	
	M											
			813	12	43	206	105	98	278	71	55.35	40.8
3d Infantry	A	82	2	9	33	12	7	10	9	78.04	52.3	
	B	68	0	9	42	7	6	4	0	94.33	93.2	
	C	68	1	7	19	12	5	23	1	66.61	57.7	
	D	69	3	10	21	2	7	24	2	71.59	76.5	
	E	73	0	10	32	2	9	18	2	75.06	56.2	
	F	71	2	1	27	21	7	13	0	74.71	38.1	
	G	76	1	2	27	16	10	9	6	72.23	67.6	
	H	74	0	2	16	11	14	23	8	49.39	21.8	
	I	71	1	1	39	2	6	19	3	68.87	77.7	
	J	72	1	3	27	10	9	17	5	65.55	64.9	
	K	71	0	8	37	9	11	5	1	86.97	79.4	
	L	74	1	11	43	9	5	5	0	96.28	75.2	
	M											
			869	12	73	368	113	96	170	37	74.94	61.8
10th Sep. B't. Inf ...	A	75	4	4	23	11	10	17	6	69.26	64.2	
	B	69	0	0	24	7	14	21	3	55.57	34.5	
	C	71	0	0	16	10	10	30	5	44.36	14.9	
	D	68	6	4	23	6	8	19	2	75.58	70.1	
		283	10	8	86	34	42	87	16	61.20	47.9	
Troop A, 1st Cav		74	1	1	10	3	11	39	9	33.98	18.3	
Total		2,883	66	174	935	365	349	802	192	64.39	47.4	

General Report.

For the first time in its history the Wisconsin National Guard under authority of the new law was represented in 1905 at the National Rifle Competition for the United States Army and Navy and all of the states of the Union. Wisconsin has no professional shots in the Guard. The best shots are young men with only such training as can be given them during the brief period of the encampments and such experience as they can gain among themselves on their home ranges. They competed with the best shots in the world and at the end of the competition held eighteenth place with thirty-seven teams competing. This standing was as good and even better than it had been expected the team would attain. The experience was worth the time and expense. Many valuable ideas were acquired and the ultimate result will be a dissemination of higher knowledge in the art of shooting throughout the entire force and the development of better shots. The Wisconsin idea is to make as good a shot as possible out of every man and not to devote much time or expense to developing a few crack shots only. The result of experience gained in attending these national matches will be in the end to make Wisconsin Guardsmen better shots. In the individual competition at Sea Girt, Color Sergeant Reinhold L. Schlick, 1st Infantry, W. N. G. won eleventh place. The personnel of the Wisconsin team was as follows:

Colonel George Graham, Team Captain.

Captain Winfield W. Warren, Team Coach.

Major C. R. Williams, Team Spotter.

Competitors.

Reinhold L. Schlick, Color Sergeant, 1st Inf.

Severt J. Olsen, 1st Sergeant, Co. "C," 1st Inf.

Peter J. Comer, Sergeant, Co. "D," 3rd Inf.

Leonard L. Bailey, Sergeant, Co. "C," 3rd Inf.

Paul Meske, Color Sergeant, 1st Inf.

General Report.

Ransom A. Holdridge, Private, Co. "A," 10th Sept. Batt. Inf.

Ole J. Olsen, Private, Co. "C," 1st Inf.

Jasper E. Olsen, Sergeant, Co., "A," 10th Sept. Batt. Inf.

Vern H. Newland, Artificer, Co. "D," 3rd Inf.

Conrad F. Asmuth, Sergeant. Co. "A," 1st Inf.

Jacob Schneller, Corporal, Co. "G," 2nd Inf.

Paul Ahnert, 2nd Lieutenant, 1st Inf.

After a long and faithful period of service Colonel George Graham, the father of rifle practice in Wisconsin, and whose intelligence, energy, discrimination and enthusiasm has done much more than any other one man to inspire love of the art of shooting and to impart knowledge in that line to the men of the Guard, retired in 1906. Having reached the retiring age, action was taken on his own application. A portion of the order placing him on the retired list is herewith reproduced:

III. On his own application, having passed the retiring age, Colonel George Graham, Inspector of Small Arms Practice, is hereby placed on the retired list with the rank of Colonel.

Enlisting in Co. "I," 37th Regiment Wisconsin Infantry Volunteers, November 1, 1863, for three years, he was transferred to Company "G" June 6, 1864, entering the company as First Sergeant. Detached on extra duty with the Third Corps as Ordnance Sergeant. Transferred to the non-commissioned staff as Sergeant Major, September 8, 1864. He was promoted to First Lieutenant Company "G," 37th Regiment Wisconsin Infantry Volunteers, December 29, 1864, to rank same date. He served as a staff officer at Washington, D. C., per Special Orders No. 19. 10th Division, 9th Army Corps; commissioned Captain Co. "G," 37th Infantry July 24, 1865, to rank the same date and was mustered out with the company July 27th, 1865.

He enlisted in the Tomah Guards April 23th, 1884; was commissioned Captain of Company "K," 3rd Infantry, Wisconsin National Guard, May 29th, 1884, and resigned November 30th, 1888; was commissioned Captain and Inspector of Small Arms Practice, 3rd Infantry, W. N. G., January 1st. 1891, commissioned Colonel and Inspector of Small Arms Practice January 7th, 1895.

In his long and honorable service Colonel Graham has at all times brought into play his ripe experience attained in the volunteer service of

General Report.

his country, to the improvement of the Wisconsin National Guard, particularly in rifle practice, and to him more than to any one factor is due the high standing that the Wisconsin National Guard has attained in that most important branch of the duties of an efficient soldiery. He retires with the love and respect and to the profound regret of all of his old associates in the service.

SERVICE MEDALS.

Since the enactment of the law in 1903 providing for the same the fifteen year service medals have been issued to the following officers and men:

Staff.

Charles R. Boardman.....	Adjutant General.
Joshua Hodgins.....	Quartermaster General.
John G. Salsman.....	Colonel and A. A. G.
George Graham.....	Colonel and I. S. A. P.
Charles R. Williams.....	Major and Quartermaster.
Edward T. Markle.....	Captain and Commissary.
Gordon H. McNeel.....	Captain and Paymaster.
Abraham B. Cambier.....	Colonel and A. D. C.
Elmer E. Tennant.....	Colonel and A. D. C.

Medical Department.

John B. Edwards.....	Colonel and Ass't Surgeon General.
Joseph B. Whiting.....	Major and Surgeon.
Frank C. Moulding.....	Major and Surgeon.
Edward H. Grannis.....	Major and Surgeon.
Ralph Chandler.....	Captain and Ass't Surgeon.

Hospital Corps.

Fred E. Darling.....	Sergeant Hospital Corps.
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First Infantry.

Otto H. Falk.....	Colonel.
George H. Joachim.....	Lieutenant Colonel.
Daniel A. Stearns.....	Major.
Benjamin H. Dally.....	Major.
John P. Joachim.....	Captain.

General Report.

Emil Wilde	Captain.
Henry C. Baker	1st Lieutenant.
John J. Foley	1st Lieutenant.
William F. Mehl	2d Lieutenant.
John Nowakowski	Quartermaster Co. "K."
Charles J. Van Etta	Sergeant Co. "A."
Edward T. Weyher.	Captain.

Second Infantry.

William Bearder	1st Lieutenant, Co. "K."
August J. Miller	Q. M. Sergeant, Co. "K."
Fred W. Milke	Musician, Co. "D."
Wilbur M. Lee	Major.
Emil C. Plonsky	Captain.
Anton C. Martin	Captain.
William B. Hall	Captain.
Gustav Disch	1st Lieutenant.
Herman Olson	1st Lieutenant.
Albert J. Cummings	1st Lieutenant.
Ulrich Moeckli	2d Lieutenant.
Harvey Johnson	Sergeant, Co. "K."
Nathan E. Morgan	Colonel.
Frank W. Gruetzmacher	Lieut. Colonel.
Wallace P. Green	Major.
Julius A. Nemitz	Major.
Ulyssus G. Carl	Captain.
Philip J. Zink	Captain.
Maurice S. Peerenboom	Captain.
Charles Bodemer	Captain.
James McCully	Captain.
Charles A. Green	Captain.
Harry R. Lee	1st Lieutenant.
Hugh E. Pomeroy	Captain.
John N. Taddy	Batt. Sergeant Major.
William E. Patten	Musician, Co. "K."

General Report.

Third Infantry.

Orlando Holway.....	Colonel.
Julius E. Kircheis.....	Lieutenant Colonel.
Randolph A. Richards.....	Major.
Joseph M. Ballard.....	Major.
John W. Hommel.....	Major.
Fred Schultz.....	Captain.
William A. Grimmer.....	Captain.
Henry W. Klopf.....	Captain.
Louis Schalle.....	1st Lieutenant.
Frank C. Dana.....	Chief Musician.
Frank Brown.....	Corporal, Co. "D."
Ansel Clark.....	Private, Co. "F."
William F. Winsor.....	Private, Co. "D."
John Turner.....	Captain.
Marshall Cousins.....	Captain.
Andrew S. Flood.....	Corporal, Co. "K."
Frank J. Burnett.....	1st Lieutenant.
Burton H. Wells.....	Sergeant, Co. "A."
C. S. Tucker.....	Private, Co. "D."
Winfield W. Warren.....	Captain.
Fred M. Foster.....	2nd Lieutenant.

10th Separate Battalion Infantry.

John J. Lynch.....	Major.
D. J. Mowatt.....	Captain.
Sewell A. Paterson.....	Captain.
John E. Driscoll.....	1st Lieutenant.

Troop "A," First Cavalry.

William J. Classen.....	1st Lieutenant.
Fred W. Cords.....	Private, Troop "A."

First Battery, Field Artillery.

Charles F. Nowell.....	Sergeant, 1st Battery, F. A.
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General Report.

BREVET SECOND LIEUTENANTS.

The following named students of the University of Wisconsin have under the laws of 1905 been given commissions as brevet second lieutenants in state troops:

Charles A. Taylor,
Leo M. Cook,
Harold K. Weld,
Victor R. Griggs,
George Rankin Ray,
Perry Curtis Stroud,
Albert Louis Lindemann.

WISCONSIN MILITARY RESERVATION.

Since the last report a new, convenient and commodious brick office building, steam heated and with ample vault accommodation has been built. At present the total number of targets available for simultaneous firing at fixed distances is being increased to sixty. This will enable a regiment to complete the regimental firing in a day and a half, thus giving more of the period of the encampments for field exercises. The number of targets for the 800 and 1,000 yard ranges will also be increased so as to give ample accommodations for all to fire whose qualification is sufficiently high to warrant it. At the present writing an up-to-date and complete telephone system, including all of the important points on the reservation is being installed. New quarters for the Governor have been provided and all buildings closely adjacent the camp ground moved and arrangements made to put everything connected with the regiment under canvass, so as to make the entire camp as nearly under actual field conditions as possible. The use of stables has been abandoned and hereafter all horses used by troops will be kept on picket lines. Property owners in the vicinity

General Report.

of the reservation have organized a drainage district to drain the marshy country to the north, east and west of the reservation. They are paying to the drainage fund five dollars per acre and for the sum of five hundred dollars the low lands of the reservation can be attached to this district. The benefits to be derived are sufficient to warrant the expenditure as it will make available for hay and for use by the troops nearly one hundred acres of land which now at times is worthless owing to high water conditions. There is still needed on the reservation a new ice house with cold storage facilities to care for fresh meat which has to be shipped in for issue to troops. The present ice house will hardly last another season, and when rebuilt as it must be, it should be designed to hold a sufficient supply of ice to care for a large body of troops, such a number as is likely to be mobilized there in case of another war.

The movement to have the United States purchase land in the vicinity of the reservation for military purposes is still being urged and owing to the untiring efforts of Hon. John J. Esch is making progress. In the event of the purchase becoming an accomplished fact I again strongly recommend that the state retain its title to and full control over its own property but give to the United States liberal privileges in the matter of the use of the grounds. In the near future a new and substantial headquarters building should be erected.

ARMORIES.

Slowly the companies of the state are coming into the possession of good armories. The more recent acquisition is that of Co. "G," 2nd Infantry at Appleton. New armories are projected for Co. "I," 1st Infantry, at Neenah, "K" of the 2nd at Beaver Dam, "D" of the 3rd at Mauston, and "H" of the 3rd at Menomonie. The law permitting cities to build armories is producing good results.

Since the last report the Broadway Armory in Milwaukee

General Report.

has been sold and has passed from the use for military purposes. The Milwaukee companies are now quartered in private halls in different parts of the city. So far as they are concerned the change seems to be beneficial. Each company is in a measure becoming a local center for the community where it is stationed. This helps recruiting for the armory becomes in a measure a club house. Recruits come from the immediate neighborhood. Men do not have to pay car fare or travel so far to attend drills and in most cases the expense of maintenance is no higher and the chance for income from sub-rentals and entertainments greater. The First Battery by courtesy of the trustees of the State Fair Association is located on the State Fair grounds. This is an experiment and it remains to be seen whether it is feasible or not: Troop "A" at present is in rented quarters but expects soon to buy sufficient ground for drills, ample stables and barracks. The organization owns all its own horses and the purchase of horses for the First Battery has commenced.

MEDICAL DEPARTMENT.

September 30. 1905.

To His Excellency, ROBERT M. LA FOLLETTE,
Governor and Commander-in-Chief.

SIR:—I have the honor to submit the annual report of the Assistant Surgeon General, for the year ending September 30th, 1905.

The usual good health of the state troops while encamped at the Military Reservation, prevailed.

During the past camps of instruction each regiment was furnished with the regimental field hospital, previously assigned to it for use if called into actual service. I would recommend that only one such outfit be used in the future, it being issued to each regiment as they go into camp. This will

General Report.

will insure two complete hospitals for use, should one or more of our regiments be called into actual service and would give the medical department the same amount of instruction as heretofore.

There is appended hereto a statement of medical, surgical and hospital supplies, expended and on hand, also amount purchased during the past year.

I respectfully tender the thanks of this department for the liberal support it has received.

Very respectfully,

JOHN B. EDWARDS,

Colonel and Ass't Surgeon General.

Medical, surgical and hospital supplies on hand at last report..	\$1,226 32
Medical, surgical and hospital supplies purchased during 1905:	
Yahr & Lange Drug Co	\$22 22
S. C. Herbst Importing Co	14 00
	36 22
Total	\$1,262 54
Medical, surgical and hospital supplies on hand 1905	1,169 40
Amount expended for sick, lost, broken, etc'	\$93 14

To His Excellency JAMES O. DAVIDSON,
Governor and Commander-in-Chief.

SIR:—I have the honor to submit herewith the annual report for the year ending June 30th, 1906.

The action of the last state legislature regarding the holding and use of annual passes over the railroads in this state resulted in the resignation of two medical officers, which necessitated the commissioning of others to fill vacancies. The vacancy caused by the resignation of Major Frank C. Moulding, was filled by the promotion of Captain Edgar C. Barnes to the rank of major. Dr. James R. Scott was commissioned as as-

General Report.

sistant surgeon with rank of 1st Lieutenant and assigned to duty with the 2d Infantry.

The resignation of Captain Theodore J. Redelings, causing another vacancy, was filled March 24th by the appointment of Dr. W. H. Gordon, Jr., who was also assigned to the 2d Infantry.

The recommendations for the appointment of Drs. Scott and Gordon were the result of careful consideration and investigation and I believe will result in a benefit to the service. The promotion of Captain Barnes was a well merited reward for long and faithful service as a line and staff officer, in the state, United States Volunteer and again in the state service.

The "Officers' School" held in Madison March 7th and 8th, 1906, was of undoubted benefit to the Medical Department. The school for medical officers was conducted by Major E. H. Grannis and that it was efficiently conducted is evidenced by unanimous opinion of the officers of which it was composed.

Before closing this report I wish to express my deep regret that existing conditions made Major Moulding's resignation, in his opinion, necessary, and my full appreciation of his faithful and efficient service. It was my privilege to serve with him as a United States Volunteer officer and it is with pleasure that I attest to his faithful untiring work.

Very respectfully,

JOHN B. EDWARDS,
Colonel and Assistant Surgeon General.

MISCELLANEOUS.

The annual convention of the Interstate National Guard Association held at Washington, D. C., Jan. 22nd and 23rd, 1906, was attended by the Adjutant General and the Assistant Adjutant General. At this meeting a determined effort was made

General Report.

to increase the annual United States appropriation for the support of the militia from \$1,000,000 to \$2,000,000. It is hoped this measure will ultimately pass congress as it is of the greatest importance to the militia. Without it an overwhelming majority of the states will not be able to equip their troops in the manner and within the time required by the United States law. The states must maintain an army subject to the call of the President of over 100,000 men. For this the United States pays in supplies less than \$10.00 annually per man. The government is now asked to pay \$20.00 annually per man in the same manner. The amount is small, the benefit great. Practically the entire Wisconsin delegation in congress favors the passage of the bill.

During the past two years there has been no occasion to call any part of the Wisconsin National Guard out for active service of any kind.

Wisconsin troops have participated in no maueuvers during the past two years.

General Report.

FINANCIAL STATEMENT.

Fiscal years July 1, 1904, to June 30, 1906.

	July 1, '04, to June 30, '05.	July 1, '05, to June 30, '06.
Rent of armories	\$22,900 00	\$23,200 00
Allowances, company commanders.....	2,100 00	2,100 00
Allowances, battalion commanders	500 00	500 00
Allowances, regimental and separate battalion adjutants	200 00	200 00
Allowances to regimental headquarters	300 00	300 00
Allowances to hospital corps.....	220 00	195 00
Clothing allowances.....	13,815 00	13,810 00
Extra horse hire, troop and battery	3,000 00	3,000 00
C. R. Boardman, salary, adjutant general.....	2,000 00	2,000 00
C. R. Boardman, expense	101 77	234 82
John G. Salsman, salary, ass't adjutant general.	1,400 00	1,800 00
John G. Salsman, expense	86 28	142 70
Salaries, National Guard department	2,040 00	2,040 00
Salaries, pension division.....	2,100 00	2,100 00
Pay of troops in camp	48,481 29	50,785 82
Major C. G. Woodward, inspection	600 00	100 00
Captain Charles King.....	300 00	400 00
Troop "A," 1st Cav., feed and care of horses \$2,500.00—\$1,000.00	3,500 00	2,500 00
Quartermaster general's department.....	24,115 95	24,239 81
Medical department	1,052 78	1,195 77
Louis Esser Co., decorations course "C" shooting	515 00	25 00
Colonel I. W. Stephenson, expense to St. Louis.	45 65	
Col. J. A. Frear, expense St. Louis exposition...	28 65	
Major M. C. Bergh, expense St. Louis exposition	34 15	
Col. A. T. Rogers, expense St. Louis exposition.	42 60	
Interstate National Guard Ass'n, dues 1905-1906.		28 00
Army and Navy Journal, tactics.....	22 70	
Seikert & Baum, card index box.....	3 50	
J. C. Everson Co., framing		5 25
E. E. Britton, pamphlets.....	3 00	
Captain C. A. Green, 2nd Inf., expense.....	10 00	
Captain Jas. McCully, 2nd Inf., expense.....		2 50
Army and Navy Journal, subscription	6 00	6 00
Telegraph and telephone.....	49 29	47 02
Express and freight.....	100 54	105 47
Printing	546 65	657 27
Postage.....	567 00	685 00
C. F. Lamb, paymaster bond		40 00
Col. Orlando Holway, expense St. Paul.....		6 42
Col. N. E. Morgan, expense St. Paul		12 60
Col. F. W. Gruetzmacher, expense, inspections..		16 00
Inspector Lieut. E. Van D Murphy.....		100 00
Captain R. W. Mueller		150 00
Officers' school pay roll		726 00
E. F. Bunn, bill of lecturing officers.....		34 10
American Bonding Co., schedule bond.....		154 00

\$130,787 80 \$134,644 55

General Report.

VOLUNTEER SERVICE.

In this department the letters received and answered from July 1st, 1904, to June 30th, 1906, numbered 918. During the same period there were 770 certificates of service issued to former soldiers.

PENSION DIVISION.

For the two years, July 1, 1904, to June 30, 1906, both inclusive there have been filed with the Pension Division of this office 1158 claims of all classes, making a total of 8,132 claims filed since the division was established in 1888.

In this biennial period there have been 1227 claims passed upon by the Bureau of Pensions, of which 991 have been allowed and 236 rejected, or almost exactly 81 per cent. of successful cases, a gain of 20 per cent. over the preceding two years.

At the date of the last report there were 692 claims on the files awaiting either evidence from claimants or final action by the Bureau. At this time there are 562 claims awaiting similar action. 130 claims have been dropped from the files either by reason of the death of the applicant or from a confessed inability to furnish the evidence to complete.

Original declarations under the General Law by soldiers of the War of the Rebellion and of the Mexican War have practically ceased, but the claims of the soldiers of the War with Spain show a decided increase and a much larger per cent. than formally are successful, showing that the debilitating effects of war service in tropical climates is making itself felt upon the health of the soldiers of that war, despite their brief term of service.

Claims under the Age Order No. 78, made more effective by Act of Congress approved April 24, 1906, still form a considerable per cent. of the new business before the Division and are quite generally successful, only a few cases being rejected on

General Report.

account of inability of claimants to prove date of birth or to clear away some discrepancy in the records.

2570 letters have been written and copied upon the files of the division, and nearly as many more written on subjects of minor importance; 2200 circulars and cards of instruction have been sent out and the business of the division is more nearly up to date than at any previous report. 2129 vouchers for pension have been executed, free of charge, this number representing the payment of \$69,328 to pensioners or an average monthly rate of about \$10.86.

A large number of declarations and affidavits have been made out and attested, free of charge, and the business has shown a very decided increase both as to claims filed and to successful adjudications.

RECOMMENDATIONS.

It is respectfully recommended that the appropriation fixed in 1905 at \$140,000 for two years be made annual.

That woolen clothing of the new patterns be issued to the state troops at the earliest possible moment.

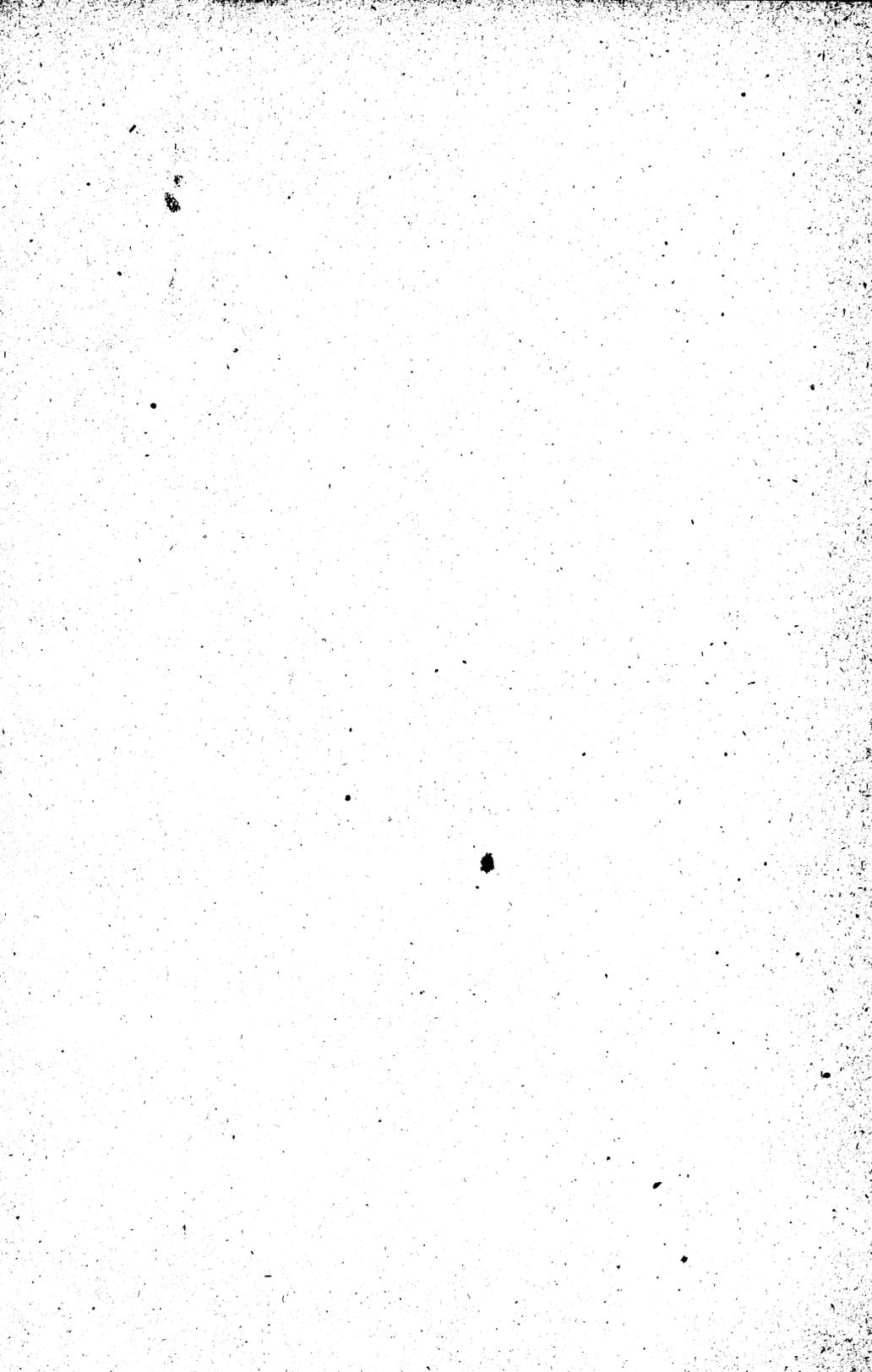
That provision be made for each company to hire a competent man to look after and care for all the military property issued to it.

That eight to ten days encampments be held as soon as the financial support will warrant it.

In concluding I desire to thank all those associated with me for cordial support and unflagging interest displayed.

Very respectfully,

C. A. BOARDMAN,
Adjutant General.





BIENNIAL REPORT

OF THE

Quartermaster General

AND

The Chief of Ordnance

OF THE

STATE OF WISCONSIN

FOR THE

Two Fiscal Years Ending June 30, 1906.



MADISON:
DEMOCRAT PRINTING COMPANY, STATE PRINTER,
1907

BIENNIAL REPORT
OF THE
QUARTERMASTER GENERAL

STATE OF WISCONSIN,
*Office of the Quartermaster General, Commissary
General, and Chief of Ordnance,*
Camp Douglas, July 1, 1906.

To His Excellency, JAMES O. DAVIDSON,
Governor and Commander-in-Chief.

Sir: I have the honor to submit the following report of the Quartermaster's, Subsistence, and Ordnance Departments of the Wisconsin National Guard, during the two fiscal years ending June 30, 1906. A table showing the expenditures of the Departments for the fiscal years ending June 30, 1905, and June 30, 1906, is annexed to this report and marked "A".

THE QUARTERMASTER'S AND ORDNANCE DEPARTMENTS.

In all transactions of these departments, the methods of like departments of the Army have been followed as closely as possible in order that all officers of the Wisconsin National Guard could obtain as much instruction in the Army's method of doing business as is possible in the amount of time they are able to devote to military duties.

The work of both departments has increased very heavily during the past two years,—so much so that I am compelled to renew my recommendation made in former reports that the permanent force be increased by the employment of an additional clerk and

Quartermaster's and Ordnance Departments.

a laborer. The present force of these departments is not as large as that employed in 1895 while the work has increased forty per cent.

The appropriation made by the general government for the support of the organized militia is five times as large as in 1895, with corresponding increase of work in handling, caring and accounting for property obtained from the supply departments of the Army on requisitions of the Governor.

In the Quartermaster's Department, 447 requisitions were received during the fiscal year ending June 30, 1905, and 783 issues of property were made. 367 requisitions were received during 1906 and 592 issues made. In the Ordnance Department 568 requisitions were received in 1905 and 681 issues made. During 1906, 392 requisitions were received and 508 issues made. In the offices of the Quartermaster General and Chief of Ordnance, 3700 letters were written and 503 circular letters mailed in 1905. During 1906, 3386 letters were written and 1153 circular letters mailed. During 1905, 256 property returns were received, examined and settled, and 283 in 1906.

It is again recommended that all shipments of public property to and from the Quartermaster's and Ordnance Depot be made on regular Quartermaster's Department bills of lading. This cannot be carried out however unless additional clerical force is authorized.

Clothing and Equipage.

CLOTHING AND EQUIPAGE.

During the two years ending June 30, 1906, the following clothing and equipage has been received from the Quartermaster's Department of the Army on the State's quota of the appropriation under the provisions of Sec. 1661, R. S.:

125 blankets, woolen, olive drab,	3 sword belts, drum major,
150 blankets, woolen, blue,	600 clothing roll straps,
250 blouses, made,	227 yards duck, khaki,
200 pairs breeches, khaki, mounted,	3000 pairs leggin strings,
112 pairs chevrons, khaki,	200 pairs shoulder straps for khaki
6 pairs chevrons, dress,	coats,
475 coats, khaki, service,	2 bugles, field artillery,
225 pairs gloves, buckskin,	3 field ranges,
100 pairs gloves, Berlin,	1 flag, field hospital,
195 hats, service,	2 flags, post,
1860 hats, campaign,	2 flags, storm and recruiting,
3705 hat cords,	1 guidon, cavalry, silk,
2400 hat letters,	1 guidon, cavalry, service,
2500 hat numbers,	400 shelter tent halves,
1050 pairs leggins,	400 shelter tent poles,
81 music pouches,	3000 shelter tent pins,
25 ornaments, cap, infantry,	1 tent, storage,
50 ornaments, hat, field artillery,	1 tent fly, storage,
300 ponchos, rubber,	1 set poles for storage tent,
3200 shirts, chambray,	20 wall tent flies,
825 shirts, dark blue flannel,	15 wall tent poles, ridge,
275 pairs trousers, kersey, foot,	30 wall tent poles, upright,
45 pairs trousers, kersey, mounted,	20 hospital tent flies,
3275 pairs trousers, khaki, foot,	20 hospital tent poles, ridge,
496 pairs trouser stripes,	40 hospital tent poles, upright,
300 waist belts, leather,	4044 tent pins, large,
81 waist belts for bandsmen,	6038 tent pins, small.

The following property has been purchased from the Quartermaster's Department of the Army under Act of Congress approved January 21st, 1903, and the value, \$1,469.31 charged against lost property fund:

1 cap, canvas,	2400 hat numbers,
1 cap, fur,	400 pair leggins,
1 pair gauntlets, fur,	1 overcoat, canvas,
380 hats, campaign,	50 ponchos, rubber,
2725 hat cords, infantry,	500 shirts, chambray,
2400 hat letters,	200 shirts, dark blue flannel,
	300 waist belts, leather.

The following publications have been received from the War Department and charged against quota for arming and equipping the militia:

25 Regulations, Drill, Hospital Corps,	50 "Epitome of Tripler's Manual",
250 Regulations, Drill, Infantry,	20 Manuals, Medical,
45 Manuals, Gymnastics,	20 Manuals, Courts Martial,
15 Manuals, Quartermaster,	200 Regulations, Field Service,
20 Manuals, Subsistence,	15 Provisional Drill Regulations, Field
100 Regulations, Small Arms Firing,	Artillery.

Clothing and Equipage.

During the two years the following clothing, equipage and publications have been issued to the Wisconsin National Guard:

48 blankets, woolen, olive drab,	1 book, endorsement,
135 blankets, woolen, blue,	1 book, financial,
463 blouses, made,	1 book, order,
69 pairs breeches, khaki, foot,	36 camp kettles,
164 pairs breeches, khaki, mounted,	35 field desks,
29 caps, forage,	9 field ranges with utensils,
396 pairs chevrons, dress,	1 guidon, cavalry, silk,
724 pairs chevrons, khaki,	1 guidon, cavalry, service,
3190 coats, khaki, service,	258 pickaxes,
9 coats, canvas, fatigue,	259 pickax helves,
65 pairs gloves, buckskin,	257 shovels, short handled,
2044 hats, campaign,	2005 shelter tent halves,
4352 hat cords,	2184 shelter tent poles,
3904 hat letters,	10371 shelter tent pins,
3255 hat numbers,	31 trumpets,
1405 pairs leggins,	30 trumpet cords and tassels,
59 music pouches,	3 trumpet crooks,
159 ornaments, cap,	4 trumpet mouthpieces,
80 ornaments, hat, field artillery,	1 hand litter,
15 overcoats,	55 Catechisms of Infantry Drill Regulations,
265 ponchos, rubber,	8 "Epitome of Tripler's Manual,"
5801 shirts, chambray,	40 Handbooks for Non-commissioned Officers,
822 shirts, dark blue flannel,	2 Manuals, cook,
14 shirts, olive drab flannel,	38 Manuals of Guard Duty,
528 pairs trousers, kersey, foot,	42 Manuals, Gymnastics,
32 pairs trousers, kersey mounted,	1 Manual, Medical,
2736 pairs trousers, khaki, foot,	1 Manual, Military Field Engineering,
25 pairs trousers, khaki, mounted,	14 Manuals, Quartermaster,
14 pairs trousers, canvas, fatigue,	14 Manuals, Subsistence,
230 pairs trouser stripes,	42 Military Documents,
668 waist belts, leather,	60 Military Hygiene,
59 waist belts for bandmen,	56 Military Map Reading,
2 sword belts for drum major,	178 Regulations, Drill, Infantry,
2 batons for drum major,	1 Regulations, Drill, Hosp. Corps,
2302 buttons, large,	168 Regulations, Field Service,
1951 buttons, small,	100 Regulations, Small Arms Firing,
1482 pairs leggin strings,	14 Regulations, U. S.
116 pairs shoulder straps for khaki coats,	1 Service of Security and Information,
12 clothing roll straps,	1 Troops in Campaign,
257 axes,	14 Artillery Drill Regulations.
262 ax helves,	
2 books, descriptive,	

The old pattern blouse and kersey trousers constituting at the present time the woolen clothing of the Wisconsin National Guard are badly worn and should be replaced at once with the olive drab service uniform, or if this clothing cannot be obtained from the Quartermaster's Department of the Army, then with the blue dress uniform.

It is again recommended that canvas folding cots, camp chairs, folding tables, and canvas bedding rolls for field service be issued to all officers of the Wisconsin National Guard.

During 1906, 3 olive drab woolen blankets and 3 large size ponchos were issued to each company, the troop of cavalry, and battery of field artillery for use of officers. These articles should be issued to all regimental field and staff officers.

Arms and Equipment.

The shelter tents with which the entire 1st Regiment is equipped are of white canvas and an old pattern, are badly worn and should be replaced with the latest pattern of khaki color.

In 1905, 779 pairs U. S. Army regulation shoes were purchased from Joseph M. Herman Company, Boston, Mass., and sold for cash to officers and enlisted men. Shoes were sold to all the officers and enlisted men of Companies "K", 1st Infantry, "A", 2nd Infantry, "D", 3rd Infantry, and the Battery of Field Artillery. Balance of shoes on hand after supplying these organizations were sold during camp of 1905 and practically every soldier in camp that year applied for the privilege of purchasing a pair of these shoes. This shoe proved very satisfactory and a great many applications for purchase were made during 1906. Sales could not be made to the service owing to lack of funds for procuring stock. The only safe method of fitting out the Guard with shoes would be for the Quartermaster's Department to purchase them for cash from Army contractors and sell them to the enlisted men through company commanders.

ARMS AND EQUIPMENT.

The Wisconsin National Guard is armed with the U. S. magazine rifle, cal. .30, model 1898, with model 1901 rear sights, and with Colt's D. A. revolvers, cal. .38, and these arms are reported by accountable officers as in good serviceable condition. 140 magazine rifles have been issued during the two years to companies and field and staff officers. The maximum allowance of arms to a company of infantry is 65 rifles and 5 Colt's revolvers. No revolvers have been issued for use of sergeants of companies as required by G. O. No. 23, W. D. 1906. It is not considered advisable to procure these additional arms until the question of a new model is settled by the Ordnance Department of the Army. 21 new barrels with receivers were issued to troops during 1906 to replace worn out barrels on rifles.

The gun slings and russet leather revolver holsters issued in 1903 were stuffed with oil and soiled the clothing of soldiers in handling. All these were ordered returned to the Ordnance Department here in 1906 and degreased and refinished.

Arms and Equipment.

Officers of the Medical Department have not been equipped with russet leather horse equipment, and steps should be taken to purchase a sufficient number of outfits to equip all officers of this Department. The horse equipment in possession of the troop of cavalry is of the black leather pattern and is much worn. This should be replaced with russet leather as soon as possible.

New rifles with equipment consisting of the following articles were issued by the Ordnance Department of the Army to the 1st Battery, Field Artillery, on June 2, 1906, without cost to the State:

4 3-inch B. L. field guns, model 1902, with all spare parts and equip- ments,	120 meat cans, 120 tin cups, 104 haversacks,
4 3-inch field carriages model 1902, with all spare parts and equip- ments,	120 revolver holsters, cal. 38, russet leather,
6 3-inch field caissons model 1902, with all spare parts,	120 revolver cartridge belts, cal. 38, 120 revolver cartridge boxes, cal. 38, 120 waist belts, russet leather, with buckles.
10 3-inch field limbers, model 1902, with all spare parts,	120 artillery knapsacks, 104 surcingles, artillery, russet leather, 104 saddle blankets, gray,
1 battery wagon,	20 saddle covers,
1 forge limber,	104 bridles, russet leather,
1 store wagon,	52 curry combs, 13 hair girths,
1 store limber,	104 halters, complete, russet leather, 20 links,
36 sets artillery harness, russet leather,	104 nose bags, 20 saddles, complete, russet leather, 20 saddlebags, russet leather,
120 canteens,	112 spurs,
172 canteen-haversack straps, russet leather,	112 spur straps, russet leather,
52 canteen straps, web,	
120 knives,	
120 forks,	
120 spoons,	

The old equipment of this organization was ordered by the Chief of Ordnance of the Army returned to the Rock Island Arsenal.

During the two years ending June 30, 1906, the following ordnance and ordnance stores have been received from the Ordnance Department of the Army, the cost being charged to this State's quota under the appropriation made for arming and equipping the militia:

50 magazine rifles, cal. 30,	45 Hospital Corps knives,
3,050 blanket roll straps, sets,	45 scabbards for Hospital Corps knives,
50 bayonet scabbards, cal. 30,	300 knives,
485 canteens,	300 meat cans,
300 canteen-haversack straps, rus- set,	60 revolver cartridge belts, cal. 38,
50 cartridge belts, cal. 30,	100 revolver cartridge boxes, rus- set,
75 cartridge boxes, McKeever,	25 revolver holsters, cal. 38,
300 forks	300 spoons,
50 gun slings,	
375 haversacks,	

Arms and Equipment.

300 tin cups,	2 stirrups with hood and socket for guidon,
100 waist belts with buckles, rus- set,	5 arm chests,
25 sliding frogs for N. C. O. waist belts,	3 stencil cutting dies,
70 officers' saber belts with slings,	1 stencil plate, haversack,
95 saber attachments, russet,	40 stencil plates, canteen,
20 bayonets, cal. 30,	1 marking outfit, complete,
60 cleaning rods, sections, cal., 30,	10 stencil outfits, complete,
550 front sight and muzzle covers, cal. 30,	28 Laidley revolving targets, 6'x6',
50 small arm oilers,	6 Laidley revolving targets, 6'x12',
10 screw drivers, rifle,	180 target frames, 6'x6',
872,210 ball cartridges, cal. 30,	12 target frames, 6'x12',
115,000 blank cartridges, cal., 30,	452 interior target frames, 4'x6',
150,000 revolver ball cartridges, cal. 38,	258 interior target frames, 6'x6',
5,000 revolver blank cartridges, cal. 38,	48 interior target frames, 6'x12',
159,400 bullets for gallery practice,	76 steel target frames D-E-H,
30,000 cartridge primers, small arms,	26,200 paper targets,
45,000 gallery practice shells, cal. 30,	1,000 cloth silhouettes, D-E-H,
200 pounds powder, small arms,	6,700 paper silhouettes, D-E-H,
25,000 reduced range cartridges, cal. 30,	500,000 pasters, white,
5,000 guard cartridges,	1,000,000 pasters, black,
80 F. A. base percussion fuzes,	3,000 yards target cloth,
40 shrapnel, 3.2",	75 danger flags,
40 shells, 3.2",	155 marking discs and staves,
100 blank cartridges, 3", drill charge,	41 repair kits, cal. 30,
100 blank cartridges, 3.2" service charge,	42 blocks, wooden,
250 pounds saluting powder,	42 hammers, brass,
60 shells, 3",	42 punches, steel,
52 shrapnel, 3",	2 brace screw drivers,
150 saluting primers,	1 brace, hand, iron,
150 felt wads,	2 vises,
50 metallic cartridge cases,	2 vise clamps,
6 fuze setters,	1 monkey wrench,
8 drill cartridges, 3",	3 gauges for head-spacing,
30 fuze punch pins,	23 files,
16 buckets, watering,	1 chest,
8 lanterns, railroad,	24 extra pins for drifts,
12 paulins,	1 space gauge,
3 sperm oilers, rectangular,	1 range rod,
20 whips, artillery,	1 punch and set for recoil plate,
3 breech covers, 3.2",	1 decapping and cleaning tools, sets,
3 tompon and muzzle covers,	50 button brushes,
125 bridles, watering, russet,	50 button sticks,
25 curry combs,	50 pieces chamois skin,
50 halters, complete,	25 cleaning plates,
25 horse brushes,	50 quarts cosmoline oil,
90 horse covers, canvas,	10 linseed oil, pints,
40 nose bags, russet,	20 ounces scouring material,
40 saddle blankets,	20 ounces compressed whiting,
120 pairs spurs,	10 wire scratch brushes,
120 spur straps, pairs,	50 quarts leather oil,
55 canteen straps, mounted,	500 cakes "H & H" soap,
20 cavalry links,	50 boxes russet leather dressing,
80 knapsacks, artillery,	10 pounds ammonium phosphate,
20 stirrups, wood,	350 front sights, cal. 30,
20 stirrup straps,	350 front sight pins,
50 surcingles,	70 rear sights, complete,
70 lariats,	1500 canteen covers,
70 lariat straps, russet,	500 canteen corks and chains,
70 picket pins,	50 buttons for gun slings,
75 halter straps, russet,	500 coffee bags for haversacks,
	500 sugar bags for haversacks,
	500 salt bags for haversacks,
	50 bacon bags for haversacks,
	500 knife scabbards for haver- sacks,
	500 fork scabbards for haver- sacks,

Arms and Equipment.

10 axes,	50 fasteners for revolver car-
60 nave boxes,	tridge belts,
40 center blocks,	200 blanket roll strap snaps,
60 journal boxes,	200 blanket roll strap buckles,
600 pins, wooden,	40 haversack hooks,
200 wedges, large,	40 brass wire end hooks,
100 wedges, small,	60 foot staples, assorted,
25 crane bushings, cal. 38,	20 bridle ornaments,
15 crane locks,	20 halter bolts,
30 crane lock screws,	20 halter squares,
25 cylinders,	20 halter swivel rings,
15 cylinder bolts with springs,	40 ovals for saddles,
assembled,	20 ovals for saddle bags,
30 cylinder bolt springs,	80 rings, assorted,
25 ejector rods,	20 saddlebag studs,
30 ejector rod heads,	24 saddlebag nails,
50 ejector springs,	20 shields for saddles,
15 hammers with strut, strut pin,	60 snap hooks, assorted,
strut spring, etc.	25 snaps,
50 hammer pins,	10 lbs. shoe thread,
15 hammer stirrups,	40 yards webbing,
15 hammer stirrup pins,	350 buckles, assorted, bar, wire,
30 hammer strut springs,	and roller,
25 hand springs assembled,	2 gross escutcheon pins,
110 hand springs,	9 pounds rivets and burs, as-
15 latch pins,	sorted,
30 latch springs,	2 gross screws,
9 locking levers,	10 papers tacks, assorted,
9 locking lever screws,	2 lbs. beeswax,
24 mainsprings,	2 boxes ingredients for leather
24 mainspring tension screws,	blacking,
15 rebound levers,	5 sides bridle leather, russet
50 recoil plates,	and black,
60 side plate screws,	200 lbs. harness leather, black and
30 stocks, right,	russet,
30 stocks, left,	12 quarts harness oil,
50 stock pins,	10 papers needles, harness,
15 stock screws,	40 brass wire double hooks,
30 triggers,	20 brass wire D-rings,
50 trigger pins,	40 brass wire squares.

The following ordnance and ordnance stores have been purchased and charged against lost property fund,—the value of this property is \$1,805.87.

5 magazine rifles, cal. 30,	13 cases for sabers, chamois skin,
65 Colt's revolvers, cal. 38,	10 sets metal trimmings for officers'
13 swords, officers',	saddles,
50 sets blanket roll straps,	10 sets metal trimmings for officers'
20 bayonet scabbards, cal. 30,	bridles,
35 cartridge belts, cal. 30,	20 sets metal trimmings for officers'
5 cartridge belts, cavalry, cal. 30,	saber belts,
10 cartridge belts, revolver, cal. 38,	50 bronze buckles for waist belts,
20 gun slings, russet,	25 revolver holster buttons,
65 revolver holsters, russet,	200 buckles for blanket roll straps,
5 sight and muzzle covers, cal. 50,	200 snaps for blanket bag coat straps,
5 small arm oilers, cal. 30,	100 iron D-rings,
1 screw driver, cal. 30,	100 fasteners for cartridge belts,
55 staves for marking discs,	100 gun sling buttons,
25 danger flags,	10 saber attachment hooks,
3 bridles, russet,	40 snaps,
3 saddles, russet,	100 buckles, roller and wire,
20 pairs spurs,	3 sides bridle leather, russet,
20 pairs spur straps, russet,	1 side collar leather, russet,
22 sword belts with buckles,	100 brass end hooks and rivets.
60 saber knots, service,	

Arms and Equipment.

The following stores have been issued by the Ordnance Department during the two years ending June 30, 1906:

199 Springfield rifles, cal. 45,	172 cartridge belt plates, cal. 45,
130 Colts' revolvers, cal. 38,	172 cartridge belts, cal. 45,
5 N. C. Officers' swords,	65 saber belts, russet,
2865 sets blanket roll straps,	65 saber attachments, russet,
5050 bayonet scabbards, cal. 30,	65 lariats,
440 canteens,	65 lariat straps, russet,
64 canteen straps,	65 picket pins,
109 canteen-haversack straps,	12 buckets, watering,
128 cartridge belts, cal. 30,	8 lanterns, railroad,
11 cartridge boxes, McKeever,	12 paulins,
156 forks,	3 breech covers, 3.2 inch,
138 gun slings,	3 tompion and muzzle covers,
2645 haversacks,	3 sperm oilers, rectangular,
54 haversack straps,	20 whips, artillery,
39 Hospital Corps knives,	40 shells, 3.2 inch,
39 Scabbards for Hospital Corps knives,	940,947 ball cartridges, cal. 30,
191 knives,	65,800 blank cartridges, cal. 30,
177 meat cans,	175,500 ball cartridges, cal. 22,
106 revolver cartridge belts, cal. 38,	300 dummy cartridges, cal. 30,
164 revolver holsters, cal. 38,	111,252 revolver ball cartridges, cal. 38,
114 spoons,	1,980 revolver blank cartridges, cal. 38,
149 tin cups,	51,500 bullets for gallery practice,
29 waist belts,	59,500 cartridge primers, small arms,
29 waist belt plates,	11,500 gallery practice shells, cal. 30,
25 waist belts with buckles, russet,	10 pounds small arms powder,
129 bayonets, cal. 30,	10,000 reduced range cartridges, cal. 30,
44 cleaning rods, barrack,	900 blank cartridges, cal. 45,
8 cleaning rods, swivel,	50 shrapnel,
17 cleaning rods, sections,	128 blank cartridges, 3.2", service charge,
286 front sight and muzzle covers,	72 blank cartridges, drill, 3",
147 oilers, small arm,	32 F. A. base percussion fuzes,
6 screw drivers, rifle,	700 friction primers,
10 arm chests,	24 barrels paste,
32 stencil plates, canteens,	10,075 score cards,
2 stencil outfits, art. and cav.	2 revolving targets, Wisconsin pattern,
6 stencil plates, company,	15 Laidley revolving targets, 6'x6',
3 sets stencil figures,	14 Laidley revolving targets, 6'x12',
8 cans marking ink,	232 target frames, 6'x6',
49 bridles, russet leather,	18 target frames, 6'x12',
24 bridles, black leather,	2 target frames, 12'x12',
68 bridles, watering, russet,	116 interior target frames, 4'x6',
14 curry combs,	116 interior target frames, 6'x6',
49 halters, complete, russet,	20 steel target frames, D-E-H,
13 halters, complete, black,	9 iron target plates,
15 horse brushes,	16,110 paper targets,
57 horse covers, complete,	698 cloth silhouettes, D-E-H,
92 nose bags, russet,	1,916 paper silhouettes, D-E-H,
4 nose bags, black,	765,000 pasters, white,
48 saddles, russet,	506,000 pasters, black,
6 saddles, black,	3,161 yards target cloth,
49 pairs saddlebags, russet,	86 danger flags,
2 saddle cloths, dress,	14 streamers,
49 saddle cloths, service,	14 halliards for streamers,
4 insignia for saddle cloths,	9 ricochet flags,
88 saddle blankets,	28 marking discs and staves,
94 pairs spurs,	40 repair kits, cal. 30 rifle,
94 pairs spur straps, russet,	13 button brushes,
3 curb straps,	13 button sticks,
13 cavalry links, russet,	16 pieces chamolis skin,
80 knapsacks, artillery,	2 cleaning plates,
85 halter straps, russet,	36 quarts cosmoline oil,
55 canteen straps, mounted, russet leather,	5 pints linseed oil,
172 bayonet scabbards, cal. 45,	144 ounces polishing material,
199 bayonets, cal. 45,	
11 bayonet scabbards, Hoffman,	

Ammunition, Targets and Target Supplies.

296 ounces scouring material,	69 rear sights complete, model
296 ounces compressed whiting,	1901, cal. 30,
5 wire scratch brushes,	4 stacking swivels,
25 quarts leather oil,	4 stacking swivel screws,
282 cakes "H & H" soap	822 canteen covers,
144 bottles powder solvent,	616 canteen corks and chains,
9 boxes russet leather dressing,	9 axes,
21 barrels with receivers, cal. 30,	44 nave boxes,
27 front sights, cal. 30,	25 center blocks,
27 front sight pins, cal. 30,	26 journal boxes,
1 hinge bar, complete,	93 journal post pins,
2 lower bands,	2 journal posts,
2 lower band pins,	104 wedges, large,
	109 wedges, small,

AMMUNITION, TARGETS AND TARGET SUPPLIES.

The allowance of ammunition and target supplies for field and staff officers, non-commissioned staff officers, companies of infantry, troop of cavalry, and battery of field artillery, is as follows:

For regimental field and staff officers, each,—
 200 ball cartridges, cal. 30, model 1898,
 200 revolver ball cartridges, cal. 38,
 20 revolver blank cartridges, cal. 38,

For non-commissioned staff officers, each,—
 200 ball cartridges, cal. 30, model 1898,
 200 revolver ball cartridges, cal. 38,

For each infantry company,—
 6000 ball cartridges, cal. 30, model 1898,
 500 blank cartridges, cal. 30,
 800 revolver ball cartridges, cal. 38,
 60 revolver blank cartridges, cal. 38,

For troop of cavalry,—
 6000 ball cartridges, cal. 30, model 1898,
 500 blank cartridges, cal. 30,
 4000 revolver ball cartridges, cal. 38,
 1000 revolver blank cartridges, cal. 38,

For 1st. Battery, Field Artillery,—
 6000 revolver ball cartridges, cal. 38,
 500 revolver blank cartridges, cal. 38,

Allowance of supplies for target range of each company,—
 24 paper targets, A,
 24 paper targets, B,
 4 paper targets, C,
 6 paper targets, F,
 4 cloth silhouettes, D,
 4 cloth silhouettes, E,
 12 paper silhouettes, D,
 12 paper silhouettes, E,
 8000 pasters, white,
 3000 pasters, black,
 24 yards target cloth.

Ammunition, Targets and Target Supplies.

For equipment of ranges at home stations of companies the following targets and materials are issued to each:

- 2 Laidley revolving targets, 6'x6', horizontal axis,
- 2 steel target frames, D,
- 2 steel target frames, E,
- 2 shot marks and staves, short range,
- 2 shot marks and staves, mid range,
- 3 danger flags,
- 3 ricochet flags,
- 2 streamers,
- 2 halliards for steamers,
- 1 Laidley revolving target, 6'x12', horizontal axis,
- 1 shot mark and stave long range.

The cost of ammunition and supplies issued for rifle practice for the year 1905 amounted to \$17,476.32, and for 1906 \$18,536.76.

376,000 empty cartridge shells were turned in by troops and picked up on the Military Reservation after camps and competitions, were decapped, cleaned, inspected, and turned in to the Frankford Arsenal at Frankford, Pa., for which 169,200 ball cartridges, cal. .30, model 1898, were received in exchange; and in 1906, 408,500 shells were returned and 183,825 ball cartridges received in exchange. The total value of this ammunition received for empty shells turned in during the two years is \$9,531.61, and the cost of freight on shells and labor decapping, cleaning, and washing amounts to about \$800.00.

The interest in rifle practice in the Wisconsin National Guard is increasing every year and with it a great demand for larger allowances of small arms ammunition. If the soldiers are willing to volunteer their time to rifle practice, the State should be willing to supply a liberal amount of ammunition. An annual allowance of 6000 ball cartridges to each company is not sufficient.

As the Ordnance Department of the Army is now prepared to issue tools, bullets, powder, and primers for reloading service ammunition, it is recommended that service ammunition be reloaded at the Ordnance Depot and the allowance to companies increased by 3000 cartridges a year. Sufficient funds from this State's quota under the laws for arming and equipping the militia will not be available to secure additional ammunition for issue until the Guard has been entirely re-uniformed.

72 Winchester muskets, cal. .22, were purchased during the two years and sold to companies under authority of the Adjutant Gen-

Military Reservation.

eral. These muskets were used for gallery practice, replacing the service rifle with the round ball, cal. .30, and gallery practice shell. The annual allowance of gallery practice material for each company is 10,000 ball cartridges, cal. .22, and 250 each paper targets X, Y and Z.

MILITARY RESERVATION.

The following improvements have been made on the Military Reservation during the two years ending June 30, 1906, and at a total cost of \$3,030.60 for 1905, and \$3,351.92 for 1906. These amounts include the cost of maintenance such as mowing, cleaning grounds, trimming trees, etc.

An office building of brick, 24'x32', two stories in height, and with fire proof vault was erected midway between the Quartermaster's and Ordnance Depot and the commissary building.

The number of targets on ranges 3 and 5 was increased from 16 to 20 each in 1905, and from 20 to 30 each in 1906. New smokestack for the pump station was purchased. 400 feet of cinder roads constructed; telegraph office removed to a site east of the staff building and rebuilt for Governor's cottage. A stone foundation was built under the staff building, which was re-roofed with red ruberoid. New roofs were placed on the commissary building and guard house. The telephone system was entirely re-constructed, new switch board and telephones being installed. Wires to firing points on ranges were run underground from the flanks. There are 18 telephones on the exchange and the switch board is large enough to accommodate 50. The ground on range 3 at the 800 and 1000 yard firing points being low and at times under water, banks 450 feet long and 10 feet wide were constructed at each of these points.

The annual appropriation of \$3000.00 made by the Legislature of 1893 for the care and improvement of the Military Reservation has not been increased, notwithstanding the heavy advance in the cost of material and labor. The appropriation for the Military Reservation should not be less than \$5000.00 per year.

The following improvements are recommended:

The installation of a heating and lighting plant for the Ord-

Encampments.

nance and Quartermaster's Depot and the office of the Quartermaster General.

New stables to accommodate at least 12 horses.

New ice house and cold storage building.

Extension of the water and sewerage system.

All laid out roads on the Reservation to be macadamized.

Cement walk to be laid from the southwest corner of the Reservation, past the quartermaster's residence, and to the office building.

The ordnance and quartermaster building will no longer accommodate the vast quantities of supplies received for issue, repairs, etc. The interior of the commissary building should be refinished so it could be used for workshops and storage of property, at such times as the Reservation is not occupied by troops.

ENCAMPMENTS.

During encampments all arrangements for the transportation of troops, horses and equipments to and from home stations, as well as purchase of all supplies required, have been made by the Quartermaster's Department. The handling of troops by the railroad companies has been generally satisfactory but there is still room for improvement by the C. & N. W. Railway Company.

All equipment and supplies required by troops during camps are now issued on requisitions to the quartermasters of the different organizations, who are required to account for same.

SUBSISTENCE DEPARTMENT.

The method of handling and issuing rations during camp has been the same as that followed in the regular Army and the work of the commissaries of the three regiments has been generally satisfactory. The Army garrison ration with the addition of butter and milk is issued to troops during camp, all supplies being purchased after inviting proposals from different supply houses. The stores issued have been of an excellent quality. During camp of 1904, 16,817 rations were issued by the commissaries of the 1st, 2nd and 3rd Regiments, and 16,897 rations issued dur-

Property Accountability.

ing camp of 1905. Sales amounting to \$326.87 were made in 1904 and \$288.32 in 1905. The cost of a ration was \$.251 in 1904 and \$.252 in 1905.

PROPERTY ACCOUNTABILITY.

The regulations regarding the accountability of public property are rigidly enforced in both the quartermaster's and ordnance departments. In 1905, \$411.87 was charged and collected for property lost and improperly accounted for, and in 1906, \$1730.34. Both these amounts have been deposited in the State Treasury to credit of lost property fund. All losses have been replaced by purchase from this fund from either the general government or in the open market.

GENERAL RECOMMENDATIONS.

It is recommended that an armorer be provided by proper legislation at a salary of \$480.00 per year, for each company of infantry, the troop of cavalry and battery of field artillery.

That one pair of field glasses be issued to each officer.

That all officers be equipped with a canvas folding cot, folding camp chair, folding table, canvas water bucket, and canvas bedding roll.

That woolen blankets and rubber ponchos be issued to all field and staff officers.

That 1 conical and 1 wall tent be issued to each company to be kept at the home station for use during practice marches and instruction of men in pitching and packing.

Very respectfully,

JOSHUA HODGINS,

*Quartermaster General and Commissary General and
Chief of Ordnance, W. N. G.*

Expenditures.

EXHIBIT "A".

Expenditures of Quartermaster General's Department, July 1, 1904, to June 30, 1906.

	July 1, 1904 to June 30, 1905.	July 1, 1905, to June 30, 1906.	Total expen- ditures, July 1, 1904, to June 30, 1906.
Transportation—			
Camp, W. N. G.	\$8,223 07	\$8,110 20	\$16,333 27
Rifle competition	579 62	825 58	1,405 20
Officers convention	361 92	394 11	756 03
Inspection	172 87	411 22	584 09
Miscellaneous	414 89	476 66	891 55
Total transportation	\$9,752 37	\$10,217 77	\$19,970 14
Freight—			
Camp, W. N. G.	\$1,171 57	\$1,155 38	\$2,326 95
Supplies, Quartermaster's and Ord- nance departments	614 53	902 29	1,516 82
Total freight	\$1,786 10	\$2,057 67	\$3,843 77
Clothing—			
Material	\$78 25	\$574 65	\$652 90
Telegraph and telephone—			
Western Union Telegraph Company	\$ 90	\$11 42	\$12 32
Wisconsin Telephone Company ...	18 00	18 00	36 00
Total telegraph and telephone.	\$18 90	\$29 42	\$48 32
Military Reservation—			
Material and supplies	\$1,572 32	\$2,284 70	\$3,857 02
Labor	1,458 28	1,067 22	2,525 50
Total Military Reservation....	\$3,030 60	\$3,351 92	\$6,382 52
Salaries—			
General J. Hodgins	\$1,000 00	\$1,000 00	\$2,000 00
Major C R. Williams	1,400 00	1,400 00	2,800 00
Sergt. E. S. Burroughs	720 00	720 00	1,440 00
Sergt. H. Schalle	300 00		300 00
Leo Wilkinson	270 00	570 00	840 00
M. M. Wells		540 00	540 00
Total salaries	\$3,690 00	\$4,230 00	\$7,920 00
Quartermaster's Department—			
Materials and supplies Quarter- master's and Ordnance Depart- ments	\$1,318 14	\$1,904 27	\$3,222 41
Labor	393 75	219 50	613 25
Total Quartermaster's Depart- ment	\$1,711 89	\$2,123 77	\$3,835 66
Camp expenses—			
Materials and supplies	\$674 75	\$549 58	\$1,224 33
Labor	875 30	921 58	1,796 88
Mess, employees Quartermaster's Department	60 40	71 10	131 50
Total camp expenses	\$1,610 45	\$1,542 26	\$3,152 71
Competition expenses—			
Materials, meals, etc.	\$15 00	\$92 20	\$107 20
Labor	216 73	271 53	488 26
Total competition expenses ...	\$231 73	\$363 73	\$595 46

Expenditures.

Expenditures of Quartermaster General's Department, July 1, 1904, to June 30, 1906.—Continued.

	July 1, 1904, to June 30, 1905.	July 1, 1905, to June 30, 1906.	Total expen- ditures, July 1, 1904, to June 30, 1906.
Expenses of officers of Quartermaster's Department—			
General J. Hodgins	\$113 20		\$113 20
Major C. R. Williams	457 50	55 73	513 23
Total expenses of officers.....	\$570 70	\$55 73	\$626 43
Printing and postage—			
Printing	\$400 92	\$306 08	\$707 00
Postage	200 00	327 25	527 25
Total printing and postage...	\$600 92	\$633 33	\$1,234 25
National Competition		\$775 95	\$775 95
Total Expenditures	\$23,081 91	\$25,956 20	\$49,038 11

LOST PROPERTY FUND.

(Sec. 37, Chap. 228, Laws 1901.)

Credits.

1904.		
July 1, To balance		\$2,656 75
1905.		
Mch. 16, To deposit State Treasurer		343 10
Mch. 24, To deposit State Treasurer		68 77
Sept. 11, To deposit State Treasurer		284 34
1906.		
Jan. 11, To deposit State Treasurer		3 12
June 1, To deposit State Treasurer		1,442 88
Total credit		\$4,798 96

Disbursements.

1905.		
Feb. 22, Ordnance Department, U. S. A.	\$1,046 98	
Mch. 22, Quartermaster's Department, U. S. A.	963 58	
May 6, C. Kenyon Company, clothing	507 50	
1906.		
Mch. 5, Quartermaster's Department, U. S. A.	505 73	
May 21, Ordnance Department, U. S. A.	502 75	
May 26, Ordnance Department, U. S. A.	256 14	
Total disbursements		\$3,782 63
Balance to credit of fund, June 30, 1906		\$1,016 23





TWENTIETH REPORT
OF THE
STATE BOARD OF HEALTH
OF
WISCONSIN.

TWO YEARS ENDING SEPT. 30, 1904,

WITH

Registration Report Relating to Births and Deaths for Part
of the Period 1903 and 1904.

C. A. HARPER, M. D.
Secretary of the State Board of Health.



MADISON, WISCONSIN:
DEMOCRAT PRINTING CO., STATE PRINTER,
1905.

MEMBERS OF THE BOARD.

WM. F. WHYTE, M. D. Pres.,	Watertown.
U. O. B. WINGATE, M. D.	Milwaukee.
Q. O. SUTHERLAND, M. D.	Janesville.
F. C. SUITER, M. D.	La Crosse.
L. E. SPENCER, M. D.	Wausau.
HASSO A. MEILIKE, M. D.	Clintonville.
C. A. HARPER, M. D. Secretary	Madison.
Prof. H. L. RUSSELL, Ph. D., Consulting Bacteriologist.	Madison.
Prof. WM. S. MILLER, M. S., Consulting Pathologist.	Madison.

LETTER OF TRANSMITTAL.

STATE OF WISCONSIN.

Office of the Secretary of the State Board of Health.

MADISON, Wis., Oct. 1, 1904.

To His Excellency, ROBERT M. LAFOLLETTE,

Governor of the State of Wisconsin.

SIR: In accordance with law the twentieth report of The State Board of Health is herewith submitted. The same being for the biennial period ending September 30, 1904.

Respectfully submitted,

C. A. HARPER M. D.,

Secretary.

INTRODUCTION.

In presenting an introduction to this biennial report, much could be said concerning the general principles of preventative medicine. We have in this state nearly fifteen hundred local health officers, most of whom are endeavoring to carry out the principles of preventing the spread of disease to the best of their abilities. There are but few exceptions to this general rule. However, the lot of the local health officer is not always a cheerful or happy one. Many factors may arise to interfere with the successful carrying out of the sanitary laws. Unfortunately, the local health officer is occasionally made the butt of attack from both physicians and laymen when he is conscientiously endeavoring to perform his duties. Both parties throughout the state are frequently to blame for the nonenforcement of proper sanitary regulations and quarantine.

The family of physicians are not always a peaceful and charity loving household. This is frequently true in the smaller towns and villages throughout the commonwealth. The objection by certain physicians to the proper quarantining of contagious diseases and the cleaning up of unsanitary conditions is often made through commercial selfishness. Unprincipled physicians frequently try to make professional capital by siding with the quarantined individuals in their objection to sanitary measures. The full success, therefore, of sanitary instruction cannot be brought about through the medical profession alone. The people should be educated in regard to the importance of isolation and quarantine. This is best accomplished through local sanitary organizations that should be made up of the prominent people of every town, village or city.

The laity should realize the importance to them of having

the health laws of the state rigidly enforced thereby preventing epidemics and spread of infectious and contagious diseases. The medical men as a class are constantly working for better sanitary and hygienic measures, in spite of the fact that such efforts on their part, are liable to lessen in proportion the amount of their income. The laity, on the other hand, fail to appreciate the work done by the medical profession in behalf of the maintenance of health. An individual is willing to accept the advice, care and treatment of a physician, when he is sick with typhoid fever, and appreciates all the attentions bestowed upon him. In case of health, however, should this same physician advise him that his drinking water was more or less impure and should be tested, he would feel that the physician was interfering with his private affairs and would not thank his good advisor for making these suggestions.

The same is true on the subject of vaccination. We frequently hear that vaccination is simply a creation of the medical profession in order to obtain a small fee for performing the simple operation. This is extremely absurd when there is scarcely a physician in the state who makes as much out of his vaccinations in a year as he would obtain in the treatment of a single case of small pox, which he is endeavoring to prevent. We would advise, therefore, that the laity be more practical and considerate of instructions given them and that they assume control of the situation at least from a purely commercial standpoint. They should investigate such unsanitary conditions as accumulations of refuse material, stagnant pools, marshy tracts and use the greatest degree of willingness and efforts in seeing that all such conditions are cleaned up, instead of disobeying the orders as they frequently do. They should have a special committee in every village or city for the purpose of keeping in touch with the sanitary authorities of the state and asking advice from time to time upon all measures pertaining to their public and individual welfare. They should cheerfully coincide with all quarantine measures and see that every individual associated with one of the contagious diseases is completely isolated from the rest of the community. In cities and vilages this is more or less a difficult proposition and requires extreme watchfulness on the part of the officials to carry out the instructions as they should be.

In the country, however, while the same precaution should be exercised, the difficulty of maintaining such supervision is more easily overcome.

In a new commonwealth, even as Wisconsin is new, there has not been such a demand in the past for careful consideration of all the factors pertaining to health, but as the density of population increases and the diversified industries become more numerous throughout the state the more complicated are the conditions controlling sanitation. Water supplies, once pure and plentiful are now becoming more or less restricted and polluted by the localities where sewage has been disposed of by cess pools. The sandy and gravelly soil which has been able to care for the waste material for long periods of time, is at present, in many instances becoming saturated and the whole environment of a village may become dangerous to health. New means and methods of disposal must receive due and careful consideration. Wells that were once free and pure are now becoming polluted from an unsanitary environment. Springs and rivers furnishing water for municipalities were not polluted, as a result of scarcity of population along the tributary places. Today, however, the increased settlements have brought about an entire change of conditions and new methods of water supplies must be sought for. Numerous conditions, therefore, could be mentioned and outlined that require the careful and serious study of every municipality in the state. In order to accomplish the happy end that should be desired in these measures, it is essential that the town authorities in towns give special attention to all these measures and the village authorities in villages, and the city authorities in cities take up and study out a more complete and thorough solution to the questions now confronting them, or about to confront them. It would be a wise provision if each county would have a county health officer, more preferably a medical man of strong character and broad learning. Each county could then appeal to this individual through its local town and city officials for relief of local conditions. The county health officer could communicate with the State Board of Health for the broader principles underlying the general sanitation of the state. In this way there could be an association of officials through which direct and lasting good could be obtained. It would prove economical and a life saving measure. It is im-

possible under the limited appropriations that the State Board of Health has at command, for this board to make sufficient personal investigations and keep in close touch with the various local conditons throughout the state.

We secure from preventative medicine the removal of cause of disease, diminished suffering and fewer deaths. In a family these are considered extremely important measures. In the state, which is simply a collection of families, too little importance is paid to the underlying laws controlling such agencies. The general public is usually luke warm and look on with indifference while the medical profession is hard at work trying to eradicate existing evils.

Tuberculosis has become such a scourge that organizations are looking into methods of combating this disease. The wave of popular sentiment has spread throughout the country in measures of this particular kind. But this is of only minor importance in comparison with the great many other fundamental conditions undermining our public health. Consumption kills its thousands. This is but a drop in the bucket. Polluted drinking water, improper sanitation at home and at public places, the selfishness that leads an individual to consider his own welfare rather than the good of his neighbor and the public, constitute the death dealing agencies. These all have a place in causing unnecessary suffering and death. The question is often raised, "If preventable, why not prevented?" Consumption is a preventable disease. In the numerous sanatoria throughout this country for the care and treatment of consumptive patients, there is no case on record where a physician or nurse has contracted the disease while being associated with the tubercular patients in these sanatoria. It is really the safest place in the world as far as consumption is concerned. What can be done in a large sanatoria with a mixed class of individuals, could most certainly be accomplished in the home and communities where the individuals are more in harmony and in a more homogeneous class.

Typhoid fever is preventable, by assuring ourselves that the milk, water, and various fruits, etc. are free from the germs, yet our large cities have the presence of typhoid almost continually and water supplies to the masses are to a degree, polluted. No one is safe from the dangers of this disease while using these polluted agencies. All the measures, however,

used to eradicate this dangerous pollution are often made secondary that a fine street or beautiful hall may be erected. Commercial success and advantage are too frequently the first factors to be considered, to the sacrifice of many lives.

The Dairy and Food Commissioner of the State with his office force is doing valuable work in establishing and maintaining pure food laws and investigating the various products on the market for consumption.

The State Veterinarian and the Live Stock Sanitary Board are earnestly working for a better standard along their particular lines, and special attention is being given to the eradication of tuberculosis from cattle herds of the state. Special attention should be given to the investigation of tuberculosis in dairy herds and while the facts associating bovine tuberculosis with that of tuberculosis in the human being are somewhat disputed, yet there can be no mistake that milk taken from a tubercular cow is not as safe to use as milk obtained from a healthy animal. It is undoubtedly true that milk taken from a cow well advanced with tuberculosis, may contain the germ of the disease and that should such milk be consumed by the human being, there is great likelihood of contracting the disease from this source. Commercially speaking, the eradication of tuberculosis from the cattle of the state would be a great boon to this particular line of industry. After such eradication, the laws should be rigidly enforced to the effect that tubercular animals should not be admitted from other states under any conditions, and all stock coming into the state should be given the tuberculin test before passing the lines. Legislation to the effect that all dairy herds in the state should be tested for tuberculosis should be enacted. This will help to insure a better and purer quality of milk and will undoubtedly greatly reduce the infant mortality of this commonwealth.

The work of this board has progressed favorably during the past two years. The small pox epidemics throughout the state have taken considerable extra time and have prevented in connection with the lack of funds the taking up of certain branches of work in other directions which are of prime importance. It is hoped that the force can be added to and that the legislature will be a little more liberal in providing means to accomplish certain work and ends in the state.

The State Hygienic Laboratory is forming an important part of the State Board of Health work and is open to all the health officers of the state, and physicians, along certain lines. It is desired that the physicians will make use of this laboratory at any and all times to determine the characters of suspicious sore throats. Serum tubes for making these tests will be forwarded upon request and upon their return to the laboratory a report will be made as to the finding therein. Not only should the material from the throat of the patient be obtained, but enough tubes should be asked for so that a test could be obtained from the throats of all individuals exposed. Even in a case of sore throat of questionable character in a community, a collection of tubes should be obtained and swabbings taken from these throats. By this means the diagnosis can be rendered positive and frequently an epidemic of diphtheria can be averted.

It is desired by the State Board of Health that the division of Vital Statistics be transferred to its supervision so that the board can better study the mortality records of the state and recommend and adopt measures that will prevent the existing evils. It is important also that the Vital Statistics be classified so that we may know the forces at work in producing the deaths of the state.

In concluding these introductory remarks it is desired that all the physicians of the state be prompt in reporting their cases of contagious diseases to the local health authorities and in return the local health authorities should report promptly to the State Board of Health, the presence of any and all epidemics of contagious diseases. The co-operation of the medical profession as well as all other officials and the laity is earnestly desired.

SECRETARY'S REPORT.

By C. A. Harper, M. D.

SECRETARY'S REPORT.

To the State Board of Health,

GENTLEMEN: I have the honor to submit to you the Twentieth Report of the State Board of Health, for the biennial period ending September 30, 1904.

Contents.

Report of General and Special Meetings.
Committees appointed.
Reports of Various Committees.
Rules adopted.
Legislation recommended.
Publications received.
Financial Statement.

Five meetings of the board were held during the two years which this report covers; three in Milwaukee and two in Madison.

A special meeting of the State Board of Health held on a call of the President for the purpose of considering and approving the Report of the Board for the biennial Period ending Sept. 30, 1902. The Secretary presented the Report as he had prepared it, and by general consent the same was approved and duly signed by those present.

JANUARY MEETING, 1903.

A report was made by the Secretary of the special investigations being made for the control of smallpox, and the present status of the smallpox epidemics in various parts of the State.

Two cases of scarlet fever and one case of diphtheria were also investigated by members of the State Board of Health since the last meeting.

Report of Dr. U. O. B. Wingate, delegate to the Conference of State and provincial Boards of Health held in New Haven, Connecticut, October 28-29, 1902.

Your delegate attended the Conference of State and Provincial Boards of Health of North America, held at New Haven, Connecticut, on October 28 and 29, 1902, together with Dr. F. C. Suiter of this Board. There were representatives from Connecticut, Minnesota, Rhode Island, Ohio, New Hampshire, Pennsylvania, Michigan, Vermont, Iowa, Maryland, Delaware, Massachusetts, Maine, Wisconsin, U. S. Army Medical Corps, U. S. Navy Medical Corps, and the Surgeon General and one other representative from the Public Health and Marine Hospital Service of the United States; also two representatives from Cuba, and one from Toronto, Canada.

The meetings, as usual at this Conference, were full of interest to those who are engaged in executive work as sanitary officers. The report of the Committee appointed at the last meeting to present a list of diseases believed to be communicable and dangerous to the public health was made, which was added to very materially, including venereal diseases. This report will be published and will be of more or less interest to boards of health generally.

Your delegate presented the subject of the production and control of vaccine virus and antitoxin, taking the ground that some provision should be made for the control of vaccine virus, especially in order that the public may be assured of its purity and safety in use. The technique required in producing antitoxin is such that much less danger results from this agent than from vaccine virus. As a result of the discussion which followed this a committee was appointed, of which your delegate was made chairman, to define the term "vaccination" and to formulate recommendations in the form of resolutions to be adopted by the Conference relative to the production and control of vaccine virus. This will also appear in the printed report of the Conference which will be of more interest than can be presented in this brief report.

The matter of rules governing the transportation of the dead was also taken up and a committee appointed, of which your delegate was made chairman, to confer with the National Baggage Masters' Association and the National Funeral Directors' Association, and report a year hence, the object being to have a

uniform system of rules which, when adopted, will be in force in all of the states and satisfactory to all concerned.

The advisability of placarding all houses in which there are cases of contagious diseases was discussed by the members, the general impression being that it was not advisable to change the rule at present. Venereal diseases as listed by the conference of State and Provincial Boards of health of North America was discussed, and it was the concensus of opinion that the family physician should take an active part in educating his families concerning the dangers from this class of diseases.

Upon the retirement of Dr. Solan Marks, President of the Board, the following resolution was moved and adopted.

“Resolved, That we the members of the State Board of Health of Wisconsin individually and collectively, upon the retirement of our late President, Solan Marks, M. D., of Milwaukee, Wis., wish to express our esteem and respect for him not only in a personal sense as a member of the board, but for his untiring devotion to the prosecution of all endeavors made by the State Board of Health in Hygienic and health matters pertaining to the people of our great State.

We regret the severance of old ties, and wish for him in the fading days of life, a pleasant passing of the years remaining to him.”

Dr. Wm. F. Whyte, of Watertown, was elected President for the ensuing year. The following committees were appointed.

On Finance,—F. C. Suiter, G. W. Harrison and L. E. Spencer.

On Legislation,—Q. O. Sutherland, U. O. B. Wingate and C. A. Harper.

Oil Printing,—U. O. B. Wingate, F. C. Suiter and L. E. Spencer.

Resolutions concerning the working organization of the board were presented by the Secretary and adopted. They are as follows.

Resolved, That the President and Secretary be and hereby are constituted the executive committee of the Board with power to act for the Board when not in session and between the times of meeting. Seconded by Dr. Suiter and adopted.

Resolved, That the President be and hereby is authorized to appoint a delegate or delegates to attend any sanitary or other meeting, at which, in the judgment of the executive committee,

the Board should be represented. Seconded by Dr. Spencer, and adoptd.

Resolved, That the President or Secretary be and hereby is authorized and directed to conduct the examinations of Undertakers for licenses as embalmers, and that the President and Secretary be and hereby are authorized to transact all the business relating to the issuing of licenses to undertakers. Seconded by Dr. Harrison and adopted.

Resolved, That the Secretary be and hereby is authorized to revise the "Powers and duties of local boards of health, and such other pamphlets issued by the Board, as in his judgment appears necessary, after the publication of the laws enacted by the legislature for the year 1903. Seconded by Dr. Suiter, and adopted.

Resolved, That the Secretary be and hereby is authorized to arrange for the publication of an article in each issue of the "Municipality," the same to be paid for out of the appropriation of the Board, on the best terms that can be made, said articles to be for the information and instruction of local health officers in the State. Seconded by Dr. Harper, and adopted.

The subject of Legislation was discussed and the following bills were presented for introduction in the Legislature.

"A bill to provide for binding in cloth a portion of the Reports of the Board."

"A bill to provide for a contingent fund of \$50,000."

"A bill to provide for an additional appropriation of \$4,500, to enable the board to equip and maintain a bacteriological and chemical laboratory."

"A bill to provide for a better system for the collection of Vital Statistics."

JUNE MEETING, 1903.

Since the last meeting of the Board five cases of smallpox were investigated by members of the State Board of Health and two cases of the disease were examined and reported on by other physicians authorized to do so.

At Black Creek, Wisconsin, a threatened epidemic of scarlet fever was investigated and favorably reported to the board.

The President and Secretary as a committee on special investigation reported on the proposed system of sewage disposal for West Allis that was complained of as a nuisance to the National Soldiers Home at Milwaukee.

In compliance with Chapter 406, Laws of 1903, requiring the Board to draft rules and regulations governing the disposition of portions of dead bodies not used for the purpose of promoting anatomical science, the following committee was appointed to formulate such rules as they deemed necessary. Doctors Suiter, Harper and Harrison.

A report of the last meeting of the American Medical Association relative to the examination of school children suffering with defective sight and hearing was taken up and discussed. It was the opinion of the Board that this is a large and important field for action. A committee composed of Doctors Harper, Wingate and Spencer was appointed to take the matter under consideration and report at the next meeting of the board.

A new law relating to an appropriation to the State Board of Health from the State University Laboratory funds, of \$1,500 per year for a period of two years was reported by Dr. Harper and acted upon by the Board. Through a suggestion made by the Board of University Regents the details of arranging for the use of the appropriation was left to Prof. H. L. Russell, consulting bacteriologist, and a committee of the State Board of Health. The President of the Board appointed as such committee Doctors Wingate and Harper.

JANUARY MEETING, 1904.

Dr. Wm. F. Whyte was re-elected President of the Board and Dr. C. A. Harper was chosen Secretary to succeed Dr. U. O. B. Wingate retired. The time when the office of Secretary should be vacated and the Secretary elect assume charge was left to the outgoing and incoming occupants of that office.

The President appointed the following committees:

On Finance—F. C. Suiter, L. E. Spencer and Hasso A. Meilike.

On Legislation—Q. O. Sutherland, U. O. B. Wingate and C. A. Harper.

On Printing—U. O. B. Wingate, F. C. Suiter and L. E. Spencer.

Reports on the investigation of outbreaks of contagious diseases in several localities in the State were made by Dr. Whyte and Dr. Sutherland.

A communication inviting the Board of Health to co-operate with various other organizations in securing the enactment of a Federal Statute known as "A bill to prevent robbing of the mails, to provide a safer and easier method of sending money by mail, and to increase the postal revenues" was briefly considered. The measure was claimed to be a sanitary provision as it would hasten the retirement of much old paper money now believed to be infected by much handling. The board deemed it undesirable to take any action concerning the proposed measure.

The Wisconsin Funeral Directors' Association through a communication asked that the State Board of Health allow three members of their association to assist in the examinations of undertakers for license. The request was granted.

Report of U. O. B. Wingate, delegate to the annual meeting of the conference of State and Provincial Boards of Health of North America, and the American Public Health Association for 1903.

Pursuant to directions of the President of the Board your delegate attended the annual meeting of the Conference of State and Provincial Boards of Health of North America, held in Baltimore, October 23 and 24, 1903. The meeting was of usual interest, there being representatives present from the following states: Vermont, Illinois, Delaware, Michigan, Connecticut, Minnesota, Ohio, Indiana, Nebraska, New Jersey, Louisiana, Kentucky, South Carolina, Virginia, Maryland, Havana, Cuba, and Wisconsin.

Among the more important subjects considered was that of adopting rules and regulations governing the transportation of the dead. An amendment to the present regulations had been adopted by the National Baggage Masters' Association and the National Funeral Directors' Association, and came up to the Conference of Boards of Health for approval. These rules were slightly modified as presented and approved by the Conference, the only changes from our present regulations practically being that all diseases are to be transported, if the bodies are prepared by licensed embalmers, except smallpox and bu-

bonic plague. It was not thought advisable at the present time to permit these bodies to be transported. There was a general impression to the effect that undertakers were improving very much in their sanitary knowledge relative to this work, and that the undertakers who had passed the examinations which are being required by State Boards of Health were fully competent to prepare bodies to be shipped with safety in all cases, except the two diseases named.

Another subject of interest considered was that of the epidemic dysentery of children, which causes such a large mortality among small children during the summer months. Papers were read upon this subject, and discussions followed which brought out the fact that it was impracticable for boards of health to isolate the germ of this disease, which had been discovered and known as the "bacillus dysenteriae," on account of the length of time it required to demonstrate this bacillus; it also requires expert knowledge in bacteriology to isolate it. The principal precautions to be taken to prevent the large mortality from this summer disease, were summed up in pure milk for artificially fed infants, and general hygienic surroundings and conditions.

Various other subjects were discussed of more or less importance to the practical applications of sanitation by State Boards and local boards of health.

Your delegate then attended the meeting of the American Public Health Association, held in Washington on October 26, 27, 28, 29, and 30th. This meeting was unusually well attended, there being about 200 active members registered, and nearly all subjects of sanitary interest were taken up and discussed, either through reports of committees or by papers presented. Among the more important subjects was that of the spread of yellow fever by the mosquito. The representatives from Havana, Cuba, illustrated very fully the methods used there to prevent the spread of the disease, and demonstrated to the minds of nearly all present that quarantine and disinfection in yellow fever were no longer necessary. The only necessary precautions to be taken were to see that certain species of mosquito that carried the poison were destroyed, and that persons be protected from the bites of these mosquitoes. Representatives from some of the southern states could not accept the mosquito as the only host in carrying this poison, but the great majority of those present accepted the theory.

Much discussion was also given to tuberculosis and the importance of Sanatoria was emphasized by nearly all who took part in the discussions.

The matter of car sanitation also came up for a very lively discussion, and it was brought out by one speaker that certain railroad officials had informed him that they only washed their blankets on sleeping cars once in six months. This statement was taken up by the New York newspapers and made a very prominent feature in their issues. Representatives from the railroads present claimed that they were willing to adopt any plans for the better ventilation and sanitary condition of cars as soon as they could learn what would be practicable and effectual; that the problem of ventilating sleeping cars had not been worked out, although experiments were continually going on.

The subject of the transmission of tuberculosis from animal to man received much attention, and it was generally acceded that the question had been settled by the evidence produced, and the experiments and investigations that had been made, and that Prof. Koch was mistaken in his statement, and that the disease could be transmitted from animal to man, and that no precautions that had been taken relative to protecting the public against tuberculous meat and milk should be neglected.

The first copy of a quarterly Bulletin to be known as the State Board of Health Bulletin was presented for consideration and adoption. The bulletin is intended for distribution to all health officers in the State and in exchange with other State Boards of Health. Such others as desire the Bulletin may secure it by subscription. It was the opinion of the board that the size of the publication be limited to sixteen pages and that for the present the edition shall not exceed two thousand two hundred copies. The board decided to print the bulletin in lieu of an article to the Municipality and enacted that the arrangements between the board and the Municipality be discontinued.

A report was received from the State Hygienic Laboratory stating that the laboratory was opened in October, 1903, and that the work being done was very satisfactory.

The committee appointed at the last meeting of the board to consider the matter of defective sight and hearing in school

children rendered a verbal report of progress made through its chairman. The methods employed by the Illinois State Board of Health were described and discussed in detail. It was decided that the committee should continue its investigations and report at the next meeting of the board.

By reason of the absence of Dr. Suiter, chairman of the committee appointed to draft rules and regulations governing the disposition of portions of dead bodies not used for the purpose of promoting anatomical science as provided by Chapter 406, Laws of 1903, the report was not received.

JUNE MEETING, 1904.

The secretary reported an epidemic of small pox at Lodi and a typhoid fever epidemic at the State Hospital for the insane. Both of these investigations may be found under the heading "Report of Special Investigations."

The outbreak of contagious diseases in numerous other places in the State was reported and discussed by the members.

Resolutions introduced by Dr. Wingate.

"Whereas, certain property of the State Board of Health of the State of Wisconsin, including furniture, books, vouchers, instruments, etc., has been turned over in a satisfactory manner by Dr. U. O. B. Wingate, the former secretary of this Board, to Dr. C. A. Harper, his successor in office, be it, therefore

Resolved, that the President and Secretary of this board be, and hereby are, authorized to receipt in full to the said Dr. U. O. B. Wingate for the same.

Resolved, that this preamble and these resolutions be entered on the records of this Board, and a copy signed by the President and Secretary be forwarded to the said Dr. U. O. B. Wingate.

Dr. Sutherland introduced a resolution recommending that all physicians while in the presence of dangerous contagious diseases should wear cap and gown, or some other sufficient cover for the clothing. It was suggested that the cap and gown be carried in a tight satchel and that when removed after a visit they be thoroughly sprinkled with four ounces of formaldehyde and returned to the satchel for six hours. The cap and gown can then be hung out and aired after which they are ready for

use at the next visit. The cap should be large enough to cover the hair, and the gown should extend to the floor covering all the clothing. The face and hands should be washed with soap and water or some disinfecting solution.

The secretary was instructed to incorporate the recommendations and method of procedure in pamphlet form for distribution throughout the State.

The committee appointed to draft rules and regulations governing the disposition of portions of dead bodies not used for the purpose of anatomical science reported through its chairman. The committee recommended that the secretary of the board formulate rules for the disposal of unused portions of such dead bodies and incorporate them in the resolutions of the board. The recommendation was adopted.

In conformity to the resolution of the Board the Secretary submitted the following resolution governing the matter in hand.

Resolved, That the Wisconsin State Board of Health in compliance with Section 1, Chapter 406, Laws of 1903, direct that the unused portions of bodies dissected for anatomical science within this state shall be disposed of decently and properly either by burial or cremation. If buried, the remains shall be gathered, placed in a wooden box and interred in some regularly established cemetery, a simple mark shall be used to signify the place of interment. If the body is cremated it shall be decently and properly done in some place definitely designated by the director of the Laboratory in which the body is used by and with the advice and consent of the president of the particular institution. Records shall be kept by every Laboratory designating the method and manner of disposing of such dead bodies.

The committee appointed to consider the question of defective eyesight and hearing of school children reported as follows:

EXAMINATION OF EYES AND EARS OF SCHOOL CHILDREN.

In view of the plans about to be considered as the best methods of adopting the system of the examination of the eyes and ears of the school children of this state, as per resolution adopted by the state board of health, June 23, 1903, will state as follows: That there are seventy-three county superintendents in this state; seven thousand three hundred and sixty-one school

buildings which would mean close to nine thousand separate school rooms; that there are seven hundred and fifty-eight thousand six hundred and twenty-six children, between the ages of four and twenty, and of this total number of children, four hundred and fifty-four thousand one hundred and eighty-six are attending the public schools of the state. It will be readily seen that the opening of a new field, with fully a half a million individuals means a large increase in the item of expense, as well as labor, with the appropriation that the state board has at its disposal annually, it seemed difficult to bring about a compatible solution of the question. Laboring under this difficulty, the chairman of the committee conferred with the Supt. of Public Instruction, Mr. Cary and stated to him what the State Board of Health was trying to do in this respect. The chairman found him, with his assistance in the office, ready and willing to shoulder a part of the responsibility, as well as a portion of the expense and labor. Mr. Cary is deeply interested in the plan about to be formulated and believes that a great good can be done to the school children, educationally, who are suffering from defects of eye or ear. The superintendent stated that he would probably be willing to add something to the circulars that the State Board of Health would formulate so as to give unmistakable evidences that the board of education, and the board of health would be in harmony, and thoroughly in earnest. These circulars we are lead to believe can be put in the hands of the Superintendent of Public Instruction for printing. We believe also, that from suggestions given us that the printing of the warning card can be intrusted to the state printing in the superintendents office. This you readily see will lessen to a large degree the expense, in this particular line. In regard to the vision charts the superintendent could not see his way clear in planning for that, and the State Board of Health, from its appropriation must attend to that part of the plan. It is natural to suppose that each individual school room of the state should have a chart and instructions of its own. There would be about eight thousand rooms above the first grade. These charts can be had of Coe & Company of Chicago at the rate of forty dollars per thousand, making a cost of these charts three hundred and twenty dollars, for eight thousand. It is offered as a suggestion that a good method of distributing these charts

and circulars of the state is through the medium of the county and city superintendents. Each superintendent will be expected to give the number of rooms under his jurisdiction, and thereby designating the number of charts to be sent him for distribution. The city superintendent can distribute the charts immediately, but the county superintendent on account of the large territory to be covered, can only do so when teachers institutes are held, or when he makes his personal visits to the school. It is usually customary for the county superintendent to visit the schools from two to three times a year. It would then seem that most of the charts could be in the hands of the teachers before the Christmas vacation. If sent for distribution early in September next.

The committee has not detailed the special outline of these circulars to go with these charts, but plans to do so in the near future. Each member of the board will be sent a type-written copy of the plans and asked for suggestions and improvements, as well as his individual approval. This rough outline is submitted in order to get an expression from every member here present. Question: What is the pleasure of the board in regard to the Parochial Schools of the state in this matter?

The board passed resolutions instructing the secretary to introduce the Illinois method into the schools and work in cooperation with the Superintendent of Public Instruction.

Dr. C. A. Harper, the Secretary of the Board, then made the following report on necessary legislation.

NEEDED LEGISLATION.

As a result of a recent decision by the supreme court of the State of Wisconsin, 1904. Case of Lowe vs Conroy, Neillville, Wis. Heading public health—preservation—powers of the health officers—destruction of private property—liability—determination fact—conclusiveness—necessity of hearing—evidence and sufficiency.

In this case a local health officer was held personally liable for the destruction of animals that were supposed to be suffering from anthrax. He evidently acted as to what he deemed proper in carrying out the duties as health officer for the protection of the general public. These animals were supposed to have been

suffering from anthrax and were ordered destroyed by the local health officer's assistant, the defendant claimed damage for the destruction of his property, and the case was taken to the circuit court. It was impossible for the boards of health interested in this to prove that the animals really had anthrax. The jury rendered a verdict for the owner of the property and the health officer was compelled to pay for property destroyed under his direction. Two points are herein suggested as amendments to the law. First, it would seem that the law should be amended, giving the owner of property the right of a hearing and trial by jury, before the destruction of said property. Isolation and quarantine can be maintained in this case until a jury decides upon the facts of the case. Of course it should be so arranged that there should be no delay in calling a jury for this purpose when a dangerous contagious disease was under consideration. After a jury has determined the facts the health officer is then relieved of the liability of damages, should destruction of property have been found as unnecessary, as the suspected disease did not exist, or secondly, a law should be passed to hold the town, city or county liable for the destruction of property at the direction of the health officer if it should be found that there was an error of judgment in the ordering of the destruction of the property.

THE LIBRARY.

During the biennial period 1902-4 the following reports, magazines and pamphlets were added to the library of the State Board of Health.

REPORTS.

California:

Eighteenth Biennial Report of the State Board of Health,
1902-4.

Connecticut:

Twenty-fifth Annual Report of the State Board of Health,
1902.

District of Columbia:

Report of the Health Officer 1903.

Florida:

Fifteenth Annual Report of the State Board of Health,
1903.

Hawaii:

Report of the President of the Board of Health, 1902.

Indiana:

Twentieth Annual Report of the State Board of Health,
1901.

Twenty-second Annual Report of the State Board of
Health, 1903.

Illinois:

Report of the State Board of Health, 1903.

Report of the State Board of Health on Medical Educa-
tion and Official Registration of Physicians.

Kansas:

Report of State Board of Health, 1902.

Minnesota:

Report of the State Board of Health, 1903. Two copies
Report of Veterinary Department.

Michigan:

Thirtieth Annual Report of Secretary of State on the
Registration of Births, Deaths, Marriages, and Di-
vorces, 1900.

Twenty-ninth Annual Report of State Board of Health,
1901.

Maryland:

Annual Report of State Board of Health, 1901.

Maine:

Twentieth Report of State Board of Health, 1901

Report of the State Board of Health, 1902.

Montana:

First Biennial Report, 1902.

Massachusetts:

Report of the State Board of Health, 1901.

Report of the State Board of Health, 1902.

Report of the State Board of Health, 1903.

North America:

Seventeenth Annual Conference of State and Provincial Boards, 1902.

Nineteenth Annual Conference of State and Provincial Boards, 1904.

New Jersey:

Report of the State Board of Health, 1902.

Report of the State Board of Health, 1903.

Report of the Bureau of Vital Statistics, 1903.

New York:

Twenty-second Annual Report of the State Health Department, 1901.

Twenty-third Annual Report for the year 1902.

Novia Scotia:

Tenth Report of the Provincial Board, 1902.

New Hampshire:

Seventeenth Report of the State Board of Health, 1902.

Ontario, Canada, Province of,

Report on the Registration of Births, Deaths and Marriages.

Ohio:

Report of the State Board of Health, 1901. Pennsylvania:
Ninth Annual Meeting of the Associated Health Authorities.

Eighteenth Annual Report of the State Board of Health, 1902.

Nineteenth Annual Report of the State Board of Health, 1903.

Operations of the State Board of Health, 1904.

Rhode Island:

Registration Report, 1901.

Report of the State Board of Health, 1899.

Report of the State Board of Health, 1900.

South Carolina:

Twenty-third Report of the State Board of Health, 1902.

United States Department of Agriculture:

Relation of Bovine Tuberculosis to the public health.

Eighteenth Annual Report of the Bureau of Animal Industry, 1901.

The Milk Supply of two hundred cities and towns.

The Nineteenth Annual Report of the Bureau of Animal Industry, 1902.

Relations of Federal Government to control of contagious diseases in animals.

Bills to increase the efficiency of the Medical Department United States Army.

Monthly publication for months of February, March, April, July, August, September, October, November and December, 1904.

Bureau of Animal Industry Bulletins 58 and 59.

Farmers Bulletin, No. 206.

Bureau of Animal Industry, Bulletin No. 39.

Index catalogue of medical and veterinary zoology, Part 8, Volume 7.

Year Book, United States Department of Agriculture, 1902.

Vermont:

Thirteenth Report of the State Board of Health, 1900.

Wisconsin:

Thirtieth Annual Report of the Wisconsin Dairying Association, 1902.

Ninth Report of Agricultural Experiment Station, 1902

Annual Report of State Horticultural Society, 1902. Ten volumes.

Report of State Board of Agriculture, 1902. Ten volumes.

Washington, D. C.:

Index catalogue of the Library of the Surgeon General's office, Volume VII.

Report of the Surgeon General, 1902.

Report of the Surgeon General, 1903.

Treasurer's Weekly Public Health Report, 1902. Three volumes.

Quarantine Laws and Regulations of the United States, 1903.

- Bacteriological Impurities of Vaccine, 1903.
 Weekly Public Health Reports, Volume XVI, 1901.
 Statistical Study of the Intestinal Parasite of five hundred male patients, 1903.
 An experimental investigation of Trypanasoma.
 Report of Working party No. 1, Yellow Fever institute.
 A study of the Etinology of yellow fever.
 Annual report on the Public Health and Marine Hospital Service.
 Weekly Public Health Report Volume XVIII, 1903.

MAGAZINES.

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|---|----------------------------|
| Architects' and Builders' Magazine, | New York. |
| American Journal of the Medical Sciences, The, | Philadelphia and New York. |
| Dietetic And Hygienic Gazette, | New York. |
| Index Medicus, | Washington. |
| International Journal of Surgery, | New York. |
| Kentucky Medical Journal, | Louisville. |
| Medical Review of Reviews, | New York. |
| Medical News, | New York. |
| Medical Record, | New York. |
| Medical Brief, The | St. Louis. |
| Monthly Weather Review, | Washington. |
| Milwaukee Medical Journal, | Milwaukee. |
| Medical World, The, | Philadelphia. |
| New Albany Medical Herald, The, | New Albany. |
| New York Medical Journal, | New York. |
| Post Graduate Bulletin, The, | Milwaukee. |
| Public Health Reports, | Washington. |
| Sanitation, | Philadelphia. |
| Sanitary Journal of Provincial Board of Health, | Ontario, Can. |
| Sanitary Record, The, | London. |
| The Journal of Hygiene, | New York. |
| Wisconsin Medical Journal, The, | Milwaukee. |
| Western Undertaker, The, | South Bend, Ind. |
| Wisconsin Medical Recorder, The, | Janesville. |
- Buffalo, N. Y. ;
 Monthly Report of the Department of Health.

Burlington, Wis.;

Annual Report of the Health Officer.

Baltimore, Md.

Report of the Commission of Health.

Chicago, Ill.:

The State of Chicago's Health, 1904.

Colorado Springs, Colo.:

Report of the Health Department.

Denver, Colo.:

Official Monthly Report of the Bureau of Health.

Erie, Pa.:

Report of the Department of Health.

Milwaukee, Wis.:

Monthly Report of the Health Department.

Twenty-fifth annual report of the Commissioner of Health,
1902.

Annual report of the Commissioner of Health, 1904.

Marinette, Wis.:

Third annual report of the Health Commissioner, 1902.

Nashville, Tenn.:

Report of City Health Officers, 1902.

Twenty-ninth annual report of the City Health Officer.

New Haven, Conn.:

Monthly Statement of Mortality, 1904.

Annual report of Health Department, 1904.

New Orleans, La.:

Statement of Mortality, 1904.

Ontario, Canada.:

Bulletin of the Provincial Board of Health.

Report on the registration of births, deaths and marriages,
1902.

Twenty-second annual report of the Provincial Board of
Health.

Providence, R. I.:

Twenty-first annual report of the Superintendent of Health.

Twentieth annual report of the Superintendent of Health.

Forty-seventh report upon the Registration of Births, Deaths and Marriages.

Portland, Me.:

Reports of Deaths and Contagious Diseases.

Quebec, Canada.:

Report of the Board of Health for the Province of Ontario.

Rockford, Ill.:

Report of Health Department.

Rochester, N. Y.:

Report of the Bureau of Health, 1904.

Reading, Pa.:

Report of the Department of Health.

Spokane, Wash.:

Report of the Health Department, 1903.

Annual report of the Board of Health of the City of Spokane, 1902.

San Francisco, Cal.:

Report of Department of Health, 1901.

Topeka, Kan.:

Contagious Diseases existing in.

London, England:

Thirty-first annual report of the Local Health Boards.

Thirty-second annual report of the Local Government Board, 1903.

PAMPHLETS.

Rural sanitary administration in Pennsylvania

Regulations for the sale of Viruses Serums, Toxins and other products in the District of Columbia.

Journal of the Elisha Mitchell Scientific School. Volumes 19 and 20.

- Report of an examination of the Sewage Purification Plants in Ohio.
- Registration of Births, Deaths, Drafts and Laws and forms of certificates.
- Annual Report of Madison Free Library, 1903.
- Physiology and Hygiene for Children.
- Columbia University Bulletin, 1903.
- Columbia University Bulletin, 1904.
- Sanitary investigations of the Illinois, Mississippi and Missouri rivers.
- State Requirements for the Medical Practice in Illinois.
- The Cause and Prevention of Consumption by Illinois State Board of Health.
- The Illinois Medical Bulletin, Volume V.
- Northwestern University Bulletin, 1904.
- Rules of the Illinois State Board of Health concerning the transportation of corpses.
- Monthly Bulletin of Indiana State Board of Health, 1904.
- Indiana Agricultural Experiment Station Bulletin, No. 99.
- National Confectioners Association. Twenty-first Annual Convention.
- Detroit College of Medicine, 1904-5.
- Teachers' Sanitary Bulletin.
- Dangerous Communicable Diseases; How Spread, How Restricted and How Prevented.
- Weekly Health Reports from Michigan.
- The Relation of Water to the Public Health, Minnesota, 1904.
- Sewage Disposal, Minnesota Bulletin, 1904.
- University of Minnesota Bulletin, 1904.
- Monthly Statements of Mortality, Missouri.

- Barnes Medical College Bulletin, St. Louis, Missouri, 1904.
- New York State Department of Health Bulletin, 1904.
- Connecticut State Board of Health Monthly Bulletin, 1904.
- The Prevention of Typhoid Fever. Read before the Connecticut Medical Society, 1904.
- Sanitary Congress of Health Officers in Connecticut.
- North Carolina Board of Health Bulletin.
- California State Board of Health, Monthly Report.
- Monthly Report of the Board of Health for the Philippine Islands, 1904.
- Memoria de La Seccion de Mujeres Correspondiente Santiago de Chile, 1903.
- Movimiento de La Caso de Orates Santiago de Chile, 1903.
- Boletin Extraordinario Mexico, 1903-4.
- Boletin Del Consejo Superior de Salubridad Mexico, 1904.
- Superior Board of Health of Porto Rico Report for 1904.
- Informe Mensual Sanitario Demografico de La Republica de Cuba. 1903 and 1904.
- Informe Bi-Annual de La Republic de Cuba, 1904.
- New Hampshire Sanitary Bulletin, 1904.
- Contagious diseases reported to the Washington State Board of Health, 1904.
- Georgetown University. Bulletin of the School of Medicine, 1904.
- Monthly Sanitary Bulletin of Ohio.
- Revised List of the Members of the American Public Health Association, 1903.
- Monthly Health Bulletin of Iowa.
- The Freedman's Bureau of Iowa. Volume III, No. 1.
- Monthly Bulletin of the Virginia Board of Health.
- 3—H.

Hints Upon School Hygiene Bulletin No. 2, Oregon State Board of Health.

The Story of Small-pox in Oregon Bulletin, No. 1.

The Prevention of Typhoid Fever, Bulletin No. 3, Oregon State Board of Health.

Report of the Tuberculosis Commission of the State of Maryland, 1902-4.

Report of the Tuberculosis Commission, State of Wisconsin, 1904.

Report of Dr. W. F. Elgin on the Inspection of Vaccine Propagating Establishments in Europe.

EXPENSES.

The expenses incurred by the Board for the past two years are as follows:

For the year ending September 30th, 1903, as shown by vouchers numbered from 2,955 to 3,113 inclusive, which have been audited, approved and paid, amount to a total of \$5,777.-36 and are classified as follows:

Official expenses of members	\$ 690.18
Postage and telegraphy	526.10
Paper and stationery	114.01
Printing and binding	408.95
Books and instruments	216.86
Secretary's salary	2,499.99
Clerical services	900.00
Miscellaneous, including express and various inspections	421.27
	<hr/>
Total	\$5,777.36

For the year ending September 30th, 1904, as shown by vouchers numbered from 3114 to 3237 inclusive, which have

been audited, approved and paid, amount to a total of \$4,971.74, and are classified as follows:

Official expenses of members	\$ 380.63
Postage and telegraphy	282.77
Paper and stationery	149.87
Printing and binding	316.15
Books and instruments	135.87
Secretary's salary	2,499.98
Clerical services	750.00
Miscellaneous, including express and various inspections	456.47
	<hr/>
Total	\$4,971.74

The total expenses for the biennial period are \$10,749.10

Respectfully submitted,

C. A. HARPER, M. D.,

Secretary.

REPORT OF SPECIAL INVESTIGATIONS.

Abstracts from investigation made by members of the State Board of Health and other physicians from September 30, 1902 to October 1, 1904.

Albany, Green County:

Epidemic of Scarlet Fever. Investigation by Dr. Q. O. Sutherland.

It was found that a Health Board and Health Officers had been duly appointed but because of the unpopularity and the offices being without pay none of the officials had qualified. A meeting of the board was called and they all agreed to work in harmony. There were five cases of scarlet fever in the place and in nearly every case the people were allowed to go at will though the houses had been placarded and the residents instructed to observe the quarantine.

The law relating to the non-observance of quarantine rules as well as the duty of the health officer and health board was explained. Considerable interest was shown and the health board expressed its determination to wipe out the epidemic.

The trouble, they thought, was due to the fact that the cases were so mild that no physician was called, quarantine was not observed and fumigation neglected.

Browntown, Green County:

Small-pox. Investigated by Dr. Q. O. Sutherland.

The examination showed fifteen undoubted cases of small-pox and some others who may have had the disease but had recovered. It appeared that all the cases arose from a boy in whom the disease was not recognized. Vaccination, quarantine and thorough fumigation was advised as the only means of stopping the epidemic.

Crandon, Forest County:

Scarlet Fever. Inspection by U. O. B. Wingate.

Considerable complaint having been received concerning an outbreak of scarlet fever at Crandon, and vicinity, also some questions asked concerning drainage at Crandon, I went to Pelican on the evening of November 18th. On the 19th visited Summit Lake and conferred with the health officer there; learned that there was no scarlet fever in that vicinity. I then went back to Pelican, and from there to Crandon, making inquiries concerning the situation, but from the best knowledge I could obtain, not being able to see either of the health officers involved, and from such other evidence as was presented, I concluded that the health officer was doing all that could be done under the circumstances. There was much feeling against him in the locality but it appeared to me to be from jealousy and not from any good and sufficient reason, so far as I could learn.

I also looked over the condition of drainage at Crandon and could see no way that relief could be given to certain localities in which there was water frequently in the cellars, except by sewer, and this I had already advised as being the best means of relieving the situation.

Black Creek, Outagamie County:

Scarlet Fever. Investigation by Dr. G. E. Seaman.

The trouble was over the quarantine of cases of scarlet fever. The health officer of Black Creek stated that there had been a number of cases of scarlet fever in the vicinity. In the town of Birnhampton there had been two cases, one a girl of ten years, who had recovered and the other a boy of seventeen who died of the disease.

The health officer placed the family under quarantine and ordered a private funeral which greatly displeased the neighbors. One of them, (unknown) removed the quarantine card and it was proposed to have a public funeral. Your informant advised the family that they obey the law and the rules laid down by the health officer. The house was again placed under quarantine and the health officer directed to call upon the authorities to see that the rules were enforced in every par-

ticular. There seemed to be no disposition on the part of the family or neighbors to disregard the rules of the State Board of Health during my visit.

Cedar River, Michigan.

Smallpox. Investigated by Dr. H. A. Norden.

The epidemic started in a lumber camp situated twenty miles from Stephenson and four miles from Cedar River, Menomonee county, Michigan.

The camp employs eighty-five men six of whom had smallpox. Two of these were in the stage of development about two hundred feet from the camp and almost joining the stables. The lumbermen had built a small pest house in which five men were confined; a sixth patient refused to go to the pest house and lives with the other boys in the main camp.

The health officer is a very old man and judging from the work he has already done is thoroughly incompetent. When a patient leaves the pest house there is no place provided to fumigate his clothes or to disinfect him. Two days before I visited the place a number of the men were in the village of Cedar River, frequenting stores and saloons. I forbid any members of the camp entering our State until we were assured that it could be done with safety. The men feared they could not return to Wisconsin until summer and therefore assured me that they would do all in their power to enforce quarantine regulations. The disease has gained considerable foothold and there has been a great deal of exposure. Vigorous quarantine, vaccination, and disinfection are the only measures that will stamp it out.

Edgerton, Rock County.

Chickenpox. Investigated by Dr. Q. O. Sutherland.

There was a difference of opinion as to whether the case was chickenpox or smallpox. Upon careful examination it was found to be chickenpox instead of smallpox as feared. It seems unnecessary to go into a detailed discussion of this case, but it was advised that in all suspicious cases of this kind quarantine be maintained until the nature of the disease is definitely determined.

Eagle River, Vilas county.

Investigations made by U. O. B. Wingate, relative to a bill issued against the town of Eagle River for services rendered smallpox patients by our agent Dr. M. W. Harvison.

This bill had been presented to the auditing committee in regular form, and as the auditing committee was to meet in accordance with requirements of law on the 2nd of December, I visited Eagle River to ascertain, if possible, what the outlook was. At first it was learned that the town authorities had been inclined not to allow the bill. The local health authorities had neglected to care for these cases of smallpox in their jurisdiction, and we were obliged to send an agent to take care of them, who rendered a very reasonable account. During my visit I met Dr. Harvison at Eagle River and the acting town clerk, both of whom had been investigating the matter, and assured me that they believed the bill would be allowed without any difficulty, and that it was not wise, perhaps, to appear before the County Board to hamper them in any way as they fully understood the position of the State Board and that suit would be begun if the bill was not allowed. Dr. Harvison felt sure, as did the town clerk, that the bill would be allowed and that my coming and showing the intention of the Board to insist upon the settlement had influenced them in their course very materially.

Eggersville, Fond du Lac county.

Smallpox. Investigated by Dr. E. V. Meers.

"I visited Eggersville and found Mr. —— child in the desquamating stage of smallpox. Mrs. —— had had it but had fully recovered. Across the road from Mr. —— there had been three cases in the house of Mr. —— who has the post-office, saloon and feed mill. They have all recovered. The hired man came down first and came to town to consult a doctor. He was told that he had smallpox and that he should go home and stay there. No card was ordered for the house.

There has been a good many cases just north of this place, around Calvary, Johnsburg, and St. Cloud, and many not quarantined at all, and others allowed to go out before desquamation was complete. I insisted on a rigid quarantine and thorough disinfection after recovery."

Fontana, Walworth county.

Scarlet fever investigated by Dr. Q. O. Sutherland relative to a dispute over quarantine rules.

The case had been properly quarantined but upon the recovery of the patient the attending physician ordered some lime sprinkled about and released the family from quarantine.

The health officer contended that the house was not properly fumigated and insisted that the family should not go about until the house was fumigated under his supervision which I decided was right. The situation was one which could easily have been settled by telephone thus saving much valuable time and expense.

Glenbeulah, Sheboygan county.

Smallpox investigated by Dr. G. V. Meers.

It was found that a family with one case of the disease had been quarantined but that the quarantine was being ignored. Some members attended church on Sunday and the children were allowed at school, the family asserting that the disease was not smallpox. The chairman of the township Board of Health refused to take any effectual action on the ground that an expenditure of money would be necessary to enforce the law.

The health officer was alive to the situation and did all in his power to prevent an epidemic. The chairman of the Board of Health was informed that the law must be enforced and that a rigid quarantine be enacted, else the State Board of Health would maintain such quarantine at the expense of the town. The penalty for disobeying quarantine rules was explained to the family and they promised to be more observant in the future. The case of a girl living at Hulls Crossing but who had returned from Oshkosh with smallpox was investigated. The attending physician was instructed to report the case to the Health Officer at once.

Greenfield, La Crosse county.

Smallpox investigated by Dr. F. C. Suiter.

After careful investigation twenty cases of the dread disease were found in the locality. Two of the families had been quarantined by order of the attending physician but the re-

mainder were at large and of course spreading the disease. The Health officer of Greenfield discovered several cases of the disease in his territory and immediately placed the homes under strict quarantine. The parties affected were indignant and threatened to raise the quarantine. The families were called to account for their threatened action, and in the future I believe the disease will receive proper attention. A threshing crew which had been exposed at a farm house is responsible for the wide spread of the disease.

Kilbourn, Columbia county.

Smallpox investigated by Dr. U. O. B. Wingate.

After receiving numerous communications from citizens, and one petition signed by 33 citizens, I visited Kilbourn and saw two patients, one of them just outside of the village of Kilbourn in Sauk county, a well marked case of smallpox, concerning which there had been no controversy. The patient was a man some 40 or 50 years of age with quite a severe form of smallpox. The other case was a man nearly 60 years of age, living in the village of Kilbourn, which had been pronounced chickenpox by two or three physicians. Two others had pronounced it smallpox. I declared it was a well marked case of smallpox, which had aborted in the papular or vesicular stage, and advised quarantine. Also from the history obtained I should judge that there had been, and were many cases of smallpox going at large, which had not been quarantined because the local health officer, a physician, had believed that all of these cases were chickenpox. The board of health was not inclined to take much action, even after my advice. I recommended that unless the local board of health did establish quarantine at once that they be removed and a new board created. There had been much needless exposure owing to the unreasonable position taken by the health officer and one other physician who could not be made to believe that the cases were small pox because of its light nature. I urged immediate quarantine and vaccination with efficient disinfection in all cases.

Lima Center, Rock county.

Diphtheria. Investigated by Dr. Q. O. Sutherland.

The great trouble in this epidemic was lack of proper quar-

antine and disinfection. The attending physician would not use antitoxin which accounts for the large death rate. For the eight months prior to my visit twenty-four cases developed in and around Lima with six deaths.

If any quarantine was instituted it was not enforced as members of the households in which the disease existed mingled freely with the rest of the community. Conditions looked very serious and I advised that unless more stringent measures were taken deplorable consequences would follow. The most thorough quarantine and disinfection was insisted upon and the use of antitoxin was advised.

Milwaukee.

Sanitary inspection of the House of Correction for Milwaukee county made by Doctors Whyte and Wingate.

In compliance with Section 1407, Chapter 56, W. S. 1898, we beg to submit the following relative to the House of Correction, located in the 14th ward of the city of Milwaukee, and owned by the county of Milwaukee. On the 7th inst., we inspected this institution as to its sanitary conditions. We would most respectfully refer you to a communication from the Milwaukee Health Department, dated January 12, 1899, in which certain defects were pointed out in the sewer system of the said institution. We are informed that these defects have never been remedied, and our inspection convinces us that the entire sewer system of the institution should be overhauled at the earliest possible date. While there is not an unusual amount of sickness among the prisoners, the present condition is one certainly fraught with grave danger. The buildings were constructed in 1865, before any record was made of sewer systems, and no one can tell exactly the location of some of the sewers in this institution, but tests have been made which show there are many defects, and that there are no traps in many openings, and nothing to prevent sewer air from escaping into the building. We noted two very dangerous openings in one of the basement rooms where vegetables are prepared for food, and at times very unpleasant odors escape into this room. There are also certain leaks in the sewer in different parts of the building, and the entire sewer system is more or less defective, owing principally to age and improper construction.

We also desire to call your attention to the fact that this institution is far too small to accommodate the number of prisoners that are frequently confined therein, the buildings having been constructed 38 years ago, when the population of the county was much smaller and the demands for space much less than at present. There are but 268 cells, while the records show that for 1902 the average number of prisoners was 320, and that during the present year the number will reach as high as 360, and at times there have been as many as 450 prisoners crowded into these 268 cells. The bucket system which is in use in the institution is objectionable, but cannot be remedied without the construction of new buildings. We are pleased to state, however, that the care of the institution is most admirable. We do not see how such system can be any better managed than it is at present, the buckets being cared for most carefully each day, thoroughly washed out, and provided with disinfectants so that they offer less offense than many privy vaults that are to be found in connection with some private houses. Great care is taken in ventilating the buildings, and we found them in a very cleanly condition, showing constant vigilance and care on the part of the management.

Th bathing facilities in the female department are inadequate for the demands and should receive early attention.

We found commendable care taken on the entrance of each prisoner, his clothing being immediately disinfected, repaired, pressed and put away for his use when he is to leave, and each prisoner, unless excused by the attending physician for some good and sufficient reason, is required to take a bath once a week.

While it is not expected that inmates of such institutions shall be supplied with luxuries that are to be provided for in private life, cleanliness and good sanitary surroundings are absolutely essential for their moral as well as their physical welfare, and if we expect to improve the moral status of these inmates we should provide them with good hygienic surroundings. Crowding prisoners into cells where they have to be doubled up is extremely objectionable; the association is detrimental to their best interests under such circumstances and should not be allowed to exist in a well arranged modern institution where any efforts are made to improve their moral standard.

We most respectfully recommend and urge that the defects herein pointed out, and those referred to in the communication from the City Health Department, be corrected at the earliest possible date.

Milwaukee.

Sanitary conditions of the House of Correction in Milwaukee county, reported by F. M. Schulz, Commissioner of Health for the city of Milwaukee.

It is hereby charged that on premises known as the House of Correction, in the 14th Ward, owned by the County of Milwaukee, there are six 6 inch sewer openings in the halls of cell room in the male department, used for catch basins, having no traps; have stone stoppers that are not tight, and a large break in sewer in manhole, of which the cover is not tight.

There are also six 6 inch open sewers covered with iron strainers in halls in cell room of female department, used as catch basin, having no traps.

In basement below office there is a leak in sewer where four inch soil pipe enters the vegetable cellar; also two 6 inch sewer openings in hall, having no traps, and covered with stone stoppers that are not tight; a leak in hall in sewer where waste of kitchen sink enters, and an open sewer pipe (1½ diameter) in store closet off kitchen in basement, having no trap.

In the Warden's house there is a leak in sewer, below floor at stop box of lawn sprinkler, and in sewer below floor in hopper closet.

The exhaust steam is discharged into sewers, and issues from the screen covered pipes, impregnated with the gases of the sewers, causing offensive odors.

These defects have all been pointed out to the Engineer in charge, and we request that they be remedied immediately for the protection of the health of the inmates of the institution.

Mendota Hospital, Dane County.

Typhoid fever investigated by Dr. C. A. Harper and Prof. H. L. Russell.

The Secretary with Prof. Russell made a personal investigation of the Mendota State Hospital for the Insane Thursday, June 16, 1904. Twelve cases of bowel trouble have originated there during the past three weeks. Samples of blood from these patients were sent to Prof. Russell director of the State

Hygienic Laboratory for examination. Practically all tests made showed a positive typhoid reaction. The water supply is by artesian well and also by an intake from the lake. The artesian well is supposed to supply sufficient water for all cooking and drinking purposes. The lake water has been used for washing, sprinkling and general cleansing conditions. The sewerage of the institution is deposited in the lake less than two hundred feet from the intake water pipe. The intake water pipe however, runs out into the lake something like thirty rods. This portion of the lake is a bay, with no apparent currents, or direct circulation of any kind. The sewage product scatters slowly and distributes itself throughout the greater portion of this bay, and evidently over and far beyond the distal end of the intake pipe.

The origin of this typhoid trouble has not been definitely determined as yet, and the assumption seems to be strong in the belief that the intake pipe picks up sewerage material and circulates it through the institution. The Supt. Dr. E. L. Bullard says that some of the patients have been in the habit of drinking water on the grounds and from some of the faucets in the building through which lake water circulates. The examination of the lake water shows the presence of fecal material and colon bacilli. This system of sewerage has been in the present shape something like twenty years, although the artesian well addition is of a very recent date. The superintendent of the hospital states that he called the attention to the state board of control of the possible dangers confronting the institution from the present system, but no definite action was taken by that body. All possible precautions are being taken to prevent the pollution of the lake water with typhoid poison, and also to check the spread of the disease in the institution. A new source of water supply must be had and all effort possible should be put forth by the state board of health in getting the state board of control and the coming legislature thoroughly aroused to the dangers confronting this institution. The bay of the lake in this locality is becoming thoroughly saturated with waste material from this settlement of nearly six hundred inhabitants. Not only is a new water supply essential, but a new system of disposing of the waste material demanded.

Menomonie, Dunn County.

Small pox investigated by Dr. C. A. Harper.

I found that after conferring with members of the Legislature here from the Menomonie district, that there was a good deal of uneasiness existing in, and around the city of Menomonie in regard to the Small Pox epidemic.

I made a visit to Menomonie Saturday, March the 7th 1904. The uneasiness evidently grew from the fact that the quarantine regulations were not thoroughly enforced. I believe the health officer there, Doctor Howieson, was conscientious in his efforts, but the first few cases were mild and did not receive as full consideration and strict quarantine as they should. One physician had reported no cases of Small Pox or any other contagious disease, but was treating several cases of what he called, either Cuban Itch or Chicken Pox. These cases after two or three days illness were allowed to be around the city in the various places of business, children from such families were admitted to the schools also.

On investigation I found there was no doubt in my mind but that these were purely cases of Small Pox in not a very severe form. I visited several of these and there could be no doubt in the diagnosis, if the physician were a conscientious man. I think through the neglect of this one party that the disease has spread considerable.

I asked the health officer there to call a meeting of the Health Board, the school board, the school superintendent, the chief executive officer, the mayor, and a few representative citizens, which he very kindly did, and all parties asked attended the meeting and showed a great deal of interest in the proceedings. I found all of these gentlemen thoroughly interested in the situation and after the meeting had been thoroughly discussed, the strict quarantine rules will be enforced. I also asked them to appoint a special man, a member of the police force to assist the health officer in attending to the people who were quarantined, which they agreed to do.

I believe the disinfection was weak and of no purpose; burning a little sulphur in the rooms inhabited by the patients, was about all that was being done. I suggested that they use the more modern methods and get the proper appliances for disinfection, which they agreed to do.

I also requested that the health Board would make it imperative that all the physicians report to him cases of Cuban Itch, Chicken Pox, and Measles. By so doing this one physician who has been misnaming the diseases can be brought to time. I believe but little trouble will arise from the situation there in the future.

They asked to have you send them quite a large number of those little yellow circulars containing the law governing small pox, or contagious diseases, and the penalty attached for their violation. They want them for distribution.

Mineral Point, Iowa County.

Typhoid Fever. Investigated by Dr. Q. O. Sutherland.

Inquiry showed that up to the time of my visit there had been fourteen cases of fever with two deaths. The disease was confined to eight different families. All drank cistern water from their own cisterns; all kept their own cows; all raised their own vegetables. They bought groceries from five different stores. Socially none of the families ever meet, nor have any of those suffering from the fever been to the houses of any of the others. The city is situated upon numerous bluffs with ravines running through parts of the city. The plumbing was inspected and found perfect. Three of the afflicted families have cess-pools on their places while the others dispose of all refuse material on the manure heaps near the barn.

There is a city water supply, but only two of the families use it. These prefer cistern water for drinking and use the city water merely for flushing closets. The meat supply will be reported on as soon as it can be definitely determined. I could not find that there had been a common eating and drinking place. In my short visit I was unable to decide upon a cause for the apparent epidemic. The citizens are quite wrought up over the matter and desire to have all the water examined.

Advice was given to disinfect all discharges from the patients and fumigate as thoroughly as possible.

New Glarus, Green County.

Smallpox. Investigated by Dr. Q. O. Sutherland.

Examined three cases and found that the disease was unquestionably smallpox. The community had been suffering from

the disease for some time, but many of the people and one of the physicians maintained that it was not smallpox. I ordered quarantine, vaccination so far as possible and thorough disinfection.

At the request of the Health Officer, Health Board and Village Board, I wrote a command in the name of the State Board of Health ordering each and all of them to proceed in the most effective and thorough manner to stamp out the disease.

Port Washington, Ozaukee County.

Typhoid Fever. Investigated by Dr. U. O. B. Wingate.

I have the honor to herewith submit the following report of my investigation at Port Washington. I visited Port Washington and its health officer, Dr. W. F. Scott, today and learned the following. About a week ago a lady about 30 years of age was reported ill with typhoid fever; this was the first case of that disease, so far as known, in the city or vicinity for over a year. Since that report 30 cases have been reported up to today, and in all probability there are other cases not reported. The cases are widely distributed over the entire city. I saw two of the cases in the same family, a young lady of 16 years, and a boy of 4 or 5 years, both very ill, the temperature of the young lady going up to 105 degrees as soon as the cold was removed for a short time. The water supply comes from wells both dug and driven. The water is considered good of its kind. It was learned, however, that nearly all of the families in which the fever existed took their milk from one milkman, and he has two cases of typhoid in his family; also that he obtained a portion of his milk from another farmer residing near him, and that he also has two cases of typhoid in his family; they live about three miles from the city. Again another milkman also has a portion of his milk from the second farmer and as near as could be learned the families that did not receive the fever from one did from the other. The cases of fever occurring in the families of the farmers came down, as I understand it, about ten or fourteen days before the first cases in the city. The number of cases coming down all at once, nearly, would seem to indicate that the poison is unusually virulent.

I advised them to stop taking milk from the second farmer, as his case was harder to control than the other, and his supply much less. I saw the other farmer and milk-man and he appears to be a reasonable man; he is not to go into his house nor are any of his milkers while the sickness lasts, is to be thoroughly disinfected under the supervision of the health officer; the udders and teats of all his cows are to be thoroughly scrubbed, all cans and utensils are to be boiled for at least fifteen minutes; cans and other utensils are not to be rinsed in any other than water that has been boiled for fifteen minutes; all persons delivering milk are not to go into any house where there is sickness, but leave their milk at the door. I also advised a council of all the physicians in the city, to insist upon having all the cases reported promptly, and every one to take all precautions to prevent the spread of the disease, but I fear they have a difficult problem to solve. The situation appears to me to be one where many little things must be observed, and such is very hard to have carried out in most places. I laid special stress upon the importance of thorough disinfection of all excretions of patients, especially the discharge from the bowels and the urine. You may think it advisable to have an analysis of the water from the wells of the farmer milkmen, and also of the milk; I do not think, however, that much information can be obtained from an analysis or examination of the milk, but I do think it may be more satisfactory to examine the water for that may have become infected. I informed the health officer that if you and Prof. Russell decided that it would be advisable to examine the water or milk or both, that you would send full instructions and sample cases. I think it advisable to send the health officer a supply of typhoid fever literature, and if you think best advice concerning the importance of disinfection that he may have something that he can show to the other physicians who may be less inclined to observe such matters than he will be.

Typhoid Fever at Port Washington, by Dr. C. A. Harper (Reprint from the quarterly Bulletin of the State Board of Health, July—Sept. 1904.

The typhoid epidemic in the city of Port Washington is one of severe proportions. This city has a population of about 4,000. Ninety-eight cases with nine deaths have thus far been

reported to this office. There is no doubt but what the impurity of the milk supply is the direct cause for the distribution of this disease. It is shown upon investigation that three milk distributors in the city of Port Washington supplied mainly the entire population. Following the line of these distributors we find that one man was supplying 90 families. Upon this route there were no cases of typhoid. Milk distributor No. 2 was supplying 207 families and following this line of distribution we find in the entire route one case of typhoid, a young man about 20 years of age. The cause of typhoid in this family and with this young man, was closely investigated. He was in the habit of occasionally taking lunches at a hotel where there were three cases of typhoid, and while the patient himself is not aware that he drank any milk at this hotel, yet the supposition is strongly maintained that through some of the foods that he obtained there he contracted the disease.

Milk distributor No. 3 was furnishing 300 families, and upon this particular route 83 cases of typhoid fever have developed. No doubt before the time limit for infection from this source is passed, there will be several more cases resulting from this same source of infection.

Immediately upon the outbreak of typhoid, investigations were made as to its cause and for a few days the wide distribution of the cases left an element of doubt in the minds of the investigating authorities. The water supplying the city was mainly from wells which were either driven to a considerable depth, or were walled dug wells. Repeated analyses of the water from these various wells immediately eliminated the possible origin from this source. The milk supply was undergoing investigation at the same time and it was discovered that a large milk distributor, known in this article as No. 3, and living about three miles from the city of Port Washington, had several cases of sickness in his family. There were also members of a neighboring family sick with a fever, but this family was not distributing milk in Port Washington. However, milk distributor No. 3 was buying one milking from this family in order to supply himself with enough milk for his 300 families in the city. The origin of the fever in these two families was almost simultaneous, only two or three days difference in the time of the initial symptoms and from eight days to two weeks earlier than

the first well defined cases in the city. There can be no doubt but that the original source of the epidemic at Port Washington was due to the supply of milk obtained from these two families. The origin of the first cases in the two country homes is difficult to trace. The members of both families had remained at home the greater part of the summer, if not all, and no visitors to the knowledge of the inspectors were there at any time during the summer, and while the starting point with the families is certain and positive, yet the source of general importation to these families is still under investigation. On the request of the local health officer of Port Washington, a member of the State Board of Health visited the city and after thorough investigation, the milk supply coming from these two families was immediately stopped and all the precautionary measures at command were exercised to prevent further spread of the disease. This epidemic up to date has shown a mortality of about 10 per cent, making it slightly more severe than the ordinary epidemics of typhoid fever.

It is noticeable also that the large number of cases was mainly with children and young adults, the milk drinking portion of the families. The history of the epidemic here tends to affirm partially the scientific investigations made of milk epidemics elsewhere as to the severity of the disease. This unfortunate epidemic has strongly emphasized the necessity of complete sanitary measures and investigations at all times. The homes of the large milk distributors should be made a point of special concern to all health officers and the public generally. The premises should from time to time be under inspection and every unsanitary agent eliminated. This would not only be a health and life saving element to the people generally, but it would prove of financial saving to the milk distributors themselves, as in the case of No. 3 in this article. After a large milk route had been built up and maintained for some eight or ten years, it was necessary to prohibit the further carrying on of this particular line of business and it is very doubtful if these families will be able in the future to re-establish their business in this line. Typhoid fever being one of the most easily preventable diseases, the prohibition of which is maintained as result of proper and thorough sanitary measures, it is not becoming to a state or locality to have what might be

called an epidemic of that disease. It is impossible to prevent the outbreak of sporadic cases imported and transported through the agencies of water, milk, fruit, insects, articles of clothing or merchandise, etc., but after the discovery of a case we have enough sanitary measures at our command to prevent further spread of the disease. These agencies should at once be applied and enforced at all hazards. The element of cost or restrictions of individual liberties should not for a moment be considered. It would be very limited in either line at the outside and when a thorough understanding on the part of all the health officials and the citizens generally is brought about as to the origin and distribution of typhoid fever, these at present so-called restrictions will not receive notice worthy of mention.

Schleisingerville, Washington County.

Smallpox. Investigated by Dr. W. H. Washburn.

Pursuant to request I visited Scheisingerville today and with Dr. Reichert inspected three families where contagious disease was suspected. In one family one case of smallpox was found, in another six cases, and in a third one case. These families live about three miles from the village. The cases are mild and many of them convalescent. Children from two of these families have been in regular attendance at the Roman Catholic Parochial School in the village to date. I advised that while the disease was very mild as a rule, yet the mild cases are apt to give rise to more serious forms of the disease. The local Board of Health was made aware of the nature and character of the disease and took immediate action to comply with my instructions.

Sharon, Walworth County.

Smallpox. Investigated by Dr. Q. O. Sutherland.

I was called to Sharon to investigate a case of smallpox. Found a young man, a lineman for a telephone company, who had had eruptions for about three days, but had worked all the time. He boarded at a hotel and had mixed freely with the other guests. I ordered the hotel and all the people in it quarantined. The Board of Health of the village started immediately to secure a detention hospital. There seemed no disposition on the part of any one to be negligent or evade the quarantine.

Shullsburg, La Fayette County.

Smallpox. Investigated by Dr. Q. O. Sutherland.

Yesterday morning I was called to Shullsburg to settle a dispute about smallpox. The physician in charge, a Wisconsin man, pronounced the disease smallpox, but the consultant who was an Illinois man, said it was not smallpox and that it was unnecessary to quarantine. I found a young man, his wife and the man's brother-in-law well broken out with distinct smallpox and ordered them quarantined.

Weyauwega, Waupaca County.

Smallpox. Investigated by Dr. Wm. F. Whyte.

I left Milwaukee for Weyauwega, but was compelled to go to Waupaca and drive from there to Weyauwega the next day with Doctors Corbitt and Jones. I visited seven homes and found everything from modified smallpox of the new type to well marked discrete venola in the postular stage. There were four cases of the latter. The doctors act as a unit and there will be no antagonism among them. As to diagnosis and quarantine they are doing everything possible to restrict the spread of the disease, but since it has been raging for several months in adjoining townships, they are likely in danger of having new sources of contagion on their streets any day. In the farming community north of Weyauwega there have been a great many families where smallpox has prevailed but when there has been no medical attendance or quarantine. These farmers do their marketing in Weyauwega and this is undoubtedly the source of the trouble they are now having. I advised the people to communicate with the health boards in these surrounding districts and try to get them to act. I also advised that the schools be closed for a week or more and then require a certificate of recent vaccination before again admitting the children to school. I advised the Parochial schools to do likewise.

The health officer seems to be a thoroughly competent and conscientious man. Please send him at once a good supply of smallpox literature.

Tomahawk, Lincoln County:

Report of State of Wisconsin vs. Dr. ————— for alleged violation of the statutes relating to contagious diseases.

At the request of the District Attorney and local health au-

thorities at Merrill, I visited that place to give evidence in the case of State vs. Dr. ———, health commissioner of Tomahawk, who it is alleged has not quarantined cases of smallpox that have occurred in his jurisdiction but sent them to Merrill, thus exposing the community and violating the sections of the statutes.

The case was called, and evidence given by a number of physicians in Merrill and Tomahawk, all stating that the case in question was one of smallpox, and one that could be easily recognized by any physician who had had any experience with the disease. I was asked the question, based upon the evidence given, if I thought the case was smallpox, and I stated that I did, from the history given there could be no doubt as to the nature of the disease. The case was not finished when I was obliged to leave.

Later: According to reports received the defendant was fined \$1 and costs. The costs amounted to \$161.16. The case was appealed to the circuit court.

West Allis, Milwaukee County:

Report concerning the proposed sewage disposal works of West Allis, made by Doctors Whyte and Wingate.

In compliance with a request from the authorities of the National Soldiers' Home, Milwaukee, Wis., to visit, inspect and give an opinion concerning the proposed Sewage Disposal works at the Village of West Allis, we desire to submit the following:

We visited the said sewage disposal works on February 6, 1903. It was proposed to drain the West Allis shops and the village of West Allis, containing several thousand persons and constantly growing, into a small creek running into and upon the grounds of the National Soldiers' Home, Milwaukee, Wis., where a small body of water is formed from which the ice supply for the Home is taken. This creek empties into the Menomonie river after passing through the grounds of the Home.

In order to render sewage as harmless as possible a septic tank and filtration sewage disposal plant is being constructed, and was nearly completed at the time of our inspection, but not in operation. This system is known as 'Shield's Septic

Tank and Filtration Process," and contains improvements over the ordinary septic tank system inasmuch as it contains what is termed an extra "grit chamber" into which the sewage flows, or rather filters upwards after leaving the septic tank, and before passing through the filter bed through which the effluent filters before going into the creek.

The plant is well constructed and in accordance with the best modern ideas of sewage disposal works. It has a capacity of 100,000 gallons per day and the final filter bed is covered by a building.

It is well known that the septic tank and filtration process is capable, when well constructed and properly managed, of filtering out from 90 to 98 per cent of bacteria contained in sewage, and that the effluent is practically pure water. We are unable to give a definite and positive opinion concerning results of the operation of this plant, for that can only be determined by analysis of the effluent after the plant is in operation, and while we believe it would have been far preferable to have drained the sewage from this source into some other stream than into this creek on account of the use to which it is put in taking ice for domestic purposes we believe it possible for the results to be very satisfactory and free from danger or offense; but we advise that the effluent be carefully and constantly analyzed as soon as the plant is in operation and if the results are not satisfactory or any nuisance is created, the same must be met as the circumstances demand. In the meantime this Board has no power other than advisory until a nuisance or condition dangerous to the public health actually exists. These conditions not being in existence at the present time we can only say that the sewage disposal plant is being well constructed and along modern sanitary lines where it is proposed to drain sewage into fresh water streams.

CONTAGIOUS DISEASES.

Reports received by the State Board of Health,
from October 1, 1902, to October 1, 1904.

CONTAGIOUS DISEASES.

Reports received by the State Board of Health,
from October 1, 1902, to October 1, 1904.

TABLE 1—SHOWING THE NUMBER OF CASES AND DEATHS FROM SMALLPOX FROM OCTOBER 1, 1902 TO OCTOBER 1, 1903.

Month.	Cases.	Deaths.	No. of counties reporting.	No of places reporting.
October	184	.....	23	34
November	278	1	28	46
December	317	1	39	65
January	416	3	41	74
February	495	3	40	87
March	412	4	39	90
April	194	1	32	51
May	259	3	32	53
June	238	.....	26	34
July	65	.....	13	16
August	24	.....	8	8
September	15	1	5	6
Total	2,897	17	326	564

TABLE 2—SHOWING NUMBER OF CASES AND DEATHS FROM SMALLPOX FROM OCTOBER 1, 1903 TO OCTOBER 1, 1904.

Month.	Cases.	Deaths.	No. of counties reporting.	No. of places reporting.
October	58	.....	7	11
November	53	1	12	20
December	224	.....	16	20
January	232	.....	21	31
February	98	.....	15	25
March	81	.....	12	17
April	82	.....	9	12
May	45	.....	6	6
June	37	.....	5	6
July	40	.....	5	6
August	17	.....	4	4
September	17	.....	4	5
Total	984	1	116	163

From the preceding tables it is evident that Smallpox is on a rapid decline throughout the state; the number of cases reported

for the year 1904 being only about one-third as large as were reported in 1903. It is quite probable that from ten to fifteen per cent should be added to the lists to cover the unreported cases, thus making a grand total of about four thousand three hundred cases, and eighteen deaths for the two years. The mild type of the disease and the corresponding low mortality have been characteristic features since the inception of the epidemic in 1901 and 1902.

The disease has been visited upon nearly every section of the state but has been confined chiefly to villages and country districts. It is quite generally recognized now that this condition is due to laxity of quarantine and improper disinfection. The presence of Smallpox in cities and villages has been found in a large measure to be due to importation from the country districts.

The beneficial results of vaccination have been proven in nearly every case requiring an investigation by the State Board of Health.

The absence of epidemics in cities is not due so much to lack of infection by importation or otherwise but to the small number of people who are unprotected by vaccination.

Considering the particularly mild form of the disease, vaccination of everyone is the only protection that can safely be relied upon. Our past experiences have proven that it is useless to trust in quarantine alone either as a protection or as a prevention of the disease. The number of mild cases show that the patient often unintentionally exposes people by appearing in some public place while in an infectious condition.

TABLE 3—DIPHThERIA.

For year ending.	No. of places reporting.	Cases.	Deaths.	Mortality per cent.
September 30, 1895	107	1,368	235	17
September 30, 1896	130	2,097	410	19
September 30, 1897	172	2,015	461	22
September 30, 1898	169	1,775	271	15
September 30, 1899	189	2,003	263	13
September 30, 1900	185	2,056	282	13
September 30, 1901	245	2,135	294	13.7
September 30, 1902	221	1,898	272	14.3
September 30, 1903	155	1,298	207	15
September 30, 1904	334	1,003	113	11

After inspecting the list of reported cases of Diphtheria it is readily seen that there has been a constant decline in the ravages of the disease since 1901. The table also shows a declining mortality rate in spite of the fact that fewer cases are unre-

ported each year. A few years ago the fear of an invasion of Diphtheria struck terror in the heart of any community. Its successful treatment until recently has been difficult and unsatisfactory to the medical profession. While the number of places reporting the presence of Diphtheria in 1904 was larger than for any previous year of which we have a record, yet the number of cases, number of deaths, and mortality rate never was lower.

The value of antitoxin in the treatment of this disease, as well as the very important assistance rendered by the laboratory can hardly be too highly spoken of. The chief aid of the laboratory to physicians and boards of health is not for a guide to the administration of antitoxin but to determine whether or not the throat affection is Diphtheria. It has also been of invaluable service in determining whether the Diphtheria bacilli have left the throat and in this way security is provided in determining when the quarantine may be removed. Cases have been reported to the Board where it would seem quarantine was maintained longer than necessary, while in other cases the bacteriological examination showed the presence of Diphtheria bacilli, thus proving that the patient was still in an infectious condition.

G. S. Graham-Smith in an article on the distribution of the Diphtheria bacillus and the bacillus of Hoffman, in the *Journal of Hygiene* for April, 1903, presents the following summary:

- “1. Diphtheria bacilli have been found in a considerable proportion of persons who have come into contact with cases of Diphtheria or with other infected persons.
2. Such persons have been shown to be a grave danger to public health; especially when frequenting schools or institutions, and to constitute the usual channel by which the disease is spread.
3. Very satisfactory results have followed on the isolation of convalescents from the disease and of infected “contacts” where two or more consecutive negative examinations have been required.
4. Carefully conducted investigations amongst healthy persons, who have not at a recent date been in contact with Diphtheria cases or infected “contacts,” have shown that virulent Diphtheria bacilli are very seldom (three examples amongst 1,511 persons) present in the mouths of the normal population. This fact renders the discovery and isolation of infected persons a

practicable possibility and offers a fair prospect of discovering and isolating the majority of them in any outbreak.

5. Diphtheria bacilli are usually distinguishable on morphological and cultural grounds, but whenever possible it is desirable that their virulence should be tested.
6. The bacillus of Hoffman is innocuous to man, and is a very common organism in the mouths of the poorer classes. The distribution of this bacillus points to the conclusion that it is carried from mouth to mouth in the same way as the Diphtheria bacillus, and therefore its widespread prevalence in schools attended by poorer children is significant, as showing how widely spread and uncontrollable an outbreak of Diphtheria may become unless measures are early taken to deal with infected contacts."

TABLE 4—SCARLET FEVER.

For year ending.	No. of places reporting	Cases.	Deaths.	Mortality per cent.
September 30, 1895	427	1,514	59	3.8
September 30, 1896	72	983	25	2.5
September 30, 1897	118	717	32	4.4
September 30, 1898	118	603	17	2.8
September 30, 1899	141	1,288	39	3
September 30, 1900	236	4,497	170	3.7
September 30, 1901	294	3,594	98	2.7
September 30, 1902	383	3,516	142	4
September 30, 1903	170	1,888	86	4.5
September 30, 1904	372	1,460	41	2.8

The disease continues to prevail throughout the state though showing a steady decrease in the number of cases reported since 1901.

From September 30, 1902, to September 30, 1903, one hundred seventy places reported the presence of Scarlet Fever, with a total of one thousand eight hundred eighty-eight cases and eighty-six deaths.

From September 30, 1903, to September 30, 1904, three hundred seventy-two places reported cases of Scarlet Fever. The total number of cases reported for that year were one thousand four hundred sixty with forty-one deaths.

That these returns are very imperfect there is no question. According to the records of vital statistics based upon the returns made by physicians there were two hundred thirty-eight

deaths from Scarlet Fever for the twenty-one months preceding September 30, 1904, while the reports from Health Officers for the biennial period, September 30, 1902, to September 30, 1904, only show one hundred twenty-seven deaths from Scarlet Fever. The responsibility for this great discrepancy rests very largely upon the health officers whose duty it is to make prompt return of all cases and all deaths from contagious diseases to the office of the State Board of Health.

In the last report reference was made to the light character of the disease and the practice of not calling a physician for fear of quarantine. This practice is no doubt still indulged in, since taking it for granted that the mortality rate is practically the same for the unreported deaths as for those that are reported, for the two hundred and thirty-eight deaths reported by the physicians there should have been six thousand three hundred thirty cases.

The reports on file in this office only show three thousand three hundred forty-eight cases.

TABLE 5—TYPHOID FEVER.

For year ending.	No. of places reporting.	Cases.	Deaths.	Mortality per cent.
September 30, 1895	59	993	144	14.5
September 30, 1896	66	1,234	171	13.8
September 30, 1897	146	658	126	19.9
September 30, 1898	165	1,085	109	10
September 30, 1899	224	1,312	120	9
September 30, 1900	233	1,465	178	12
September 30, 1901	291	1,804	236	13
September 30, 1902	208	1,007	153	15
September 30, 1903	62	374	80	21
September 30, 1904	126	393	20	5

For the year ending September 30, 1903, from 62 places there were reported 374 cases with 80 deaths, giving a mortality of 21 per cent.

For the year ending September 30, 1904, from 126 places there were reported 393 cases with 20 deaths, a mortality of 5 per cent.

It will be observed from a study of the tables that during the past two years the disease has been reported from fewer places than ever before since 1896. The number of cases reported as well as the number of deaths are fewer than ever before, but the figures show a better state of affairs than actual conditions really warrant.

The mortality rate for 1903 of 21 per cent is very high and is due no doubt to the practice of always reporting deaths when any report is made, but only seldom reporting the total number of cases.

From the official report of vital statistics there were 475 deaths from Typhoid Fever for the period which our table covers. Assuming that the mortality rate remained constant there should have been reported to this office about 3,600 cases for the biennial period. From the age grouping for deaths from Typhoid given in another part of the report it will be seen that 80 per cent of the deaths are for people under 40 years of age. It is essentially, therefore, a disease of young people and its prevalence is the result of carelessness in food, milk or water supply.

To meet the conditions known to be responsible for the spread of this disease sanitary education must be carried to every home. Public safety requires that the water supply be pure. It therefore devolves upon the public officials to so construct sewage systems and water supply plants that there will be no possible source of contamination,—not only that, but food supply stations such as groceries, meat markets, bakeries and fruit stands should be inspected and maintained in a sanitary condition. The local sanitary organization should be headed by the health officer a local physician, enforced by the best members of the laity. In this way only can complaints, inspections and bacteriological examinations be speedily attended to.

TUBERCULOSIS. (Phthisis)

For the year ending September 30, 1903, health officers throughout the state reported 407 deaths from tuberculosis and for the year ending September 30, 1904, they reported 434 deaths from the disease.

These figures are quite unreliable and are only given to show the great inaccuracies in the system of reporting contagious diseases.

The regular vital statistics records for twenty-one of the twenty-four months included in the above report show 2,587 deaths from pulmonary tuberculosis alone and 709 deaths from other tubercular diseases. A grand total as we will see of 3,296 deaths does not compare favorably with 841 deaths, the number reported by health officers in their reports of contagious diseases.

The present warfare against contagious diseases of every type is the greatest and most far reaching ever attempted but "in the face of a determined opposition based upon ignorance, apathy or selfish disregard of others" there is small wonder that much of the data is grossly inaccurate.

The legislature recently saw fit to enact a law making it compulsory upon physicians or householders under penalty of fine to report to the health officer all cases of contagious diseases under their care.

It is to be hoped that this law will have a salutary effect and that henceforth the report of deaths from contagious diseases will more nearly coincide with actual conditions.

MEASLES.

The statistics relative to cases and deaths from Measles are undoubtedly more unreliable than any other records of contagious diseases included in this report. This is accounted for largely from the very mild form of the disease, not requiring medical attendants whose duty it is to report the case to the health officer, and also the failure to quarantine.

For the year ending September 30, 1903, the presence of Measles was reported in 18 different places, giving a total of 451 cases with 7 deaths.

From September 30, 1903 to September 30, 1904, 88 places reported Measles with 573 cases and 48 deaths. From the figures as given the disease was much more fatal in the latter period, but this cannot be conclusively shown. However, sufficient data is given to show that the disease is worthy of careful consideration. Its spread in most instances is found to be due to the congregating of children in schools, which emphasizes, as was stated in a previous report the need of medical inspectors for both the public and the parochial schools.

WHOOPIING COUGH.

From the reports received this disease does not appear to be as prevalent throughout the state as usual, but the figures are scarcely more reliable than those given for measles. The death certificates as prepared by the physicians for the regular report of Vital Statistics show 241 deaths from whooping cough while the reports made by the health officers direct to this office show

only 35 deaths for the two years ending September 30, 1904. The opinion that Whooping Cough is of only trivial importance is a mistaken one and its spread should be well guarded against. Here again the need of a medical inspector for schools is very essential.

The table in another part of the report giving mortality by age groups shows that a large per cent of the fatal cases occur under three years of age.

TABLE 6—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING OCTOBER 31, 1902.

County,	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams			4									
Barron					18	3	1					
Brown		2	2				1				25	
Bayfield			6					1				
Buffalo					1							
Columbia					2							
Clark							3					
Dane			10	2	1		2					
Douglas			15	1	21							
Door	1	1							3		10	
Dunn					4							
Eau Claire			1	1								
Fond du Lac					1		3	1				
Grant			6	1								
Gates					1							
Jackson			1	1								
Jefferson					1		11					
Kewaunee			6		2		1					
Kenosha					3							
La Crosse			14	1	5							
Lincoln			3		1		6					
Marquette			1		7							
Manitowoc			3		2		1	1			4	
Miwaukee	9	19	46	4	10		27	7	1			3
Ozaukee	1						1					
Oneida			4	1	8							
Outagamie	1		4	2								
Pepin					4		1					
Price					2							
Rock			8	1	2							
Racine					2							
St Croix			3	3	3							
Sawyer					7							
Sauk							2					
Trempealeau			2		13						4	
Vilas					4							
Waushara					4							
Washburn			1									
Waupaca			1									
Winnebago					3							
Total	12	22	140	19	124	3	60	9	4		43	3

TABLE 7—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING NOVEMBER 30, 1902.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland			1		33	1						
Adams							1					
Barron			9	2	10	1						
Burnett			13	1	31	2						
Bayfield		1	10	1							100	
Brown		3	1		3		1	1			8	1
Calumet					6		2					
Clark					8							
Crawford			5									
Columbia				1	5							
Douglas			30	12	45		2					
Dodge							2				15	
Dane			6	1	4							
Door			4	1								
Dunn			2									
Fond du Lac			2									
Green					1		1	1				
Jefferson							10	1				
Juneau							3					
La Crosse			20	3	5							
Lincoln			2	1	1		5					
Milwaukee	5	39	50	15	32	2	34	8	13	2	5	
Monroe		1			10		1					
Ozaukee			1						1			
Oconto												
Portage			4	1								
Pepin			1	1			2	2				
Polk							2					
Pierce			5				2		1			
Rock			5	1	6		1				2	
Racine			6	1								
Sawyer					1		1					
Sauk	2	2										
Trempealeau			31	7	4		1					
Vernon			1									
Waupaca			1	1								
Winnebago			1		7							
Walworth			7		1							
Wausara			1		2							
Washington		1	12	3								
Totals	7	47	231	53	215	8	70	13	15	2	130	1

TABLE 8—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH FOR THE MONTH ENDING DECEMBER 31, 1902.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland					13	1						
Adams					2		1					
Barron	1				14		2				2	
Brown		4	1		2		2		2			
Bayfield			2		2		1					
Burnett			23	5	6							
Columbia			2		4		1					
Clark					1		1					
Crawford			1	1								
Chippewa					1							
Calumet					1							
Douglas			21		46							
Door			1		1							
Dunn			3	2								
Dodge					1		1					
Fond du Lac			1		1							
Gates					1							
Grant												
Iowa			2	1					15			
Jefferson							2					
Kewaukee			2				3		1			
Lincoln			2		1							
La Crosse			9	2	21							
Lafayette			5									
Langlade			1		10							
Milwaukee	2	40	54	13	19		7	5		1		4
Marquette			5	1								
Monroe									6			
Outagamie					1							
Oconto			1									
Oneida					11	1						
Ozaukee					2							
Pepin			1				1				6	
Polk			6									
Price					13	3						
Rock												22
Sauk					1							
St. Croix			1		1							
Sawyer			1		1	1						
Shelbygan			1		5	2						
Shawano					1							
Trempealeau	1	1	12		11		1		32			
Taylor												8
Vilas			1		2				6			
Vernon			1		3							
Winnebago			1		3							
Walworth					3	2						
Waukesha					1							
Wood			2		11		1					
Waupaca			1									
Totals	4	45	163	25	215	10	24	5	64	1	38	4

TABLE 9—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING JANUARY 31, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland			5	1	22							
Adams					17	1						1
Bayfield					3		1					
Barron			1		9				7			
Brown		4	5	2	4		1					
Burnett			5		10	1	1					
Clark			1		14							
Calumet			1		48							
Chippewa					1							
Columbia					17							
Crawford			6	1								
Dane	2		2		7		2		14			
Douglas			16	1	34	1						
Dunn			3		2							
Dodge			1		27		2				2	
Eau Claire			2		6							
Fond du Lac		1			26	1						
Grant			4	1	10							
Gates					8							
Green									1			
Jackson			3		16	1						
Jefferson			1		5		2					
Kewaunee			6	1								
Kenosha			1		1							
Lafayette											12	
Lincoln			1		1							
La Crosse			2		5				3			
Milwaukee	1	41	62	14	52	1	30	7	2	1		16
Manitowoc			4	1								
Marquette					19				3			4
Marinette			1									
Monroe									25			
Marathon	1											
Outagamie			1		6							
Oconto									12			
Ozaukee			3									
Oneida		1			3							
Polk			2		4				1			
Price					3							
Pierce	1				7				13			
Racine									1			
Rock					12		1					
Sheboygan					5							
Sauk					3							
Trempealeau			1		3							
Vernon					4		2					
Vilas									4			
Washington					3							
Walworth					5		11					
Waukesha					6							
Waupaca			2		2				1			
Waushara					1							
Winnebago					1	1	2	2				
Total	5	47	141	22	434	7	54	9	87	1	19	16

TABLE 10—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING FEBRUARY 28, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland			2		42							
Adams					8							7
Bayfield					4							
Brown		1			3		2					
Barron								2				
Clark			2		4				1			
Columbia	2	1	2		4						1	
Crawford					1							
Dane					4		1		20			
Dodge			2		5							
Douglas			14	2	37	4					4	
Dunn					2							
Fond du Lac			1		7				4		18	
Green Lake					4							
Green			1	1								
Iowa					1	1						
Jackson			3									
Juneau			2									
Jefferson			2		1		1					
Lincoln			1		5							
Lafayette												
Milwaukee	4	29	41	4	17		9	6	7			5
Marquette					4						1	
Monroe		2										
Marathon			1						24			
Manitowoc			1		1							
Oneida	1				1						6	
Outagamie	3				2	1	1					
Ozaukee			1		1							
Pepin									8			
Pierce		1			3							
Polk			4		2		4					
Price			2	1	4							
Rock									2			
Richland			1				1					
Sheboygan			2		21	1						
Sauk			2		6				2			
St. Croix									2			
Sawyer			1	1								
Vernon					1		1					
Vilas			1						5			
Washington			2									
Waushara					2							
Waupaca					8							
Waukesha					2	1						
Winnebago					4							
Total	10	34	94	9	206	10	20	6	75		37	5

TABLE 11—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING MARCH 31, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet fever.		Typhoid fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams					2	1					1	
Ashland					3							
Barron					2	2						
Brown	3	4	4		2		1					
Burnett					3							
Chippewa			8	1								
Columbia					5							
Clark					3	1						
Crawford			1		1							
Douglas			9		33	7						
Dunn			1		11	1						
Dodge					7							
Dane				1	1				1			
Fond du Lac			6	2	1							
Grant					1							
Green			3		4							
Iowa									3			
Jackson							1	1				
Jefferson					1	2	1					
Kewaunee					1	1						
La Crosse			4		5		1					
Lafayette			3				1					
Lincoln					2							
Marquette			11									
Marinette					4				2			
Milwaukee	2	40	25		22		15	1	8			5
Outagamie					2							
Oconto		1	2	2								
Oneida											10	
Price			1		3							
Pierce					1							
Polk					2							
Rock									7			
Sheboygan					6							
St. Croix			1		1				4	1		
Sawyer					2							
Trempealeau							1	1				
Vernon					1							
Washburn	3		1						4			4
Waukesha					5							
Waupaca					14	1						
Walworth					7							
Wood											6	
Total	8	45	30	6	168	14	21	4	29	1	21	5

TABLE 12.—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING APRIL 30, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brown		1	1			2						
Burnett												
Crawford			1									
Columbia					6						4	
Clark					1							
Dodge					5							
Dane	1		1		3		1					
Douglas			4		25	4	1					
Dunn					1							
Fond du Lac				1								
Green							1					
Iowa									6			
Jefferson							2					
Jackson		1	1	1								
Kenosha			6			1						
Langlade			1									
La Crosse			2		1							
Lincoln					1		1					
Marathon			2									
Milwaukee	10	25	29	6	20	2	18	5	4		1	1
Onelda		1			1							
Price				1								
Pierce			1	1					1			
Polk					4					12		
Rock			1		2							
Sauk					5		1					
St. Croix			8	1	3					2		
Sheboygan					12							
Taylor							1			3		
Trempealeau					2		2			2		
Walworth					1							
Waupaca					5							
Total	11	28	58	11	100	7	27	5	30		5	1

TABLE 13—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING MAY 31, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland					5							
Brown		6			7			1	1	1		
Barron		1			2			1				
Chippewa					2							
Columbia			5		10							
Clark										2		
Dodge			1		8							
Douglas			5		43	9						
Dane			3		4					1		
Dunn			4		6							
Iowa							2	1	8			
Kenosha					2							
La Crosse			2		2							
Lafayette		1	2									
Lincoln			1	1			4					
Milwaukee	10	27	22	4	28	2	10	6	5		4	3
Oneida			9		7						1	
Ozaukee				2								
Oconto			2									
Price			1									
Portage					5		2					
Polk					2							
Pepin							1					
Racine					5							
Rock			3	4	1				14			
St. Croix			1				1		19	1		
Sauk									1			
Sheboygan					6	1						
Shawano					5							
Trempealeau					2				38			
Taylor									5			
Vernon			5		1							
Waupaca			1	1	2							
Waushara					2				3			
Walworth					3							
Washington			3	1								
Winnebago					1							
Total	10	35	70	15	161	12	22	8	97	1	5	3

TABLE 14—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING JUNE 30, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland					7							
Adams									4			
Barron	1		1		8							
Brown		3	1		5							
Burnett					5							
Chippewa					1		1		1			
Columbia			1	1	2							
Dane			5	3	1							
Douglas			7		32	2						
Dunn			1		2							
Dodge			1				3					
Green Lake					1							
Juneau			2									
Jefferson			1									
Iron			1									
La Crosse			1		2							
Langlade			2									
Lafayette			10	1								
Monroe	1		1									
Milwaukee		34	20	2	15		18	1	3		3	
Outagamie			1									
Oconto			2									
Oneida		1	5		4	2	1	2	7			
Polk			14	2								
Rock			1		1	1						
St. Croix			11									
Shawano					5							
Waushara					4		1					
Waupaca			3		4				2			
Winnebago					3						2	
Total	2	38	91	9	102	5	24	3	17		5	

TABLE 15—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING JULY 31, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb, Croup.		Scarlet. Fever.		Typhoid. Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams									5			
Ashland					1				1			
Burnett			4	1								
Barron			2	1	4							
Brown		1	1		7	1						
Clark					1							
Douglas			4		13	1						
Dane			5		3							
Dunn	1		8	1			1					
Dodge			2	1								
Jefferson			1									
La Crosse			1		2		1					
Langlade			2	1								
Lincoln			2									
Manitowoc			1		3							
Milwaukee		14	14	11	13		3	2	4			1
Oconto			1		8							
Oneida	1		4		1				1		2	3
Polk			2	1								
Rock			10	1	3							
St. Croix			8									
Sauk			1						1			
Taylor							1					
Vernon				1					5			
Waupaca					3							
Walworth			1		8				10			
Washington					1							
Winnebago							2					
Total	2	15	74	19	72	2	8	2	27		2	4

TABLE 16—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING AUGUST 31, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland					4				1			
Barron			2		2		2				2	
Brown		2	6		2		2					
Clark			1									
Columbia			1		3							
Dodge			4									
Douglas			7	1	12	5						
Dunn			4									
Dane	1				1	1	2					
Grant	1		1								1	
Iowa							4					
Jefferson							1					
Juneau					4							
Kewaunee			1	1								
Lincoln			2		1							
La Crosse			2	1	1							
Milwaukee		30	22	4	13		14	4		1		2
Oneida			9					1		4		
Pierce			1									
Richland					2							
St. Croix			1									
Sheboygan			1		1							
Sauk			1									
Vernon					1							
Waupaca			12		1							
Winnebago								1				
Wood					1							
Total	2	32	78	7	49	6	24	7	5	1	3	2

TABLE 17—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING SEPTEMBER 30, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams							1					
Brown	3		3		2			2				
Barron					3							
Columbia			1		1							
Douglas			12	1	7	1						
Dodge			1		1	1						
Gates					1							
Iron			3		3		1	1				
Jackson											2	
Lafayette			1		1							
Manitowoc			2	2								
Marquette							1					
Milwaukee	16		24	3	21		12	4	1			
Oneida			19	3				2				
Oconto												5
Polk			2									
Richland			3									
Vernon			1									
Waupaca			6	2	1		2					
Winnebago			1	1	4		3				10	
Total	19		78	12	45	2	20	9	1		20	

TABLE 18—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING OCTOBER 31, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whoop- ing Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland					3							
Barron					3							
Bayfield								2				
Brown		3		3	17			1				
Columbia				1				2				
Crawford				1				2				
Clark					1							
Douglas				14	1	12						
Dane				3		1						
Dunn				6				1				
Dodge								1				
Iowa								1				
Jackson					8							
Jefferson								1				
Juneau					3							
Kenosha				2		1						
Kewaunee				2								
La Crosse				1								
Lafayette				2								
Lincoln				7	1							
Milwaukee	1	37	44	11	44	3	18	3	2			
Manitowoc					1							
Marinette											50	
Oneida		1		2		1						
Oconto								3				
Outagamie				2		2						
Polk					1							
Racine								90	5			
Sauk	1	1										
Waushara					1							
Waukesha					1							
Waupaca				13	2	7		2				
Washington				2		4						
Winnebago				2		5		2				
Wood				3	1	1						
Total	2	42	108	17	117	3	125	9	2		50	

TABLE 19—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING NOVEMBER 30, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Barron					2							
Bayfield					1						13	
Brown		2	7		3		1		2			
Crawford			1				2					
Chippewa			4									
Columbia					1							
Douglas			10		26							
Dane			1		3	1						
Fond du Lac					4							
Grant	1	1			2							
Iowa					1							
Juneau					6							
Jackson					3							
Kenosha			1		2							
Kewaunee					2							
La Crosse			1		1							
Lincoln			7									
Langlade			1									
Milwaukee	2	30	31	2	43	1	23		9			
Oneida			2	1	1		1	1	1			
Outagamie	1	1	2				1				5	
Racine					7							
St. Croix			1									
Trempealeau							2					
Taylor									3			
Washington					6							
Walworth			1									
Waupaca			1		1							
Winnebago			1	1	7	1						
Wood			2		2							
Total	4	34	74	4	124	3	35	1	15		23	

TABLE 20—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING DECEMBER 31, 1903.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Bayfield												
Brown			1		3		1		25	1		
Barron			4	2	1							
Crawford			1									
Columbia					8							
Chippewa			3	1	4							
Clark					4							
Dunn	1		1				2		4			
Douglas	1		10		31							
Dane			7		8	1	2		1			
Dodge							1					
Forest					1							
Grant					2							
Green					1							
Juneau	1		1		1		1					
Kenosha					3							
Lincoln					1							
La Crosse			7									
Marinette			3	1			4					
Manitowoc							1					
Milwaukee		22	45	9	35	1	23		12			
Monroe							3					
Oneida			4	1	1		1					
Polk			1				1					
Racine					1							
Sauk			2	1	6							
Shawano					2							
Sheboygan					3		1					
Taylor					1							
Vernon					1							
Waupaca			7		1							
Wood	1		6	1	5							
Waushara					4	1			12			
Winnebago					5		1					
Washington					1	1						
Total	3	22	104	16	133	4	42		55			

TABLE 21—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING JANUARY 31, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Membr. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland					5							
Barron			14	3	5							
Bayfield			3		2		4					
Brown			2		5				4			
Burnett		1										
Columbia					6							
Crawford					1							
Dane			4		5							
Dodge			8						1			
Dunn									4			
Door			7	1								
Douglas			15		26	1						
Eau Claire					4	2						
Forest									10			
Fond du Lac					2							
Grant					3							
Green					15							
Juneau			3						23			
Kewaunee			2									
La Crosse			1		1							
Lincoln			5		1							
Marquette					1		5					
Manitowoc									3			
Milwaukee		40	46	12	90	1	15		24			
Oconto			5	1			1		1			
Oneida		3	2	2	2		1	1	6			
Pierce									77			
Polk			2									
Pepin			3	1								
Rock			1		1							
Racine					3							
St. Croix					1							
Shawano			1		22							
Sauk			2	1	2							
Sheboygan			1									
Trempealeau					3							
Washington					13	1						
Winnebago					3							
Walworth									1			
Waupaca			4		11	1						
Waushara									1			
Total		44	131	21	233	6	26	1	154			

TABLE 22—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING FEBRUARY 29, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland					1	4		8				
Adams					8							
Brown		1			9		1			3		
Barron		1	8	1	2		2					
Crawford					2							
Chippewa			1							12		
Columbia	2											
Dane			4	2	3							
Douglas			2		23							
Dodge			5		1		1					
Forest										2		
Green	1		1									
Iowa					1		1					
Jefferson					1							
Juneau					2							
Kenosha					1							
Kewaunee			1									
La Crosse				3	2							
Lincoln			3	1	4							
Marinette	1		3		1		12	1				
Manitowoc					1							
Milwaukee	6	31	42	2	68		8		28			
Oconto			1		2				1			
Oneida		1	2		1					4		
Pepin												
Price					7							
Pierce					3							
Polk			3		1							
Racine					1							
Sauk	1	1			7							
Sheboygan					2							
Waupaca			9		7				7			
Waushara									2			
Wood					5							
Washburn			15									
Washington					8	1						
Total	11	35	100	9	176	1	33	1	59			

TABLE 23—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING MARCH 31, 1904.

County	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Cases.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams			3		1							
Ashland			7		7			7				
Barron			7	1	1							
Brown		3	2					1		2		
Buffalo										3		
Clark	1	1			3			5				
Chippewa	1											
Columbia					1							
Dane			3									
Dodge			1									
Douglas			7		6							
Dunn											3	
Door			2									
Forest										2		
Fond du Lac			1	1	7							
Grant			1		16					1		
Iowa			1									
Kenosha					2							
Kewaunee			3									
Marinette								3				
Manitowoc					1							
Milwaukee		28	32	6	77	4	6		40			
Oconto					2				2			
Oneida	1		2						3			
Portage					4			1				
Polk		1	3						1			
Shawano					6							
Vernon					1							
Walworth					41				2			
Waupaca			2		12	1						
Washington					3							
Winnebago			1		3				1			
Total	3	33	71	8	194	5	21	1	57		3	

TABLE 24—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING APRIL 30, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland			4		2							
Barron			5	2	3							
Brown	1		1		2		3	2	1			
Burnett		1										
Chippewa					1							
Columbia			1		2							
Crawford					1							
Dane			2									
Dodge			1									
Fond du Lac			1		1							
Grant					15							
Kenosha					1							
La Crosse			2		2							
Douglas			6		6							
Lincoln			2		1							
Marquette		1					1				1	1
Milwaukee	45	56	22	2	47	5	7		23			
Oneida			7	1			1	1	13			
Ozaukee									2			
Rock	1		1		5				3			
Sauk			4	1								
Sheboygan					4				1			
Walworth					5							
Washington					2		5					
Waushara			1		1							
Winnebago			1									
Waupaca			2									
Total	48	58	63	6	101	5	17	3	43		1	1

TABLE 25—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING MAY 31, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams			2	1			1					
Barron			2	2								
Bayfield			1		2				11		1	
Brown		6	4	1								
Burnett			3		1							
Columbia					3							
Crawford					1							
Dane					3							
Douglas					1				4			
Dunn	1											
Fond du Lac					2							
Green Lake					3							
Juneau					1							
Jefferson and Dodge	3	3							19			
Kenosha			4	1	1							
La Crosse			2		1							
Milwaukee	1		13	1	45	5	27		53	47		
Monroe			1									
Oneida			7									
Portage			3									
Polk					1							
Pierce					2		2		2			
Rock	2		4		3				2			
Sawyer					1							
Shawano					2							
St. Croix			2									
Sheboygan					2							
Sauk			2									
Trempealeau					3							
Vernon					2		1					
Walworth							1					
Washburn	3		3									
Winnebago					6							
Washington					2				3			
Waupaca					1							
Washburn			1	1								
Total	10	9	54	7	88	5	32		94	47	1	

TABLE 26—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING JUNE 30, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Membr Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland			2		2							
Barron			4									
Brown		4			1	1	1		10			
Burnett			4									
Columbia					1							
Clark					1							
Calumet			1									
Douglas			1		2							
Dodge					3							
La Crosse			5		1		1					
Langlade			1		7							
Milwaukee	2	34	9	1	53	2	12		30			
Outagamie					2							
Oneida		1	7									
Price									5			
Portage					3							
Polk			1	1								
Racine					1							
Rock			2		1		1					
Sauk					2							
Sheboygan					6				3			
Waukesha					6	1						
Winnebago			1									
Waupaca							1					
Walworth					15							
Washburn	3		2	1			1		1			
Washington					2				1			
Total	5	39	40	3	109	4	17		50			

TABLE 27—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING JULY 31, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Membr. Croup.		Scar'et Feve .		Typhoid Fever.		Measles.		Whoop- ing Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland			9	3								
Brown	1						1		2	1		
Barron			1				1					
Columbia					3							
Chippewa			17	2								
Douglas			9		5							
Fond du Lac					1							
Jefferson					1							
Juneau			2									
Kenosha			2		2							
Kewaunee					1							
Manitowoc							1					
Marinette			2									
Milwaukee	4	43	13	2	30	2	10		23			
Outagamie			2									
Oneida			7	1								
Price			4									
Rock	8	2	7		1		2		3			
Sawyer			1									
St. Croix					1							
Shawano			2	1								
Taylor			4	1								
Vernon							4	1				
Vilas			1									
Winnebago					1							
Walworth					4							
Washburn	2		6									
Total	14	46	89	10	50	2	19	1	28	1		

TABLE 28—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING AUGUST 31, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ashland			3		1							
Barron							1					
Brown		1					5					
Clark					3							
Chippewa			17	1	3							
Dodge			4									
Dane			1		2							
Douglas			1	1	10							
Juneau			1									
Kenosha			1									
Langlade	1				1							
La Crosse			5									
Milwaukee	8	25	19		40		13		11			
Oconto			1		1							
Oneida		1			1		1					
Outagamie			3									
Pepin					3							
Polk			1									
Rock	1		3	1	2		2					
Sauk					1							
Sheboygan			2	1								
Shawano			10									
St. Croix			3									
Walworth	1											
Winnebago			1									
Washington	1				5		1					
Wood			1									
Waupaca					3							
Waushara					1							
Winnebago							1					
Total	12	27	77	4	76		24		11			

TABLE 29—REPORTS OF CONTAGIOUS DISEASES IN WISCONSIN, AS RECEIVED AT THE OFFICE OF THE SECRETARY OF THE STATE BOARD OF HEALTH, FOR THE MONTH ENDING SEPTEMBER 30, 1904.

County.	DISEASES.											
	Phthisis.		Diphtheria, Memb. Croup.		Scarlet Fever.		Typhoid Fever.		Measles.		Whooping Cough.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams							1					
Bayfield			3		1							
Brown	2	4	1				3					
Buffalo							1					
Burnett			2	1								
Dodge			6				4	1				
Douglas			1		7							
Grant			2									
Jefferson			1		2		1		3			
Kenosha			3									
Kewaunee			1									
Langlade			2									
Milwaukee	4	40	33	3	40	3	14		2			
Oneida	1		1				10	1				
Outagamie				1								
Ozaukee				2								
Polk			17				58					
Pierce							1					
Price					2							
Rock			4		1		3	1				
Sauk	5		1		1							
Sheboygan												
Trempealeau			5	1			11					
Vilas			2									
Walworth					1							
Washington		1	5		4		3					
Waupaca			1	1								
Total	12	45	92	8	59	3	102	3	5			



TABLE 30. REPORT ON THE SANITARY CONDITION OF NORMAL SCHOOLS.

	Milwaukee.	Oshkosh.	Platteville.	River Falls.	Stevens Point.	Superior.	Whitewater.
1. Number of Pupils.....	587.....	696.....	450.....	450.....	550.....	500.....	410.....
2. Number of Rooms.....	27.....	81.....	27.....	27.....	33.....	47.....	40.....
3. System of Ventilating.....	Johnson System.....	Fans, Plenum system.....	Old fan system.....	Fan.....	Fan.....	Intake fans and exhaust fans.....	Fan, O. K.....
4. System of Heating.....	Steam and Hot Air.....	Direct and indirect steam radiation.....	Steam.....	Timstead steam heat.....	Steam.....	Steam.....	Steam.....
5. Water Supply.....	City.....	City for closets, but artesian drink.....	City.....	City, Artesian well.....	City.....	City system.....	City service from artesian well.....
6. Number of Coat rooms.....	Four—200 Lockers in Halls.....	9.....	6 very poor ones.....	8.....	10.....	5.....	6.....
7. Coat rooms—how heated.....	From adjoining room.....	Direct radiation.....	Steam.....	All.....	Steam.....	Steam.....	Steam.....
8. Coat rooms—how lighted.....	Outside light.....	Windows and transoms.....	Windows and electric light.....	All.....	Windows and electric lamps.....	Windows.....	Windows.....
9. Coat rooms—how ventilated.....	No special system.....	No.....	No.....	Same as other rooms.....	Fan and exit flues.....	Same as other rooms.....	No.....
10. Number of Closet Seats.....	22.....	23.....	25.....	16.....	32.....	31.....	23.....
11. Closet Rooms—how ventilated.....	Fairly well.....	Into shafts leading through roof.....	Hot shaft system.....	All.....	Like coat rooms.....	Same as other rooms.....	No.....
12. System of Sewage Disposal.....	City system.....	City. Flushed by water.....	Old well used.....	Discharges into stream.....	Sewer empties into river.....	Sewer.....	No sewage.....
13. Is Sewage System Satisfactory.....	Yes.....	Yes.....	No. Odor at times.....	Perfectly satisfactory.....	Yes.....	Yes.....	No.....
14. Have you a Gymnasium.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....
15. Is Gymnasium well Lighted and Ventilated.....	Lighting good ventilation poor.....	Yes.....	Fairly well lighted, poor ventilation.....	Yes.....	Yes.....	Yes.....	Yes.....
16. Is Gymnasium large enough.....	No.....	Yes.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....
17. What Bath Facilities.....	Shower and two tubs.....	2 tub, 6 shower baths.....	1 tub, 6 shower.....	Two bath rooms.....	Showers and tub.....	Tub and shower.....	Good.....
18. Is Bathing Compulsory after Gymnasium Work.....	Not for girls.....	No.....	No.....	No.....	No.....	No.....	No.....
19. Bath Rooms or Swimming Pool.....	Bath rooms.....	Separate baths.....	No.....	Separate rooms.....	No pool.....	Yes both.....	Bath rooms.....
20. Are Lockers Used.....	Yes.....	Yes.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....
21. Is there a Sufficient Number.....	Yes.....	Yes.....	No.....	Yes.....	Yes.....	Not quite.....	Yes.....
22. Is Seclusion and Privacy Provided.....	Yes.....	Would like greater space.....	No.....	Are planning to improve it.....	We think so.....	Yes.....	Yes.....
23. Have you had any Epidemics.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....
24. Describe Severity and Cause.....	No.....	No.....	No.....	No.....	No.....	No.....	No.....
25. Are Rules Preventing Spread of Contagious Diseases Enforced.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....
26. Do you Admit Teachers or Pupils Suffering from Tuberculosis.....	No.....	Not if we know it.....	No questions asked.....	I know of no such cases.....	Do not admit when known.....	Not if we know it.....	25.....
27. How Many Pupils Eat Midday Lunch in Building.....	.....	About 40.....	Not over 20.....	30 or 40.....	12 to 50.....	85.....	.....
28. Are Special Rooms Provided.....	They use various rooms.....	Two class rooms.....	No.....	No.....	No.....	Yes.....	Certain class-rooms.....
29. Any Additional Information.....	Heating inadequate ventilation poor.....	Lack of uniformity in ventilation.....	Need a new building.....	.....	.....	.....	.....

TABLE 31—SHOWING TABULATED SUMMARY OF THE REPORT OF LOCAL HEALTH OFFICERS FOR THE YEAR ENDING SEPTEMBER 30, 1904, CLASSIFIED ALPHABETICALLY BY COUNTIES—Continued.

Name of health officer.	County, city, village and town.	Salary of Health officer and of Health commissioner.	Are the proceedings of meetings recorded?	Number of public schools.	Sanitary condition.	Are the schools disinfected?	Is health officer empowered to act for the board in cases of emergency?	What special sanitary work has been done?	Estimated cost of the work.	Has there been an increase or decrease in contagion?	Diseases most prevalent.	Are reports made of contagious diseases?	Percentage of people who have been vaccinated.	Are reports of contagions made to the state board of health?	Are births and deaths reported?	Are burial permits required.	What disinfectant is commonly used.
COLUMBIA.																	
S. E. Hanson	Scott	\$2 per day	Yes	7	Good	No	Yes	None		Decrease	La Grippe	Yes	10 per cent	Yes	Yes	Yes	Sulphur.
Joseph Chandler	Pardeeville	Fees	Yes	1	Good	No	Yes	None		Decrease	Rheumatism	Yes	20 per cent	Yes	Yes	Yes	Formaldehyde.
W. A. Pease	Otsego	\$10 per year	Yes	7	Good	No	Yes	None		Decrease	Rheumatism	Yes	2 per cent	Yes	Yes	Yes	Formalin.
L. A. Squire	Poynette	\$10 per year	Yes	2	Fair	No	No	None		Decrease		Yes	12 per cent	Yes	Yes	Yes	Sulphur.
J. R. Sisson	Town West Point	None	Yes	7	Good	No	No	None		Decrease		Yes	Little	Yes	Yes	Yes	Sulphur, Formalin.
C. J. Lapp	Town Newport	Fees	Yes	4	Good	No	No	None		Decrease		Yes	Little	Yes	Yes	Yes	Sulphur, Formalin.
W. E. Williams	Cambria	None	Yes	1	Good	No	No	None		Decrease	Sc't Fever, Pneu.	Yes	80 per cent	Yes	No	Yes	Formalin.
A. F. Schmeling	Columbia	\$50 per year	Yes	3	Good	Yes	Yes	None		Decrease		Yes	10 per cent	Yes	Partly	Yes	Formaldehyde
L. A. Minn	Vil. Arlington	\$5 and fees	No	4	Good	No	No	None		Decrease		Yes	Very little	Yes	Yes	Yes	Sulphur, Formaldehyde.
C. E. Woodford	Town Leeds	\$20 per year	Yes	6	Good	No	Yes	None		Decrease	Whooping cough.	Yes	25 per cent	Yes	Partly	Partly	Formaldehyde.
Chas. Rhoades	Dekona	None	Yes	9	Good	No	No	None		Decrease		Yes	Very little	Yes	Yes	Yes	Sulphur.
F. D. Bentley	Portage	\$120 per year	Yes	5	Good	Yes	Yes	None		Decrease		Yes	Little	Partly	Partly	Yes	Sulphur.
F. P. Upham	Spring Vale	\$2 per day	No	6	Good	No	No	None		Decrease		Yes	Very little	No	Partly	Partly	Sulphur.
M. C. Meyer	Town Ft. Winnebago	\$2 per day	Yes	7	Good	No	Yes	None		Decrease		Yes	75 per cent	Yes	Yes	Yes	Sulphur.
G. H. Moir	Lodi	None	No	1	Good	No	Yes	None		Small Pox	La Grippe	Yes	General	Yes	Partly	Yes	Sulphur, Formaldehyde.
F. M. Hammond	Town Wocena	None	Yes	8	Good	No	Yes	None		Scarlet fever	Intestinal disease	Yes	Very little	No	Yes	Yes	Formalin.
S. C. Belt	Town Hampdon	None	No	5	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
F. O. Hunt	Fall River	None	Yes	7	Good	No	Yes	None		No change	La Grippe	Yes	General	Yes	Yes	Yes	Sulphur.
Asa Smith	Town Marcellon	Fees	Yes	5	Good	No	Yes	None		Decrease		Yes	10 per cent	Yes	Yes	Yes	Formalin.
A. Marsden	Rio	\$10 per year	No	1	Good	No	Yes	None		Decrease		Yes	60 per cent	Yes	Yes	Yes	Formalin.
A. Marsden	Town Louisville	\$10 per year	Yes	8	Good	Yes	Yes	None		Decrease		Yes	20 per cent	Yes	Yes	Yes	Formaldehyde.
CRAWFORD.																	
E. Van Gunlach	Town Freeman	None	Yes	4	Good	No	Yes	None		No change		Yes	15 per cent	Yes	No	No	Formaldehyde.
Jos. Campbell	Stubon	\$10 per year	No	1	Good	Yes	No	None		No change	Measles	Yes	50 per cent	No	Yes	Yes	Sulphur.
C. E. Cole	Prairie du Chien	\$3 per day	Yes	4	Good	Yes	Yes	None		Decrease	Whooping cough	Yes	90 per cent	Yes	Yes	Yes	Formaldehyde.
G. H. Perrin	Vil. Wauzeka	\$10 per year	Yes	1	Good	No	Yes	None		Decrease		Yes	Very little	Yes	Partly	Yes	Formalin.
DANE.																	
C. K. Jayne	Town Madison	None	Yes	8	Fair	No	Yes	None		Decrease		Yes	General	Yes	Partly	Yes	Formalin, Sulphur.
Wm. O'Broyer	Vil. & town Dane	\$10 per year	No	7	Fair	No	No	None		No change		Yes	Very little	Yes	Yes	Yes	Formalin.
Ed. Jen sen	T'n Pleasant Spring	\$2 per day	No	7	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
W. W. Stebbins	Town Springdale	Fees	No	8	Good	No	Yes	None		No change		Yes	General	Yes	Partly	Yes	Formaldehyde.
G. E. Brown	Elmoming Grove	\$2 per day	Yes	5	Fair	No	No	None		No change		Yes	Very little	Yes	No	No	Formaldehyde.
John Ackerman	Roxbury	\$5 per year	Yes	7	Fair	Yes	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
W. G. McLachlan	Town Dunn	\$10 per year	Yes	6	Fair	No	No	None		No change		Yes	Limited	Yes	Yes	Yes	Sulphur.
G. L. Gibbs	Town Medina	\$10 per year	Yes	7	Good	Yes	Yes	None		Decrease	Pneumonia	Yes	Limited	Yes	Yes	Yes	Formaldehyde.
T. Gonider	Town Perry	None	Yes	5	Good	No	No	None		No change		Yes	General	Yes	Partly	Yes	Formalin.
C. W. Derickson	Town Montrose	None	Yes	6	Fair	No	No	None		No change	Rheumatism	Partly	General	Yes	Partly	Yes	Formalin.
John Worocuk	Liberty Grove	None	No	6	Good	No	No	None		No change		Yes	General	Yes	Partly	Yes	Formalin.
Carl Strohmeyer	Town Sun Prairie	None	Yes	5	Good	No	Yes	None		No change		Yes	Limited	Yes	No	Yes	Formaldehyde.
H. V. Bennet	Blue Mounds	Fees	No	6	Good	No	Yes	None		No change		Yes	10 per cent	Yes	No	Yes	Formalin.
W. E. T. Froggatt	Cross Plains	None	No	5	Good	No	Yes	None		No change		Yes	2 per cent	Yes	Partly	Yes	Formaldehyde.
A. S. Thompson	Vil. Mt. Horeb	\$15 per year	Yes	3	Good	No	Yes	None		No change		Yes	75 per cent	Yes	Yes	Yes	Formaldehyde.
Otto Kerl	Town Berry	\$12 per year	Yes	6	Good	No	Yes	None	\$2,400.00	No change	La Grippe	Yes	Limited	Yes	Yes	Yes	Formalin, Sulphur.
H. R. Learnard	Mazomanie	\$25 per year	No	2	Good	No	Yes	None		Decrease		Partly	Limited	Yes	Partly	Yes	Formalin.
John Howie	Vienna Town	None	No	7	Good	No	No	None		No change		Yes	Limited	Yes	Yes	Yes	Formaldehyde.
D. W. Clancey	Town Dunkirk	None	No	10	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
G. E. Crosley	Town Albion	Fees	Yes	8	Fair	Partly	No	None		Scarlet fever	Pneumonia	Generally	2 per cent	Yes	No	Partly	Formaldehyde.
H. H. Leslie	Verona	\$35 yearly	Yes	7	Bad	No	No	None		Diphtheria		Yes	25 per cent	Yes	Yes	Yes	Formalin.
F. T. Lewis	Town Vermont	\$5 per year	Yes	7	Fair	No	Yes	None		Decrease		Yes	Limited	Yes	Yes	Yes	Formaldehyde, Sulphur.
H. T. Lewis	Town Black Earth	\$6 per year	Yes	1	Good	No	Yes	None		Decrease		Yes	Limited	Yes	Yes	Yes	Formaldehyde.
C. T. Wakeham	Town York	\$2 per day	Yes	8	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.
J. Cramfield	Town Fitchburg	Fees	Yes	10	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.
J. P. Donovan	Madison	\$600 per year	Yes	10	Good	No	Yes	None		Decrease		Yes	General	No	No	Partly	Formalin.
DODGE.																	
T. A. Eickelberg	Rieseville	None	No	1	Good	No	No	None		No change		Yes	5 per cent	Yes	Yes	Yes	Formalin.
J. L. Parker	Calamus	\$2 per year	No	1	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
L. M. Wright	Town Lowell	None	No	12	Good	No	Yes	None		No change		Yes	General	Yes	Partly	Yes	Formalin.
C. W. Voors	Town Beaver Dam	None	Yes	9	Good	No	No	None		No change		Partly	33 per cent	Yes	Yes	Yes	Formalin.
G. W. Dewey	Town Burnett	None	Yes	8	Good	No	No	None		Decrease		Yes	25 per cent	Yes	Yes	Yes	Formalin.
W. E. Hallock	Town Oak Grove	None	No	5	Good	No	No	None		Decrease		Partly	General	Yes	No	Yes	Formalin.
H. M. Holtz	Beaver Dam	\$200 per year	No	8	Good	No	No	None		Decrease	Diphtheria	Yes	95 per cent	Yes	Yes	Yes	Sul. Formalino.
D. N. Billmeyer	Town Chester	Fees	Yes	7	Good	Yes	Yes	None		Decrease	La grippe	Yes	General	Yes	Yes	Yes	Formalin.
Nelson Bonner	Town Westford	Fees	Yes	7	Good	Yes	Yes	None		No change		Yes	2 per cent	Yes	Yes	Yes	Formalin.
J. W. Elmer, Dr.	Theresa	None	Yes	1	Fair	No	No	None		No change	Measles	Yes	Limited	Yes	Yes	Yes	Formalin.
C. G. Schwabade	Juneau	\$2 per call	Yes	1	Good	No	Yes	Drainage ditch	\$2,400.00	No change		Yes	40 per cent	Yes	Yes	Yes	Formalin.
J. C. Lindlay	Town Fox Lake	\$6 per year	No	7	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
E. L. Sharp	Fox Lake	\$10 per year	No	5	Good	No	No	None		No change		Yes	Limited	Partly	Yes	Partly	Formalin.
H. Mielke	Town Trenton	None	No	7	Good	No	No	None		No change		Yes	Limited	Yes	Yes	Yes	Formalin.
W. F. Boerbaum	Portland	None	No	7	Good	No	No	None		No change		Yes	Limited	Partly	Yes	Yes	Formalin.
W. F. Whyte, M. D.	Town Lebanon	None	No	7	Good	No	Yes	None		Decrease		Yes	Nil	Yes	Yes	Yes	Formaldehyde.
DOOR.																	
August Simpson	Town Sturgeon Bay	None	Yes	4	Good	Yes	Yes	None		Decrease		Yes	50 per cent	Yes	Yes	Yes	Formalin.
C. Hanneson	Town Washington	\$1.50 per day	No	4	Good	Yes	Yes	None		No change		Yes	50 per cent	Yes	Partly	Yes	Formalin.
Sam Churches	Gibraltar	\$2 per day	Yes	6	Good	No	No	None		Decrease		Yes	Limited	Yes	75 per cent	Yes	Sulphur.
T. Melville	Svavstopol	\$2 per day	Yes	8	Good	No	Yes	None		Decrease		Yes	1 per cent	Partly	Yes	Yes	Formalin.
Alex. Tufts	Clay Banks	Fees	No	3	Good	No	Yes	None		No change		Yes	Limited	Partly	Yes	Yes	Sulphur.
J. G. Weber	Town Garden	\$2 per day	Yes	5	Good	No	Yes	None		No change		Yes	Limited	Yes	Yes	Yes	Sulphur.
O. F. Voigt	Vil. Bailey's Harbor	\$2 per day	Yes	2	Good	Yes	Yes	None		No change	Pneumonia	Yes	75 per cent	Yes	Yes	Yes	Sulphur.
W. L. Brooks	Jacksonport	\$2 per day	No	4	Good	No	Yes	None		No change		Partly	General	No	Yes	Yes	Formalin.
J. Worackuk	Liberty Grove	None	No	6	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
Jos. Machia	Town Forestville	None	No	4	Good	No	Yes	None		No change		Yes	General	No	Yes	Yes	Formaldehyde.
DOUGLAS.																	
J. A. Reese	Superior	\$1,200	Yes	5	Good	Yes	Yes	None		Small pox	Scarlet fever	Yes	50 per cent	Yes	Yes	Yes	Formaldehyde.
F. Perquist	Gordon	Fees	No	5	Good	No	No	None		Decrease		No	No	Yes	No	No	Formaldehyde.
F. G. Johnson	Nebazamon	\$100 per year	No	22	Good	No	No	None		Decrease		Yes	25 per cent	Yes	Yes	No	Formaldehyde.
E. E. Geary	Town Brule	\$3 per day	No	21	Fair	Yes	Yes	None		Decrease		Yes	12 per cent	Yes	No	Yes	Sulphur.
G. H. Conklin	Town Superior	\$50 per year	No	21	Fair	Yes	No	None		No change		Yes	General	Yes	Yes	Yes	Sulphur.
DUNN.																	
A. Dehnhoff	Red Cedar	None	No	10	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Sulphur.
J. B. Ford	Town Lucas	\$2 per day	No	6	Good	No	No	None		Decrease		Yes	General	Yes	Yes	Yes	Formaldehyde.
O. F. Cole	Town Stanton	Fees	No	7	Good	No	Yes	None		Small Pox	Measles	Yes	10 per cent	Yes	Yes	Yes	Formaldehyde.

TABLE 31—SHOWING TABULATED SUMMARY OF THE REPORT OF LOCAL HEALTH OFFICERS FOR THE YEAR ENDING SEPTEMBER 30, 1904. CLASSIFIED ALPHABETICALLY BY COUNTIES—Continued.

Name of health officer.	County, city, village and town.	Salary of health officer of health commission.	Are the proceedings of meetings recorded?	Number of public schools.	Sanitary conditions.	Are the schools disinfected?	Is health officer empowered to act for the board in cases of emergency?	What special sanitary work has been done?	Estimated cost of the work.	Has there been an increase or decrease in contagion?	Diseases most prevalent.	Are reports made of contagious diseases?	Percentage of people who have been vaccinated.	Are reports of contagions made to the state board of health?	Are births and deaths reported?	Are burials required?	What disinfectant is commonly used?	
FOND DU LAC.																		
M. A. T. Hoffman	Campbellsport	None	No	2	Good	No	Yes	None		Decrease		Generally	1 per cent	No	Yes	Yes	Formaldehyde.	
S. Edwald	Town Oakfield	Fees	Yes	9	Fair	No	No	None		Decrease	Measles	Yes	90 per cent	Yes	Yes	Yes	Formaldehyde.	
S. Edwards	Vil. Oakfield	Fees	Yes	1	Good	No	No	None		Decrease	Measles	Yes	90 per cent	Yes	Yes	Yes	Formaldehyde.	
Chas. Brown	Ripon	\$5 and fees	Yes	8	Good	No	No	None		No change		Yes	75 per cent	Yes	Partly	Yes		
John DerBust	Town Alto	\$2 per day	No	9	Good	No	Yes	None		No change		Yes	33 per cent	No	Partly	Partly	Formalin.	
W. E. McCreary	Byron	\$2 per day	No	13		No	No	None		No change		Yes	Limited	Yes	Yes	Yes		
T. J. Oiver	Town Eden	\$10 per year	Yes	7	Good	No	Yes	None		Decrease		Yes	90 per cent	Yes	Yes	Partly	Formaldehyde.	
S. S. Morse	Town Eldorado	Fees	Yes	6	Good	No	Yes	None		Decrease		Yes	Limited	Yes	Yes	Yes	Formalin.	
E. T. Bunker	Town Calumet	None	No	6	Fair	No	No	None		No change		No	10 per cent	Yes	Yes	Yes	Sulphur.	
P. E. Sleykett	Bredon	None	Yes	1	Good	Yes	No	None		Decrease	Pneumonia	Yes	90 per cent	No	Yes	Yes	Formalin.	
P. A. Hoffman	Town Ashford	None	Yes	9	Good	No	No	None		Decrease		Yes	Limited	Yes	Yes	Yes	Sulphur.	
P. J. Caloy	N. Fond du Lac	Fees	No	2	Good	No	No	None		Decrease	Scabies	Yes	General	Yes	No	Yes	Formalin.	
R. Willis	Town Empire	None	Yes	8	Good	No	Yes	None		Decrease	Diphtheria	Yes	25 per cent	Yes	No	No		
E. Roy	Town Lamartine	Fees	Yes	10	Good	Yes	Yes	None		Decrease	Pneumonia	Yes	General	Yes	Partly	Partly	Formalin.	
A. Mitchell	Ripon	\$100 per year	Yes	4	Good	Yes	No	None		Decrease	Cardiac	Yes	General	Yes	No	Yes	Formaldehyde.	
J. J. Le Hoofs	Town Toychedah	None	Yes	7	Fair	No	No	None		Decrease		Partly	2 per cent	Yes	Partly	Partly	Sulphur.	
FOREST.																		
J. H. Dowley	Town Laona	\$25 per year	Yes	1	Good	Yes	Yes	None		Decrease	Measles	Yes	General	Yes	Yes	Yes	Formaldehyde.	
W. F. Walechka	Town Hien	None	Yes	1	Good	No	Yes	None		No change		Yes		Yes	Yes	Yes		
P. H. Carlin	Town Caswell	Fees	Yes	2	Good	No	No	None		No change		No	90 per cent	Yes	No	No	Sulphur.	
GATES.																		
P. Goodenough	Rusk	None	No	3	Good	No	Yes	None				Yes	Limited	No	Yes	Yes		
Peter Jasicki	Town Strickland	None	No	3	Good	No	No	None				Yes		Yes	Yes	Yes		
S. L. Jordan	Grant	\$3 per day	No	7	Good	No	Yes	None		Decrease	La Grippe	Yes	5 per cent	No	Yes	Yes	Yes	Sulphur.
H. C. Johnson	Town True	None	No	3	Good	No	No	None		Decrease		No	95 per cent	Yes	Yes	Yes		
G. M. Camadeau	Bruce	None	No	1	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.	
W. L. Stephenson	Ladysmith	Fees	No	2	Good	No	Yes	None		No change		Yes	General	Yes	Partly	Partly	Formaldehyde.	
R. Withelt	Lawrence	\$2 per day	Yes	1	Good	Yes	Yes	None		No change		Yes	General	Yes	Yes	Yes		
GRANT.																		
S. E. Reid	Hickory Grove	\$1 per year	No	9	Good	No	No	None		No change		Partly	Limited	Yes	Yes	Yes		
P. Hottenstein	Town Harrison	None	No	8	Good	No	Yes	None		Decrease		Yes	Limited	Yes	Yes	Yes	Formalin.	
Dr. C. A. Armstrong	Town Boscobel	\$5 per year	No	0		No	Yes	None				Yes	General	Yes	Yes	Yes	Formaldehyde.	
Dr. C. A. Armstrong	Town Marion	None	No	3	Good	No	Yes	None		No change		Yes		Yes	Yes	Yes		
Dr. L. H. Treglow	Lima	\$10 per year	Yes	11	Good	No	Yes	None		Decrease	La Grippe	Yes	Limited	Yes	Yes	Yes	Formaldehyde.	
J. Goodrey	Town Lancaster	None	No	10	Good	No	No	None		Decrease	Measles	Yes	Limited	Yes	Partly	Yes	Sulphur.	
T. L. Edwards	Town Smelser	None	No	9	Good	No	No	None		No change		Yes	75 per cent	Yes	Yes	Yes	Formalin.	
S. F. Tuffley	Town Clifton	None	No	11	Good	No	No	None		Decrease	Pneumonia	Yes	Limited	Yes	Yes	Yes	Formalin.	
John Martin	Wordman	None	No	7	Good	No	No	None		No change		Yes	General	No	Yes	Yes		
E. A. Ketterer	Town Wingville	\$5 per year	Yes	5	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.	
F. E. Blackburn	Beetown	None	No	4	Good	No	No	None		No change		Yes	10 per cent	Yes	Yes	Partly	Sulphur.	
W. R. Counite	Walterstown	Fees	No	5	Good	No	Yes	None		No change	Diphtheria, typhoid fever	Yes	Limited	Yes	Yes	Yes	Sulphur.	
Dr. E. D. Orr	Mount Hope	None	Yes	6		No	No	None		Decrease	Measles	Yes	20 per cent	Yes	Partly	Yes	Sulphur.	
Peter Quick	Ellanboro	Fees	No	9	Good	No	Yes	None		Decrease		Yes		Yes	Partly	Partly		
J. C. Blair	Vil. Hazel Green	None	Yes	0		No	No	None		Decrease		Yes	Limited	Yes	Partly	Yes	Formalin.	
J. C. Blair	Town Hazel Green	None	Yes	7	Good	No	No	None		Decrease		Yes	Limited	Yes	Yes	Yes	Formalin.	
J. E. Heraty	Vil. Bloomington	None	Yes	2		No	Yes	None		No change		Yes		Yes	Yes	Yes	Formalin.	
Wm. Hammetzer	Town Potosi	None	Yes	8		No	Yes	None		Scarlet fever		Yes		Yes	Yes	Yes	Formalin.	
M. J. Smith	Town Jamestown	None	Yes	8	Fair	No	Yes	None		No change		Yes	50 per cent	No	No	Partly	Formaldehyde.	
Dr. C. B. Pickering	Town Castle Rock	Fees	No	5	Good	No	No	None		No change		Yes	10 per cent	Yes	Yes	Yes	Formaldehyde.	
Dr. C. B. Pickering	Town Muscoda	None	No	3	Good	No	No	None		No change		Yes	10 per cent	Yes	Yes	Yes	Formaldehyde.	
C. A. Cooper	Vil. Montfort	None	No	3	Good	No	No	None		No change		Yes		No	Yes	Yes	Formaldehyde.	
R. H. Henry	Vil. Muscoda	None	Yes	1	Good	No	Yes	None		Decrease		Yes		Yes	Yes	Yes	Formalin.	
GREEN.																		
Dr. W. B. Gnagi	Town Clarno	Fees	Yes	10	Good	No	Yes	None		No change		Yes	General	No	Yes	Yes	Formaldehyde.	
E. J. Mitchell	Town Decatur	None	Yes	7	Good	No	Yes	None		Decrease	Pneumonia	Yes	50 per cent	No	Partly	Yes	Formaldehyde.	
F. L. Hodges	Monroe	\$100 per year	No	4	Good	Yes	Yes	Sewage Plant	\$5,000 00	Decrease	Measles	Yes	General	Yes	Yes	Yes	Formaldehyde.	
Frank Asums	Jefferson	None	No	10	Good	No	No	None		No change		Yes	33 per cent	Yes	Partly	Partly		
S. R. Meyer	Town Monroe	Fees	No	25	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Sulphur.	
Dr. D. Flower	Monticello	None	No	3	Good	No	No	None		No change	Measles	Partly	Limited	Yes	No	Yes	Formaldehyde.	
C. W. Ransom	Brooklyn	None	No	1	Fair	Yes	No	None		No change		Yes	General	No	Yes	Yes	Formaldehyde.	
Dr. H. A. Rouse	Vil. Brownstown	None	No	1	Good	Yes	No	None		Decrease		Yes	2 per cent	Yes	Yes	Yes	Formaldehyde.	
J. B. Richards	Broadhead	None	No	2	Good	No	No	None		Decrease		Yes	General	Yes	Yes	Yes	Formaldehyde.	
D. D. Flower	Mount Pleasant	None	No	9	Good	No	No	None		No change	Measles	Yes	Limited	Yes	No	Yes	Formaldehyde.	
E. W. Fairman	Spring Grove	None	No	8	Fair	No	No	None		No change		No	General	No	No	No	Formaldehyde.	
Dr. C. A. Hansen	Town Jordan	None	No			No	No	None		No change		Partly	66 per cent	Yes	Partly	Yes		
Dr. C. A. Hansen	Town Adams	Fees	No		Fair	No	No	None		No change		Partly	Limited	Yes	Partly	Yes		
D. Kratzer	Town Cadiz	\$2 per day	Yes	9	Good	Yes	Yes	None		Decrease		Yes	General	Generally	No	No		
A. C. Ula	Town York	\$2 per day	No	6	Good	No	Yes	None		No change		Yes	General	Yes	No	No		
M. M. Hulbert	Town Sylvester	None	No	8	Good	No	No	None		No change		Yes	Limited	No	Partly	Partly		
GREEN LAKE.																		
J. Leigh	Town Seneca	Fees	No	5	Good	No	Yes	None		No change		Yes	Limited	Yes	Partly	Yes		
D. F. Bothwell	Kingston	None	Yes	8	Good	No	Yes	None		Decrease		Partly	90 per cent	Yes	Yes	Yes	Formaldehyde.	
G. E. Baldwin	Vil. Dartford	None	No	1	Good	No	No	None		No change		Yes	25 per cent	No	Partly	Yes	Formaldehyde.	
G. E. Baldwin	Town Brooklyn	Fees	Yes	6	Good	No	No	None		No change		Yes	25 per cent	No	Partly	Yes	Formaldehyde.	
W. H. Talsom	Markesan	None	No	1	Good	No	No	None		No change		Yes	Partial	Yes	No	Yes	Formaldehyde.	
Dr. J. Razeck	Vil. Princeton	\$25 per year	No	3	Good	No	No	None		No change		Yes	Very little	No	Yes	Yes	Formaldehyde.	
IOWA.																		
V. C. Munger	Town Barneveld	None	No	11	Fair	No	Yes	None		No change	Pregnancy?	Yes	General	Yes	No	No	Formaldehyde.	
Dr. T. S. Lawler	Vil. Cobb	None	Yes	1	Bad	No	Yes	None		Increase		Yes	General	Yes	Yes	Yes	Formaldehyde.	
C. A. Gianville	Linden	None	No	1	Poor	No	Yes	None		No change	Consumption	Yes	Very little	Yes	Partly	Yes		
F. M. Bailey	Mineral Point	\$25 per year	No	4	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Sulphur. Formaldehyde.	
D. O. Bennett	Clyde	\$10 per year	No	4	Good	No	Yes	None		No change		Yes	Limited	Yes	Yes	Yes	Formaldehyde.	
Wm. Skews	Town Waldwick	\$2 per day	Yes	1	Good	No	Yes	None		No change		Yes	Limited	Yes	Partly	Yes		
R. H. Beckerleg	Town Mineral Point	rees	No	15	Fair	No	Yes	None		No change		Yes	Limited	No	Partly	Yes	Sulphur.	
IRON.																		
Dr. J. H. Urganhart	Town Knight and Anderson	\$10 per mo.	Yes	5	Good	No	Yes	Swamp drains		Decrease		Yes	General		Yes	Yes	Sulphur. Formaldehyde.	
Dr. T. J. Hambley	Hurley	\$20 per mo.	Yes	7	Good	No	No	None		Typoid fever		Yes	General	Yes	Yes	Yes	Formalin.	
JACKSON.																		
Dr. H. B. Cole	Black River Falls	\$40 per year	No	2	Good	Yes	No	None		Decrease		Yes	Very little	Yes	Partly	Yes	Formaldehyde.	
Marti Lynn	Garfield	None	No	5	Good	No	No	None		Decrease		Yes	Very little	Yes	Yes	Yes		
Chas. E. Remaly	Irving	None	No	7	Good	No	Yes	None		Decrease	Pneumonia	Yes	Very slight	Yes	Yes	Yes	Formalin.	
J. R. Breakey	Vil. Alma Center	Fees	Yes	1	Fair	Yes	Yes	None		Decrease		Yes	General	Yes	Yes	Yes	Formaldehyde.	
E. Moore	Vil. Merrillan	\$15 yearly	No	1	Good	Yes	Yes	None		Decrease	Small Pox	Yes	Very little	Yes	Yes	Yes	Formaldehyde.	
John Morrill	Vil. Taylor	Fees	No	6	Good	No	No	None		No change		Yes	Very little	Yes	Yes	Yes		
Dominic Diehn	City Point	None	No	4	Good	No	Yes	None										

TABLE 21—SHOWING TABULATED SUMMARY OF THE REPORT OF LOCAL HEALTH OFFICERS FOR THE YEAR ENDING SEPTEMBER 30, 1904. CLASSIFIED ALPHABETICALLY BY COUNTIES.—Continued.

Name of health officer.	County, city, village and town.	Salary of health officer of health commission.	Are the proceedings of meetings recorded?	Number of public schools.	Sanitary conditions.	Are the schools disinfected?	Is health officer empowered to act for the board in cases of emergency.	What special sanitary work has been done?	Estimated cost of the work.	Has there been an increase or decrease in contagion?	Diseases most prevalent.	Are reports made of contagious diseases?	Percentage of people who have been vaccinated.	Are reports of contagions made to the state board of health.	Are births and deaths reported?	Are burial permits required?	What disinfectant is commonly used?
JUNEAU.																	
V. Priessnitz	Germantown	None	No	4	Good	No	No	None		No change		Yes	Small per ct.	Yes	Partly	Yes	Formaldehyde.
J. E. Smith	Maunton	\$50 per year	No	1	Good	Yes	Yes	None		No change		Yes	Small per ct.	Yes	Partly	Yes	Formaldehyde.
C. S. Smith	Elroy	\$25 per year	No	2	Good	No	Yes	Sewer system		No change		Yes	General	No	Yes	Yes	Formaldehyde.
C. O. Cron	Town Orange	None	No	4	Good	No	No	None		Decrease		Yes	Small per ct.	Yes	Yes	Yes	Formaldehyde.
H. J. Waterman	Town Clearfield	None	No	4	Good	No	No	None			Pneumonia	Yes		Yes	Yes	Yes	
T. Gillery	Town Wewauc	Fees	No	5	4 good, 1 bad	No	No	None				Yes		Yes	Yes	Yes	
J. S. Hess	Lindina	Fees	No	3	Good	Yes	Yes	None		No change		Yes	Small per ct.	Yes	No	Yes	Corrosive sub.
A. T. Gregory	Town Plymouth	Fees	Yes	7	Good	No	Yes	None		No change		Yes	50 per cent.	Yes	Partly	Yes	Formaldehyde.
R. W. Hoyt	New Lisbon	\$25 per year	No	1	Good	Yes	No	None		Decrease		Yes	25 per cent.	Yes	Partly	Yes	Formaldehyde.
L. G. Earle	Cutler	\$12 per day	No	5	Good	Yes	No	None		Decrease		Yes	75 per cent.	Yes	Yes	Yes	Formaldehyde.
KENOSHA.																	
J. A. Lowe	Pleasant Prairie	Fees	No	6	Good	No	No	None		No change		Partly		No	Yes	Yes	Formalin.
J. R. Eastman	Kenosha	\$50 per year	No	11	Good	No	No	None		Decrease		Yes		Yes	Yes	Yes	Formaldehyde.
W. A. McKasson	Town Randall	\$2 per day	No	4	Good	No	No	None		No change		Yes		Yes	Partly	Yes	
J. E. Spencer	Somers	\$5 per year	No	3	Good	No	Yes	None		Decrease		Yes	Small per ct.	Yes	None	Yes	Formaldehyde.
KEWAUNEE.																	
A. Trossort	Town Casco	\$10 per year	Yes	4								Yes	50 per cent.	Yes	Yes	Yes	Sulphur.
V. Bellin	Town Lincoln	Fees	Yes	6	Fair	No	Yes	None		No change		Generally	25 per cent.	Yes	Partly	Yes	Formalin.
Ervin Maidke	Town Ahnapee	None	No	5	Good	No	Yes	None		No change	Diphtheria	Yes	10 per cent.	Yes	Yes	Yes	Formaldehyde.
F. Moranx	Luxemburg	\$15 per year	No	6	Fair	No	No	None		Decrease	Whooping Cough	Yes	Very small	Yes	Yes	Yes	Formaldehyde.
J. Brezinski	West Kewaunee	\$15 per year	Yes	6	Good	No	Yes	None		Decrease		Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
J. M. Melziv	Monpellier	\$5 per year	No	6						No change		Yes		Yes	Yes	Yes	
G. E. Bartran	Algona	\$20 per year	No	2	Good	No	Yes	None		Decrease		Yes	50 per cent.	Yes	No	Yes	Formaldehyde.
N. Feluar	Town Carlton	\$5 per year	No	6						No change		Yes	Nil	Yes	Yes	Yes	
B. Halsperger	Town Pierce	None	No	3						Decrease		Yes		Yes	Yes	Yes	Formaldehyde.
LA CROSSE.																	
H. M. Swarthout	Town Onalaska	None	No	7	Good	No	Yes	None		No change		Yes		Yes	Partly	Partly	
C. T. Hoffman	Town Holland	None	No	6	good&bad	No	No	None		No change		No		Yes	Partly	Yes	
A. Andregg	Town Greenfield	\$2 per year	Yes	4						No change		Yes		Yes	Yes	Yes	
A. De Pierre	Vil. Bangor	None	No	1	Good	No	Yes	None		Decrease		Yes	10 per cent.	Yes	Yes	Yes	Formaldehyde.
H. A. Jacobs	Town Shelby	\$2 per day	No	6	Fair	No	Yes	None		Decrease		Yes		Yes	Partly	Yes	Formaldehyde.
W. J. Dawson	Town Campbell	\$2 per day	No	5	Good	No	No	None		No change		Yes		Yes	Yes	Yes	Formaldehyde.
R. D. Murphy	La Crosse	\$90 per year	No	9	Good	No	Yes	Garbage collection	\$1,100	No change		Yes	General	Yes	Partly	Yes	Formaldehyde.
C. Hulbert	Town Burns	None	No	13	Good	No	Yes	None		No change		Yes	General	No	Partly	Yes	Sulphur.
T. J. Buckley	Fayette	None	No	5	Good	No	Yes	None		No change		Yes	66 per cent.	Yes	Yes	Yes	
LA FAYETTE.																	
O. L. Hansen	Vil. Argyle	None	No	1	Good	Yes	No	None		No change		Yes	50 per cent.	Yes	Yes	Yes	Sulphur.
A. Hayden	La Fayette	None	No	1	Good	No	No	None		No change		Yes	Very small	Yes	Yes	Yes	Formaldehyde.
J. Goodman	Town Lamont	None	No	6	Fair	Yes	No	None		No change		No	General	Yes	No	Partly	
D. W. Hogen	Darlington	Fees	Yes	2	Good	Yes	No	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.
S. Birkbeck	Vil. Gratiot	\$10 per year	Yes	1	Good	No	Yes	None		No change		Yes	33 per cent.	Yes	Yes	Yes	Formalin.
G. E. Hobbs	Town Wayne	\$10 per year	Yes	7	Fair	No	Yes	None		No change		Partly	Very small	No	Yes	Yes	
J. Engebretson	Wiota	None	No	9	Good	Yes	Yes	None		No change		Yes		Yes	Partly	Yes	
LANGLADE.																	
G. M. Davlass	Ello	None	Yes	5	Good	No	Yes	None		No change		Yes	40 per cent.	Yes	Yes	Yes	Formaldehyde.
J. M. Okoneski	Evergreen	None	No	1	Good	No	No	None		Decrease		Yes		No	Yes	Yes	Wood Alcohol.
F. V. Watson	Antigo	\$75 per year	Yes	6	Good	No	Yes	Removal Privies		Decrease		Yes	75 per cent.	Yes	Yes	Yes	Formaldehyde.
H. Weaerge	Town Upham	\$3 per day	Yes	3	Good	No	Yes	None		No change		Yes	Nil	Yes	Yes	Yes	Formaldehyde.
Wm. Malleit	Town Price	\$3 per day	No	4	Good	No	Yes	None		Decrease		Yes	15 per cent.	Yes	Yes	Yes	Sulphur.
C. F. Priem	Town Lily	None	No	6								Yes		Yes	Yes	Yes	
B. Lukas	Town Nava	None	No	4								Yes		Yes	Yes	Yes	
W. Wildman	Summit	None	No	5	Good	No	No	None		No change		Yes	Nil	Yes	Yes	Yes	Sulphur.
LINCOLN.																	
W. H. Bayer	Russell	None	No	4	Good	No	No	None		Decrease	Pneumonia	Yes	Very small	Yes	Yes	Yes	Formaldehyde.
J. Johnston	Tomahawk	\$100 per year	No	4	Good	Yes	Yes	None		Diphtheria		Yes	General	Yes	Partly	Partly	Tarious.
G. T. Bellis	Harrison	None	No	4	Good	No	No	None		No change	Dysentery	Yes	12 per cent.	Yes	Yes	Yes	Formaldehyde.
Wm. Bartman	Birch	None	Yes	3	Good	Yes	Yes	None		No change		Yes	Very small	Yes	No	Yes	
C. Procknow	Town Corning	None	Yes	7	Good	Yes	Yes	None		No change		Yes	Nil	Yes	Yes	Yes	Sulphur.
N. Barbain	King	\$2 p. r day	No	3	Good	No	Yes	None		Decrease		Yes	General	Yes	Yes	Yes	Formaldehyde.
D. B. Reinhart	Merrill	\$100 per year	No	3	Good	No	Yes	None		Decrease	Dyphtheria	Yes	General	Yes	No	Yes	
MANITOWOC.																	
J. Hendricks	Manitowoc Rapids	\$2 per day	Yes	6													
L. R. Syster	Kiel	None	Yes	2	Good	No	Yes	None		Decrease	Rheumatism	Yes	2 per cent.	Yes	Yes	Yes	Formaldehyde.
P. H. Hertel	Meeme	None	No	6	Good	Yes	No	None		No change		Yes	General	Yes	Partly	Partly	
Peter Bausch	Town Manitowoc	None	No	6													
L. A. Schnell	Liberty	\$2 per day	Yes	6	Good	Yes	No	None		No change		Yes	5 per cent.	No	Yes	Yes	Formaldehyde.
W. H. Spencer	Kosnott	\$150 per year	Yes	6	Good	No	Yes	None		Decrease		Yes	General	No	Yes	Yes	
R. Schubert	Kossuth	\$2 per day	Yes	6	Good	Yes	Yes	None		No change		Yes	25 per cent.	Yes	Yes	Yes	
W. A. Keune	Two Rivers	None	Yes	7	Good	No	Yes	None		No change		Yes		Yes	Yes	Yes	
A. H. Farrell	Centerville	\$5 per year	No	5	Good	No	Yes	None		Decrease		Yes	Very small	Yes	Yes	Yes	Formaldehyde.
Chas. Regba	Two Rivers	\$10 yearly	No	3	Good	No	Yes	Swr. & water syst.		Decrease	Consumption	Yes	General	Yes	Yes	Yes	
	Town Gibson	\$10 per year	Yes	7	Good	Yes	No	None		Decrease		Yes	General	Yes	Yes	Yes	
MARATHON.																	
G. M. Lafee	Houll	Fees	No	5	Good	No	No	None		No change		Yes		No	Partly	Yes	
H. Sontag	Wausau	None	No	1	Good	No	Yes	None		No change		Yes	Nil	Yes	Yes	Yes	Carbolic acid.
F. Pawerlie	Town Bergen	\$2 per year	No	3	Good	No	No	None		No change		Yes	Nil	Yes	Yes	Yes	Sulphur.
J. Braunwalder	Berne	None	No	5	Good	No	No	None		No change		Yes	Nil	Yes	Yes	Yes	
H. Kreuger	Ber In	\$2 per day	Yes	7	Good	No	Yes	None		No change		Yes	Generally	Yes	Yes	Yes	
W. B. Miller	Town Halsey	\$2 per day	Yes	3	Good	No	Yes	None		No change		Yes	15 per cent.	Yes	Yes	Yes	
P. G. Gebhard	Town Stettin	\$2 er day	Yes	7	Good	Yes	Yes	None		No change		Yes	Nil	Yes	Yes	Yes	
J. Holzem	Hewitt	\$5 per day	No	4	Good	Yes	Yes	None		No change	Cancer	Yes	Very small	Yes	Yes	Yes	
L. Seiler	Emmet	None	No	8						No change		Yes	Small p. c.	Yes	Yes	Yes	
J. R. Simons	Town Franzen	\$2 per day	No	3						Decrease		Yes		No	No	Yes	
Gus Matter	Town Spencer	None	No	3						No change		Yes	Nil	No	No	Yes	
A. J. Halte leben	Town Plover	None	No	5	Good	No	No	None		No change		Yes	75 per cent.	No	Yes	Yes	Formaldehyde.
F. J. Edmonds	Vil. Brokaw	None	No	1	Good	No	No	None		No change	Tonsillitis	Yes	Nil	No	Yes	Yes	Sulphur.
J. G. Wesley	Town Eau Pleene	None	Yes	5	Good	No	Yes	None		No change		Yes	20 per cent.	Yes	No	Yes	
Ed. Hachlke	Town Hamburg	\$1.50 per day	Yes	7	Good	Yes	Yes	None		No change		Partly	Nil	Yes	Yes	Yes	
M. John	Town Wien	\$20 per year	Yes	6	Good	No	Yes	None		No change		Yes	Nil	Yes	Yes	Yes	
J. Kai-er	Town Johnson	None	No	3								Yes		Yes	Partly	Yes	
F. G. Strayer	Vil. Spencer	Fees	Yes	1	Good	No	Yes	None		Small Pox		No	33 per cent.	Yes	Yes	Yes	Formaldehyde.
L. Nariach	Hatley	None	No	2	Good	Yes	Yes	None				Yes		Yes	Yes	Yes	
J. Kurdus	Town Cassi	\$5 per year	No	5	Good	No	Yes	None		No change		Yes		No	Yes	Yes	
F. Laloudek	Town Harrison	None	No	4	Good	No	No	None		No change		Yes	50 per cent.	Yes	Partly	Yes	Sulphur.
E. M. Macauley	Town Day	None	No	4	Good	No	No	None		Decrease		Yes	General	Yes	Yes	No	Sulphur.
W. A. Ludwig	Edgar	None	Yes	1	Good	Yes	No	None		No change		Yes	4 per cent.	Yes	Yes	Yes	
F. M. Gerorick</																	

TABLE 31.—SHOWING TABULATED SUMMARY OF THE REPORT OF LOCAL HEALTH OFFICERS FOR THE YEAR ENDING SEPTEMBER 30, 1904, CLASSIFIED ALPHABETICALLY BY COUNTIES—Continued.

Name of health officer.	County, city, village and town.	Salary of health officer of health commission.	Are the proceedings of meetings recorded?	Number of public schools.	Sanitary conditions	Are the schools disinfected?	Is health officer empowered to act for the board in case of emergency?	What special sanitary work has been done?	Estimated cost of work.	Has there been an increase or decrease in contagion?	Diseases most prevalent	Are reports made of contagious diseases?	Percentage of people who have been vaccinated.	Are reports of contagions made to the state board of health?	Are births and deaths reported?	Are burial permits required?	What disinfectant is commonly used?	
MILWAUKEE.																		
R. G. Arveson	East Milwaukee	Fees	Yes	1	Good	No	No	None		Scarlet Fever		Yes	Very little		Yes	Yes	Formaldehyde.	
F. M. Schulz	Milwaukee	\$2,500	Yes	1	Good	Yes	Yes	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
H. Steinberg	Town Lake	\$2 per day	Yes	13	Good	Yes	Yes	None		Small Pox		Yes	General		Yes	Yes	Sulphur.	
L. B. Stinson	Town Franklin	None	No	9	Good	No	Yes	None		No change		Yes	Very little		Yes	Yes	Sulphur.	
L. Heuer																	Formalin.	
S. M. Smith	South Milwaukee	\$240 yearly	No	3	Fair	No	Yes	None		No change		Yes	5 per cent		Yes	Yes	Formalin.	
C. H. Jahn	Town Brown Sear	None	No	12	Good	No	Yes	None		No change		Yes	General		Partly	Yes	Sulphur.	
C. A. Naber	North Milwaukee	\$50 per year	No	1	Good	No	No	None		No change	Measles	Yes	General		Yes	Yes	Formaldehyde.	
	Town Greenfield	Fees	No	11	Good	No	Yes	None		No change	Pneumonia	Yes	Nil		Yes	Yes	Formaldehyde.	
MONROE.																		
S. D. Beebe	Sparta	\$50 yearly	Yes	6	Good	No	Yes	None		Scarlet Fever		Yes	General		Yes	Yes	Formaldehyde.	
Wm. Fischer	Town Ridgeville	\$10 per year	No	6	Good	No	Yes	None		No change		Yes	Nil		Yes	Yes	Formaldehyde.	
G. O. Murray	Greenfield	Fees	No	4	Good	Yes	Yes	None		No change		Yes	90 per cent		Yes	Yes	Sulphur.	
W. B. Ford	Norwalk	\$10 per year	Yes	1	Good	No	No	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
C. M. Beebe	Town Sparta	None	No	6	Good	No	No	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
A. M. Matby	Town Oakdale	None	Yes	5	Good	No	Yes	None		No change		Yes	Generally		Yes	Yes	Formalin.	
C. H. Cremer	Vil. Cassiton	None	No	6	Good	No	No	None		No change		Yes	10 per cent		Partly	Partly	Formaldehyde.	
J. M. Christensen	Kendall	Fees	No	1	Good	Yes	No	None		No change		No	General		Yes	Yes	Sulphur.	
F. Muermann	Town Byron	None	No	7	Good	No	Yes	None		Small Pox		Partly	General		Yes	Yes	Sulphur.	
A. E. Winter	Tomah	\$2 yearly	No	4	Good	Yes	Yes	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
C. H. Cloutie	Wells	\$2 per day	Yes	8	Good	No	No	None		Scarlet Fever		Yes	75 per cent		Yes	Yes	Formaldehyde.	
W. W. Richardson	Glendale	None	Yes	6	Good	No	Yes	None		No change		Yes	Nil		Yes	Yes	Formaldehyde.	
F. P. Warrens	Town Grant	None	No	4	Good	No	No	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
C. A. Doame	Lafayette	\$2 per day	No	3	Fair	No	Yes	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
Joseph Newsome	Town LaGrange	\$2 per day	No	7	Good	No	No	None		Small Pox		Yes	50 per cent		Yes	Yes	Formaldehyde.	
E. T. Hanchette	Town Arglo	Fees	Yes	4	Good	No	Yes	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
J. G. Seidel	Warrens	None	No	5	Good	No	Yes	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
I. Jones	Town Scott	\$4 per year	No	10	Good	No	No	None		Small Pox		Yes	Small per ct.		Yes	Yes	Formaldehyde.	
A. D. Gibson	Little Falls				Good	No	Yes	None		No change		Yes	90 per cent		Yes	Yes	Wood Alcohol.	
ONEIDA.																		
R. J. Goggins	Oconto Falls	Fees	No	4	Good	No	No	None		No change		Yes	75 per cent		Yes	Yes	Formaldehyde.	
F. Peplinski	Soliteki	Fees	No	4	Good	No	No	None		No change		Yes	General		No	Yes	Formaldehyde.	
D. E. Whiting	Town Oconto	\$2 per day	Yes	3	Good	Yes	Yes	None		Decrease	La Grippe	No	General		Yes	Yes	Sulphur.	
Herman Kasten	Town Gillett	None	Yes	3	Good	Yes	No	None		No change		Yes	General		Yes	Yes	Sulphur.	
E. Cleveland	Town Chase	None	No	4	Good	Yes	Yes	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
A. Cleveland	Town Morgan	None	Yes	4	Fair	No	No	None		Decrease		No	Very small		Yes	Yes	Formaldehyde.	
Louis Busch	Under Hill	\$2 per day	Yes	3	Good	Yes	Yes	None		Decrease	Small Pox	Partly	50 per cent		Yes	Yes	Formaldehyde.	
G. Anderson	Town Armstrong	\$2 per day	Yes	3	Good	No	Yes	None		No change		No	75 per cent		Yes	Yes	Formaldehyde.	
J. D. Keyser	Town Bracon	\$2 per day	No	3	Good	No	Yes	None		No change		No	Nil		Yes	Yes	Formaldehyde.	
J. E. Johnson	Town Breed	None	Yes	3	Good	No	No	None		Decrease		Yes	Nil		Yes	Yes	Formaldehyde.	
ONEIDA.																		
H. L. Garner	Rhineland	\$200 per year	No	5	Good	No	Yes	None		Diphtheria	Typhoid fever	Yes	5 per cent		No	Yes	Formaldehyde.	
M. Sullivan	Woodboro	None	No	1	Good	No	No	None		No change		Yes	90 per cent		No	Yes	Formaldehyde.	
F. H. McAnn	Town Pine Lake	None	No	3	Good	Yes	No	None		No change	Neuralgia	Yes	Very little		No	Yes	Formaldehyde.	
A. Sturdevant	Cassian	\$2 per day	Yes	6	Good	No	No	None		No change		Yes	50 per cent		Yes	Yes	Formaldehyde.	
A. Lindstrand	Town Sugar Camp	None	Yes	4	Good	No	No	None		No change		Yes	50 per cent		Yes	Yes	Formaldehyde.	
B. Johnston	Town Crescent	None	No	4	Good	No	Yes	None		No change		Yes	Nil		No	Yes	Formaldehyde.	
Larry Nolan	Town New Loll	None	Yes	4	Good	Yes	Yes	None		No change		Yes	Nil		Yes	Yes	Formaldehyde.	
OUTAGAMIE.																		
R. Gagnon	Town Liberty	\$2 per day	No	5	Good	Yes	No	None		No change		Yes	75 per cent		Yes	Yes	Formaldehyde.	
J. Spence	Town Maple Creek	None	No	3	Good	No	Yes	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
D. MacIntyre	Dale	None	Yes	8	Good	Yes	Yes	None		Decrease		Yes	90 per cent		Yes	Yes	Formaldehyde.	
W. E. Zilisch	Vil. Hortonville	\$10 per year	Yes	1	Good	No	No	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
S. Leith	Center	None	Yes	8	Good	No	Yes	None		No change		Yes	Nil		Yes	No	Formaldehyde.	
Wm. Miskunmon	Grand Clute	\$2 per year	No	7	Good	No	No	None		No change		Yes	General		Yes	Yes	Formaldehyde.	
F. C. Sauer	Town Freedom	Fees	No	7	Good	No	Yes	None		No change	Rheumatism	Yes	Nil		Partly	Partly	Formaldehyde.	
J. Quinlan	Town Buchanan	None	No	7	Good	No	Yes	None		Decrease		Partly	20 per cent		Partly	Yes	Sul. acid gas.	
L. A. Weaver	Welcome	Fees	Yes	1	Good	No	Yes	None		Decrease		Yes	50 per cent		Yes	Yes	Sulphur.	
A. Lochmidt	Town Greenville	\$75 per year	No	9	Good	No	Yes	None		Decrease		Yes	50 per cent		No	Partly	Sulphur.	
A. Bloomer	Town Osborn	None	No	2	Good	No	Yes	None		No change		Partly	Nil		Yes	Yes	Sulphur.	
OSHAUKEE.																		
W. M. F. Scott	Port Washington	\$100 per year	Yes	2	Good	Yes	Yes	For Typhoid Fever		Typhoid fever		Yes	30 per cent		Yes	Yes	Formaldehyde.	
W. A. Meilke	Town Fredonia	\$10 per year	No	4	Fair	No	No	None		No change		Yes	Very little		Yes	Yes	Formaldehyde.	
H. Kiersek	Town Grafton	None	No	2	Good	No	Yes	None		No change		Yes	Very little		Partly	Yes	Formalin.	
H. Kiersek	Vil. Grafton	None	No	4	Good	No	No	None		No change	Gastro enteritis	Yes	50 per cent		Partly	Yes	Formalin.	
H. M. Winkel	T. Port Washington	Fees	Yes	5	Good	Yes	Yes	None		Typhoid fever		Yes	Very little		Yes	Yes	Lime, carb. ac.	
PEPIN.																		
A. C. Huleat	Arkansaw	\$10 yearly	No	9	Good	Yes	Yes	None		No change		Yes	10 per cent		Yes	Partly	Partly	Sulphur.
L. W. Newman	Town Stockholm	None	No	2	Good	No	No	None		No change		Yes	Small per ct.		Partly	Partly	Formaldehyde.	
M. B. Axtell	Town Pepin	\$25 per year	No	6	Good	No	Yes	None		No change		Yes	10 per cent		Yes	Yes	Formalin.	
M. B. Axtell	Vil. Pepin	\$10 per year	Yes	2	Good	Yes	Yes	None		No change		Yes	Small per ct.		Yes	Yes	Formaldehyde.	
M. A. Shaw	Durand	\$80 per year	No	2	Good	No	Yes	None		No change		No	Small per ct.		Yes	Yes	Formaldehyde.	
E. Monnan	Town Albany	\$2 per day	Yes	5	Good	No	Yes	None		No change		Yes	Small per ct.		Yes	Yes	Formalin.	
W. F. Gearing	Vil. Stockholm	None	No	1	Good	No	Yes	None		No change	Diarrhoea	Yes	Small per ct.		Yes	Yes	Formalin.	
PERCE.																		
F. Cook	Prescott	\$10	Yes	1	Bad	No	Yes	None		No change	Very little	Yes	Small per ct.		Yes	Yes	Formaldehyde.	
T. H. Miller	Vil. Maiden Rock	None	No	1	Good	No	No	None		Scarlet fever	Pneumonia	No	General		No	Partly	Formaldehyde.	
C. A. Toby	River Falls	None	Yes	1	Good	Yes	Yes	None		Decrease		Yes	60 per cent		Yes	Yes	Formaldehyde.	
C. Place	Town Gilman	None	Yes	2	Good	Yes	Yes	None		No change		Yes	3 per cent		Partly	No	Formaldehyde.	
H. P. Conway	Spring Valley	\$100 per year	Yes	6	Good	Yes	No	Draining	\$200 00	Decrease	Whooping cough	Yes	3 per cent		Yes	Yes	Formaldehyde.	
G. M. Hope	Diamond Bluff	None	No	4	Fair	No	No	None		No change		Yes	Nil		No	No	Sulphur.	
G. M. Dill	Town Clifton	None	No	4	Good	No	No	None		No change		Yes	Small per ct.		Yes	Partly	Sulphur.	
G. M. Dill	Town Oak Grove	None	No	7	Good	No	No	None		No change		Yes	Small per ct.		No	No	Sulphur.	
C. Mickelson	Town Salem	\$5 per year	Yes	7	Good	No	Yes	None		Small pox		Yes	Small per ct.		Yes	Yes	Sulphur.	
H. A. Miles	Town Spring Lake	None	No	6	Good	No	No	None		No change		No	Small per ct.		No	Partly	Formaldehyde.	
J. Josephson	Esdales	Fees	No	7	Good	No	Yes	None		No change	Measles	Yes	10 per cent		Yes	No	Sulphur.	
A. N. Kerr	Town Martell	\$10 per year	No	7	Good	No	No	None		No change		Yes	Nil		Yes	No	Formaldehyde.	
O. P. Olson	Trenton	\$2 per day	No	4	Good	No	Yes	None		No change		Yes	General		Yes	No	Sulphur.	
H. W. Lane	Town Ellsworth	Fees	Yes	8	Good	No	Yes	None		No change		Yes	Small per ct.		Yes	No	Sulphur.	
H. W. Lane	Town Trimble	Fees	Yes	9	Good	No	Yes	None		No change		Yes	Small per ct.		Yes	No	Sulphur.	
L. H. Place	Town El Paso	\$2 per day	Yes	8	Good	No	No	None		No change		Yes	Small per ct.		No	Yes	Formaldehyde.	
POLK.																		
N. Peterson	Lincoln	\$2 per day	No	6	Good	No	Yes	None		Decrease		Yes	Nil		Yes	Yes	Formaldehyde.	
G. C. Fest	Town Sterling	\$2 per day	No	6	Good	No	Yes	None		No change		Yes	Nil		Yes	Partly	Sulphur.	
S. C. Benjamin	Osceola	\$15 per year	Yes	1	Good	Yes	Yes	None		Decrease		Yes	General		Yes	Yes	Formaldehyde.	
I																		

TABLE 31—SHOWING TABULATED SUMMARY OF THE REPORT OF LOCAL HEALTH OFFICERS FOR THE YEAR ENDING SEPTEMBER 30, 1904, CLASSIFIED ALPHABETICALLY BY COUNTIES—Continued.

Name of health officer.	County, city, village and town.	Salary of health officer of health commission.	Are the proceedings of meetings recorded?	Number of public schools.	Sanitary conditions.	Are the schools disinfected.	Is health officer empowered to act for the board in cases of emergency?	What special sanitary work has been done?	Estimated cost of work.	Has there been an increase in decrease of contagion?	Diseases most prevalent.	Are reports made of contagious diseases?	Percentage of people who have been vaccinated.	Are reports of contagious diseases made to the state board of health?	Are births and deaths reported?	Are burial permits required?	What disinfectant is commonly used?
PRICE.																	
J. M. Hicks	Prentice	\$20 yearly	Yes	2	Good	No	No	None		No change	Rheumatism	Partly	Small per ct.	Yes	Partly	Yes	
Dr. P. M. Sinz	Vil. Kennan	\$10 per year	Yes	5	Good	Yes	No	None		No change		Yes	General	Yes	Yes	Yes	Sulphur.
T. B. Larson	Town Braunton	\$2 per day	Yes	4	Good	Yes	Yes	None		No change		Yes	General	Yes	Yes	Yes	
L. McComber	Catawaba	None	No	2	Good	No	Yes	None		No change		Yes	75 per cent.	Yes	No	Yes	Formaldehyde.
I. R. Birkeland	Phillips	\$30 per year	Yes	3	Poor	Yes	Yes	None		No change		Partly	Nil	Yes	Partly	Yes	Formaldehyde.
F. F. Taggart	Town Georgetown	None	No	7	Good	No	No	None		No change		Yes	Nil	Yes	Yes	Yes	
F. O. Johnson	Vinax	\$5 per year	No	5	Good	No	No	None		No change	Croup	No	Nil	No	Yes	No	Nothing.
V. Hilgart	Eisenstien	None	Yes	7	Good	No	No	None		No change		Yes	Nil	No	No	No	
C. Anderson	Hackett	None	No	2	Good	No	No	None		No change		Yes	Nil	Yes	Yes	Yes	
RACINE.																	
F. Pfister	Racine	\$100 per year	No	10	Good	No	Yes	None		Typhoid fever		Yes	General	Yes	Yes	Yes	Formaldehyde.
J. P. McMahon	Town Dover	None	No	7	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
J. J. Zaum	Town Raymond	\$10 per year	No	10	Good	No	No	None		No change		Yes	General	Yes	Partly	Partly	Formalin.
A. Anderson	Norway	\$2 per day	Yes	5	Good	Yes	Yes	None		Decrease		Yes	75 per cent.	Yes	Yes	Yes	Formalin.
F. Piehn	Town Mt. Pleasant	Fees	Yes	14	Good	Yes	Yes	None		No change		Yes	90 per cent.	Yes	No	Yes	Formalin.
W. M. Ela	Rochester	None	Yes	4	Good	Yes	Yes	None		No change		Yes	General	Yes	No	Yes	Formalin.
J. T. Carr	Town Caledonia	Fees	Yes	4	Good	No	Yes	None		No change		Yes	General	Yes	Partly	Yes	Formaldehyde.
H. B. Newell	Waterford	None	Yes	7	Good	No	No	None		Decrease	La Grippe	Yes	10 per cent.	Yes	Yes	Yes	Sulphur.
R. W. McCracken	Vil. Union Grove	\$10 per year	No	1	Fair	Yes	Yes	None		Scarlet fever		Yes	5 per cent.	Yes	Yes	Yes	Sulphur.
E. W. McCracken	Town Yorkville	None	No	2	Fair	No	No	None		No change		Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
RICHLAND.																	
G. R. Mitchell	Richland Center	\$50 yearly	Yes	3	Good	No	Yes	None		No change		Yes	75 per cent.	Yes	Yes	Yes	Formaldehyde.
G. R. Mitchell	Town Richmond	Fees	Yes	7	Good	No	Yes	None		No change		Yes	75 per cent.	Yes	Yes	Yes	Formaldehyde.
Jas. Bachtenkircher	Town Akan	None	Yes	7	Good	No	Yes	None		No change		No	Small per ct.	Yes	Partly	Partly	Sulphur.
P. G. Lasche	Bloom City	None	Yes	8	Good	No	Yes	None		No change		Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
F. F. Edicott	Eagle	None	Yes	7	Good	No	Yes	None		No change		Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
B. B. Dye	Vil. Gotham	\$2 per day	Yes	7	Good	No	Yes	None		No change	Tonsillitis	No	75 per cent.	Yes	Yes	Yes	Formaldehyde.
B. Beagles	Town Ithaca	Fees	Yes	7	Fair	No	No	None		No change		Yes	Small per ct.	No	Yes	Yes	Formaldehyde.
J. Kadlic	Cazenovia	Fees	Yes	2	Good	Yes	Yes	None		No change	La Grippe	Yes	Nil	Yes	Yes	Yes	Carbolic acid.
B. Adelman	Town Westford	Fees	Yes	5	Good	Yes	Yes	None		No change	La Grippe	Yes	Nil	Yes	Yes	Yes	Sulphur.
J. Kuykendall	Town Oran	Fees	No	5	Good	Yes	No	None		No change	Tonsillitis	Partly	Nil	Yes	Yes	Yes	Sulphur.
W. J. Anderson	Willow	\$2 per day	Yes	8	Good	Yes	No	None		No change		Yes	Small per ct.	Yes	Partly	Yes	Sulphur.
ROCK.																	
B. L. Cleary	Edgerton	None	Yes	1	Good	No	Yes	None		No change		Yes	General	Yes	No	Yes	Formaldehyde.
E. A. Loomis	Emerald Grove	\$2 per day	No	9	Good	No	No	None		No change		Yes	10 per cent.	Yes	No	No	Formaldehyde.
R. H. Sleton	Lima	None	No	16	Fair	No	No	None		Diphtheria	La Grippe	Yes	10 per cent.	No	No	Yes	Formaldehyde.
S. W. Lacey	Town Plymouth	None	Yes	5	Good	Yes	Yes	None		Decrease		Yes	50 per cent.	Generally	Yes	Yes	Formaldehyde.
W. D. Merritt	Janesville	\$50 per year	Yes	9	Good	No	Yes	Garbage system		Decrease		Yes	General	Yes	No	No	Formalin.
F. C. Binnewies	Town Milton	Fees	Yes	7	Good	No	Yes	None		Decrease	Whooping cough.	Yes	80 per cent.	Yes	Yes	Yes	Formaldehyde.
W. H. Payno	Beloit	\$300 per year	No	6	Fair	No	Yes	Garbage & sewer extension.		No change		Yes	General	Yes	Yes	Partly	Formaldehyde.
A. E. Wilcox	Town Harmony	\$2.00 per day	No	10	Good	Yes	Yes	None		No change		Yes	80 per cent.	Yes	Yes	Yes	Formalin.
D. Archson	Magnolia	None	Yes	8	Good	Yes	Yes	None		No change		Partly	Nil	Yes	Partly	Partly	Sulphur.
C. M. Smith	Evansville	\$35 yearly	Yes	2	Good	Yes	Yes	None		Decrease	Rheumatism	Yes	75 per cent.	Yes	Yes	Partly	Formaldehyde.
P. F. MacGee	Town Janesville	Fees	Yes	8	Good	Yes	Yes	None		No change		Yes	Nil	Yes	Partly	Yes	Formalin.
ST. CROIX.																	
N. Amquest	Star Prairie	None	Yes	6	Good	No	Yes	None		No change		Yes	Small per ct.	Yes	Yes	Yes	Formaldehyde.
H. L. Kurasch	Town Hudson	None	Yes	6	Good	Yes	Yes	None		No change		Yes	10 per cent.	Yes	Yes	Yes	Formaldehyde.
J. N. Mehleis	Town Glenwood	\$2 per day	No	6	Good	No	Yes	None		No change		Yes	60 per cent.	Yes	Yes	Yes	Formaldehyde.
J. T. Elliott	Cylon	Fees	Yes	1	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.
M. F. Barry	Hammond	3 cents per hour	Yes	1	Good	Yes	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.
A. S. Wade	Town Richmond	Fees	No	6	Fair	No	Yes	None		No change		Yes	General	Yes	Yes	Partly	Formaldehyde.
M. J. Stephens	Erin Prairie	Fees	Yes	6	Good	Yes	Yes	None		Decrease		Yes	General	Yes	No	Yes	Formaldehyde.
SAUK.																	
C. L. Carpenter	Town Franklin	\$2 per day	Yes	6	Good	No	No	None		Scarlet fever.		Yes	Small per ct.	Yes	Partly	Yes	Sulphur.
W. S. Pierce	Troy	\$2 per day	Yes	10	Good	No	No	None		No change		Yes	Nil	Yes	Partly	Yes	Lime.
E. G. Cristman	Vil. Spring Green	\$25 per year	Yes	2	Good	No	Yes	None		Decrease	Heart disease	Yes	General	Yes	Yes	Yes	Sulphur.
F. J. Jones	North Freedom	None	No	1	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.
F. C. Cristman	Town Spring Green	Fees	Yes	5	Good	No	No	None		Decrease	La Grippe	Yes	General	Yes	Yes	Yes	Sulphur.
N. J. Hummel	Ableman	None	Yes	1	Good	No	Yes	None		No change		Yes	Nil	Yes	Yes	Yes	Formaldehyde.
H. P. Person	Readsburg	\$25 per year	No	3	Good	No	No	None		No change	La Grippe	Yes	Nil	Yes	Yes	Yes	Formaldehyde.
M. O. Keefe	Merrimac	None	Yes	2	Fair	No	No	None		Decrease		Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
M. J. Miller	Vil. La Valle	None	Yes	5	Poor	No	No	None		No change	Measles	Yes	General	Yes	Yes	Yes	Sulphur.
O. Lippert	Town Baraboo	Fees	Yes	8	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Sulphur.
T. V. Oosh	Baraboo	\$150 yearly	Yes	4	Good	Yes	No	None		Decrease		Yes	Nil	Yes	Yes	Yes	Formaldehyde.
L. M. Kelly	Winfield	None	No	6	Good	No	Yes	None		No change		Yes	10 per cent.	No	No	Yes	Formaldehyde.
J. W. Buehler	Honey Creek	None	No	9	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Sulphur.
J. W. Buehler	Prairie du Sac	None	Yes	2	Good	Yes	Yes	None		Scarlet fever.	Diphtheria	Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
J. W. Buehler	Town Sumpter	None	No	5	Good	No	Yes	None		Diphtheria.	Colds.	Yes	Small per ct.	Yes	Yes	Yes	Formaldehyde.
J. W. Buehler	Town Prairie du Sac	None	Yes	3	Good	No	Yes	None		Diphtheria.		Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
L. Premo	Merrimac	None	No	1	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Sulphur.
J. Prouty	Town Bear Creek	\$5 and fees	Yes	9	Good	No	No	None		No change		Yes	Nil	Yes	No	No	Sulphur.
Wm. Montgomery	Town Greenfield	None	Yes	6	Good	No	No	None		Decrease	La Grippe	Yes	General	Yes	No	Yes	Sulphur.
SAWYER.																	
J. B. Trohbridge	Hayward	Fees	Yes	2	Good	Yes	No	None		Decrease		Yes	General	Yes	Partly	Yes	Formaldehyde.
SHAWANO.																	
M. B. Eicker	Town Hartland	Fees	No	5	Good	No	Yes	None		Decrease		Yes	2 per cent.	No	Yes	Yes	Formaldehyde.
Carl Beilke	Town Almon	\$2 per day	Yes	5	Good	No	Yes	None		No change		Yes	Nil	No	Yes	No	Formaldehyde.
R. H. Sweetman	Vil. Birmanwood	Fees	Yes	1	Good	Yes	No	None		Scarlet fever		Yes	General	Yes	Partly	Partly	Formaldehyde.
O. A. Rismun	Green Valley	\$3 per day	Yes	5	Good	No	Yes	None		No change		Partly	General	Yes	Yes	Yes	Formaldehyde.
Wm. Rosnow	Town Lessor	None	Yes	3	Good	No	No	None		No change		Yes	General	Yes	Yes	Yes	Formaldehyde.
J. Netzel	Pella	\$5 per year	No	4	Good	No	No	None		No change		Yes	Small per ct.	Yes	Yes	Yes	Formalin.
L. Rottman	Town Grant	\$2 per day	No	4	Good	No	No	None		No change		Yes	Small per ct.	No	Yes	Yes	Formalin.
J. Krull	Vil. Wittenburg	\$5 per year	Yes	3	Good	No	Yes	None		No change		Yes	50 per cent.	Yes	Yes	Yes	Formalin.
A. Beversdorf	Town Aniwa	Fees	Yes	1	Good	No	Yes	None		No change		Yes	General	Yes	Yes	Yes	Formalin.
W. S. Sexton	Town Bella Plaine	\$2 per day	Yes	7	Good	No	Yes	None		No change		Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
C. Speth	Town Waukechon	None	No	5	Good	Yes	Yes	None		Decrease	Small pox	Yes	Small per ct.	Yes	Yes	Yes	Formaldehyde.
C. F. Stabenwall	Town Germania	\$5 per year	Yes	1	Fair	No	Yes	None		No change		Yes	Nil	Yes	Partly	Yes	Sulphur.
O. Tarkison	Tigeron	\$10 per year	Yes	5	Fair	No	Yes	None		No change		Yes	Nil	Yes	Yes	Yes	Formaldehyde.
N. C. Hanson	Town Monie	\$2 per day	Yes	1	Good	No	Yes	None		No change		Partly	Fair per cent.	No	Yes	Yes	Sulphur.
W. E. Pemberton	Vil. Aniwa	None	No	1	Good	Yes	No	None		Diphtheria		Yes	General	No	Yes	Yes	Formalin.
C. J. Larson	Wittenburg	\$5 per year	No	1	Fair	No	No	None		Scarlet fever		Yes	General	No	Yes	Yes	Formaldehyde.
W. F. Dumbke	Navarino	\$5 per year	Yes	4	Good	No	No	None		Decrease		Yes	General	Yes	Yes	Yes	Formaldehyde.
	Seneca	\$4 yearly	Yes	5	Good	No	No	None									

TABLE 31—SHOWING TABULATED SUMMARY OF THE REPORT OF LOCAL HEALTH OFFICERS FOR THE YEAR END NG SEPTEMBER 30, 1904, CLASSIFIED ALPHABETICALLY BY COUNTIES—Continued.

Name of health officer.	County, city, village and town.	Salary of health officer of health commission.	Are the proceedings of meetings recorded?	Number of public schools.	Sanitary conditions.	Are the schools disinfected?	Is health officer empowered to act for the board in case of emergency?	What special sanitary work has been done?	Estimated cost of work.	Has there been an increase or decrease in contagion?	Diseases most prevalent.	Are reports made of contagious diseases?	Percentage of people who have been vaccinated.	Are reports of contagions made to the state board of health?	Are births and deaths reported?	Are burial permits required?	What disinfectant is commonly used?
TREMPEALEAU.																	
J. N. Dimeter	Town Burnsides	None	Yes	4	Good	Yes	Yes	None		No change	Pneumonia	No	Small per ct	No	Partly	Partly	Formaldehyde.
T. H. Lawrence	Galesville	\$25 and fees	Yes	1	Good	Yes	Yes	None		No change	Pneumonia	Yes	General	Yes	Partly	Yes	Formaldehyde.
H. A. Jogi	Town Gale	None	No	19	Good	Yes	Yes	None		Decrease	Pneumonia	Yes	20 per cent	Yes	Yes	Yes	Formaldehyde
H. J. Olson	Town Arcadia	None	No	7	Good	No	Yes	None		No change	Pneumonia	Yes	General	Yes	Yes	Yes	Formaldehyde
J. W. Radomski	Dodge	None	No	2	Fair	No	No	None		No change	Pneumonia	Yes	Nil	No	No	No	Formaldehyde
R. Warner	Town Hale	\$5 per year	Yes	12	Good	No	Yes	None		No change	Pneumonia	Yes	Nil	Yes	Partly	Partly	Sulphur.
W. E. McFarland	Trempealeau	\$5 per year	No	1	Good	Yes	Yes	None		Decrease	Pneumonia	Yes	Small per ct	Yes	Yes	Yes	Sulphur.
T. Bodom	Vil. Fair	\$10 per year	No	9	Good	No	Yes	None		Decrease	Pneumonia	Yes	Small per ct	Yes	Yes	Yes	Sulphur.
J. Curtis	Town Trempealeau	\$2 per day	Yes	7	Good	No	No	None		No change	Pneumonia	Yes	50 per cent.	Yes	Yes	Yes	Formaldehyde.
A. Hannam	Town Caledonia	\$2 per day	Yes	5	Good	No	Yes	None		No change	Pneumonia	Yes	50 per cent.	Yes	Yes	Yes	Formaldehyde.
O. H. Paulsrud	Town Pigeon	\$2 per day	Yes	7	Good	No	Yes	None		No change	Pneumonia	Yes	Nil	Yes	Yes	Yes	Formaldehyde.
W. E. Parker	Vil. White Hall	\$10 per year	Yes	2	Good	Yes	Yes	Sewer System	\$400	Decrease	Pneumonia	Yes	75 per cent.	Yes	Yes	Yes	Formaldehyde.
W. E. Parker	Town Lincoln	\$10 per year	Yes	4	Good	No	Yes	None		Decrease	Pneumonia	Yes	25 per cent.	Yes	Yes	Yes	Formaldehyde.
G. F. Stock	Independence	None	Yes	2	Good	No	No	None		Decrease	Pneumonia	Partly	50 per cent.	Yes	Partly	Partly	Formaldehyde.
VERNON.																	
D. F. Allen	Harmony	None	No	8	Good	No	No	None		Decrease	Typhoid fever.	Partly	General	Yes	Yes	Yes	Formaldehyde.
F. P. Johnson	Vil. Ontario	None	Yes	1	Good	Yes	Yes	None		Decrease	Typhoid fever.	Yes	General	Yes	Partly	Yes	Sulphur.
E. A. Gaines	La Farge	Fees	Yes	1	Good	Yes	Yes	None		No change	Skin disease	Partly	80 per cent.	Yes	Yes	Yes	Sulphur.
N. S. Ewers	Kickapoo	None	Yes	6	Good	No	Yes	None		No change	Skin disease	Yes	General	Yes	Yes	Yes	Sulphur.
S. W. Tiltman	Town Bergen	None	No	6	Good	No	Yes	None		No change	Skin disease	Yes	General	Yes	Yes	Yes	Sulphur.
J. E. Shreve	Town Greenwood	None	No	7	Good	No	Yes	None		No change	Skin disease	Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
G. W. Hanika	Readstown	None	Yes	1	Good	No	No	None		Decrease	Skin disease	Yes	Nil	Yes	Yes	Partly	Formaldehyde.
F. E. Morley	Viroqua	\$50	Yes	3	Good	No	Yes	None		Decrease	Skin disease	Yes	General	Yes	Partly	Yes	Formaldehyde.
F. V. Evert	Town Sterling	Fees	Yes	9	Good	No	Yes	None		No change	Skin disease	Yes	General	Yes	Partly	Yes	Formaldehyde.
A. T. Hubbard	Forest	\$2 per day	Yes	9	Good	No	Yes	None		Decrease	Skin disease	Yes	Nil	No	Yes	Yes	Formaldehyde.
G. Bakkin	Town Jefferson	Fees	Yes	10	Good	No	Yes	None		Decrease	Scarlet fever	Partly	Small per ct.	No	Partly	Partly	Wood alcohol.
J. K. Wells	Town Hamburg	None	No	6	Fair	No	Yes	None		Decrease	Scarlet fever	No	Small per ct.	Yes	No	No	Formalin.
G. W. Sheldon	Town Hillsboro	15 cents a mile.	No	4	Fair	No	Yes	None		No change	Scarlet fever	No	Small per ct.	Yes	No	Partly	Formalin.
K. C. Storie	Coon Valley	\$5 per year	No	7	Good	No	No	None		Decrease	Scarlet fever	Yes	50 per cent.	Yes	Yes	Yes	Formaldehyde.
E. Von Gundlach	Town Wheatland	None	Yes	5	Good	No	Yes	None		No change	Scarlet fever	Yes	75 per cent.	Yes	No	No	Formaldehyde.
E. Von Gundlach	Vil. De Sota	None	Yes	1	Good	No	Yes	None		No change	Cholera infantum	Yes	General	Yes	No	No	Formaldehyde.
W. B. Lewis	Union	None	No	7	Good	No	No	None		No change	La Grippe	Yes	50 per cent.	Yes	Yes	Yes	Formaldehyde.
A. J. Dakems	Vista	Fees	No	1	Good	No	No	None		No change	La Grippe	Yes	10 per cent.	Yes	Yes	Yes	Formaldehyde.
P. H. Hansberry	Hillsboro	\$10 per year	No	1	Good	No	Yes	None		Smallpox	La Grippe	Yes	4 per cent.	Yes	Yes	Yes	Formalin.
VILAS.																	
W. J. Pinkerton	Town Eagle	\$3 per day	Yes	6	Good	No	No	None		No change	La Grippe	Yes	75 per cent.	Yes	Partly	Partly	Formaldehyde.
J. W. Pinch	Lac du Flambeau	Fees	No	3	Good	No	Yes	None		No change	La Grippe	Yes	10 per cent.	No	No	No	Sulphur.
WALWORTH.																	
E. E. Campbell	Vil. Walworth	Fees	Yes	1	Good	Yes	Yes	None		Decrease	La Grippe	Partly	General	Yes	Partly	Yes	Formaldehyde.
W. B. Ellis	Sugar Creek	\$2 per day	Yes	5	Good	Yes	No	None		Scarlet fever	La Grippe	Yes	General	Yes	Yes	Yes	Formaldehyde.
C. E. Dike	Richmond	Fees	Yes	8	Fair	No	Yes	None		No change	La Grippe	Yes	General	Yes	Yes	Yes	Formaldehyde.
R. Kimball	Linn	Fees	Yes	7	Good	No	Yes	None		No change	La Grippe	Yes	Nil	Yes	Yes	Yes	Formaldehyde.
E. J. Fuick	Town Walworth	None	Yes	3	Good	Yes	Yes	None		No change	Tuberculosis	Yes	50 per cent.	Yes	Yes	Yes	Formalin.
W. E. White	Town Lyons	None	Yes	9	Good	Yes	Yes	None		No change	Tuberculosis	Yes	2 per cent.	Yes	Yes	Yes	Formaldehyde.
G. H. Young	Elkhorn	\$25 per year	No	2	Good	Yes	No	None		Scarlet fever	Tuberculosis	Yes	General	Yes	Yes	Yes	Formaldehyde.
S. S. Craig	Town East Troy	None	Yes	6	Good	No	No	None		No change	Tuberculosis	Yes	5 per cent.	Yes	Yes	Yes	Sulphur.
S. S. Craig	Vil. East Troy	None	Yes	1	Good	No	No	None		Typhoid fever	Whooping cough	Yes	50 per cent.	Yes	Yes	Yes	Sulphur.
F. Dalrymple	Town Geneva	\$2 per day	Yes	8	Good	No	No	None		Scarlet fever	Whooping cough	Yes	66 per cent.	Yes	Partly	Yes	Formaldehyde.
C. C. Blanchard	Delavan	\$50 per year	Yes	4	Fair	Yes	No	None		Scarlet fever	Whooping cough	Yes	66 per cent.	Yes	Partly	Yes	Formaldehyde.
J. C. Reynolds	Lake Geneva	None	Yes	3	Good	Yes	Yes	None		No change	Whooping cough	Yes	Small per ct.	Yes	Yes	Yes	Formaldehyde.
A. M. Leland	Whitewater	\$25 per year	Yes	4	Fair	No	Yes	None		No change	Whooping cough	Yes	General	Yes	Yes	Yes	Formalin.
F. L. Andrus	Town Troy	Fees	Yes	7	Fair	No	No	None		No change	Whooping cough	Yes	Small per ct.	Yes	Partly	Yes	Sulphur.
E. McDougall	La Grange	None	Yes	8	Good	No	No	None		Scarlet fever	Whooping cough	Yes	General	Yes	Partly	Yes	Sulphur.
WASHBURN.																	
J. P. Cox	Town Spooner	\$100 per year	Yes	6	Good	Yes	Yes	None		Typhoid fever	La Grippe	Yes	General	Yes	Yes	Yes	Formaldehyde.
J. P. Cox	Vil. Spooner	\$200 per year	Yes	1	Good	Yes	Yes	None		Typhoid fever	La Grippe	Yes	General	Yes	Yes	Yes	Formaldehyde.
A. Trepania	Veazie	None	No	2	Good	No	Yes	None		No change	Typhoid	Yes	General	Yes	Yes	Yes	Formaldehyde.
Floyd Jay	Bashaw	None	No	9	Good	Yes	No	None		No change	Typhoid	Yes	General	Yes	No	Partly	Carbolic acid.
H. B. Madge	Miung	\$20 per year	No	7	Good	Yes	No	None		No change	Typhoid	Yes	General	Yes	Yes	Yes	Carbolic acid.
F. B. Patterson	Long Lake	None	No	3	Fair	Yes	Yes	None		Decrease	Typhoid	Yes	General	Yes	Yes	Yes	Carbolic acid.
F. B. Patterson	Chicog	None	No	3	Fair	No	No	None		Decrease	Typhoid	Yes	Nil	Yes	Partly	Partly	Carbolic acid.
WASHINGTON.																	
J. P. Whelan	Town Erin	None	No	6	Good	No	No	None		Scarlet fever	La Grippe	Yes	50 per cent.	Yes	Yes	Yes	Sulphur.
H. H. Albers	Addison	None	No	10	Good	No	Yes	None		Scarlet fever	La Grippe	Yes	50 per cent.	No	Yes	Yes	Formaldehyde.
T. I. Lambeck	Vil. Kewaskum	\$15 a year	Yes	1	Fair	No	No	None		Scarlet fever	La Grippe	No	40 per cent.	Yes	Yes	Yes	Formaldehyde.
G. Rheingans	Town Germantown	Fees	Yes	10	Good	No	No	None		Scarlet fever	Diarrhoea	No	Small per ct.	Yes	Partly	Yes	Sulphur.
H. Blank	Vil. Jackson	\$20 per year	Yes	9	Good	No	Yes	None		Decrease	Diarrhoea	Yes	Small per ct.	Yes	Partly	Partly	Sulphur.
G. Heidner	Town West Bend	Fees	Yes	5	Fair	No	Yes	None		Decrease	Diarrhoea	Yes	20 per cent.	Yes	Yes	Yes	Formaldehyde.
G. A. Heidner	Barton	Fees	Yes	3	Good	No	Yes	None		Decrease	Diarrhoea	Yes	20 per cent.	Yes	Yes	Yes	Formaldehyde.
E. H. Ehlert	Hartford	Fees	Yes	3	Good	No	No	None		Scarlet fever	Diarrhoea	No	General	Yes	Yes	Yes	Formaldehyde.
S. B. Mertzig	Town Farmington	50 cents per mile.	Yes	8	Good	No	Yes	None		Decrease	Diarrhoea	Yes	50 per cent.	Yes	Partly	Yes	Sulphur.
H. H. Zaum	Town Richfield	Fees	Yes	7	Fair	No	Yes	None		Decrease	Diarrhoea	Partly	General	Yes	Yes	Yes	Formalin.
W. J. Wehle	West Bend	\$100 per year	Yes	2	Good	No	No	None		Decrease	Diarrhoea	Yes	50 per cent.	Yes	Yes	Yes	Formaldehyde
WAUKESHA.																	
J. H. Alexander	Mukwanago	Fees	Yes	6	Good	Part	No	None		No change	La Grippe	Yes	General	Yes	Yes	Yes	Sulphur.
Wm. Bailey	Summit	None	Yes	6	Good	None	No	None		No change	La Grippe	Yes	General	Yes	Partly	Yes	Formaldehyde
J. M. Jones	Town Genesee	\$10 per year	Yes	7	Good	No	No	None		No change	La Grippe	Yes	General	Yes	No	Yes	Formaldehyde
H. G. W. Winton	Vil. Hartland	\$10 per year	Yes	1	Good	Yes	Yes	None		No change	La Grippe	Yes	General	Yes	No	Yes	Formaldehyde
W. R. Notbohn	Town Ottawa	None	Yes	4	Good	Yes	No	None		No change	La Grippe	Yes	Small per ct.	Yes	Yes	Yes	Sulphur.
H. A. Morset	Town Brookfield	None	Yes	4	Good	No	No	None		Decrease	La Grippe	Yes	20 per ct.	Yes	Partly	Yes	Sulphur.
R. S. Connell	Town Waukesha	\$10 per year	Yes	9	Good	Yes	Yes	None		No change	La Grippe	Yes	General	Yes	No	Yes	Sulphur.
U. J. Tibbets	Town New Berlin	\$10 per year	Yes	8	Good	No	Yes	None		No change	La Grippe	Yes	Small per ct.	Yes	Partly	Partly	Formalin.
B. L. Stinson	Town Muskego	None	Yes	8	Good	No	Yes	None		No change	La Grippe	Yes	Small per ct.	Yes	Partly	Partly	Formalin.
O. F. Partridge	Pewaukee	None	Yes	1	Good	Yes	Yes	None		No change	La Grippe	Yes	General	Yes	Yes	Yes	Formaldehyde.
H. Clillar	Waukesha	\$200 per year	Yes	6	Good	Yes	Yes	Sceptic Tank	\$10.00	No change	Consumption	Yes	Small per ct.	Yes	Partly	Yes	Formaldehyde.
T. Tomely	Town Vernon	None	Yes	7	Good	Yes	No	None		No change	Measles	Yes	General	Yes	Yes	Yes	Formaldehyde.
WAUPACA.																	
J. F. Corbett	Town Flinn	None	No	10	Good	No	No	None		No change	La Grippe	Yes	25 per ct.	Yes	Partly	Yes	Sulphur.
W. F. Brownell	New London	\$100 per year	No	2	Good	Yes	No	None		Decrease	La Grippe	Partly	75 per ct.	Yes	Yes	Yes	Formaldehyde.
M. A. Monhouse	Town St. Lawrence	None	No	6	Good	No	No	None		Decrease	La Grippe	Yes	20 per ct.	Yes	Partly	Partly	Sulphur.

TABLE 31—SHOWING TABULATED SUMMARY OF THE REPORT OF LOCAL HEALTH OFFICERS FOR THE YEAR ENDING SEPTEMBER 30, 1906. CLASSIFIED ALPHABETICALLY BY COUNTIES—Continued.

Name of health officer.	County, city, village and town.	Salary of health officer of health commission.	Are the proceedings of meetings recorded?	Number of public schools.	Sanitary conditions.	Are the schools disinfected?	Is health officers empowered to act for the board in cases of emergency?	What special sanitary work has been done?	Estimated cost of works.	Has there been an increase or decrease in contagion?	Diseases most prevalent.	Are reports made of contagious diseases?	Percentage of people who have been vaccinated.	Are reports of contagions made to the state board of health?	Are births and deaths reported?	Are burial permits required?	What disinfectant is commonly used?
WINNEBAGO.																	
J. C. Petty	Omro	Fees		7	Good	No	No	None		No change		Yes					
O. P. Iteim	Town Nepeuskun	\$2 per day	No	6	Good	No	No	None		No change		Yes	Fair per ct.	Yes	Yes	Yes	Formaldehyde.
J. M. Conley	Oshkosh	\$100 per year		10	Good	Yes	No	None		No change		Yes		Yes	Yes	Yes	Carbolic Acid.
A. Hart	Town Clayton	\$2 per day	Yes	10	Good		Yes	None		Diphtheria		Yes	60 per ct.	No	No	Partly	Formaldehyde
J. R. Barnett	Neenah	\$200 per year	Yes	4	Good	No	Yes	None		No change		Yes		Partly	Partly	Partly	
Wm. Grimes	Town Menasha	\$2 per day	Yes	5	Good	No	No	None		Scarlet fever		Yes	General	Yes	Partly	Partly	Formaldehyde
WOOD.																	
G. A. Ott	Town Seneca	\$1.50 per day		3	Good	No	No	None				Yes					
H. L. Watrous	Lindsay	Fees		5	Good	Yes	Yes	None		Decrease		Yes	Nil	Yes	Yes	Yes	Sulphur.
Hugh Jones	Town Sherry	Fees	Yes	4	Good	No	No	None		Decrease		Yes	Small per ct.	No	Yes	Partly	Formalin.
B. L. Tupper	Marshfield	Contract	Yes	4	Good	No	No	None		Decrease	Measles	Yes	General	Yes	No	Yes	
E. Eichstadt	Vil. Port Edwards	None		4	Good	No	No	None		Decrease		Yes	General	No	Partly	No	Formaldehyde.
Jacob Lusk	Vil. Auburndale	\$10 per year	No	1	Good	No	No	None		Decrease		Yes	33 per ct.	Yes	Yes	Yes	Carbolic Acid.
C. Fredrickson	Arpin	Fees		1	Good	Yes	Yes	None		No change		Yes		Yes	Yes	No	
F. Schultz	Town Auburndale	\$10 per year		5	Good	No	No	None				Yes	Nil	Yes	Yes	Yes	Formaldehyde.
E. H. Sartell	Town Milladore	\$10 per year	No	5	Good	No	Yes	None		No change		Yes	Nil	Yes	Yes	No	Formaldehyde.
F. A. Godecke	Town Manson	Fees	Yes	5	Good	No	Yes	Ditching		Decrease		Yes	10 per ct.	Yes	Yes	Yes	Formaldehyde.
T. C. Clark	Town Hiles	None		3	Good	Yes	No	None		No change		Yes	Fair per ct.	Generally	Partly	Yes	Platts Chloride
					Good	No	Yes	None		No change		Yes		Yes	Yes	Yes	Sul. Formald.

**EXAMINATION OF WATER SUPPLIES AND
SEWERAGE DISPOSAL SYSTEMS 1904.**

EXAMINATION OF WATER SUPPLIES AND SEWERAGE DISPOSAL SYSTEMS 1904,

Perhaps the most difficult problem that local boards of health and sanitarians have to solve at the present time is the question of pure water supply and proper sewerage disposal systems for our cities and villages.

The problem is made still more difficult of solution from the fact that there must be diversity in the systems adopted to secure the best results at a minimum cost. This is for the reason that many elements such as the size of the town and the principal occupations of the people have very important bearings on the proposed water supply or sewerage system. Again the density of the sewerage is materially changed by the amount of water supply and the price at which it is furnished to the residents, which requires changes in the methods of disposal. Inland towns so located that they cannot discharge their sewerage into a nearby water way are rapidly increasing in both numbers and size. It is, therefore, very necessary to purify the sewerage before its final disposal else a nuisance will soon be created. On the other hand, any sewerage disposal system that discharges the crude sewerage into a body of water from which the water supply of the city is taken is open to criticism.

The use of "septic" tanks and filtration systems for purifying the sewage has advanced far beyond the experimental stages and the results achieved are extremely important to cities and villages where the question of adequate sewerage disposal has not yet been solved.

From the scientific reports of work done in this connection it appears that the filtration system of disposing of sewage is best adapted to the needs of the smaller cities and villages when water-ways cannot or should not be used for that purpose.

Interest in public hygiene is manifested not only in the in-

creased activity of local health officers but also in an earnest desire on the part of all the people for a pure public water supply and safe methods of sewage disposal.

This report is based on returns received from eighty-six different cities in answer to the following questions.

1. Name of City
2. Name of County
3. Estimated population of city
4. Have you a system of water supply? If from wells, number of wells and depth. If from river, give origin and mouth of river. If from lake, give size, depth and water supply. If from springs the distance transported.
5. Have you a sewerage system? Does it empty into a river, lake or have you a disposal plant?
6. Are cess pools allowed?
7. What per cent of the families have them?
8. What per cent of the houses in your city are on the system of water supply and connected with the sewerage system?
9. When was the system of water supply established?
10. Have there been any changes in the water supply since its adoption?
11. What changes in the disposal system have been made, if any, since its adoption?
12. How many cases of the following diseases have you had in your city during the past two years,—Diphtheria Typhoid F. Scarlet F. Malaria
13. Have you had any regular prescribed system of milk inspection?
14. Has the death rate from diarrheal diseases been unusually high?
15. Have you any system of meat inspection?
16. Are the alleys and gutters systematically cleaned by authority of the city?
17. Is debris deposited in the streets?
18. What action is taken in regard to stagnant pools, etc?
19. What is the death rate annually for the past two years per thousand in population or fraction thereof.
- Name of official reporting.
- Post Office

Augusta, Eau Claire County, Dr. H. F. Prill, Health Officer.

Water supply from two wells twenty feet deep. No sewerage system. 65% of the houses are connected with the water supply system. Streets and alleys are well cleaned. Debris is not allowed on the streets. Cess-pools are allowed. Stagnant pools are drained if possible. No system of milk or meat inspection. Death rate from diarrheal diseases is low. Cases of Diphtheria, none; Typhoid Fever, 2; Scarlet Fever, 6. Population 1,800. Death rate estimated at 8 per thousand.

Appleton, Outagamie County, N. P. Mills, Health Officer.

Water supply from lower Fox River, formerly from artesian wells. Sewerage empties into the river; system has never been changed. 90% of the houses are connected with the water supply and sewerage systems. Streets and alleys are well cleaned. Debris is not allowed on the streets. Cess-pools are not allowed. Stagnant pools are all drained. No system of milk or meat inspection. Death rate from diarrheal diseases is low. Cases of Diphtheria, 100; Typhoid Fever, 20; Scarlet Fever, 50. Population, 17,000. Death rate 9.5 per thousand.

Ashland, Ashland County, W. J. Reinhart, Health Officer.

Water filtered from Chequemagon Bay. Sewage formerly emptied into Chequemagon Bay. About 75% of the houses are connected with the water system and about 30% have sewer connections. Sewage is now burned and buried on a 40 acre garbage ground. Streets and alleys are cleaned by the city. Debris is not allowed on the streets. Cess-pools are not allowed. Stagnant pools are either drained or filled. A system of milk inspection, but no meat inspection. Deaths from diarrheal diseases few. Cases of Diphtheria, 22; Typhoid Fever, 14; Scarlet Fever, 90. Population 20,000. Death rate not given.

Algoma, Kewaunee County, G. R. Bartran, Health Officer.

Water supply is taken from lake taken 1,500 feet from shore. No sewerage system. Sewage empties into the river. 12% of the houses are supplied with the water system. Nearly all of the families have cess-pools. No system of milk or meat inspection. Death rate from diarrheal diseases few. Cases of Diphtheria, 4; Typhoid Fever, 2; Scarlet Fever, 6. Population 2,000. Death rate 11 per thousand.

Arcadia, Trempealeau County, Geo. H. Hidershide, Health Officer.

Water supply from one well 375 feet deep. Sewer system in part of the village. Sewage empties into river. Streets and alleys are cleaned by the village. Cess-pools are allowed. No system of milk or meat inspection. Cases of Diphtheria, none; Typhoid Fever, 2; Scarlet Fever, 3. Population, 1,500. Death rate about 8 per thousand.

Bayfield City, Bayfield County, W. F. Austria, Health Officer.

Water supply is taken from Lake Superior. The sewerage disposal system empties into Lake Superior. About 95% of the houses use city water and 75% are connected with the sewer system. Neither plant has been altered since construction. Cess-pools are not allowed; streets and allies are cleaned by the city; no debris is allowed on the streets. Stagnant pools are not allowed in the city. No system of milk or meat inspection. Few deaths from diarrheal diseases. Cases of Diphtheria, 24; Typhoid Fever, 6; Scarlet Fever, 18. Population, 2,500. Death rate about 7 per thousand.

Beloit, Rock County, W. H. Payne, Health Officer.

Water supply from 36 artesian wells, 150 feet deep. Sewage is drained into the river, 10% of families are on the system of water supply; 30% have sewer connection. There have been no changes of water supply or sewer systems since their adoption. Debris is deposited on the streets. The city cleans alleys and gutters. Cess-pools are allowed; 10% of the families have them. There are no stagnant pools. No system of milk or meat inspection. Case of Diphtheria, 5; Typhoid Fever, 7; Scarlet Fever, 7; Malaria, 2. Population, 15,000. Death rate 10 per thousand.

Berlin, Green Lake County, W. J. Clement, Health Officer.

Water supply is from 2 artesian wells, 480 feet deep. Sewage is emptied into the Fox river. 25% of the houses are connected with the water supply and sewerage systems. Cess-pools are allowed. 1% of the families have them. Debris is deposited on the streets. Alleys and gutters are cleaned by the city. Stagnant pools are well drained. Cases of Diphtheria, 1; Typhoid Fever, 8; Scarlet Fever, 13. Population, 4,750. Death rate 12 per thousand.

Beaver Dam, Dodge County, H. M. Holtz, Health Officer.

Water supply from artesian wells, 500 feet deep and a spring 250 feet from the pumping station. Sewage is drained into the river. About 80% of the people use the water supply and sewerage systems. Cess-pools are allowed where people have no access to the sewer. No changes in either system since their adoption, 1888. Streets and gutters are cleaned by the city. Stagnant pools are not allowed. No system of milk or meat inspection. No abnormal death rate from diarrheal diseases. Cases of Diphtheria, 14; Typhoid Fever, 1; Population, 5,500. Death rate 14 per thousand.

Brodhead, Green County, J. B. Richards, Health Officer.

Water supply is from two artesian wells, 800 feet deep. No sewerage system. 90% of the people use the city water. Streets and allies are cleaned by the city. 10% of the families have cess-pools. Stagnant pools are not allowed. No system of milk or meat inspection. Few deaths from diarrheal diseases. Cases of Diphtheria, 2; Typhoid Fever, 30; Scarlet Fever, 10. Population, 2,000. Death rate not given.

Black River Falls, Jackson County, H. B. Cole, Health Officer.

Water supply from springs four miles from the city. No sewerage system. 60% of the houses are connected with the water system. Streets and alleys are cleaned partly by the city. About 5% of the families have cesspools. Stagnant pools are drained. Population, 2,200. Death rate not given.

Barron, Barron County, W. H. Ellis, Health Officer.

Water supplied from flowing spring in the bank of the Vermillion river. No sewerage system. About 25% of the families are on the water supply system. Debris is not allowed in the streets. Cess-pools are allowed. Stagnant pools are drained. No system of milk or meat inspection. Deaths from Diphtheria, 4; Typhoid Fever, 3; Scarlet Fever, 30. Population 2,000. Death rate not given.

Boscobel, Grant County, C. A. Armstrong, Health Officer.

Water supplied from private wells, 30 to 60 feet deep. No sewerage system. Few cess-pools are allowed. Alleys and gutters are cleaned by the city. Stagnant pools are prohibited. Population, 2,000. Death rate 10 per thousand.

Chippewa Falls, Chippewa County, Charles A. Hayes, Health Officer.

Water supply from springs one mile above town. Sewage is deposited in the river. 10% of the families have sewer connections. 30% use water system. Debris is not allowed on the streets. 60% of the families have cess-pools. Water supply system has recently been enlarged. No system of milk or meat inspection. Few deaths from diarrheal diseases. Diphtheria, 8; Typhoid Fever, 10; Scarlet Fever, 100; Population, 12,000. Death rate not given.

Columbus, Columbia County, A. F. Schmeling, Health Officer.

Water supply from 4 artesian wells, 80 feet deep. No sewerage system. Nearly all the families have cess-pools. About 200 families use the water supply system. Streets and gutters are cleaned by the city. Debris is not allowed on the streets. No system of milk or meat inspection. 5 cases of Typhoid Fever. Population, 2,500. Death rate 10 per thousand.

Clintonville, Waupaca County, G. M. Goodrich, Health Officer.

Water supply from private wells about 40 feet deep. No sewerage system. Cess-pools are allowed. Few families have them. Streets are cleaned by the city. Stagnant pools are drained. Population, 2,000. Death rate not given.

Darlington, LaFayette County, D. W. Hogan, Health Officer.

Water supply from a spring within the city limits. No sewerage system. About 20% of the families have cess-pools. 75% of the houses are on the water system. Alleys and gutters are cleaned by the city. Stagnant pools are drained. No system of milk or meat inspection. 2 cases of Typhoid Fever. Population, 2,000. Death rate not given.

Delavan, Walworth County, C. C. Blanchard, Health Officer.

Water supply from springs close to the reservoir. Sewerage system empties into Delavan Lake, which is drained by Turtle creek. 10% of the families have the water supply system and 5% of the houses have sewer connections. 10% of the families have cess-pools. Sewerage system is gradually being extended. Streets are cleaned by the city. Stagnant pools are drained. Cases of Diphtheria, 7; Typhoid Fever, 10; Scarlet Fever, 65; Malaria, 5. Few deaths from diarrheal diseases. Population, 2,500. Death rate 15.2.

DePere, Brown County, D. A. Gregory, Health Officer.

Water supply from 5 wells from 500 to 850 feet deep. Sewerage system empties into the river. About 20% of the families have water supply and sewer connection. Cess-pools are allowed. Stagnant pools are prohibited. Debris is not deposited on the streets. Cases of Typhoid Fever, 10; Scarlet Fever, 20; Few deaths from diarrheal diseases. Population, 4,500. Death rate not given.

Eau Claire, Eau Claire County, J. F. Farr, Health Officer.

Water supply from wells and springs five miles from the city. Sewage empties into the Chippewa river. Water supply system has been changed several times. No changes in the sewerage system. Cess-pools are allowed. Abutting property holders clean the alleys and gutters. Stagnant pools are either drained or filled. Cases of Diphtheria, 247; Typhoid Fever, 11; Scarlet Fever, 23. Population 18,500. Death rate 15.3.

Elroy, Juneau County, C. S. Smith, Health Officer.

Water supply from 3 artesian wells. Sewage empties into the river. Few cess-pools are allowed. Stagnant pools are filled. Alleys and gutters are cleaned by the city. Few families on the sewerage system since it was just recently completed. Cases of Diphtheria, 20. Very few deaths from diarrheal diseases. Population 2,000. Death rate not given.

Fennimore, Grant County, Mark Bailey, Health Officer.

Water supply from 1 well, 800 feet deep. No sewerage system. Alleys and gutters are cleaned by the city. Debris is not deposited on the streets. No system of milk or meat inspection. Population 1,200. Death rate not given.

Ft. Atkinson, Jefferson County, E. J. Gibson, Health Officer.

Water supply from well 750 feet deep. Only a few private sewers which empty into the river. 25% of the families have cess-pools. Alleys and gutters are cleaned by the city. Debris is not allowed on the streets. Stagnant pools are drained. No system of milk or meat inspection. Population 3,500. Death rate 10 per thousand.

Fountain City, Buffalo County, J. P. Reinhardt, Health Officer.

Water supply from private wells about 50 feet deep. No sewerage system. A few families have cess-pools. Alleys and gutters are cleaned by the city. Debris is not allowed on the street. Stagnant pools are drained. No system of milk or meat inspection. Population, 1,200. Death rate not given.

Glenwood, St. Croix County, P. A. Beebe, Health Officer.

Water supply from one well, 280 feet deep. No sewerage system. About 20% of the families use the city water. Water was first pumped direct from the well, now a tank is used. Debris on the streets and cess-pools are not allowed. Cases of Diphtheria, 2. Few deaths from diarrheal diseases. Population, 1,200. Death rate 8 per thousand.

Hartford, Washington County, E. H. Ehlert, Health Officer.

Water supply from well, 200 feet deep. Sewage is emptied into mill pond and river. 175 families use the city water, 87 have sewer connections. About 75% of the families have cess-

pools. Streets and alleys are cleaned by the city. Debris on the streets and stagnant pools are not allowed. Cases of Diphtheria, 7; Typhoid Fever, 3; Scarlet Fever, 150. Population, 3,000. Death rate 12 per thousand.

Horicon, Dodge County, F. P. Clahr, Health Officer.

Water supply from private wells, 40 feet deep. A limited sewerage system which terminates in the river. About 1% of the families have sewer connections, and from 5% to 10% of them have cess-pools. Alleys and gutters are cleaned by the city. Debris on the streets and stagnant pools are not allowed. Cases of Diphtheria, 3, with few deaths from diarrheal diseases. Population, 1,600. Death rate 10.3 per thousand.

Jefferson, Jefferson County, J. B. Brewer, Health Officer.

Water supply from a well about 700 feet deep. Sewage empties into the river. Families living on the outskirts of the city have cess-pools. Alleys and gutters are cleaned by the city. Stagnant pools are well looked after. No system of meat inspection. No cases of contagious disease reported. Population, 3,500. Death rate not given.

Juneau, Dodge County, C. G. Schwalbach, Health Officer.

Water supply from well 400 feet deep. No sewerage system. 75% of the families use the city water. The water system has not been changed for ten years. 10% of the families have cess-pools. Stagnant pools are drained. Cases of Typhoid Fever, 2. Population, 1,000. Death rate not given.

Kenosha, Kenosha County, J. R. Eastman, Health Officer.

Water supply from 7 artesian wells, 1,800 feet deep, and Lake Michigan. The water taken one mile from shore at a depth of 35 feet. The sewerage system empties into Lake Michigan. 95% of the families use the city water. Cess-pools are not allowed. Streets and alleys are cleaned by the city. Stagnant pools are prohibited. Cases of Diphtheria reported, 3; Typhoid Fever, 2; Scarlet Fever, 2. Population, 15,000. Death rate 12 per thousand.

Kewaunee, Kewaunee County, E. J. Kerwin, Health Officer.

Water supply is piped from springs about a mile from town.

No sewerage system. Surface sewage empties into the river. Cess-pools are allowed. Alleys and gutters are cleaned by the city. Stagnant pools are not allowed. Cases of Diphtheria, 4; Scarlet Fever, 4. Population, 1,800. Death rate 12.3 per thousand.

Kilbourn, Columbia County, A. A. Duclos, Health Officer.

Water supply from 6 wells, 66 feet deep. No sewerage system. 75% of the families use the city water. The water supply system was changed six years ago. Few families have cess-pools. Alleys and gutters are cleaned by the city. Stagnant pools are not allowed. No system of milk or meat inspection. Population, 1,300. Death rate about 8 per thousand.

La Crosse, La Crosse County, R. D. Murphy, Health Officer.

Water supply from the Mississippi river. Artesian water being used for drinking, and also private wells with an average depth of 40 feet. Sewage is drained into the river below the intake pipe. 10% of the families have cess-pools. Alleys and gutters are cleaned by the city. Stagnant pools are filled. No system of milk or meat inspection. Cases of Diphtheria, 106; Typhoid Fever, 30; Scarlet Fever, 46; Malaria, 8. Population, 33,000. Death rate 13 per thousand.

Lake Mills, Jefferson County, F. Henry Dodge, M. D., Health Officer.

Water supply from drilled wells some of which are 450 feet deep. Sewage empties into Rock river. 75% of the families have both city water supply and sewer connections. A new water tank has recently been added to the water supply system. Few families have cess-pools. Alleys, gutters and stagnant pools are inspected weekly by the health board. Milk is thoroughly inspected at the creameries. Cases of Diphtheria, 4; Typhoid Fever, 5. Population, 1,500. Death rate not estimated.

Lancaster, Grant County, S. W. Doolittle, Health Officer.

Water supply from springs two and one-half miles from town. Sewage is disposed of through the aid of a garbage plant. 75% of the families are on the water supply system, and 20% have sewer connections. Streets and alleys are cleaned by the city,

stagnant pools not allowed. About 5% of the families have cess-pools. No system of milk or meat inspection. Cases of Diphtheria, 4; Scarlet Fever, 6. Population, 3,000. Death rate unestimated but thought to be low.

Marshfield, Wood County, B. L. Tupper, Health Officer.

Water supply from wells. Have sewerage disposal plant. About one-half the families are on the system of water supply, but few are connected with the newly established sewerage system. Nearly all the families have cess-pools. The city does not clean streets and alleys. Stagnant pools are not allowed. No system of milk or meat inspection. Cases of Diphtheria, 1; Typhoid Fever, 10; Scarlet Fever, 25. Population, 6,250. Death rate not given.

Manitowoc, Manitowoc County, Dr. M. Staehle, Health Officer.

Water supply from two spring-fed wells, about 30 feet deep. Sewage empties into the river near its mouth. About 80% of the families have water supply and sewerage connections. Two families have cess-pools. Debris is not allowed on the streets, stagnant pools are filled. No system of milk or meat inspection. Cases of Diphtheria, 16; Typhoid Fever, 4; Scarlet Fever, 18. Population 12,000. Death rate $12\frac{1}{2}\%$ per thousand.

Marinette, Marinette County.

Water supply is taken from Green Bay. Sewage is emptied into the Menomonie river. About 95% of the families have water and sewer connections. Recently a filter plant has been put in to aid in disposing of the sewage. Debris is not allowed on the streets and stagnant pools are drained. No system of milk or meat inspection. Cases of Diphtheria, 20; Typhoid Fever, 170; Scarlet Fever, 162. Population, 1,800. Death rate 13.6 per thousand.

Mauston, Juneau County, J. E. Smith, Health Officer.

Water supply from private wells from 30 to 100 feet deep. Sewage system just being adopted. A few families have cess-pools. Stagnant pools are either filled or drained. Cases of Scarlet Fever, 7. Population, 2,000. Death rate 10 per thousand.

Mayville, Dodge County, A. R. Bachhuber, Health Officer.

Water supply is from private wells. No sewerage system. Surface sewage empties into the river. About a dozen families have cess-pools. Debris is not allowed in the street. Stagnant pools are drained or filled. Population 2,100. Death rate 11 per thousand.

Milwaukee, Milwaukee County, F. M. Schulz, Health Officer.

Water supply from Lake Michigan. Sewage empties into Milwaukee river. 90% of the families have water and sewer connections. Cess-pools are not allowed. Stagnant pools are ordered drained or filled at once. Cases of Diphtheria, 816; Typhoid Fever, 409; Scarlet Fever, 565. A regularly prescribed system of milk and meat inspection is enforced. Population, 325,000. Death rate 1902, 12.65 per thousand. Death rate 1903, 12.99 per thousand.

South Milwaukee, Milwaukee County, S. M. Smith, Health Officer.

Water supply from Lake Michigan, taken a considerable distance from the shore. Sewage empties into the lake about four-fifths of a mile from the intake pipe for water supply. About 75% of the families have the water system and 50% have sewer connections. The intake pipe for water supply has recently been extended 2,500 feet further into the lake. About 20% of the families have cess-pools. No system of milk or meat inspection. Cases of Diphtheria, 11; Typhoid Fever, 24; Scarlet Fever, 18; Malaria, 3. Population, 5,000. Death rate estimated at 5 or 6 per thousand.

Menomonie, Dunn County, G. A. Barker, Health Officer.

Water supply from two wells, 400 feet deep. Sewage empties into the river. 20% of the families have water and sewer connections. About 5% of the families have cess-pools. Streets are cleaned by the city, stagnant pools are usually drained or filled. No system of milk or meat inspection. Cases of Diphtheria, 10; Typhoid Fever, 5; Scarlet Fever, 50. Population, 7,000. Estimated death rate 8 per thousand.

Mineral Point, Iowa County, F. M. Bailey, Health Officer.

Water supply from wells 150 feet deep. No sewerage system. About 70% of the families have water connections. The sys-

tem has recently been extended in various parts of the city. 90% of the families have cess-pools. Stagnant pools are either drained or filled. Cases of Diphtheria, 2; Typhoid Fever, 22; Scarlet Fever, 2. Population, 3,100. Death rate 10-3/10 per thousand.

Monroe, Green County, Frank L. Hodges, Health Officer.

Water supply from well, 900 feet deep. Sewage is disposed of by the use of a septic tank disposal plant. 20% of the families have water and sewer connection. The artesian wells were recently added to the water supply system. Sewage disposal plant only recently installed. 25 to 40% of the families have cess-pools. Alleys and gutters are cleaned several times each year by the city. Stagnant pools are not allowed. Cases of Diphtheria, 1; Typhoid Fever, several; Scarlet Fever, 100. Population, 4,000. Death rate not determined.

Mondovi, Buffalo County, P. B. Amunson, Health Officer.

Water supply from artesian wells 500 feet deep. Sewage is emptied into river. The system has just been completed. Alleys and gutters are not cleaned by the city. Stagnant pools are not allowed. Cases of Diphtheria, 4; Typhoid Fever, 2; Scarlet Fever, 1; Malaria, 1. Population, 1,500. Death rate not given.

Neenah, Winnebago County, J. R. Barnett, Health Officer.

Water supply is taken from artesian well. Sewage is deposited in the lake. The water supply was taken from the lake until recently. Cess-pools are not allowed. Debris is not allowed on the streets. Stagnant pools are filled or drained. No system of milk or meat inspection. Cases of Diphtheria, 7; Typhoid Fever, not known; Scarlet Fever, 61. Population, 6,000. Death rate 12 per thousand.

Neillsville, Clark County, J. F. Conroy, Health Officer.

Water supply is taken from the Black river. Sewage is discharged into the river one mile below the intake pipe. The water system has recently been enlarged. 40% of the families have water and sewer connection. 60% of the people have cess-pools. Debris is often deposited on the street. There are no stagnant

pools. No system of milk or meat inspection. Cases of Diphtheria, 14; Scarlet Fever, 5. Population, 2,500. Death rate 10 per thousand.

New Lisbon, Juneau County, R. W. Hoyt, Health Officer.

Water supply is taken from private wells, either drilled or dug. No sewerage system or disposal plant. Cess-pools are unknown. Debris is allowed on the streets. Stagnant pools are filled. No system of milk or meat inspection. Cases of Diphtheria, 2; Typhoid Fever, 1; Scarlet Fever, 9. Population, 1,200. Death rate not given.

New London, Juneau County, R. W. Hoyt, Health Officer. ,

Water supply for drinking purposes is taken from wells 50 to 200 feet deep. Sewers are now being put in. Surface sewage is deposited in the river. Few families have cess-pools. Debris is not allowed on the streets. Stagnant pools are filled or drained. No system of milk or meat inspection. Cases of Typhoid Fever, 1; Scarlet Fever, 1. Population, 3,500. Death rate not given.

Oconomowoc, Waukesha County, H. A. Notbohm, Health Officer.

Water supply from wells, 900 feet deep. No sewerage system. About one-half the families use city water. 1% of them have cess-pools. Stagnant pools are kept sanitary. Debris is not allowed on the streets. Alleys and gutters are cleaned by the city. Population 3,200. Death rate 12 per thousand.

Omro, Winnebago County, C. J. Hurlbut, Health Officer.

Water supply from private wells, 20 to 100 feet deep. Sewage is emptied into Fox river. About 1% of the families have sewer connections. Few people have cess-pools. Stagnant pools are carefully watched. Alleys and gutters are cleaned by the city. Cases of Typhoid Fever, 2; Scarlet Fever, 6. Population, 1,400. Death rate not correctly estimated.

Onalaska, La Crosse County, W. A. Lester, Health Officer.

Water supply from artesian well, where an iron stand-pipe is used. No sewerage system. 15% of the families use city water. From 5% to 10% of the families have cess-pools. Alleys and

gutters are not carefully cleaned. Cess-pools are not allowed. No system of milk or meat inspection. Cases of Diphtheria, 5; Typhoid Fever, 3; Malaria, 100. Population 1,350. Death rate about 12 per thousand.

Oshkosh, Winnebago County, J. M. Conley, Health Officer.

Water supply is taken from Lake Winnebago, the Fox and Wolf rivers. Sewage is disposed of in the lakes and rivers. Outside the business district 25% of the people have sewer and water connections in their houses. A better system of filtering water has recently been installed. The sewerage lines are constantly being extended. Most of the families in the outlying districts have cess-pools. Streets and gutters are cleaned by the city. Stagnant pools are ordered drained or filled. Cases of Diphtheria, 250; Typhoid Fever, quite a number; Scarlet Fever, about 50. Population, 30,000. Death rate not given.

Phillips, Price County, J. R. Birkland, Health Officer.

Water supply for drinking purposes from about 50 wells, with an average depth of about 30 feet. Sewerage system only partly completed. Sewage is deposited in the river. About 5% of the houses have water and sewer connections. Stagnant pools are not allowed. Cases of Diphtheria, 3; Typhoid Fever, 10; Scarlet Fever, 15. Population, 2,000. Death rate 1903, 11.2 per thousand, 1904, 9.2 per thousand.

Platteville, Grant County, T. W. Bishop, Health Officer.

Water supply from a well 800 feet deep. Sewerage system has been decided upon. About 60% of the people use city water. 10% of the people have cess-pools, which number is rapidly increasing. Alleys and gutters are not systematically cleaned. Debris is deposited in the streets. No system of milk or meat inspection. Cases of Diphtheria, 3; Typhoid Fever, 3. Population, 4,000. Death rate estimated at 12 per thousand.

Plymouth, Sheboygan County, C. R. Nutt, Health Officer.

Water supply from well, 425 feet deep. No sewerage system. 150 of the houses have water and sewer connections. A mill-pond badly contaminated by sewerage drainage has recently been removed. 10% of the families have cess-pools. Alleys

and gutters are cleaned once a year. Debris on the streets is regulated by city ordinance. Cases of Typhoid Fever, 3; Scarlet Fever, 45. Population, 2,300. Death rate about 8 per thousand.

Portage, Columbia County, F. D. Bentley, Health Officer.

Water supply taken from Wisconsin river. No sewerage system. About 50% of the houses have water connections. About 2% of the families have cess-pools. Only one stagnant pool in the city and that has been ordered drained. Cases of Typhoid Fever, 12; Scarlet Fever, 20. Population, 5,500. Death rate 12.5 per thousand.

Port Washington, Ozaukee County, W. F. Scott, Health Officer.

Water supply is taken from private wells. Sewage is deposited in Lake Michigan. 20% of the houses have sewer connections. Few families have cess-pools. Stagnant pools are either filled or drained. No system of milk or meat inspection. Cases of Diphtheria, 11; Typhoid Fever, 104; Scarlet Fever, 2. Population, 4,000. Death rate 11 per thousand.

Prairie du Chien, Crawford County, C. E. Cole, Health Officer.

Water supply is principally from private wells. Only about 10% of the families use the city water. Private sewers which empty into the river. About 25% of the families have cess-pools. Stagnant pools are drained. Alleys and gutters are cleaned by the city. Cases of Diphtheria, 12; Typhoid Fever, 4; Scarlet Fever, 20; Malaria, 24. Population, 2,500. Death rate not correctly estimated.

Racine, Racine County, Fred Pfister, Health Officer.

Water supply from Lake Michigan. Sewage is drained into Lake Michigan and Root river. 95% of the houses have water connections and 50% have sewer connections. Cess-pools are not allowed. Stagnant pools are filled or drained. No system of milk or meat inspection. Cases of Diphtheria, 45; Typhoid Fever, not known; Scarlet Fever, 60. Population, 35,000. Death rate 1903, 12.57, 1904, 12.88 per thousand.

Reedsburg, Sauk County, H. P. Person, Health Officer.

Water supply from four wells, 200 feet deep. Only a partial sewer system, which empties into the river below the dam. Most

of the people use the city water. The water supply system is constantly being enlarged. The sewer mains are being extended from time to time. Cess-pools are not allowed. Alleys and gutters are cleaned when necessary. Stagnant pools are drained or filled. Cases of Diphtheria, 2; Typhoid Fever, 4; Scarlet Fever, 15. Population, 3,000. Death rate not correctly estimated.

Rice Lake, Barron County, J. H. Coats, Health Officer.

Water supply from one large well. No sewerage system of disposal plant. Water supply system has recently been extended. 30% of the families have cess-pools. Stagnant pools are carefully watched. Alleys and gutters are cleaned regularly. Population 2,700. Death rate between 10 and 11 per thousand.

Richland Center, Richland County, G. R. Mitchell, Health Officer.

Water supply is chiefly from an artesian well. Sewerage is emptied into Pine river. A majority of the families have water and sewer services. Alleys and gutters are cleaned regularly by the city. Stagnant pools are not allowed. Population, 2,500. Death rate not given.

River Falls, Pierce & St. Croix County, V. A. Toby, Health Officer.

Water supply from an artesian well, 500 feet deep and many surface wells. Five sewers which empty into Kinnickinnic river 60% of the houses have water connections. Few of the families have private sewers. About one-third of the families have cess-pools. Stagnant pools are cleaned at once. Debris is not allowed on the streets. No system of milk or meat inspection. Population, 3,000. Death rate between 10 and 11 per thousand.

Rhineland, Oneida County, H. L. Garner, Health Officer.

Water supply taken from the Wisconsin river. Sewage empties into the river one-half mile below the intake pipe. About 5% of the houses have water and sewer connections. Cess-pools are allowed. Stagnant pools are looked after. Cases of Diphtheria, 50; Typhoid Fever, 50; Scarlet Fever, 30. Population, 6,000. Death rate not given.

Ripon, Fond du Lac County, A. Mitchell, Health Officer.

Water supply from private wells, 15 to 20 feet deep. Filter beds are used in disposing of the sewage. 80% of the houses have water connections and 40% have sewer connections. Stagnant pools are not allowed. Alleys and gutters are cleaned regularly. Cases of Typhoid Fever, 5; Scarlet Fever, 10. Population, 4,000. Death rate 11 per thousand.

Seymour, Outagamie County, A. P. Holz, Health Officer.

Water supply from wells from 20 to 500 feet deep. No sewerage system or disposal plant. Cess-pools are allowed. Stagnant pools are promptly drained. No system of milk or meat inspection. Cases of Typhoid Fever, 2; Scarlet Fever, 40. Population, 1,200. Death rate estimated at 8 per thousand.

Sheboygan, Sheboygan County, H. C. Reich, Health Officer.

Water supply from Lake Michigan taken about one mile from shore. Sewage empties into sewer and lake. About 35% of the houses have sewer and water connections. Few families have cess-pools. Alleys and gutters are inspected by the city and ordered cleaned by property owners. Stagnant pools are declared a nuisance and abated. Cases of Diphtheria, 62; Typhoid Fever, not reported; Scarlet Fever, 128. Population, 25,000. Death rate for 1903, 10 per thousand; for 1904, 10.7 per thousand.

Shullsburg, LaFayette County, A. Hayden, Health Officer.

Water supply from one well, 280 feet deep. No sewerage system or disposal plant. Cess-pools are allowed. Alleys and gutters are cleaned by the city. No stagnant pools. No system of milk or meat inspection. Population, 1,400. Death rate not given.

Sparta, Monroe County, S. D. Beebe, Health Officer.

Water supply is from artesian wells. Sewerage system empties into La Crosse river. 50% of the houses have water connections, and 20% are on the sewerage system. About 30% of the families have cess-pools. Stagnant pools are drained. Alleys and gutters are cleaned by the city. Population, 4,000. Death rate not given.

Stevens Point, Portage County, Dr. C. Von Neupert, Health Officer.

Water supply from the Wisconsin river, established 1885. Sewerage system only partially completed. Sewage is deposited in the Wisconsin river one-half mile below intake pipe. About one-half the houses have water connections and about one-third are on the sewerage system. New methods of filtering water have recently been introduced. There are few stagnant pools in this city. Debris is not allowed to remain on the streets. No system of milk or meat inspection. Cases of Diphtheria, 37; Typhoid Fever, 88; Scarlet Fever, 48; Malaria, 15. Population, 11,000. Death rate 10 per thousand.

Stanley, Chippewa County, Dr. J. N. Cunningham, Health Officer.

Water supply from private wells about 25 feet deep. Sewage is discharged into the river. About 5% of the houses have sewer and water connections. 75% of the families have cess-pools. Stagnant pools are drained by the individuals having them, at the request of the authorities. Estimated population, 3,000. Death rate not given.

Sturgeon Bay, Door County, H. A. Norden, Health Officer.

No public water supply and no sewerage system or disposal plant. Cess-pools are allowed. Nearly all the families have them. Alleys and gutters are cleaned by the city. Debris is not allowed on the streets. Deaths from contagious diseases not given. Population, 4,000. Death rate not determined.

Superior, Douglas County, J. A. Rene, Health Commissioner.

Water supply from eighty-four wells, 40 feet deep, located on the shore of Lake Superior. The sewage is discharged into the bay and thence into Lake Superior. About 25% of the houses have water and sewer connections. Few families have cess-pools. Stagnant pools are drained and never complained of. No system of milk or meat inspection. Cases of Diphtheria, 237; Typhoid Fever, 36; Scarlet Fever, 534. Population, 35,000. Death rate 12 per thousand.

Tomahawk, Lincoln County, Jay Johnston, M. D., Health Officer.

Water supply from springs on the outskirts of the city. Sew-

age is discharged into the Wisconsin river. About 50% of the people have water and sewer connections. Cess-pools are not allowed. No system of milk or meat inspection. Alleys and gutters are cleaned twice each year. Stagnant pools are filled. Refuse material is not put in street. Cases of Diphtheria, 15; Typhoid Fever, 20; Scarlet Fever, 25. Population, 3,000. Death rate not given.

Two Rivers, Manitowoc County, A. M. Farrell, Health Officer.

Water supply from Lake Michigan with sand filter. Sewage is discharged in North and South Twin rivers. 45% of the houses have water and sewer connections. Cess-pools are not allowed. Gutters are cleaned by the city. Stagnant pools are removed. No system of milk or meat inspection. Cases of Diphtheria, 8; Typhoid Fever, 29; Scarlet Fever, 4. Population, 5,200. Death rate 13 per thousand.

Viroqua, Vernon County, F. E. Morley, M. D., Health Officer.

Water supply from two wells, 300 to 400 feet deep. No sewerage system or disposal plant. 10% of the houses have water connections. Few families have cess-pools. Streets and alleys are cleaned by the city. No system of milk or meat inspection. Cases of Diphtheria, 10; Typhoid Fever, 4; Scarlet Fever, 45. Population, 2,500. Death rate cannot be given, due to incomplete records.

West Bend, Washington County, W. J. Wehle, Health Officer.

No public water supply system. No sewerage system or disposal plant. Cess-pools are allowed. Many families have them. There are no stagnant pools and debris is not allowed on the streets. Cases of contagious disease are not given in the report. Population, 2,300. Death rate 11 per thousand.

Wauwatosa, Milwaukee County, E. A. Schmitz, Health Officer.
cer.

Water supply is from a well 140 feet deep. Sewage is disposed of by means of a disposal plant. About 70% of the houses have water and sewer connections. Very few families have cess-pools. Stagnant pools are drained or filled if possible.

Alleys and gutters are cleaned by the city. No system of milk or meat inspection. Population, 3,000. Death rate not reported.

Wausau, Marathon County, D. Sauerhering, Health Officer.

Water supply from a large watershed east of the city. Sewage is discharged into the Wisconsin river. 85% of the people have water and sewer connections. No cess-pools are allowed where sewer connections are possible. Alleys and gutters are cleaned by the property owners. Stagnant pools are filled or drained. Milk and meat are inspected only upon complaint. Report of contagious diseases not given. Population, 14,500. Death rate about 8 per thousand.

Waupaca, Waupaca County, Dr. L. H. Pelton, Health Officer.

Water supply from Wolf river and wells varying from 20 to 60 feet in depth. Poor sewerage system. Sewage is discharged into a pond near the center of the city. About 33% of the families use the city water and many have private sewers. Cess-pools are allowed though there is an attempt being made to abolish them. Alleys and gutters are cleaned by the city. No system of milk or meat inspection. Cases of Diphtheria, 7; Typhoid Fever, 4; Scarlet Fever, 20. Population, 3,200. Death rate about 12 per thousand.

Waukesha, Waukesha County, Hugo Philler, Health Commissioner.

Water is supplied by private corporation from five artesian wells from 1,000 to 1,500 feet deep. The sewage is discharged into the Fox river, being first passed through the septic tank. About 900 of the houses have water and sewer connection. The septic tank system was introduced in 1901, though the authorities are now advocating the use of filter beds. Only about 900 of the 1,500 houses are connected with the water and sewer systems, hence many cess-pools and vaults are to be found. Cases of Diphtheria, 2; Typhoid Fever, 11; Scarlet Fever, 97. Population, 8,000. Death rate 9.2 per thousand.

Watertown, Jefferson County, R. B. Hoermann, Health Officer.

Water supply from wells from 600 to 1,100 feet deep. Sewage is discharged into the Rock river at the southern part of

the city which is considered objectionable. About 6% of the houses are supplied with water and sewer connections. A new well was added to the water system in 1902. Only the main streets and their gutters are cleaned by the city. Debris is not tolerated on the street. Stagnant pools are filled. During the nine months preceding November 1, 1904, there were reported 2 cases of Diphtheria; 4 of Typhoid and 4 of Scarlet Fever. No system of milk or meat inspection. Population, 10,500. Death rate estimated at 2.8% per year.

Waupun, Fond du Lac County, G. B. Durand, Health Officer.

Water supply from two artesian wells, 750 feet deep. A sewerage system is provided for only one street which empties into the river. About 5% of the houses have sewerage connections and about 34% of the houses have water connections. About 20% of the families have cess-pools. Stagnant pools are not allowed to exist when known. Cases of Typhoid Fever, 3. Population, 3,000. Estimated death rate 8 per thousand.

Whitewater, Walworth County, A. M. Leland, Health Officer.

Water supply from two artesian wells, 850 to 1,000 feet deep. No sewerage system or disposal plant. About 50% of the houses have water and sewer connections. Cess-pools are allowed, though few families have them. No system of milk or meat inspection. Stagnant pools are either drained or filled. Cases of Diphtheria, 3; Typhoid Fever, 2; Scarlet Fever, 10. Population, 4,000. Death rate 12 per thousand.

SUMMARIZED STATEMENT.

Of the eighty-six cities included in this report, twenty-one have no public water supply of any kind. Cities of this class are usually the first to suffer from a contaminated water supply, since in nearly every case sewerage systems are not maintained and cess-pools are allowed.

In forty-three of the cities the water supply is partly private and partly public. A comparatively pure public water system being maintained on the business streets, while the resident districts are dependent upon private wells often very shallow and easily contaminated.

Forty-nine of the cities mentioned in this classification are

provided with public water supplies procured in the main from artesian wells and flowing springs. In addition to these, eighteen cities receive their public water supply from some natural waterway, usually either a river or lake near the city. Sewerage from cities of this class is drained into the same body of water from which the water supply is taken, either directly or indirectly through tributary streams.

The importance of having a pure public water supply is easily disclosed when we consider that in ten of the cities herein mentioned, 90% of the people are dependent upon a public water supply; and in twenty-nine of the remaining cities 50% of the people must use the public water.

It appears from the reports that approved scientific methods of disposing of sewage have not been fully considered since only seven cities reported the use of sewage disposal plants and twenty-four others reported no sewerage systems, other than the ordinary surface drains.

Of the fifty remaining cities presenting data upon this subject more than 90% of them discharge their crude sewage into some nearby waterway.

Cess-pools are tolerated in fifty-three of the cities. The number of families having them varying from 10 to 90%.

EMBALMERS.

On June 25, 1901, the Wisconsin State Board of Health adopted rules and regulations governing the qualifications and requirements necessary for embalmers to prepare for transportation the remains of those who have died from infectious or contagious diseases. From the time of the passage of the rule to December 30, 1904, 345 embalmers' licenses have been issued.

Four public examinations were held from September 30, 1902 to September 30, 1904, three in the city of Milwaukee and one at Oshkosh. At each of these examinations the Secretary of the Board, and usually some other member, was present who conducted the examinations as provided in the rules.

In the four examinations held 147 candidates were examined of whom 123 were found qualified to practice the art of embalming and 24 were not qualified.

The examinations and results obtained are shown in the tabulated statement following:

EMBALMERS EXAMINATIONS.

For the period September 30, 1902, to September 30, 1904..

Place of the examination.	Time of the examination.	Number examined.	Number passed.	Number failed.
Milwaukee.....	October, 1902.....	23	22	1
Milwaukee.....	April, 1903.....	20	20	.....
Milwaukee.....	September, 1903.....	38	34	4
Oshkosh.....	August, 1904.....	66	47	19

As a sanitary precaution the relation between the embalmers of the state and the State Board of Health is a very important one. The successful development of the profession of embalming, as well as the observance of rules of hygiene and sanitation depends in a large measure upon the hearty and continuous cooperation of the embalmers and the Board of Health.

The question of embalming is a very old one yet for our needs a limited knowledge of anatomy is sufficient for the practical embalmer.

Success in the art of embalming from a sanitary point of view, depends upon the ability to destroy germ life by the use of a solution that will stop germ action and germ development. When this has been fully accomplished under all conditions an exceptionally high degree of success has been attained, and to that extent the general public is protected from infectious and contagious diseases.

From the esthetic standpoint the embalmer has quite another duty to perform, though in no sense antagonistic to his duties as a sanitarian. The task of preserving the subject being embalmed in as natural and life like condition as possible is extremely important and the skill shown in this particular will be productive of obtaining concessions from the relatives and friends of the dead for a more thorough process of embalming. But after all the work of beautifying and deodorizing is done if nothing has been accomplished to prevent the spread of the disease which caused the death of the subject the process is a failure as a sanitary safeguard.

To the extent that the licensed embalmer demonstrates his ability to prevent the spread of disease of whatever kind to that extent will he be granted rights and privileges by our law-mak-

ers, transportation companies and common carriers. The question of absolute germ destruction not only within and on the body but the thorough sterilization of every article of clothing, of every portion of the room and absolute cleanliness on the part of the undertaker is of vital importance.

During the past two years but few complaints have come to the Secretary's office from transportation companies or individuals in regard to the work done by the licensed embalmers of the state, which is very gratifying, considering that we have only had licensed embalmers in Wisconsin for about four years. There has been, however, some criticism on account of a lack of thoroughness and occasionally bodies are reported in a deplorable condition after a few days from the time of embalming. It would seem advisable considering the newness of the art of embalming by licensed embalmers that a record be kept of all bodies shipped or detained from interment after a specified time; such records to be accessible to members of the embalmers' association and the State Board of Health. This could be made productive to the embalmers in obtaining legislation in the future and would also be of immense value to sanitarians.

The Board is of the opinion that the licensed embalmers of the state should be granted more privileges in the preparation of bodies for transportation and a resolution to that effect was passed at the meeting of the board held in June, 1904. In this we would conform to the National Association and the American Association of General Baggage Agents for the transportation of the dead. This enlargement of the field will rapidly increase the number of licensed embalmers, lessen the cost of preparing bodies dead of certain diseases, for transportation and remove many of the cumbersome appliances which are now required.

Sample set of questions for the examination of embalmers and undertakers.

August 12, 1904.

1. Where does the general circulation begin, and where does it end?
2. What arteries supply (a) the brain; (b) the lungs; (c) the heart; (d) the liver; (e) the stomach; (f) the spleen; (g) the kidneys; (h) the small and large intestines; (i) the bladder and the uterus?

3. If in a dropsical case where the whole body is involved how would you proceed to remove the water and thoroughly supply every tissue with the embalming fluid?
4. Do you believe it is ever necessary to remove blood for the perfect preservation of a dead body by embalming? If so, (a) Name three cases that require it. (b) Name three that do not require it.
5. What precaution should the embalmer or sanitarian take in disinfecting a body dead of contagious or infectious disease and the contents of the room where the body died, to prevent taking the disease or communicating it to others?
6. How would you embalm a body dead of Puerpural Septicemia?
7. What artery do you use in embalming? Locate it and describe how you raise it.
8. How long should it take to embalm a body arterially?
9. Name and locate the three great cavities of the body.
10. Define fully the difference between an artery and a vein.
11. Name four communicable diseases and state bacterium that causes each disease.
12. Name the cavities of the heart and state which contain venous (impure) blood.
13. Describe the systemic circulation of the blood.
14. Locate the stomach, naming the muscle directly above and the organs below. Also name the cavity in which the stomach is situated and state in what portion.
15. How would you effectively disinfect soiled underwear, bed linen, cotton goods, etc., which you desire to save? Describe some other method than the use of formaldehyde.
16. In cavity embalming, name the cavities or organs which you consider it is necessary to inject.
17. State in full the reasons or necessity for embalming bodies.
18. Describe the manner in which you remove blood from the veins.
19. State in detail just how you prepare for transportation a body dead of an infectious or contagious disease.
20. What means do you take to avoid carrying infection after

handling a dead body of a dangerously contagious or infectious disease?

21. State the trustworthy tests to be made in case when there is a doubt that life has expired.
22. Describe thoroughly how you would disinfect a room 12 ft. x 10 ft. x 9 ft.? What chemical would you use and how much? How long should the room remain closed?
23. What are the causes of purging? How do you prevent it?
24. What is a disinfectant? What is an antiseptic? What is a deodorant? Give an example of each.
25. How would you embalm a body on which a post mortem had been held removing the organs from the Thoracic and Abdominal Cavities?

The funeral directors are of special importance in the collection of the vital statistics of the state. With our laws as they are now framed we must look to the undertaker for aid in securing accurate statistics of death and only in so far as undertakers insist upon the use of burial permits will our death reports be correct.

It is to be regretted that burial permits are not required by many of the undertakers either before or after the interment of the body. Such practice is a flagrant violation of section 1024, statutes of 1898, which states that no person shall bury, prepare for incineration or remove from the place where death occurred any human body until he has received a permit to do so from the health officer or his deputy, of the city, village or town in which death occurred." The portion of the section which follows is of most importance to students of vital statistics, stating as it does that "no such permit shall be issued until there has been delivered to the health officer or clerk, as the case may be, a satisfactory certificate containing the full name of the person deceased, maiden name, if wife or widow, color, sex, race, occupation, age (giving years, months and days,) names and birth place of father and mother and birth place of deceased, name of wife or of husband, and date of birth of deceased, condition, (whether single, married or widowed,) date of death, residence at time of death, primary and secondary cause of death, place of death, duration of disease, whether deceased was ever a fed-

eral soldier or sailor, place of burial, name of undertaker or other person conducting the burial or incineration, date of certificate, number and date of burial permit. Said certificate shall be signed by the physician last in attendance on deceased, if any there was, who shall state the primary and secondary cause of death according to the best information he can obtain.

In order to encourage uniformity in the form of the burial permits and also provide a type that may be used in case the proper printed blanks are not at hand a sample form of burial permit is herewith presented.

BURIAL PERMIT.

Date.....19...

1. To whom issued.....
2. Name of deceased.....
3. Date of death.....
4. Place of death.....
5. Cause of death.....
6. Name and location of cemetery.....
7. Name of attending physician or other person signing death certificates
8. Name of person signing permit.....

No.

Before a body can be disinterred or removed from the place of burial a disinterment permit must be issued by the Secretary of the State Board of Health.

The following is the form of blank approved by the Board. Upon receipt of the required information a blank will be filled out and forwarded to the persons desiring the body removed or to the undertaker who has charge of the case. The removal of the body must also be approved of by the local Health Officer by signing the permit in a space provided on the back.

STATE OF WISCONSIN.

STATE BOARD OF HEALTH.

TRANSPORTATION OF CORPSES.

DISINTERMENT PERMIT.

Application having been made for the disinterment and removal of the body of who died of..... on the day of, 1...., from the place where the body now lies buried in County of, Wis., to, in the State of

This is to certify that such disinterment and removal has been approved by the State Board of Health subject to the consent of the Health Authorities of the locality from which it is desired to remove said body, and subject also to all the laws of the State of Wisconsin and rules of the State Board of Health, relative to the transportation of the dead by which Health Authorities and Transportation Companies are to be governed.

Given at the office of the Secretary of the State Board of Health at Madison, Wis., this day of, 190.....

.....M. D., Sec'y.

It may be announced as a safe rule, for undertakers not to handle a body until they have a death certificate properly signed by the attending physician, health officer, coroner or justice of the peace. It is not clear how an embalmer can accomplish the best results without knowing definitely the cause of death for death from certain diseases requires special treatment to be successful. It is not necessary to emphasize the necessity of caution in embalming bodies before being positive that the cause of death has been regular and that the proper papers have been signed by the proper officials. By so doing the embalmer will gain the respect of the community and materially strengthen his business.

ANNUAL REPORT
OF
LOCAL HEALTH OFFICERS
FOR
TOWNS, VILLAGES AND CITIES.

ANNUAL REPORT OF LOCAL HEALTH OFFICERS.

BLANKS FOR THE REPORT.

In 1903 and again in 1904 the following list of questions was sent to all Health Officers in the state to be used in the preparation of their annual reports.

1. Name of city, village or town for which you report.
2. County in which it is situated.
3. Number and nationality of population.
4. Are you working under charter provisions that provide for a Commissioner of Health or under the law providing for a Board of Health and a Health Officer?

5. Does the Board of Health of which you are a member hold regular meetings? If so, how often?

If it has not held regular meetings how often has it been called together during the past year, and for what reason?

Are its proceedings and orders regularly recorded?

6. State salary of Health Officer or Commissioner of Health.
7. Number of public school houses in your jurisdiction.
8. Sanitary condition of school houses.

Are school houses disinfected at intervals? Have you had any epidemics originating from unsanitary condition of school houses?

9. Has the Board of Health by any recorded resolution, given its Health Officer authority to act in its name in any emergency, and at times when the Board is not in session?

10. Describe what special sanitary work has been done by the Board of Health, or under its direction, during the year covered by this report?

What has been the cost of such work?

11. What special unsanitary conditions are there now existing within the jurisdiction of your Board of Health that are in your opinion sources of danger to the public health, such as un-

drained lands, foul millponds or water courses, slaughter-houses, or like places not properly cared for, foul privies, barns, stables and like out-buildings, etc?

12. Has there been any marked change in the character of amount of sickness in your vicinity during the past year?

Especially has there been any increase or diminution in such diseases as Smallpox, Diphtheria, Scarlet Fever and Typhoid Fever?

Give detailed statement of what has been done for the suppression or control of such diseases if any outbreaks have occurred.

13. What, if any, other forms of disease have been notably prevalent in your vicinity during the year?

14. Give source and quality of public water supply.

15. If you have a sewerage system, where does it empty?

16. Please give the number of cases and the number of deaths (do not use indefinite terms, such as "few," "many," etc., but by estimate and personal inquiry, give as careful and approximate statement as possible) of each of the following named diseases that have occurred in the town, village or city under your jurisdiction during the year ending Sept. 30, 1904. In answering this please fill blanks in adjoining spaces.

17. Is the law generally observed which required the report of dangerous contagious diseases?

If not, please state what you consider the most general reason for non-compliance with its requirements.

18. To what extent have the people in your vicinity been vaccinated within the last five years?

What proportion of the children of your community are vaccinated before arriving at school age?

What per cent. of the cases of Smallpox under your jurisdiction is found in the unvaccinated?

19. Please state just what is done on receipt of reports of contagious diseases. Is the State Board of Health always promptly notified at the appearance of the first cases as required by law?

20. Has the general result of efforts to restrict the spread of contagious disease in the territory under your supervision been on the whole encouraging or discouraging?

21. Is the law requiring the report of births observed in your jurisdiction?

Is the law requiring burial permits observed in your jurisdiction?

22. What do you use for disinfection after contagious diseases, and how do you use it?

23. Please give any general observation that you may have made on Health or sanitary matters not embodied in the above inquiries, using for that purpose the blank space on the next page if necessary.

Suggestions on any topic especially interesting to you will be welcome. If a physician, state when and where graduated, and sign your name with your professional title.

SUMMARY OF THE REPORT OF HEALTH OFFICERS FOR THE YEAR
ENDING SEPTEMBER 30, 1903.

739 Boards of Health reported for this year.

The number of public schools reported throughout the state was 3,892. Sanitary conditions in the schools were generally reported as good.

80 places reported an increase in sickness during the year and 350 places reported a considerable decrease.

Most of the water was from wells and of good quality.

Sewerage systems were reported in 60 places.

203 places reported a large per cent of the people as having been vaccinated.

MONEY EXPENDED FOR SANITARY IMPROVEMENTS DURING THE
YEAR.

Green Bay Sewerage System	\$86,900 00
Mellen Township, Ash and County, Pest House	500 00
Bayfield,—Improving Sewer System	600 00
Iron River Township,—Sewerage Connections	1,500 00
Hurley Village, Iron County, Vaugh Township, Five branches of Sewerage	4,000 00
Bangor Village, La Crosse County, for Fornaldehyde Generator	50 00
Fumigation	100 00
Manitowoc City, Stamping out S. P.	2,000 00
Two Rivers City, New System of Water Works & Sewerage	120,000 00
Cudahy Village, Sewerage System at present being laid	39,000 00
Appleton City,—Increasing Sanitary Districts, etc.,	500 00
Janesville City,—Installation of garbage boxes	175 00
La Prairie—Rock County, disinfection	165 00
Westboro, Taylor County, Draining o'd ponds & pools and disinfecting	800 00
Scandinavia town & village, Sewer from Creamery to River	350 00
Miscellaneous	4,000 00

Total \$260,580 00

REPORT
OF THE
DEPARTMENT OF VITAL STATISTICS
OF THE
STATE OF WISCONSIN
FOR THE
BIENNIAL PERIOD,
1902-1904.

STATE BOARD OF HEALTH AND DEPARTMENT OF
VITAL STATISTICS.

WM. F. WHYTE, M. D. Pres.,.....Watertown
U. O. B. WINGATE, M. D.,.....Milwaukee
Q. O. SUTHERLAND, M. D.,.....Janesville
F. C. SUITER, M. D.,.....La Crosse
L. E. SPENCER, M. D.,Wausau
HASSO A. MEILIKE, M. D.,Clintonville
C. A. HARPER, M. D., SecretaryMadison.

INTRODUCTORY.

With our laws as they are now constituted, there should be little difficulty in securing accurate returns of births, deaths, marriages and accidents. In most cases the health officers of cities and the clerks of towns and villages secure very complete returns, thus demonstrating the possibility of so doing in other localities where the reverse is true. The failure to report promptly and fully shows the indifference of public officers in the discharge of their official duties.

It is difficult to understand this indifference on the part of people of good standing in the community with reference to such an important matter. Hardly a day passes without one or more inquiries being made at our office for records of births, deaths and marriages. These are required for family history, legal proofs, insurance or for other purposes and are of the greatest importance. It very often happens that a soldier's widow in stricken circumstances makes application for the death certificate of her husband and too often we cannot comply with the request because some local official has neglected his duty and made no return of such death. The statistical value of such returns is also very great, for without a knowledge of the prevalence of certain diseases intelligent effort cannot be made for their prevention on the part of sanitary officials; or if such efforts are made, it cannot be ascertained with what measure of success the work has been attended. With the great increase of population in urban centers vital statistics are absolutely necessary for sanitary progress particularly in the way of collecting mortality statistics for various diseases.

Comparisons of birth and deaths usually made in a report of this kind to determine approximately the natural increase of population has been omitted. The birth reports being so incomplete that a comparison of this nature would show absolutely nothing of statistical value.

The law requiring physicians, midwives, householders or others to report upon properly prepared blanks all births, deaths, marriages and accidents, has worked very well in that deaths and marriages are quite generally reported. This is for the reason that licenses are required before marriages can take place and the use of burial permits which are required by statute insures the proper execution of death certificates. However, the section of the law requiring the use of birth certificates is violated in every section of the state by both physicians and midwives. For this reason not more than one-third and probably not more than one-fourth of the total number of births are reported for any one year.

Since a fee is provided for reporting births, both for the physician and midwife, and the local clerk or health officer the responsibility for failure to make proper returns is a divided one.

We have many records of localities where the officer for the collection of vital statistics is active in the performance of his duties, few births remain unreported and the records are quite complete. In other places due largely to the indifference and lack of proper information on the part of the local registrar only a very small per cent of the births are ever recorded. As soon as these indifferent people realize that the valuable data they are so purposely keeping from the public is the material upon which the truly scientific work of improving the public health is based great advances will be made in the collection of our statistics of births, deaths and accidents.

The accurate registration of vital statistics has become so important that both houses of congress recently passed resolutions urging upon all states the necessity for proper registration laws.

Joint resolution passed by both houses of congress and approved by the president of the United States, February the eleventh, 1903.

PUBLIC RESOLUTION—NO. 7.

Joint resolution requesting state authorities to co-operate with census office in securing a uniform system of birth and death registration.

Whereas the registration of deaths at the time of their occurrence furnishes official record information of much value to individuals; and

Whereas the registration of births and deaths, with information upon certain points, is essential to the progress of medical and sanitary science in preventing and restricting disease and in devising and apply remedial agencies; and

Whereas all of the principal countries of the civilized world recognize the necessity for such registration and enforce the same by general laws; and

Whereas registration in the United States is now confined to a few states, as a whole, and the larger cities, under local laws and ordinances which differ widely in their requirements; and

Whereas it is most important that registration should be conducted under laws that will insure a practical uniformity in the character and amount of information available from the records; and

Whereas the American Public Health Association and the United States Census office are now co-operating in an effort to extend the benefits of registration and to promote its efficiency by indicating the essential requirements of legislative enactments designed to secure the proper registration of all deaths and births and the collection of accurate vital statistics, to be presented to the attention of the legislative authorities in non-registration states with the suggestion that such legislation be adopted; Now, therefore,

Resolved by the senate and house of representatives of the United States of America in Congress assembled, That the senate and house of representatives of the United States hereby expresses approval of this movement and requests the favorable consideration and action of the state authorities, to the end that the United States may attain a complete and uniform system of registration.

Approved, February 11, 1903."

Summary of births reported for the period January 1, 1904, to September 30, 1904.

BIRTHS.

The number of living births recorded in Wisconsin for the nine months preceding September 30, 1904, was 23,426.

The number of stillbirths reported 1,803.

Total births recorded for the period 25,229. Of this number 12,971 were white males and 12,238 were white females.

The total colored births recorded was only 20, of which number 14 were males and 6 females.

Birth rates are not given due to the returns being so incomplete.

The tables following show the births classified by counties and months. Many of these reports were made by the registers of deeds under the provision of section 1026a, statutes of 1898. For this reason it was impossible where errors were found to determine whether the mistake was the fault of the register of deeds or whether the information was lacking on the original certificate of birth. From the figures given it appears that the errors in most cases were errors of omission in the original certificates for almost without exception the grand total of births or deaths reported was either equal to or greater than the sum of the births or deaths under the various sub-headings.

The register of deeds of Green county, Juneau county, Marinette county and Sauk county failed to make the report of births required by the Board.

DEATHS.

Deaths for the twenty-one months preceding September 30, 1904.

The total number of deaths reported from all causes including 1,803 stillbirths, was 35,293. Of this number 19,541 were males and 15,752 were females. 16,821 were married and 18,454 were single with 18 cases where the conjugal condition was not stated.

Excluding still births the annual death rate per 1,000 population was 9.65 which shows that the data we have is insufficient to establish a true death rate.

The number of deaths reported of children under five years of age including stillbirths was 8,036 which is equal to 22.76 per cent of the deaths from all causes.

The register of deeds of Green county, Juneau county and Manitowoc county failed to make the report of deaths as required by the Board.

TABLE 1. SHOWING BIRTH RECORD BY MONTHS FOR THE NINE MONTHS
 JANUARY 1, 1904, TO SEPTEMBER 30, 1904. CLASSIFIED ACCORDING TO SEX
 AND RACE.

Month.	Total Births.	White.		Colored.	
		Male.	Female.	Male.	Female.
January	2,706	1,417	1,286	2	1
February.....	2,374	1,202	1,170	1	1
March.....	2,933	1,514	1,417	2	0
April.....	3,100	1,554	1,546	0	0
May.....	3,057	1,601	1,453	3	0
June.....	2,504	1,280	1,223	1	0
July.....	2,807	1,495	1,310	1	1
August.....	2,923	1,485	1,432	4	2
September.....	2,825	1,423	1,401	0	1
Total.....	25,229	12,971	12,238	14	6

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TABLE 2.—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF JANUARY 1904, CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENTAGE.

Counties.	Total births.		White.		Colored		Twins.	Triplets.	Attended by a physician.	Attended by mid-wives or others.	Parentage.							
	Male.	Female.	Male.	Female.	Male.	Female.					American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
Adams	7	5	2						3	3	4	2	0	1				
Ashland	27	14	13						19	7	17	10						
Barron	29	14	15						23	6								29
Bayfield	19	5	14						19	7	1	7						4
Brown	69	46	23						43	26	46	11	2	2	6			
Buffalo	3	1							1	1	1							
Burnett	10	7	3						10	2	1	3						4
Calumet	12	4	8						11	1	11	1						
Chippewa	69	36	33						34	5								
Clark	25	11	14						18	7	15	8	1	1				
Columbia	10	8	2						10	2								2
Crawford	4	9	5						5	7								
Crawford	14	9	5						5	7								2
Dodge	35	13	22						31	3	33	1		1				
Door	36	17	19				2		15	21	22	4	4	1		5		
Douglas	90	50	40						62	28	21	9	9	2	3	1		45
Dunn	9	5	4						4	5	3	4	2					
Eau Claire	12	5	7						9	3	3	2	4	0	1			2
Florence	1	1													1			
Fond du Lac	64	32	32						56	8	51	10			1			3
Forest	5	1	4						5									
Gates	5	2	3						1	4	1	2	0		1			1
Grant	65	35	30				1		58	6	58	5	2					
Green Lake	10	7	3						9		3	4		1				2
Iowa	9	4	5						9		9							
Iron	2	2							2						1			1
Jackson	27	12	15						2	19	8	12	6					
Jefferson	20	8	12						20									
Kenosha	12	5	7						11									11
Kewaunee	18	6	12						13	5	16							2
La Crosse	57	29	28				1		28	29	31	6	3	1				16
Lafayette	18	11	7						15	3	15	1	1					1
Langlade	24	11	13							3	9	3	6		2			5
Lincoln	22	13	9				2		16	6	8	2						12
Manitowoc	47	25	22				1		34	13	3	30	1	1	8	2		2
Marathon	74	31	43						23	45	40	25	4		1			4
Marquette									5	3	4	3		1				
Marquette	8	2	6															
Milwaukee	1021	537	484				1	1	446	575	352	301	5	4	65	1	51	242
Monroe	23	10	11		1	1			18	5	15	2		1				5
Oconto	5	2	3						1	4	1	1	1					2
Oneida	10	3	7						11	7	8	1	1		1	1		
Outagamie	86	40	46						60	26	46	12			1			27
Ozaukee	10	6	4						174	33	177	19	3	2	6			
Pepin	1	1							1		1							
Pierce	21	14	7						21		15	2	2					
Polk	31	18	13						20	11	12	3	16					
Portage	44	26	18						14	30	15	1		1	27			
Price	13	8	5															
Racine	52	22	30						21	35	28		3	2	1			16
Richland	9	6	3						6	3		6	3	2	1		1	16
Rock	59	29	30						58	1	39	5	5					10
St. Croix	7	5	2						3	8	1			6				
Sawyer	11	7	4						3	3	3		3					
Shawano	37	25	12				2		14	23	4	24	3	4	1	1		
Sheboygan	8	4	4				2		7	1	6							2
Taylor	14	6	8						8	6	3	9			2			
Trempealeau	18	9	9						3	14	4	1	12	1				
Vernon	16	10	5		1				11	4	8		7					2
Vilas	6	4	2						6		4	2	7					4
Walworth	34	22	12						34		25	5						4
Washburn	1	1							1									
Washington	7	2	5						6	1	7							
Waukesha	20	14	6						16	3	17	3						3
Waupaca	25	16	9						21	4	8	12						5
Waushara	6	4	2						6		3	3						3
Winnebago	84	45	39						47	37	49	27	1	2	1			3
Wood	3		3						2	1								3
Total.	2706	1417	1286	2	1	12	1	1721	1107	1338	607	128	33	126	26	52	475	

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TABLE 3—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF FEBRUARY 1904 CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENTAGE.

Counties.	Totalbirths.		White.		Colored		Twins.	Triplets.	Attended by a physician.	Attended by midwives or others.	Parentage.											
	Male.	Female.	Male.	Female.	Male.	Female.					American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.				
Adams	15	7	8						8	5	9		4								2	
Ashland	8	5	3						4	4	6		2									
Barron	48	16	32				1		32	16	4										48	
Bayfield	14	4	10						10	4	4		1	4							5	
Brown	91	46	45						72	19	62	9	1			1	11				7	
Buffalo	2	2							2	2	2											
Burnett	9	8	1						3	6	2		1								6	
Calumet	18	9	8			1			16	2	13	5										
Chippewa	5	4	1						2	2	3											
Clark	33	21	12						26	7	26	7										
Columbia	24	10	14						19	5	19		1								4	
Crawford	15	6	9						5	4	4											
Dane	49	26	22		1		1		34	15	36		7								3	
Dodge	47	23	24						40	7	43	3	3			1						
Door	18	9	9						8	10	14	1	1									
Douglas	60	37	23						26	33	8	2	2			1					42	
Dunn	33	20	13						22	11	13	10		2								
Eau Claire	46	24	22				1		3	43	16	4	20	1		1					4	
Florence	3	1	2										3									
Fond du Lac	13	5	8						11	2	10	1					1				1	
Forest	3	2	1				1		3		2		2									
Gates	3	1	2						3		2										1	
Grant	34	15	19				1		33	1	20	11	1	1							1	
Green Lake	11	5	6						4		8	2									1	
Iowa	16	9	7						16		25		2								5	
Iron	15	8	7						6	9	3	1								4	7	
Jackson	9	6	3						6	3	6	2					1					
Jefferson	48	29	19						40	8												
Kenosha	7	5	2						7												7	
Kewaunee	5	3	2						3	2	4										1	
La Crosse	67	32	35				1	1	29	38	32	9	6			3	1				17	
Lafayette	22	9	13						18	2	14	4	1								3	
Langlade	6	4	2							1	9	1	1			1					1	
Lincoln	17	8	9						11	6	6	2	1								8	
Manitowoc	37	15	22						36	11	1	25	1	1	3						6	
Marathon	66	39	27						26	39	46	17	1								2	
Marquette	6	3	3						2	4	1	4	1	1								
Milwaukee	660	329	331				3		282	378	216	213	5	1	52		2				171	
Monroe	28	18	10						25	3	18	2	3								5	
Oconto	13	8	5						1	12	8		1		1							
Oneida	20	10	10				1		7	13	9		3									
Outagamie	94	45	49				2		72	22	67		3				1				22	
Ozaukee	16	6	10																			
Pepin	8	3	5						4	4		1									7	
Pierce	11	6	5						11		7	1	2	1								
Polk	10	5	5						6	4	1		9									
Portage	14	8	6						8	6	9	2	3									
Price	17	6	11																			
Racine	54	28	26						27	27	29	12		2	1						11	
Richland	7	2	5						5	2												
Rock	52	28	24						52		33	5	7								2	
St. Croix	11	6	5						11		6	3		1		1						
Sawyer	8	5	3						2	6	2		5	1							3	
Shawano	33	15	18						16	17	3	22	5									
Sheboygan	111	58	53						68	43	48	27									36	
Taylor	9	6	3						8	1	2	3	1									
Trempealeau	22	11	11						12	10	10		3									
Vernon	19	11	8					4	17	2	10		7	2								
Vilas	14	7	7				2		14		5	2	4	1			1				1	
Walworth	36	20	16						34	2	27	5									3	
Washburn	16	7	9						13	3												
Washington	8	3	5						8		7	1									3	
Waukesha	14	11	3						13	1	11										7	
Waupaca	33	18	15						30	3	8	13	4			1					8	
Waushara	11	6	5						9	2			3								5	
Winnebago	84	37	47						44	40	41	33	3		1						18	
Wood	18	5	13					1	14	4												
Total	2374	1202	1170	1	1	19	1	1361	915	1033	473	147	19	61	19	7	478					

TABLE 4.—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF MARCH, 1904, CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENTAGE.

Counties.	Total births.		White.		Colored		Twins.	Triplets.	Attended by a physician.	Attended by midwives or others.	Parentage.								
	Male.	Female.	Male.	Female.	Male.	Female.					American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
Adams	11	7	4						6	4	7	1	1						2
Ashland	26	14	12						19	6	13	12							
Barron	50	24	26						35	14			1						50
Bayfield	10	8	2						10	2	2								8
Brown	109	52	57				3		87	22	89	3	2						7
Buffalo	3	2	1						3	2	2	1							1
Burnett	4	1	3						4	4									
Calumet	49	21	28				1		46	3	44	5	2				1		
Chippewa	41	20	21						17	24									
Clark	34	18	16				1		26	8	26	6		1			1		
Columbia	23	12	11						22										
Crawford	19	12	7						8	8	8	1	1						13
Dane	66	33	33						50	12	52	5	3						6
Dodge	21	14	7					1	19	2	19	2	2						
Door	18	8	10						7	11	15	3							
Douglas	45	27	18						27	18	13		5	2					25
Dunn	26	15	11						16	10	17	3	4	2					
Eau Claire	52	28	24				1		16	10	17	3	4	2					7
Florence	2	2							16	36	18	7	19	1					
Fond du Lac	70	34	36				2		66	4	54	11	2		1				2
Forest	3	1	2						3	1	1	1							
Gates	4	3	1				1		3	1	1	1	2						
Grant	42	30	12				1		40	2	32	7	3						
Green Lake	4		4						4	4									
Iowa	20	14	6						20	35		2	1						2
Iron	4	1	3						1	3			1	1					2
Jackson	23	11	12						9	14	18	2	3						
Jefferson	47	21	26				1		45	2	2								
Kenosha	78	44	34						43	35									78
Kewaunee	39	18	21						25	14	33								6
La Crosse	65	34	31						35	30	38	5	3						18
Lafayette	20	13	7						16	1	19	1					1		
Langlade	43	21	22						15	6	10	12		5	1				1
Lincoln	21	11	10						15	6	6	2	1						12
Manitowoc	64	36	28				3		35	29	3	41	5	1	3		1		10
Marathon	80	38	42						30	50	41	31	2		1	2			3
Marquette	14	8	6						7	7	5	7		2					
Milwaukee	654	312	341	1			3		272	382	219	192	5		39		25		174
Monroe	17	6	11						15	2	12	2							3
Oconto	37	16	21						25	12	28	4	3	1					1
Oneida	15	8	7						7	8	4	4	1		3	3			
Outagamie	98	45	53				3		75	21	55	9							33
Ozaukee	17	10	7						4	2									6
Pepin	6	2	4						4	2									
Pierce	12	5	7						11	1	11	1							
Polk	21	11	10						10	11	6	1	13						1
Portage	15	9	6						10	5	8	5	2						
Price	22	14	8																
Racine	147	90	57				1		57	90	73	20	4				3		47
Richland	26	16	10				1		23	3									
Rock	70	36	34				2		70	48	10	5	1						6
St. Croix	71	31	40						70	1	18	14	17	19	1	2			
Sawyer	6	3	3						2	4	2		3						
Shawano	28	18	10						18	10	5	21	2						
Sheboygan	10	5	5				2		7	3	8								2
Taylor	15	8	7						6	9	1	11	5			1			
Trempealeau	26	16	10						20	5	11	5	10						
Vernon	24	13	11				2		19	4	21	5	3						
Vilas	8	3	5						8	3	1	2							2
Walworth	45	27	17	1			10		44	1	41		1	1					2
Washburn	13	7	6						13										
Washington	5	2	3						5		4	1							
Waukesha	81	42	39				1		76	5	47	15							19
Waupaca	46	27	19						37	9	12	20	4	1					9
Waushara	11	6	5						11	1	1	1							9
Winnebago	105	56	49				1		65	39	57	31	4	1	5				8
Wood	32	14	18						17	15									32
Total	2933	1514	1417	2			32		1803	1027	1333	538	141	43	54	21	29		607

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TABLE 5—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF APRIL 1904, CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENT-AGE.

Counties.	Total births.		White.		Colored		Twins.	Trip'ets.	Attended by a physician.	Attended by mid-wives or others.	Parentage.							
	Male.	Female.	Male.	Female.	American.	German.					Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
Adams	8	5	3						4	2	6		1					1
Ashland	15	8	7						12	3	8							2
Barron	41	21	20						20	21	6							41
Bayfield	15	9	6						15	6	1	6	1					1
Brown	9	53	52						61	34	73	4	4				2	3
Buffalo	10	5	5				3		10	7	1							2
Burnett	18	10	8						2	16	4		3					11
Calumet	25	15	10						21	4	23	2						
Chippewa	22	10	12				1		21	1								
Clark	47	30	17						28	19	35	10	1				1	
Columbia	25	13	12						22	3	20	2						3
Crawford	12	6	6						8	8								
Dane	79	40	39				1		71	8	55	6	10				1	7
Dodge	70	36	34				2		42	24	61	9	9					
Door	22	10	12						4	18	9	7	7	4				
Douglas	46	24	22						40	6	10	3	6		2			27
Dunn	58	31	27						20	38	14	27	16	1				
Dau Claire	8	4	4						1	7	5		3					
Florence	4	2	2							2		2						
Fond du Lac	32	10	22					1	30	2	28	3						1
Forest	3	1	2					3										
Gates	1		1						1		1							
Grant	49	22	27						47	1	35	11		1	1			1
Green Lake	22	7	15						22		16	2						4
Iowa	13	4	9						13		26							
Iron	16	12	4						13	3	2		1	2			5	6
Jackson	17	9	8						11	6	14	1	2					
Jefferson	34	13	21						30	4								
Kenosha	6	2	4						6									6
Kewaunee	33	16	17						20	13	27				2			4
La Crosse	44	28	16				1		22	22	26	4	2		1			11
Lafayette	19	10	9				2		17	1	17		1					1
Langlade	24	17	7							10	9		2					1
Lincoln	25	9	16						17	8	9	3	1					12
Manitowoc	154	71	83				4		71	83	4	96	10	7	18	5		14
Marathon	83	38	45						39	43	48	30	2		1			2
Marquette	15	10	5						3	12	4	8		1	1			1
Milwaukee	758	367	391						384	374	295	202	6	3	50		12	190
Monroe	31	18	13				1		25	6	26	1						4
Oconto	153	70	83				3		95	58	72	13	8		49			10
Oneida	10	4	6						4	6	3	2	2					2
Outagamie	92	49	43				3		73	20	59	8			1			25
Ozaukee	39	20	19															
Pepin	16	5	11						5	11		2						14
Pierce	27	15	12						27		20	3	3					1
Polk	35	18	17				2		13	23	10	2	19					4
Portage	68	32	36						23	45	13	19	3	1	29	1		2
Price	13	7	6															
Racine	124	59	65						110	14	80	9	2	2			1	27
Richland	25	18	7				2		19	6								
Rock	62	34	28						62		43	8	6	1				4
St. Croix	33	14	19						30	3	9	6	11	6		1		
Sawyer	9	5	4						7	2	4		2	3				
Shawano	42	22	20						30	12	7	29	6					
Sheboygan	11	6	5						7	4	11							
Taylor	16	7	9						14	2	2	11	1	1	1			
Trempealeau	27	16	11				1		13	11	9	8	8			1	1	1
Vernon	28	15	13						19	10	19		9	1				
Vilas	7	4	3						7		4	1	1	1				
Walworth	28	16	12						27	1	23	4	1					
Washburn	10	6	4						8	2								
Washington	21	14	7						21		17	4						
Waukesha	16	7	9						15	1	9	2						5
Waupaca	51	25	26						40	11	9	19	15	1				7
Waushara	14	5	9				1		8	6	5	3			1			6
Winnebago	86	43	43				1		45	42	39	37	2	1	3			5
Wood	34	22	16						18	20								38
Total	3100	1554	1546				28	1	11906	1105	1388	635	184	37	110	71	21	507

TABLE 6—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF MAY 1904, CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENT-AGE.

Counties.	Total births.	White.		Colored		Twins.	Triplets.	Attended by a physician.	Attended by mid-wives or others.	Parentage.									
		Male.	Female.	Male.	Female.					American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
Adams	8	6	2	5	.....	.....	.....	1	6	4	1	3	.....	.....	.....	.....	.....	.....	.....
Ashland	11	6	5	.....	.....	.....	.....	11	.....	10	.....	1	.....	.....	.....	.....	.....	.....	.....
Barron	31	18	13	.....	.....	.....	.....	21	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	31
Bayfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brown	102	45	57	.....	.....	.....	.....	83	19	60	7	4	1	5	9	.....	.....	.....	16
Buffalo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burnett	11	10	1	.....	.....	.....	.....	2	9	4	.....	.....	.....	.....	.....	.....	.....	.....	7
Calumet	9	4	5	.....	.....	.....	.....	8	1	7	2	.....	.....	.....	.....	.....	.....	.....	.....
Chippewa	6	3	3	.....	.....	.....	.....	4	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clark	33	21	12	.....	.....	.....	.....	23	5	22	10	1	.....	.....	.....	.....	.....	.....	.....
Columbia	13	12	1	.....	.....	1	.....	11	2	11	.....	.....	.....	.....	.....	.....	.....	.....	2
Crawford	12	9	3	.....	.....	1	.....	10	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dane	67	40	27	.....	.....	.....	.....	51	16	47	7	6	.....	.....	.....	.....	.....	.....	7
Dodge	30	14	16	.....	.....	.....	.....	28	2	25	3	.....	.....	.....	.....	.....	.....	.....	1
Door	99	55	44	.....	.....	.....	.....	53	46	75	7	7	.....	.....	.....	.....	.....	.....	4
Douglas	51	21	30	.....	.....	.....	.....	33	18	11	.....	14	.....	.....	.....	.....	.....	.....	22
Dunn	12	7	5	.....	.....	.....	.....	7	5	9	3	.....	.....	.....	.....	.....	.....	.....	.....
Eau Claire	29	10	19	.....	.....	.....	.....	11	18	17	.....	.....	.....	.....	.....	.....	.....	.....	12
Florence	6	2	4	.....	.....	.....	.....	.....	1	1	3	.....	.....	.....	.....	.....	.....	.....	.....
Fond du Lac	63	33	29	1	.....	.....	.....	60	3	45	13	1	.....	.....	.....	.....	.....	.....	3
Forest	5	1	4	.....	.....	.....	.....	5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Gates	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grant	39	24	15	.....	.....	1	.....	39	.....	29	6	1	.....	.....	.....	.....	.....	.....	.....
Green Lake	11	7	4	.....	.....	.....	.....	11	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iowa	13	6	7	.....	.....	.....	.....	11	2	22	1	1	1	.....	.....	.....	.....	.....	1
Iron	3	2	1	.....	.....	.....	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1
Jackson	18	11	7	.....	.....	.....	.....	7	11	14	2	2	.....	.....	.....	.....	.....	.....	.....
Jefferson	41	15	24	2	.....	.....	.....	30	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kenosha	49	26	23	.....	.....	.....	.....	40	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	49
Kewaunee	23	13	10	.....	.....	.....	.....	11	12	15	4	.....	.....	.....	.....	.....	.....	.....	3
La Crosse	36	23	13	.....	.....	.....	.....	17	19	21	1	3	.....	.....	.....	.....	.....	.....	10
Lafayette	17	12	5	.....	.....	.....	.....	14	2	13	.....	2	.....	.....	.....	.....	.....	.....	2
Langlade	29	17	12	.....	.....	.....	.....	.....	7	12	.....	2	.....	.....	.....	.....	.....	.....	4
Lincoln	19	12	7	.....	.....	1	.....	12	7	6	2	.....	.....	.....	.....	.....	.....	.....	11
Manitowoc	84	40	44	.....	.....	1	.....	51	33	3	61	2	4	7	.....	.....	.....	.....	7
Marathon	68	34	34	.....	.....	.....	.....	21	45	44	18	1	.....	3	1	.....	.....	.....	1
Marquette	6	4	2	.....	.....	.....	.....	3	3	6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee	1021	523	498	.....	.....	1	.....	548	473	391	241	12	2	51	.....	.....	.....	8	316
Monroe	23	15	8	.....	.....	.....	.....	20	3	14	3	.....	.....	.....	.....	.....	.....	.....	6
Oconto	20	13	7	.....	.....	.....	.....	13	7	14	3	.....	.....	.....	.....	.....	.....	.....	1
Oneda	12	5	7	.....	.....	.....	.....	5	7	6	1	3	.....	.....	.....	.....	.....	.....	.....
Outagamie	113	68	45	.....	.....	.....	.....	82	31	74	8	.....	.....	.....	.....	.....	.....	.....	32
Ozaukee	31	12	19	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pepin	7	4	3	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
Pierce	25	13	12	.....	.....	.....	.....	19	6	11	3	8	.....	.....	.....	.....	.....	.....	3
Polk	22	9	13	.....	.....	.....	.....	12	10	8	.....	8	.....	.....	.....	.....	.....	.....	6
Portage	10	7	3	.....	.....	1	.....	9	1	2	3	1	1	.....	.....	.....	.....	.....	1
Price	16	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Racine	39	21	18	.....	.....	.....	.....	25	14	16	6	3	1	.....	.....	.....	.....	.....	12
Richland	12	6	6	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rock	60	28	32	.....	.....	.....	.....	58	2	48	4	3	.....	.....	.....	.....	.....	.....	4
St. Croix	21	9	12	.....	.....	.....	.....	18	3	2	5	10	3	1	.....	.....	.....	.....	.....
Sawyer	5	2	3	.....	.....	.....	.....	3	2	1	.....	1	2	.....	.....	.....	.....	.....	1
Shawano	32	16	16	.....	.....	.....	.....	15	17	.....	31	1	.....	.....	.....	.....	.....	.....	.....
Sheboygan	94	51	43	.....	.....	.....	.....	70	24	45	36	.....	.....	.....	.....	.....	.....	.....	11
Taylor	28	11	17	.....	.....	.....	.....	20	8	7	20	.....	.....	.....	.....	.....	.....	.....	.....
Trempealeau	96	50	45	.....	.....	.....	.....	44	46	63	7	19	.....	.....	.....	.....	.....	.....	4
Vernon	47	21	26	.....	.....	.....	.....	37	10	27	.....	20	.....	.....	.....	.....	.....	.....	.....
Vilas	6	3	3	.....	.....	.....	.....	6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Walworth	25	15	10	.....	.....	.....	.....	19	6	17	6	1	.....	.....	.....	.....	.....	.....	.....
Washburn	6	3	3	.....	.....	.....	.....	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington	27	17	10	.....	.....	.....	.....	26	1	24	3	.....	.....	.....	.....	.....	.....	.....	.....
Waukesha	35	20	15	.....	.....	.....	.....	35	.....	24	6	1	.....	.....	.....	.....	.....	.....	5
Waupaca	21	11	10	.....	.....	.....	.....	19	2	5	6	6	.....	.....	.....	.....	.....	.....	3
Waushara	12	6	6	.....	.....	.....	.....	7	5	.....	6	.....	.....	.....	.....	.....	.....	.....	6
Winnebago	106	58	48	.....	.....	.....	.....	63	40	57	35	5	.....	.....	.....	.....	.....	.....	6
Wood	32	13	19	16	16	32
Total	3067	1601	1453	3	9	1902	1060	1384	598	147	18	86	18	12	656

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TABLE 7—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF JUNE 1904 CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENT-AGE.

Counties.	Total births.		White.		Colored		Twins.	Triplets.	Attended by a physician.	Attended by mid-wives or others.	Parentage.								
	Male.	Female.	Male.	Female.	Male.	Female.					American	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
Adams	18	8	10						9	9	11	2	2	1					2
Ashland	20	7	13						20	9	14	6							
Barron	32	18	14						22	10									32
Bayfield	3	1	2						1	1	1		1						1
Brown	92	50	42						17	67	6	6	1	1	5	1			5
Buffalo	2	2							2	2									
Burnett	1	1							1										1
Calumet	30	14	16						27	3	22	8							
Chippewa	40	22	18						34	6									
Clark	16	5	11						15	1	11	5							
Columbia	33	15	18						24	9	24	1							8
Crawford	11	5	6						8	3									
Dane	54	26	28						50	4	37	8	3						6
Dodge	55	31	24				1		49	6	42	5							8
Door	23	12	11						3	20	11	6	6						
Douglas	42	22	20						28	14	9		4			1			28
Dunn	21	12	9						16	5	12	1	1						
Eau Claire	41	20	21						37	4	20		4						17
Florence	8	7	1										5						
Fond du Lac	21	9	12						15	6	17	3							1
Forest	6	2	4						6	1	1								
Gates	9	3	6						1	8	4	3							2
Grant	34	14	20						33	1	22	7	1	1					3
Green Lake	11	7	4						5										2
Iowa	5	3	2						5	5	7	1							2
Iron	13	8	5						8	5	2	1					7		3
Jackson	24	11	13						5	19	20	2	1						1
Jefferson	49	24	25				1		45	4									
Kenosha	45	18	27				2		28	17									45
Kewaunee	40	20	20						24	16	29	1				1			9
La Crosse	46	22	24						25	21	30	4	3						9
Lafayette	15	7	8						15		8	1	1			3			2
Langlade	25	16	9							10	8				1	1			3
Lincoln	26	15	11						22	4	11	4							11
Manitowoc	40	19	21				1		22	18	1	22	1	5	1				10
Marathon	50	26	24						22	27	27	18			1	1			3
Marquette	10	4	6						10		7	2			1				
Milwaukee	560	288	271	1			1		248	312	182	166	8	2	30		8		164
Monroe	36	15	21						28	8	28	1							7
Oconto	9	4	5						3	6	8								1
Oneida	11	6	5						6	5	6	2	2			1			
Outagamie	94	46	48						62	32	49	9							36
Ozaukee	16	9	7										1						
Pepin	3	1	2						3				1						2
Pierce	23	12	11						22	1	7	4	7	1					4
Polk	16	9	7						16		10	1	5						
Portage	19	7	12						11	8	8	7	2		2				
Price	13	10	3				1												
Racine	56	26	30						18	38	24	9	1		1				21
Richland	26	16	10						18	8									
Rock	59	30	29				1		53	1	46	3	3						7
St. Croix	30	13	17						30		8	8	12	2					
Sawyer	8	2	6						7	1	4	1	1	1					
Shawano	38	24	14						25	13	3	30	8						
Sheboygan	119	64	55						89	30	69	39							11
Taylor	14	3	11						1	13	2	10	1	1					
Trempealeau	21	14	7				1		5	16	7	7	7						
Vernon	25	12	13						12	13	19		6						
Vilas	8	3	5				1		8		3	2	3						
Walworth	14	10	4						14		9	3							1
Washburn		7	9																
Washington	16	7	9						16		13	3							
Waukesha	37	19	18						36	1	21	7							9
Waupaca	63	32	31						56	7	11	30	7	1					14
Waushara	14	7	7						9	5	3	4							7
Winnebago	69	37	32						35	34	40	23	2	1					5
Wood	76	48	28				3		67	9									76
Total	2504	1280	1223	1			15		1614	821	1065	494	126	19	41	11	16		579

TABLE 8—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF JULY 1904, CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENT-AGE.

Counties.	Total births.	White.		Colored.		Twins.	Triplets.	Attended by a physician.	Attended by mid-wives or others.	Parentage.							
		Male.	Female.	Male.	Female.					American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
Adams	6	5	1					1	2	2	2	1					1
Ashland	5	3	2					5	2	5							2
Barron	28	15	13					21	7								28
Bayfield	3	2	1					1	1	1							2
Brown	99	52	47			2		76	23	53	19	2	1	2	9	1	12
Buffalo	3	1	2					3	3	3							
Burnett	10	2	8					9	1	4		3					3
Calumet	32	19	12	1				30	2	32							
Chippewa	25	14	11					23	2								
Clark	83	46	37					74	9	58	21	1		1			2
Columbia	65	35	30			2		64	1	43	2	1					19
Crawford	9	7	2					8	1	1							
Dane	91	49	42					72	19	60	11	10					10
Dodge	84	47	36		1			65	19	77	7						
Door	35	16	19					17	18	28	3				1		
Douglas	60	34	26					36	24	17	4	2					30
Dunn	48	25	23					20	28	11	26	7	1		1		2
Eau Claire	71	44	27					3	68	27	2	25	2				15
Florence	7	2	5						1	1		5					
Fond du Lac	59	33	26			1		53	6	39	16			2			2
Forest	4	1	3					4									
Gates	5	3	2							2	2				1		
Grant	54	26	28			1		50	3	47	4						1
Green Lake	6	6	4					4						2			2
Iowa	17	11	6					17		30	2	2					
Iron	1	1						1		1							
Jackson	17	10	7					13	4	16	1						
Jefferson	30	15	15					23	7								
Kenosha	98	52	46			2		57	40								98
Kewaunee	80	37	43					61	19	57	3			3			17
La Crosse	54	31	23					19	35	30	5	4		2			13
Lafayette	7	6	1					6	1	6		1					
Langlade	26	12	14					17	9	6	6	2	4	3	1		3
Lincoln	26	13	13					17	9	6	6						14
Manitowoc	47	15	32			2		36	11		34	2	4	1			6
Marathon	76	35	41					37	38	42	26	2		2	2		2
Marquette	6	5	1					2	4	1	5						
Milwaukee	587	318	279					283	314	235	166	5	2	22		4	163
Monroe	45	23	22					42	3	38							7
Oconto	22	13	9					15	7	17	3			2			
Oneida	8	6	2					4	4	2	4	2					
Outagamie	115	53	62					88	27	69	13						30
Ozaukee	30	15	15														
Pepin	7	6	1					7									7
Pierce	10	5	5					10		7	3						
Polk	10	5	5					5	5	2		8					
Portage	14	7	7					6	8	5	1	2		6			
Price	12	7	5														
Racine	103	53	45					57	46	58	10	3					
Richland	14	6	8					14								1	31
Rock	50	30	20			2		50		38	4	3					5
St. Croix	6	2	4					6			2	1	3				
Sawyer																	
Shawano	33	20	13					22	11	10	25	8					
Sheboygan	17	8	9					13	4	15	2						
Taylor	3	2	1					1	2	2	1						
Trempealeau	26	15	11			1		18	8	12		12		1			1
Vernon	24	14	10					18	6	16		8					
Vilas	9	4	5			2		9		4	2	1	1				
Walworth	10	6	4					10		7	1						1
Washburn	11	6	5					9	2								
Washington	54	24	30					53	1	48	6						
Waukesha	28	17	11					27	1	19	3						6
Waupaca	41	22	19					40	1	14	11	7	2		1		6
Waushara	17	11	6					17									13
Winnebago	85	43	42					44	39	41	35	2	1				9
Wood	29	19	10					18	11								29
Total	2807	1495	1310	1	1	15		1812	905	1353	496	139	24	54	18	6	590

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TABLE 9—SHOWING BIRTHS BY COUNTIES FOR THE MONTH OF AUGUST 1904, CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND PARENT-AGE.

Counties.	Total births.		White.		Colored		Twins.	Triplets.	Attended by a physician.	Attended by mid-wives or others.	Parentage.									
	Male.	Female.	Male.	Female.	Male.	Female.					American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassi-fied.		
Adams	5	1	4						2	2	5									
Ashland	9	5	4						2	2	5			1						
Barron	34	16	18						22	12	22									24
Bayfield																				
Brown	118	54	64						94	24	81	15	3	3	1	2	1			6
Buffalo																				
Burnett	8	4	4						3	5	4									4
Calumet	44	16	24	3	1	2			42	29	38	6								
Chippewa	58	33	25						54	4	4									
Clark	20	13	7						17	33	16	4								
Columbia	28	10	18				1		26	29	15	8								5
Crawford	13	9	4						6	6										
Dane	34	16	18						26	39	24	2	3			1				3
Dodge	23	18	5						20	33	20						2			1
Door	26	14	12						9	17	12	6	4			3				1
Douglas	36	15	21						18	18	9			1						21
Dunn	18	9	9						14	4	5	3	6							4
Eau Claire	1	1							1											1
Florence	5	3	2										5							
Fond du Lac	65	30	35						56	9	52	10			1					2
Forest	5	3	2				1													
Gates	3	2	1							3	2									
Grant	60	34	26				2		53	3	52	7								1
Green Lake	24	12	12						21	2	14	2			1					7
Iowa	13	7	6						13	7	13	3								
Iron	14	9	5						7	7	3	1			1			4		5
Jackson	57	32	25						45	12	53		4							
Jefferson	59	29	30						57	2	2									
Kenosha	45	20	25						23	22										45
Kewaunee	31	18	13				2		18	13	25	2								4
La Crosse	55	29	26						26	29	33	7	4		2	1				8
Lafayette	12	7	5						9	3	11									1
Langlade	21	6	15							9	8		1	2	1					1
Lincoln	14	8	6						11	3	5	3								6
Manitowoc	76	40	36						50	26	6	50	7	3						10
Marathon	59	29	30				1		30	28	35	16	3		2	2				1
Marquette	3	3							1	2										
Milwaukee	924	483	441						438	486	331	243	5	1	64		38			242
Monroe	32	18	14						26	6	24									8
Oconto	30	12	18				1		26	4	19	5	3		1					2
Oneida	15	9	6						9	6	10	2	2			1				
Outagamie	108	54	54				1		75	34	64	16								31
Ozaukee	39	21	18																	
Pepin	6	3	3						3	3	5									2
Pierce	13	8	5							5	2	2								4
Polk	27	13	14						13	14	11	2	13							1
Portage	38	19	19						31	7	13	9	4	2	5	4				1
Price	20	9	11																	
Racine	51	24	27				1		30	21	26	3			1			5		16
Richland	13	8	5						9	4										
Rock	50	27	21	1	1				50	3	34	2	2							12
St. Croix	22	9	13						19	3	8	7	5	2						
Shawano	30	12	18						16	14	4	28	2							
Sheboygan	106	50	56						87	19	55	27								24
Taylor	19	8	11						10	9	3	15			1					
Trempealeau	31	18	13						21	10	17	1	11		1					1
Vernon	19	10	9						16	4	17	2	2		1					
Vilas	7	4	3						7		4	2	1		1					
Walworth	22	12	10						22		17	3								2
Washburn	7	1	6						7											
Washington	13	8	5						12	1	7	6								
Waukesha	51	20	31						49	2	34	6	1							10
Waupaca	23	12	11						16	7	9	12	1							1
Waushara	7	3	4						2	5	2									5
Winnebago	78	42	36						40	37	36	2	3		1					4
Wood	26	13	13						13	13										26
Total	2923	1485	1432	4	2	14			1834	988	1298	583	102	13	85	21	50			563

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TABLE 11.—SHOWING BIRTHS BY COUNTIES FOR THE NINE MONTHS, JAN. 1, 1904, to SEPT. 30, 1904, CLASSIFIED ACCORDING TO RACE, COLOR, SEX AND NATIONALITY.

Counties.	Total births.		White.		Colored		Twins.	Triplets.	Attended by a physician.	Attended by midwives or others.	Parentage.										
	Male.	Female.	Male.	Female.	Male.	Female.					American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.			
Adams	87	47	40						35	40	56	6	14	2	11						
Ashland	136	71	65						107	26	85	41	4	3							8
Barron	337	161	176						221	115											337
Bayfield	93	44	49						85	8	32	3	22	1							34
Brown	536	435	401						618	218	570	84	26	10	15	71			3		57
Buffalo	31	18	13				10		1	20	26	31									3
Burnett	78	46	32						20	58	23	2	13								39
Calumet	252	120	126	4	2	3			231	21	219	33									
Chippewa	299	162	137						220	49											
Clark	312	180	132						246	66	225	75	5	1	2	1	2				2
Columbia	265	138	127						236	28	177	15	6								67
Crawford	118	67	51						64	40											
Dane	558	294	263		1				465	89	401	54	49								49
Dodge	453	236	216			1			369	79	394	43			2						11
Door	313	165	148						127	186	212	39	37	1	5		12				6
Douglas	507	270	237						328	178	110	23	59	7	17	5					26
Dunn	240	134	106						125	115	89	80	58	6							6
Dau Claire	271	146	126						90	181	114	16	77	4							58
Florence	43	27	16								9	2	30								
Fond du Lac	417	201	215	1					372	45	321	70	3		4						17
Forest	36	14	22						36			7	1	1							
Gates	52	24	28						31	16	23	13	5		1	1					9
Grant	402	215	187						384	16	318	60	8	4	4						6
Green Lake	127	65	62						106	2	73	21			5						28
Iowa	124	65	59						119	5	198	4	7	2							15
Iron	82	51	31						43	39	14	4	1	2	4					26	30
Jackson	212	113	99					1	120	92	168	22	19								2
Jefferson	360	169	189		2				319	41											
Kenosha	403	205	198						267	134											402
Kewaunee	286	139	147						187	99	219	12			4	3					48
La Crosse	469	254	215					1	220	249	264	47	29		9	4					117
Lafayette	142	83	59						120	15	114	7	7	1	2	4					10
Langlade	215	112	103								56	85	6	24	9	9					22
Lincoln	179	96	83					3	129	50	58	24	3								94
Manitowoc	690	305	355					13	382	288	24	422	33	28	65	8					80
Marathon	602	294	308						248	344	354	192	16		11	10					19
Marquette	36	44	32						37	39	25	40			6	1					1
Milwaukee	6997	3532	3463	2			9		3291	3696	2491	1954	56	19	430		166				1870
Monroe	262	139	127		1				223	39	195	12	4	1							50
Oconto	323	154	169						206	117	194	33	18	2	58	1					17
Oneida	115	61	54						65	51	54	24	22		7	6	1				2
Outagamie	850	437	443				11		642	238	540	84									254
Ozaukee	207	105	102						174	33	177	19	3	2	6						
Pepin	65	27	38						39	22	5	4	1								57
Pierce	154	86	68						121	8	83	19	27	2		2					21
Polk	196	102	94					2	113	84	70	10	104								12
Portage	247	130	117					2	127	120	85	52	21	5	75	5					4
Price	142	79	63																		
Racine	749	393	356						421	332	390	84	16	7	7						236
Richland	145	85	60						116	29											
Rock	500	259	238		1	2			496	4	729	85	74	2							110
St. Croix	226	102	124						244	12	60	51	62	47	2	4					
Sawyer	47	24	23						24	23	16	1	20	8							1
Shawano	308	170	138					2	175	133	36	239	41	4	1	1					3
Sheboygan	525	276	249					4	396	129	295	138	1								89
Taylor	122	53	69						69	53	23	82	6	5	5	1					
Trempealeau	293	158	135					3	148	135	145	33	101		5	1	2				7
Vernon	231	122	108			1			171	60	158	70	4								
Vilas	70	35	35					5	70	29	16	19	3			2					5
Walworth	241	143	99		1				231	10	187	31	4	3							14
Washburn	74	33	41						58	16											
Washington	213	117	96						209	4	175	28									
Waukesha	337	176	161					1	322	14	223	45	2		1						69
Waupaca	303	163	140						259	44	76	122	44	5		4					52
Waushara	108	53	55						82	26	1	22	13								72
Winnebago	777	400	377					2	416	352	396	294	23	7	13	1					48
Wood	299	156	143					4	201	98											239
Total	25,229	12,971	12,238	14	6	149	2		15,787	8,883	11,813	5,031	1,291	229	72	165	218				51,650

TABLE 13.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal. relation		Age.										Nationality.									
	Total.	Male.	Fem. s.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
ADAMS COUNTY.																										
Total deaths	135	66	69	69	66	16	5	.....	2	5	4	15	6	8	11	16	39	96	15	7	5	1	1	.....	11
Still Births	1		1																							
I. Epidemic Diseases.																										
Typhoid Fever	2	1	1	1	.....					1		1													2
Smallpox	1		1	1	.....									1				1							2
Measles	1		1	1	.....													1							
Scarlet Fever	1		1	1	.....					1								1							
Whooping Cough	1		1	1	.....													1							
Diphtheria	1		1	1	.....													1							
Influenza	6	3	3	4	1					1		1			1	1	2	4	2							
Others																										
II. Other General Diseases.																										
Pyæmia and Septicæmia																										
Rabies																										
Malaria																										
Syphilis																										
Tuberculosis (lungs)	2	5	3	3	4	1				1				1	1	2	4	2	2							
Tuberculosis (other)	6	1	5	4	2							2														
Rheumatism	1	1	1	1	.....										1	1	3	1	1		1				
Diabetes																1		1								
Anæmia																										
Chlorosis																										
Alcoholism	1	1		1	.....								1						1						

TABLE NO. 12 — Showing comparative mortality in Wisconsin from twenty principal causes of death for the twenty-one months preceding September 30, 1904. Arranged in order of the actual number of deaths.

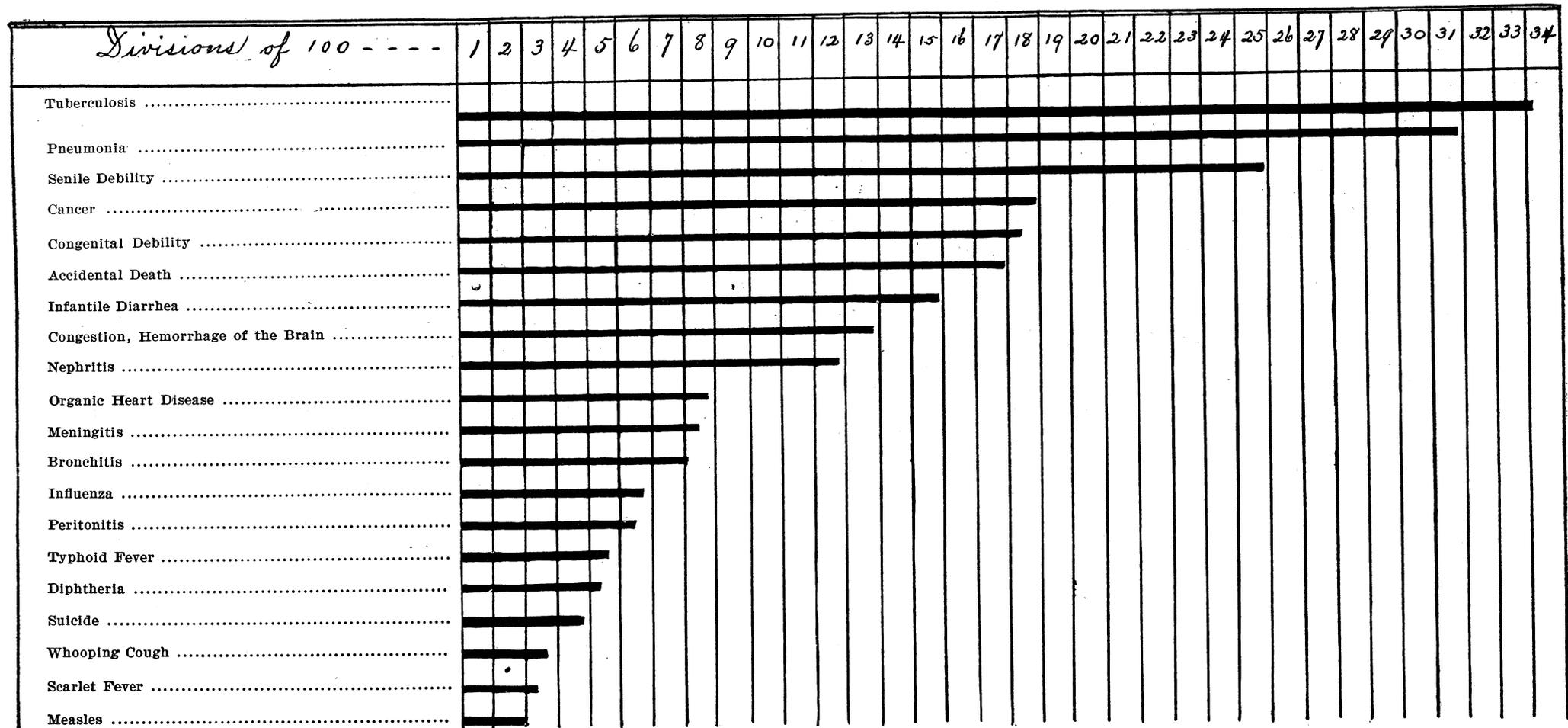


TABLE 13—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH,	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
ADAMS.																									
Peritonitis	4	3	1	3	1					1					1	2		3							
Appendicitis	1		1					1												1					
VII. Disease Genito Urinary System.																									
Nephritis	6	4	2	3							1					1		3	5		1				
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder	1	1		1															1						
Diseases Male Genito Urinary Organs																									
Pelvis Abscess	2	1	1	2								1	1						2						
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors	1		1		1														1	1					
Other diseases Female Urinary Organs	1		1	1								1							1						
Renal Calculus																									
VIII. Puerpal Diseases.																									
Accidents of Pregnancy																									
Puerpal Hemorrhage	1		1	1												1			1						
Puerpal Septicemia																									
Puerperal Convulsions																									
Other Diseases Pregnancy	1		1	1							1														

IX. Diseases Skin and Cellular Tissue.															
Erysipelas															
Gangrene															
Other Diseases Skin and Adnexia															
X. Diseases Infancy.															
Congenital Debility	5	3	2		5	5						5			
Other Diseases of Infancy	3	1	2		3	3						3			
XI. Diseases of Old Age.															
Senile Debility	10	2	8	5	5					10	6	1	1	1	1
XII. Violence.															
Suicide	3	2	1	3				1	1		1	2			1
XIII. Accident.															
Fractures	1	1		1				1				1			
Gunshot	1	1		1								1			
Lightning									1			1			
Mining															
Railroad															
Burning															
Vehicles and Horses															
Sunstroke and Freezing															
Drowning															
Other Accidents	1	1		1		1						1			
Homicide															
XIV. Causes Ill-Defined.															
Exhaustion															
Fever															
Sudden Death															
Heart Failure	3	3		2	1						3	2		1	
Dropsy															
Surgical Shock															
Unknown or not Specified	6	5	1	2	4	1		1			1	1	3	1	2

TABLE 14—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Conju- gal re- lation.		Age.										Nationality.									
	Male.	Female.	Married.	Single.	Undr 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Iri h.	Pole.	French.	Italian.	Unclassified.		
ASHLAND.																										
Peritonitis	18	11	7	5	13			1	3	4		1	1	4	2		9		2							1
Appendicitis	5	3	2	2	3					2		2		1			2		2							
VIII. Disease Genito Urinary System.																										
Nephritis	23	15	8	15	8				1		3	7		4	3	5	8	4	6	3						2
Perinephritic Abscess																		4								
Vesical Calculi																										
Diseases Bladder	1	1			1					1																
Diseases Male Genito Urinary Organs..																										
Pelvis Abscess	1		1	1							1					1										
Uterine Hemorrhage																										
Uterine Tumor	2		2	1	1					1	1															
Other Diseases Uterus										1								1								1
Ovarian Cyst and Tumors																										
Other diseases Female Urinary Organs																										
Renal Calculus																										
VIII. Puerpual Diseases.																										
Accidents of Pregnancy	1		1	1							1															
Puerpual Hemorrhage																				1						
Puerpual Septicemia																										
Puerpual Convulsions																										
Other Diseases Pregnancy	3		3	3							3								2							1

IX. Diseases skin and Celluar Tissue.															
Erysipelas															
Gangrene	1	1			1						1		1		
Other Diseases Skin and Adnexia															
X. Diseases Infancy.															
Congenital Debility	15	6	9		15	15						9	1	3	
Other Diseases of Infancy	27	20	7		27	20	7					18	2	5	1
XI. Diseases of Old Age.															
Senile Debility	11	5	6								3	8	4	4	
XII. Violence.															
Suicide	6	6		1	5			1		2		2		1	
XIII. Accident.															
Fractures	8	8		3	5					1	2	2		1	
Gunshot	5	5		2	3					2	2		1		
Lightning															
Lightning															
Railroad	7	6	1	2	5			1		2					
Burning	1	1			1			1							
Vehicles and Horses	4	3	1		4	1		1					2	1	
Sunstroke and Freezing	1	1		1									1		
Drowning	8	8			8			1	2		3	1			
Other Accidents	27	27		9	18			2	3	1	4	11	2	2	
Homicide															
XIV. Causes Ill-Defined.															
Exhaustion															
Fever															
Sudden Death															
Heart Failure	15	12	3	6	9	1				1	4	3	4		
Dropsy															
Surgical Shock															
Unknown or not Specified	11	7	4	4	7	1		1	1		1		2		1

41 per cent of all deaths were under five years of age.

IX. Diseases skin and Celluar Tissue.													
Erysipelas													
Gangrene													
Other Diseases Skin and Adnexia													
X. Diseases Infancy.													
Congenital Debility	2	1	1	2	2						1	1	
Other Diseases of Infancy													
XI. Diseases of Old Age.													
Senile Debility	2	2		2						2	1		1
XII. Violence.													
Suicide													
XIII. Accident.													
Fractures													
Gunshot													
Lightning													
Mining													
Railroad	1	1		1					1		1		
Burning													
Vehicles and Horses													
Sunstroke and Freezing													
Drowning													
Other Accidents	4	4		2	2			1		1	2	1	1
Homicide													
XIV. Causes Ill-Defined.													
Exhaustion													
Fever													
Sudden Death													
Heart Failure	2	2		2							1	1	1
Dropsy													
Surgical Shock													
Unknown or not Specified	11	5	6	2	9	4	1	1	1	1	9	2	

TABLE 17.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.										Nationality.										
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
BROWN COUNTY.																										
Total deaths	1027	545	482	448	579	245	54	13	23	15	21	73	66	55	64	79	220	453	193	27	55	28	7	.....	264	
Still Births	64	33	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	5	2	.....	.....	.....	.....	8	
I. Epidemic Diseases.																										
Typhoid Fever	10	8	2	1	9	.....	.....	.....	.....	1	3	6	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	3
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles	2	1	1	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Scarlet Fever .....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Whooping Cough	12	6	6	.....	12	7	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	6	3	.....	.....	.....	.....	.....	.....	3
Diphtheria .....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza	2	1	1	.....	4	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	3
Others	7	5	2	2	5	2	.....	.....	.....	1	1	1	1	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	.....	2
II. Other General Diseases.																										
Pyæmia and Septicæmia	23	10	13	16	7	1	2	.....	.....	.....	.....	5	7	2	3	2	1	13	6	.....	2	.....	.....	.....	.....	2
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis	3	.....	3	1	2	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....
Tuberculosis (lungs)	42	18	24	20	22	.....	.....	.....	.....	1	3	21	6	4	4	1	2	11	8	1	2	1	.....	.....	.....	19
Tuberculosis (other)	33	18	15	10	23	10	2	.....	.....	1	3	4	6	2	4	1	.....	17	9	1	1	.....	.....	.....	.....	5
Rheumatism	10	8	2	5	5	.....	.....	.....	.....	1	.....	1	.....	1	1	2	.....	.....	.....	2	1	.....	.....	.....	.....	4
Diabetes	11	6	5	8	3	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	4
Anæmia Chlorosis	2	1	1	1	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	4
Alcoholism .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 18.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.		Con- jugal Relatio		Age.											Nationality.										
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 yrs or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian	Unclassified.		
BUFFALO COUNTY.																											
Total deaths	126	76	50	67	59	16	5	3	1	4	4	7	9	10	11	16	16	59	39	14	3						11
Still Births	1	1																1									
I. Epidemic Diseases.																											
Typhoid Fever	2	1	1	1	1						1						1		1	1							
Smallpox																				1							
Measles	1		1		1	1													1								
Scarlet Fever					1																						
Whooping Cough																											
Diphtheria																											
Influenza																											
Others																											
II. Other General Diseases.																											
Pyaemia and Septicemia	1	1		1												1			1								
Rabies																											
Malaria																											
Syphilis	1		1		1								1						1								
Tuberculosis (lungs)	11	4	7	7	4	1				1	1	1	2		3	1	1	4	6	1						1	
Tuberculosis (other)																											
Rheumatism	1		1	1							1								1								
Diabetes	2	2		2												1	1										2
Anemia Chlorosis																											
Alcoholism																											

TABLE 19.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.											Nationality.											
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over	American.	German.	Norwegian	Irish.	Pole.	French.	Italian.	Unclassified.			
BURNETT COUNTY.																												
Total deaths	127	67	60	55	72	10	6	1	14	4	9	8	10	10	12	10	33	29	8	88								2
Still Births																												
I. Epidemic Diseases.																												
Typhoid Fever																												
Smallpox																												
Measles																												
Scarlet Fever	3	2	1		3	1			1		1							2		1								
Whooping Cough																												
Diphtheria	10	4	6		10		2	1	4		2	1						5		5								
Influenza	2	2			2				1										1		1							
Others																												
II. Other General Diseases.																												
Pyæmia and Septicæmia	2		2	2														1		1								
Rabies																												
Malaria																												
Syphilis																												
Tuberculosis (lungs)	17	6	11	9	8					1	3	2	5	3	3													
Tuberculosis (other)	1	1			1														2		1							1
Rheumatism	2		2		2				1					1														
Diabetes	1	1		1																	2							
Anæmia Chlorosis	1		1								1										1							
Alcoholism																												

TABLE 19.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH	Total deaths.		Sex		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
BURNETT COUNTY—Continued.																									
Peritonitis	3	2	1						1								2		3						
Appendicitis																									
VII. Disease Genito Urinary System.																									
Nephritis	5	3	2	2	3				1						1	3			5						
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder	1	1		1									1						1						
Diseases Male Genito Urinary Organs																									
Pelvis Abscess																									
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors	1		1	1								1							1						
Other diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpal Diseases.																									
Accidents of Pregnancy	1		1	1							1								1						
Puerpal Hemorrhage																									
Puerpal Septicemia																									
Puerpal Convulsions																									
Other Diseases Pregnancy																									

IX. Diseases Skin and Celluar Tissue.															
Erysipelas															
Gangrene															
Other Diseases Skin and Adnexia															
X. Diseases Infancy.															
Congenital Debility	4	4		4	4							3		1	
Other Diseases of Infancy	1	1		1		1								1	
XI. Diseases of Old Age.															
Senile Debility	16	7	9	8	8							16	1	2	13
XII. Violence.															
Suicide	1	1			1				1				1		
XIII. Accident.															
Fractures															
Gunshot	1	1			1				1						1
Lightning															
Mining															
Railroad															
Burning															
Vehicles and Horses															
Sunstroke and Freezing	3	2	1		3			1	2				3		
Drowning	2	1		1	1				1		1			2	
Other Accidents	2	1	1	1	1			1		1			2		
Homicide															
XIV. Causes Ill-Defined.															
Exhaustion															
Fever															
Sudden Death															
Heart Failure	4	1	3	3	1				1	1	1	1	1	3	
Dropsy	2	1	1	2					1			1	1		
Surgical Shock															
Unknown or not Specified	2		2	1	1	1						1		1	1

TABLE 20.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.									
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
CALUMET COUNTY.																										
Total deaths	246	139	107	161	85	37	9	1	3	3	9	14	15	15	25	33	75	113	112	1	10	1	1	8		
Still Births	5	5																5								
I. Epidemic Diseases.																										
Typhoid Fever	1		1	1										1												
Smallpox																			1							
Measles																										
Scarlet Fever	1		1		1		1																			
Whooping Cough	1	1			1	1												1								
Diphtheria	1		1		1		1											1								
Influenza	5	1	4	4	1	1												2		2						
Others																		2							1	
II. Other General Diseases.																										
Pyæmia and Septicæmia	2	1	1	2							1			1				1	1							
Rabies																										
Malaria																										
Syphilis																										
Tuberculosis (lungs)	21	11	10	14	7																					
Tuberculosis (other)	5	3	2	2	3		2			2			3	5	1	1	4	13	6						2	
Rheumatism	4	1	3	3	1				1		1							4	1							
Diabetes	2	1	1														2	3	3							
Anæmia Chlorosis																										
Alcoholism	1	1			1					1								1	1							

TABLE 21.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		AGE.											Nationality.										
		Male.	Female	Married	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over	American	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
CHIPPEWA CO																											
Total deaths	397	222	175	168	229	55	17	9	22	18	25	34	32	32	37	52	52	191	90	45	27	1	2	.....	40	
Still Births	12	8	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	2	1	.....	.....	.....	.....	2	
I. Epidemic Diseases.																											
Typhoid Fever	7	5	2	4	3	.....	.....	.....	.....	.....	.....	2	3	1	.....	1	.....	5	.....	.....	1	.....	.....	.....	.....	1
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles	9	6	3	.....	9	.....	2	.....	1	.....	2	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever	1	1	.....	.....	1	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough	3	2	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria	5	3	2	.....	5	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza	9	5	4	4	5	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Others .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																											
Pyæmia and Septicæmia	3	1	2	2	1	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (lungs)	28	10	18	13	15	.....	.....	.....	.....	.....	2	10	6	6	2	2	.....	16	2	7	3	.....	.....	.....	.....	.....
Tuberculosis (other)	8	5	3	.....	8	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rheumatism	3	2	1	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diabetes	6	5	1	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anæmia Chlorosis	3	2	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alcoholism .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 21.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904 ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
CHIPPEWA COUNTY—Continued.																									
Peritonitis	9	5	4	5	4			3		1	1		1	1	1	1	2	1	3						3
Appendicitis	7	5	2	1	6				2	2	2				1	1	4	2		1					
VII. Disease Genito Urinary System.																									
Nephritis	13	8	5	10	3						1	1	1	2	4	4	3	7	1						2
Perinephritic Abscess	1		1	1										1					1						
Vesical Calculi																									
Diseases Bladder	1	1		1																					
Diseases Male Genito Urinary Organs..	1	1		1																					
Pelvis Abscess															1					1					
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors	2		2	1	1							1					1	1							
Other diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpeal Diseases.																									
Accidents of Pregnancy																									
Puerpeal Hemorrhage																									
Puerpeal Septicemia	1		1										1					1							
Puerpeal Convulsions																									
Other Diseases Pregnancy	2		2	1							1	1					1	1							

IX. Diseases Skin and Cellular Tissue.															
Erysipelas	1		1	1											
Gangrene	1	1			1					1					
Other Diseases Skin and Adnexia	1	1			1	1				1					1
X. Diseases Infancy.															
Congenital Debility	15	8	7		15	15							12	2	1
Other Diseases of Infancy	19	8	11		19	17	2						15	1	1
XI. Diseases of Old Age.															
Senile Debility	18	9	9	18									18	9	4
XII. Violence.															
Suicide	1	1			1				1					1	
XIII. Accident.															
Fractures	2	1	1	1	1										
Gunshot	1	1			1								1	1	1
Lightning	1	1		1				1						1	
Mining									1						
Railroad	2	2		1	1									1	1
Burning								2							
Vehicles and Horses															
Sunstroke and Freezing															
Drowning	3	3			3										
Other Accidents	7	6	1	5	2			1	1				2	1	
Homicide								2	3	2			1	2	1
XIV. Causes Ill-Defined.															
Exhaustion	1	1		1											
Fever										1				1	
Sudden Death															
Heart Failure	7	4	3	3	4										
Dropsy	3	1	2	2	1				1		1	3	1	1	3
Surgical Shock								1			1	1		3	
Unknown or not Specified	5	5		1	4			1	2		1		1	4	1

TABLE 22,—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total Deaths.		Sex.		Con-jugal relation		Age.										Nationality.													
			Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.				
	CLARK COUNTY.																													
Total deaths	303	171	132	167	136	61	8	6	9	9	8	24	22	16	24	39	76	174	98	21	4	2	.....	.....	.....	.....	.....	.....	4	
Still Births	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
I. Epidemic Diseases.																														
Typhoid Fever	10	6	4	8	2	.....	.....	.....	.....	1	1	2	1	2	1	.....	2	6	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smallpox	6	4	2	.....	6	.....	3	.....	1	1	.....	1	.....	.....	.....	.....	.....	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles	4	4	1	.....	4	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever	6	2	4	.....	6	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough	4	2	2	.....	4	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria	8	7	1	5	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Others .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																														
Pyæmia and Septicæmia	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis	2	13	14	15	12	1	.....	.....	.....	.....	.....	1	2	4	5	1	5	10	7	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Tuberculosis (lungs) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (other) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rheumatism .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diabetes .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anæmia Chlorosis .....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alcoholism .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

IX. Diseases Skin and Cellular Tissue.												
Erysipelas												
Gangrene												
Other Diseases Skin and Adnexia												
X. Diseases Infancy.												
Congenital Debility		4	4		8	8					5	3
Other Diseases of Infancy	18	10	8		18	15	2	1			12	3
XI. Diseases of Old Age.												
Senile Debility	19	9	10	15	3						19	8
XII. Violence.												
Suicide												
XIII. Accident.												
Fractures	2	1	1	1	1				1		1	1
Gunshot	1	1									1	
Lightning												
Mining												
Railroad	2	2		1	1				1	1		2
Burning	1	1			1				1		1	
Vehicles and Horses												
Sunstroke and Freezing	1	1		1					1		1	
Drowning	1	1			1							1
Other Accidents	6	5	1	4	2	1			1	1	1	4
Homicide	2	1	1	2					1			2
XIV. Causes Ill-Defined.												
Exhaustion	1		1	1						1		1
Fever												
Sudden Death												
Heart Failure	8	6	2	8					1	1	6	1
Dropsy	3	2	1	3							3	1
Surgical Shock												2
Unknown or not Specified	3	1	2	2	1			1	1		1	2

TABLE 23.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- juga- relation		Age.										Nationality.										
	Total	Deaths	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
																											Under 1 year.
COLUMBIA COUNTY.																											
Total deaths	516	260	256	299	217	49	15	9	5	9	12	24	30	33	35	66	216	250	105	36	47	1				74	
Still Births	11	6	5															10	1								
I. Epidemic Diseases.																											
Typhoid Fever	4	3	1						1	1		1	1						3	1							
Smallpox																											
Measles	2	1	1	1	1	1							1						2								
Scarlet Fever	1	1			1				1																		
Whooping Cough	4	2	2		4	1	1	1		1									1	1	1					1	
Diphtheria	2	1	1		2						1								2	2							
Influenza	20	9	11	13	7	1		1	1							2	2	13	12	4		2				2	
Others																											
II. Other General Diseases.																											
Pyæmia and Septicæmia	3	1	2	1	2	1						1				1			2			1					
Rabies																											
Malaria	2	1	1	1	1																						1
Syphilis																			1								1
Tuberculosis (lungs)	35	11	22	20	13							1	7	8	4	5	3		17	6	6	1					3
Tuberculosis (other)	10	5	5	6	4		1					1	3	4	1	1	5		5	2	2	1					3
Rheumatism	14	7	7	9	5				1	1	2	1	2	1	1	3	4		9	3	1	1					3
Diabetes	7	4	3	6	1											1	1		3	2							3
Anæmia Chlorosis	4	2	2	3	1												1		2								1
Alcoholism	1	1			1														1								

IX. Diseases Skin and Celluar Tissue.																			
Erysipelas	3	2	1	2	1						1	1	1	1	2				
Gangrene	1	1		1								1			1				
Other Diseases Skin and Adnexia	3	1	2	2	1	1						1		1	3				
X. Diseases Infancy.																			
Congenital Debility	10	5	5			10								8	1	1			
Other Diseases of Infancy	22	9	13			22								19	1	2			
XI. Diseases of Old Age.																			
Senile Debility	62	30	32	39	23							1	2	59	14	20	9	9	10
XII. Violence.																			
Suicide	5	5		5							3	1	1		1	1	2		1
XIII. Accident.																			
Fractures	2		2	2										2		1		1	
Gunshot																			
Lightning																			
Mining														1				1	1
Railroad	2	1	1	2		1								1				1	
Burning	1	1		1										2	2	1			
Vehicles and Horses	3	3		2	1	1								2	2	1			
Sunstroke and Freezing																			
Drowning	2	2			2	1				1									2
Other Accidents	4	3	1	3	1			1				2	1	2					
Homicide																			
XIV. Causes Ill-Defined.																			
Exhaustion														1		1			
Fever	1	1			1														
Sudden Death														1					3
Heart Failure	8	6	2	6	2			1				2	5	2	2		1		
Dropsy	2	1	1	2							1		1	2					
Surgical Shock																			
Unknown or not Specified	5	3	2	3	2			1					4	2		1			2

TABLE 24.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	70 yrs. or over.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
CRAWFORD COUNTY.																								
Total deaths	162	86	76	85	77	31	4	3	7	2	4	16	13	8	10	23	34	44	22	4	8	1	1	81
Still Births	2	1	1																1					1
I. Epidemic Diseases.																								
Typhoid Fever	2	2		1	1		1						1					2						
Smallpox																								
Measles			1																					
Scarlet Fever	1		1		1			1																1
Whooping Cough	4	1	3		4	4												3						1
Diphtheria	5	1	4		5	1		1	2	1								3		1				1
Influenza	4	2	2	4												4			3	3				1
Others																								
II. Other General Diseases.																								
Pyæmia and Septicæmia	3	2	1	1	2			1					1		1			1						2
Polio																								
Malaria	4	4			4																			
Syphilis																				2				
Tuberculosis (lungs)	16	5	11	9	6						8	3	1	1	1			7	1					8
Tuberculosis (other)	1		1		1	1												1						
Rheumatism	2		2		1	1					1							1	1					
Diabetes	1	1			1													1	1					
Anæmia Chlorosis													1											
Alcoholism																								

IX. Diseases Skin and Celluar Tissue.														
Erysipelas														
Gangrene	1	1												
Other Diseases Skin and Adnexia			1											1
X. Diseases Infancy.														
Congenital Debility	1	1			1	1								1
Other Diseases of Infancy	18	9	9		18	15	3					5	2	11
XI. Diseases of Old Age.														
Senile Debility	19	13	6	18	1						19	3	2	14
XII. Violence.														
Suicide	2	2		1	1				1		1			1
XIII. Accident.														
Fractures														
Gunshot														
Lightning														
Mining														
Railroad	2	2		2							1	1		1
Burning	2		2	1	1		1			1	1	1		1
Vehicles and Horses	2		2	1	1				1	1	1			2
Stroke and Freezing														
Sunstroke and Freezing	3	3		1	2			1			1	1		1
Drowning	1	1			1							1		
Other Accidents	1	1					1							
Homicide														
XIV. Causes Ill-Defined.														
Exhaustion														
Fever														
Sudden Death														
Heart Failure	5	3	2	4	1			1		1	1	2		1
Dropsy	4	2	2	4						2	1	1		2
Surgical Shock														
Unknown or not Specified	10	5	5	8	2			1		2	2	3	1	4

TABLE 13.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over	American.	German.	Norwegian.	Irish.	Pole.	Fren ch.	Italian.	Unclassified.
DANE COUNTY—Continued.																								
Peritonitis	21	10	11	11	10	1	1	1	1	2	2	1	2	1	3	6	8	3	5	1				4
Appendicitis	17	6	11	10	7			1		4	6	2	1	3		8	3	4						2
VII. Disease Genito Urinary System.																								
Nephritis	55	32	23	41	14				1	2	2	3	5	5	14	23	17	16	6	9				7
Perinephritic Abscess																								
Vesical Calculi																								
Diseases Bladder	13	13		10	3												4	3	4					2
Diseases Male Genito Urinary Organs..	3	3		3												3	1	1	1					
Pelvis Abscess																								
Uterine Hemorrhage	1		1	1								1					1							
Uterine Tumor	1		1	1												1								1
Other Diseases Uterus	1		1	1																		1		
Ovarian Cyst and Tumors	5		5	4	1						4	1					1		1			1		3
Other diseases Female Urinary Organs																								
Renal Calculus																								
VIII. Puerpeal Diseases.																								
Accidents of Pregnancy	4		4	4						1		3					2		1	1				
Puerpeal Hemorrhage	1		1	1								1							1					
Puerpeal Septicemia	9		9	9						1	2	5	1				1	4	2	1				1
Puerpeal Convulsions	7		7	7							5						3	3	1					
Other Diseases Pregnancy	1		1	1								1					3	1						

IX. Diseases Skin and Cellular Tissue.																				
Erysipelas	6	2	4	4	2	1					1	2	2	4	1	1				
Gangrene	8	6	2	6	2							1	1	6	4	3	1			
Other Diseases Skin and Adnexia	2		2	2										2	1	1				
X. Diseases Infancy.																				
Congenital Debility	30	19	11		30	30								23	1	5		1		
Other Diseases of Infancy	42	20	22		42	42								23	6	6	1	6		
XI. Diseases of Old Age.																				
Senile Debility	91	46	45	87	4									91	22	29	10	14	1	15
XII. Violence.																				
Suicide	12	9	3	8	4					2	1	4	1	2	2	3	5	2	2	
XIII. Accident.																				
Fractures	7	4	3	4	3	1					1		3	2	1	1	4	1		
Gunshot	3	2	1	1	2		1		1	1					2					1
Lightning	2	2		1	1			1		1						1	1			
Mining																				
Railroad	8	8		3																
Burning	4	4	1	1	3	1				3	2	1		2	2	1	1	1		2
Vehicles and Horses	3	2	1		3	2		1							1	1	2		1	
Sunstroke and Freezing	1	1		1											2		1			
Drowning	6	4	2	4	2				1		2	1	2		1					1
Other Accidents	15	8	7	8	7	2	1		2	1	1	1	3	1	3	7	4	1	1	2
Homicide																				
XIV. Causes Ill-Defined.																				
Exhaustion																				
Fever																				
Sudden Death																				
Heart Failure	17	8	9	13	4			1	1			1	4	10	7		2	5		3
Dropsy	2	2		1	1									1	1	1				
Surgical Shock	2		2	1	1						2				1	1				
Unknown or not Specified	14	7	7	6	8	3	1	1		2		3	2	2	7	5	1			1

TABLE 26.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
DODGE COUNTY																									
Total deaths	778	446	332	338	390	92	17	11	11	8	19	41	43	44	47	90	265	325	379	5	50	11	.....	.....	8
Still Births	30	23	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	5	.....	1	.....	.....	.....	.....
I. Epidemic Diseases.																									
Typhoid Fever	13	5	8	6	7	.....	.....	.....	.....	4	3	.....	2	.....	3	1	.....	5	7	.....	1	.....	.....	.....	.....
Smallpox .....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	1	.....	.....	.....	.....
Measles	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough	2	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza	11	5	6	6	5	.....	.....	1	.....	.....	.....	.....	.....	2	.....	1	.....	6	.....	.....	.....	.....	.....	.....	.....
Others	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																									
Pyæmia and Septicæmia	7	2	5	4	3	.....	.....	.....	1	.....	.....	1	3	.....	.....	1	1	3	4	.....	.....	.....	.....	.....	.....
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Syphilis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (lungs)	44	26	18	24	20	.....	.....	.....	.....	4	12	12	7	3	4	2	22	18	.....	.....	3	.....	.....	.....	1
Tuberculosis (other)	11	7	4	4	7	1	2	.....	1	1	.....	.....	.....	.....	.....	.....	5	5	.....	.....	.....	.....	.....	.....	1
Rheumatism	9	5	4	5	4	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Diabetes	13	5	8	5	8	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anæmia Chlorosis	4	1	3	3	1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alcoholism	3	3	.....	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....

TABLE 26.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.									
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
DODGE COUNTY—Continued.																										
Peritonitis	17	2	15	11	6			2			2		1	1	5	6	6	11								
Appendicitis	9	6	3	2	7			2	4	1		2				6	2			1						
VII. Disease Genito Urinary System.																										
Nephritis	26	16	10	20	6		1				1	1	1	1	6	15	6	18		2						
Perinephritic Abscess																										
Vesical Calculi																										
Diseases Bladder	4	4		4																						
Diseases Male Genito Urinary Organs ..	1	1		1																1						
Pelvis Abscess																										
Uterine Hemorrhage																										
Uterine Tumor																										
Other Diseases Uterus																										
Ovarian Cyst and Tumors	1		1	1										1			1									
Other diseases Female Urinary Organs ..																										
Renal Calculus																										
VIII. Puerpeal Diseases.																										
Accidents of Pregnancy	2		2	2								1	1													
Puerpeal Hemorrhage																										
Puerpeal Septicemia	2		2	1	1																					
Puerpeal Convulsions	3	1	2	2	1									1			2									
Other Diseases Pregnancy	1		1	1							1							1								

IX. Diseases Skin and Cellular Tissue.																			
Erysipelas	3	1	2	1	2	1						1	1	2		1			
Gangrene	7	1	6	2	5	1						1	5	3	3				
Other Diseases Skin and Adnexia	2	2			2	1							1	1	1				
X. Diseases Infancy.																			
Congenital Debility	42	23	19		42	42								30	11			1	
Other Diseases of Infancy	17	11	6		17	17								12	5				
XI. Diseases of Old Age.																			
Senile Debility	77	45	32	53	24									77	22	46	1	8	
XII. Violence.																			
Suicide	5	4	1	2	3				1	2		1		1	4	1			
XIII. Accident.																			
Fractures	7	6	1	4	3						2	1		4	1	5		1	
Gunshot																			
Lightning																			
Mining											2								
Railroad	3	3			3										1			2	
Burning	1		1	1							1								
Vehicles and Horses	1		1		1	2									1				
Sunstroke and Freezing																			
Drowning	3	3							3						3	3			
Other Accidents	7	5	2	5	2	2					1			2	3	4			
Homicide																			
XIV. Causes Ill-Defined.																			
Exhaustion	1		1		1					1					1				
Fever																			
Sudden Death																			
Heart Failure	10	4	6	10					1		1	2	4	2	3	5		1	
Dropsy	4	2	2	4									1	3	1	3			
Surgical Shock																			
Unknown or not Specified	10	8	2	5	5				2	1	1			6	5	4		1	

TABLE 27.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.				Age.										Nationality.									
		Male.	Female.	Con-jugal relat on		Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
				Married.	Single																				
DOOR COUNTY																									
Total deaths	303	164	139	127	176	37	41	4	7	8	11	27	18	20	19	22	71	158	55	48	11	2	31		
Still Births	15	9	5															12	3						
I. Epidemic Diseases.																									
Typhoid Fever	3	1	2	1	2				1		1	1						3							
Smallpox	1		1		1																				
Measles	3	2	1		3			1	1		1							3						1	
Scarlet Fever	1		1		1													1							
Whooping Cough	1	1			1			1										1							
Diphtheria	3	3	3		1	1												1							
Influenza	6	3	3		6			2										6							
Others	5	3	2	4	1		1										3	2		2	1				
II. Other General Diseases.																									
Pyæmia and Septicæmia	1		1		1	1												1							
Rabies																									
Malaria																									
Syphilis																									
Tuberculosis (lungs)	29	16	13	12	17	2			1		3	13	4	3	1	1	1	12	9	5				3	
Tuberculosis (other)	4	3	1	1	2				1		1	1		1				3		1					
Rheumatism	1	1		1	1						1														
Diabetes	4	2	2	2	2					1	1													1	
Anæmia Chlorosis											1	1						3	1						
Alcoholism																									

TABLE 28.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.									
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
DOUGLAS COUNTY.																										
Total deaths	778	445	333	94	684	121	47	41	40	44	22	68	103	80	46	42	49	420	33	161	32	6	1	.....	124	
Still Births	55	28	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39	2	8	2	.....	1	.....	3	
I. Epidemic Diseases.																										
Typhoid Fever	25	19	6	2	23	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....	8	1	.....	.....	.....	4	
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Measles	2	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Scarlet Fever	51	23	28	1	50	4	12	19	9	3	1	2	.....	.....	.....	.....	.....	31	.....	8	.....	.....	.....	.....	.....	12
Whooping Cough	8	3	5	.....	8	6	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	1	2	.....	.....	.....	.....	1
Diphtheria	15	8	7	.....	15	1	.....	4	5	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	4	.....	.....	.....	.....	.....	2
Influenza	6	4	2	.....	6	1	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	4	.....	1	1	.....	.....	.....	.....	1
Others .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																										
Pyæmia and Septicæmia	10	4	6	2	8	.....	2	.....	.....	.....	1	3	3	.....	.....	.....	.....	1	6	.....	1	.....	.....	.....	.....	3
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis	1	1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (lungs)	71	38	33	17	54	5	1	2	1	2	4	15	15	18	1	6	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (other)	9	6	.....	.....	8	1	.....	.....	.....	.....	3	.....	4	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	5
Rheumatism	4	3	.....	.....	4	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	3	.....	.....	.....	1	.....	.....	.....	.....
Diabetes	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anæmia Chlorosis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alcoholism	14	14	.....	.....	14	.....	.....	.....	.....	.....	.....	1	4	3	4	2	.....	4	.....	5	1	.....	.....	.....	.....	4

TABLE 28.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relat on		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
DOUGLAS COUNTY—Continued.																									
Peritonitis	15	9	6	2	13	1											1	6							5
Appendicitis	5	3	2	1	4			1									1	3		2					
VII. Disease Genito Urinary System.																									
Nephritis	22	10	12	5	17			1			1	2	3	1	4	6	4	18	1		1				2
Perinephritic Abscess	1	1			1								1		1						1				
Vesical Calculi	1		1		1																				1
Diseases Bladder	1		1		1										1										
Diseases Male Genito Urinary Organs..	1	1			1							1						1							
Pelvis Abscess	4		4		4						2	2					2		1						1
Uterine Hemorrhage																									
Uterine Tumor	1		1		1								1												
Other Diseases Uterus																									
Ovarian Cyst and Tumors	1		1		1													1							
Other diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpeal Diseases.																									
Accidents of Pregnancy	1		1		1																				
Puerpeal Hemorrhage	2		2	1	1							1	1												1
Puerpeal Septicemia	2		2	2	1							1	1					1	1						
Puerpeal Convulsions																									
Other Diseases Pregnancy	1		1		1							1													

IX. Diseases Skin and Cellular Tissue.															
Erysipelas	1	1			1									1	
Gangrene															
Other Diseases Skin and Adnexia	1		1		1	1									1
X. Diseases Infancy.															
Congenital Debility	7	7			7	7								1	3
Other Diseases of Infancy	31	19	12		31	28	2		1					16	6
XI. Diseases of Old Age.															
Senile Debility	46	19	27	40	6								1	45	19
XII. Violence.															
Suicide	6	4	2	3	3					2	1	3		2	2
XIII. Accident.															
Fractures	6	4	2	3	3			1		1	2			2	3
Gunshot	4	4		2	2				1	1	1				2
Lightning															
Mining															
Railroad	3	2	1		3			1		1		1		1	1
Burning	1	1		1											
Vehicles and Horses															
Sunstroke and Freezing				1	3			2		1					1
Drowning	4	4								1					
Other Accidents	14	11	3	10	4	1		1		3	1	3	2	3	10
Homicide	1		1		1	1									1
XIV. Causes Ill-Defined.															
Exhaustion															
Fever															
Sudden Death															
Heart Failure	26	19	7	22	4			1		1	6	6	6	10	3
Dropsy	8	4	4	7	1					2	1	4	1	2	3
Surgical Shock	1		1	1						1				1	1
Unknown or not Specified	23	14	9	11	12			1	2	3	2	7	3	5	6

TABLE 31.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
FLORENCE COUNTY																								
Total deaths	50	34	16	15	35	11	1	2	1	4	7	4	5	5	3	5	18	8	20			2	1	1
Still Births	2	1	1																2					
I. Epidemic Diseases.																								
Typhoid Fever	1	1			1						1						1							
Smallpox																								
Measles																								
Scarlet Fever	1		1		1												1							
Whooping Cough									1															
Diphtheria																								
Influenza																								
Others																								
II. Other General Diseases.																								
Pyæmia and Septicæmia	1		1		1	1													1					
Rabies																								
Malaria																								
Syphilis																								
Tuberculosis (lungs)	5	3	2	1	4					1	1	1			1		1		3					1
Tuberculosis (other)																								
Rheumatism																								
Diabetes																								
Anæmia Chlorosis																								
Alcoholism	1	1			1											1			1					

IX. Diseases Skin and Cellular Tissue.													
Erysipelas													
Gangrene													
Other Diseases Skin and Adnexa.....													
X. Diseases Infancy.													
Congenital Debility.....	5	3	2	5	5					1	1	2	1
Other Diseases of Infancy	1	1		1	1							1	
XI. Diseases of Old Age.													
Senile Debility	2	2		2						2	1	1	
XII. Violence.													
Suicide	1	1		1					1			1	
XIII. Accident.													
Fractures	2	2		2				1		1		1	
Gunshot													
Lightning													
Mining	1	1		1				1				1	
Railroad													
Burning													
Vehicles and Horses													
Sunstroke and Freezing	1	1		1				1			1		
Drowning													
Other Accidents	5	4	1	5	1	1		1	2		1	2	1
Homicide													
XIV. Causes Ill-Defined.													
Exhaustion													
Fever													
Sudden Death													
Heart Failure													
Dropsy													
Surgical Shock	1		1	1	1							1	1
Unknown or not Specified	3	2	1	1	2				1	2		1	2

TABLE 32. —SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.										
	Total.	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
FOND DU LAC COUNTY.																											
Total deaths	893	487	406	503	390	100	23	13	6	21	21	32	62	67	66	94	291	458	138	2	76	2	26	...	29		
Still Births	25	10	15															17	8								
I. Epidemic Diseases.																											
Typhoid Fever	4	2	2	2	2						1	2		1				2	2								
Smallpox	2		2		2			1			1																
Measles	3	2	1		3		2	1										3									
Scarlet Fever	4	1	3		4			1			1	2						2	2								
Whooping Cough	20	10	10	15	5		1		1	2	2	2	2	2	1	1	8	10	9						1		
Diphtheria	1	1			1				1									1									
Influenza																											
Others																											
II. Other General Diseases.																											
Pyæmia and Septicæmia	6	3	3	4	2		1					3	1					1	2	4							
Rabies																											
Malaria																											
Syphilis	77	40	37	35	42				1	1	7	25	17	9	9	5	23	34	31		9	1			2		
Tuberculosis (lungs)	18	9	9	7	11	1	2	1		1		7	2	2	2	1	23	10	5		1				2		
Tuberculosis (other)	12	6	6	9	9					1		2	2	2	2	1	15	9	3								
Rheumatism	12	4	8	9	9				1			2	2	2	3	2	23	7	7		1				1		
Diabetes	7	4	3	4	2		1					1	1	1		2	23	4									
Anæmia Chlorosis	7	4	3	4	2		1					1	1	1		2	23	4									
Alcoholism	1	1		1									1				2		1								

TABLE 32.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years	3-5 years,	5-10 years.	10-15 years.	15-20 years	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
FOND DU LAC COUNTY—Continued.																								
Peritonitis	4	1	3	2	2						2					2	3					1		
Appendicitis	20	10	10	6	14			1	5	1	7	1	2	1	1	1	11	5	1	1		1		1
VII. Disease Genito Urinary System.																								
Nephritis	29	17	12	23	6		1		1		2	3	4		5	13	16	9		2		1		
Perinephritic Abscess	1	1		1								1					1							
Vesical Calculi	2	2		1	1												1			1				
Diseases Bladder	7	5	2	6	1												3	1	1					1
Diseases Male Genito Urinary Organs.																								
Pelvis Abscess	2		2	1	1					2							2							
Uterine Hemorrhage																								
Uterine Tumor																								
Other Diseases Uterus																								
Ovarian Cyst and Tumors	7		7	4	3							2	2	2	1	3	1		1		2			
Other Diseases Female Urinary Organs																								
Renal Calculus																								
VIII. Puerpeal Diseases.																								
Accidents of Pregnancy	2		2	2							1	1				1								1
Puerperal Hemorrhage																								
Puerperal Septicemia	3		3	3						1	2													
Puerperal Convulsions	1		1	1						1							1	1		1				
Other Diseases Pregnancy																								

IX. Diseases Skin and Cellular Tissue.																						
Erysipelas	9	7	2	5	4	2						1	2	4	3	5	1					
Gangrene																						
Other Diseases Skin and Adnexia.....	1	1		1										1		1						
X. Diseases Infancy.																						
Congenital Debility	4	31	17		48	48									32	9		1	3	3		
Other Diseases of Infancy	30	16	14		30	26	2	2							24	4			1	1		
XI. Diseases of Old Age.																						
Senile Debility	75	42	33	63	12										75	43	19		10	1	1	1
XII. Violence.																						
Suicide	6	5	1	4	2							1	2			3	4	1				1
XIII. Accident.																						
Fractures	6	4	2	5	1							2	1	1		2	2	2		2		
Gunshot	3	3		1	2					1						1	3					
Lightning																						
Mining																						
Railroad	7	7		5	2							2	1	2		2	4	1		1	1	
Burning	1	1			1					1						1						
Vehicles and Horses	2	1	1		2	2										2						
Sunstroke and Freezing	1	1			1											1				1		
Drowning	7	3	4	1	6	4				1	1				1	6	1					
Other Accidents	16	13	3	6	10		1	2		2		3	1	1		1	5	7	7		1	1
Homicide																						
XIV. Causes Ill-Defined.																						
Exhaustion	1	1		1											1		1					
Fever																						
Sudden Death																						
Heart Failure	14	10	4	11	3					1				2	3	8	4	7		2		1
Dropsy																						
Surgical Shock	2	1	1	1	1					1						1	2					
Unknown or not Specified		1	6	5	2					1	3		2			1	2	3		1		1

TABLE 33—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 yrs.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
FOREST COUNTY.																								
Total deaths	38	22	16	16	22	10	2	2	1	3	3	6	2	3	4	27	5	1	2	1				2
Still Births	2	2														1			1					
I. Epidemic Diseases.																								
Typhoid Fever																								
Smallpox																								
Measles																								
Scarlet Fever	1		1		1			1								1								
Whooping Cough																								
Diphtheria																								
Influenza																								
Others																								
II. Other General Diseases.																								
Pyæmia and Septicæmia	2		2	2							2					1								1
Rabies																								
Malaria																								
Syphilis																								
Tuberculosis (lungs)	1	1		1												1								1
Tuberculosis (other)																								
Rheumatism																								
Diabetes																								
Anæmia Chlorosis																								
Alcoholism	2	2		1	1							2				1		1						

IX. Diseases Skin and Cellular Tissue.												
Erysipelas	1	1	1	1							1	
Gangrene												
Other Diseases Skin and Adnexia												
X. Diseases Infancy.												
Congenital Debility	1	1	1	1						1		
Other Diseases of Infancy	5	2	3	5	5					2	2	1
XI. Diseases of Old Age.												
Senile Debility	1	1		1						1	1	
XII. Violence.												
Suicide	1	1	1						1	1		
XIII. Accident.												
Fractures												
Gunshot												
Lightning												
Mining												
Railroad												
Burning												
Vehicles and Horses												
Sunstroke and Freezing												
Drowning												
Other Accidents	1	1		1		1				1		
Homicide												
XIV. Causes Ill-Defined.												
Exhaustion												
Fever												
Sudden Death												
Heart Failure	1	1		1						1		
Dropsy												
Surgical Shock												
Unknown or not Specified	1	1		1				1				1

TABLE 35.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.										
			Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
GRANT COUNTY.																											
Total deaths	561	264	297	358	203	57	30	10	11	9	7	35	38	23	29	72	196	393	109	22	31	1	1	0	5		
Still Births	14	11	3															14									
I. Epidemic Diseases.																											
Typhoid Fever	5	2	3	2	3	1					1	1		1	1			4	1								
Smallpox																			9								
Measles	9	4	5	1	8		1	1	2	1	3	1															
Scarlet Fever																											
Whooping Cough	4	1	3		4	4													2	1	1						
Diphtheria	1	1			1												1		1								
Influenza	15	4	11	15														13	2								
Others																			2								
II. Other General Diseases.																											
Pyæmia and Septicæmia	5	1	4	4	1									2			3		3	1							1
Rabies																			1	1							
Malaria	1	1		1																							
Syphilis																											
Tuberculosis (lungs)	32	12	20	18	14						1	8	6	7	3	5	2	22	4	3	3						
Tuberculosis (other)	8	4	4	1	7		2	1	1									5	2	1							
Rheumatism	7	4	3	5	2							1	1						4	1		1					
Diabetes	5	1	4	5															3	1							
Anæmia Chlorosis	5	1	4	4	1							1							4	1							
Alcoholism	1	1		1															1								

TABLE 35.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Conjugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	60-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
GRANT COUNTY—Continued.																									
Peritonitis	13	7	6	9	4			2			1	2		1		6	7	5		1					
Appendicitis	7	4	3	2	5				1		3	1		2			5		1	1					
VII. Disease Genito Urinary System.																									
Nephritis	22	6	16	14	18			1		2	1	3			7	8	13	7	1	1					
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder	5	5		5												5	4	1							
Diseases Male Genito Urinary Organs																									
Pelvis Abscess																									
Uterine Hemorrhage	1		1	1								1					1								
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors																									
Other Diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpal Diseases.																									
Accidents of Pregnancy	2		2	1	1						1		1				2								
Puerperal Hemorrhage	1		1	1								1					1								
Puerperal Septicemia	2		2	1	1							2					2								
Puerperal Convulsions																									
Other Diseases Pregnancy	3		3	3								3					2		1						

TABLE 37.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY. —Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
IOWA COUNTY—Continued.																								
Biliary Calculi	1		1	1													1	1						
Peritonitis	4	2	2	3									1				2	1	1	1				
Appendicitis	1		1		1															1				
VII. Disease Genito Urinary System.																								
Nephritis	9	7	2	7	2							1	1	2	2	3	4	1		3	1			
Perinephritic Abscess																								
Vesical Calculi																								
Diseases Bladder	3	2	1	2											1	2		3						
Diseases Male Genito Urinary Organs..	1	1		1									1				1							
Pelvis Abscess																								
Uterine Hemorrhage																								
Uterine Tumor																								
Other Diseases Uterus																								
Ovarian Cyst and Tumors	2		2	2											1	1					2			
Other Diseases Female Urinary Organs																								
Renal Calculus																								
VIII. Puerpeal Diseases.																								
Accidents of Pregnancy	1		1	1									1						1					
Puerperal Hemorrhage																								
Puerperal Septicemia	3		3	3							2	1					2	1						
Puerperal Convulsions																								
Other Diseases Pregnancy	3		3	3							2	1					2			1				

TABLE 32.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
JACKSON COUNTY.																									
Total Deaths	325	181	144	166	159	58	7	2	7	5	13	25	26	18	22	38	101	177	38	92	8				10
Still Births	3	3																3							
I. Epidemic Diseases.																									
Typhoid Fever	7	2	5	4	3				1		3	1	2					5	1		1				
Smallpox																									
Measles	2		2		2	1						1						2							
Scarlet Fever																									
Whooping Cough	1		1		1	1																			
Diphtheria	2	1	1		2	1		1																	
Influenza	4	1	3	2	2			1		1						1	1	2	2						
Others																									
II. Other General Diseases.																									
Pyæmia and Septicæmia	2		2	1	1									1		1		1		1					
Rabies																									
Malaria	1	1			1												1	1							
Syphilis																									
Tuberculosis (lungs)	27	11	16	9	18					5	8	9	2	1	2			14	1	10					2
Tuberculosis (other)	10	5	5	2	8	1			1	2	5							9		1					
Rheumatism	3	2	1	3									1					1		1					
Diabetes	2	1	1	2										1	1			2							
Anæmia Chlorosis	1		1	1														1							
Alcoholism	2	2		1	1									1	1			1	1						

IX. Diseases Skin and Cellular Tissue.

Erysipelas	3	2	1	2	1				1			1	1	2					
Gangrene																			
Other Diseases Skin and Adnexia.....	1		1	1					1				1						

X. Diseases Infancy.

Congenital Debility	25	13	12		2	25							21		4				
Other Diseases of Infancy	13	6	5		13	8	5						10		3				

XI. Diseases of Old Age.

Senile Debility	42	27	15	33	9								42	14	11	16	1		
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XII. Violence.

Suicide	2	2		1	1								1	1				1	
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XIII. Accident.

Fractures	4	2	2	3	1					2			2	1	1	1	1		
Gunshot	3	2	1		3			1	1					2	1				
Lightning	1	1		1									1						1
Mining										1								1	
Railroad	1	1		1															
Burning																			
Vehicles and Horses	4	2	2		4	1	1				1		1	2	1				1
Sunstroke and Freezing																			
Drowning	1	1			1	1								1					
Other Accidents	5	3	4	2	1		1			1	1		2	3	1	1			
Homicide																			

XIV. Causes Ill-Defined.

Exhaustion	1	1		1									1		1				
Fever																			
Sudden Death																			
Heart Failure	6	5	1	4	2	1							3	2	5		1		
Dropsy	1		1	1									1		1				
Surgical Shock																			
Unknown or not specified.....	9	6	3	4	5					3	1	1		4	2	1	6		

TABLE 40—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
JEFFERSON COUNTY.																									
Total Deaths	724	371	353	480	224	96	22	7	9	8	12	41	35	49	60	89	272	307	183	51	29			204	
Still Births	24	15	9															15	3					6	
I. Epidemic Diseases.																									
Typhoid Fever	9	7	2	5	4					1	1			2	1	4		5	2						2
Smallpox																									2
Measles	2	2			2				1																2
Scarlet Fever	1		1		1			1										1							2
Whooping Cough	4	1	3		4	3	1											1	2						2
Diphtheria	5	2	3		4	1		2	1	1								2	1						2
Influenza	10	1	9	9	1				1							2	7	2	8						2
Others	2	2			2		1					1													2
II. Other General Diseases.																									
Pyæmia and Septicæmia	5	2	3	4	1		1				1			1		1	1	2	1						2
Rabies																									
Malaria																									
Syphilis																									
Tuberculosis (lungs)	55	22	33	37	18				1	2	18	7	11	6	4	6	22	12	2	3					16
Tuberculosis (other)	16	7	9	9	7	3			1		4		2	3	1	2	7	2							7
Rheumatism	9	5	4	3	3			2			1					2	4	1							4
Diabetes	17	12	5	13	4				1		1		1	1	2	6	7	7							3
Anæmia Chlorosis	7	4	3	5	2		1			1			2	1	3		3	3							1

TABLE 40.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married,	Single.	Under 1 year,	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
JEFFERSON COUNTY—Continued.																									
Cirrhosis Liver	1	1	1																						
Biliary Calculi	9	6	3	8	1									1	2	1	5	1							
Peritonitis	3	3	3	3																					
Appendicitis	18	6	12	14	4		2		1	1	2	7	5		2	1									
VII. Disease Genito Urinary System.																									
Nephritis	17	6	11	14	3				1			1		3	2	10	8	5							4
Perinephritic Abscess	1	1	1	1												1		1							
Vesical Calculi	2	2	1	1																					
Diseases Bladder	8	7	1	8							1			1		7	1	5							2
Diseases Male Genito Urinary Organs.																									2
Pelvis Abscess	2	2	2							1		1					1	1							
Uterine Hemorrhage																									
Uterine Tumor	1	1	1												1										1
Other Diseases Uterus																									
Ovarian Cyst and Tumors	2	2	1	1								1			1			1							1
Other Diseases Female Urinary Organs.																									
Renal Calculus																									
VIII. Puerperal Diseases.																									
Accidents of Pregnancy																									
Puerpal Hemorrhage	1	1	1								1						1								
Puerperal Septicemia	2	2	2																						
Puerperal Convulsions	2	2	2								1	1					1	1							1
Other Diseases Pregnancy	4	4	4							2	2	1						2							2

TABLE 41.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
KENOSHA COUNTY.																									
Total Deaths	486	262	224	211	275	89	18	7	13	8	14	37	50	31	33	47	108	104	89	7	18	3	3	6	255
Still Births	29	16	9															9	4				2	10	
I. Epidemic Diseases.																									
Typhoid Fever	6	3	3	1	5				1	1	2	1				1		2	3						1
Smallpox	5	3	2		5	2	3											2	3						1
Measles	4	2	2		4	2	1											1	1						3
Scarlet Fever	3	3	3	3	3	2	1	2										1		1					3
Whooping Cough	4	2	2		4													1							2
Diphtheria	10	6	4	7	3	1			3	1								2	2				1		2
Influenza	1	1		1	1					1	1							1	4			1			4
Others																		1							
II. Other General Diseases.																									
Pyæmia and Septicæmia	5	3	2	3	2						3	2						2	1						2
Rabies																									
Malaria	1		1																						1
Syphilis																									1
Tuberculosis (lungs)	29	16	13	18	11					3	6	11	5	3				3		1	3				19
Tuberculosis (other)	6	4	2	3	3	1				1	6	2	1	3				1	3	1	3				3
Rheumatism	6	4	2	4	2						2	2	1	1				2	1	1	1				3
Diabetes	2	1	1	2	2			1		1	1				1			1	1	1	1				3
Anæmia Chlorosis	3	3		3							1	1	1	1				1	1	1					1
Alcoholism	1	1		1						1	1	1						1	1				1		1

TABLE 12.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
KEWAUNEE COUNTY—Continued.																									
Biliary Calculi	1	1	1	1											1										
Peritonitis	5	4	1	2	3		1		1					1	1	3		2							
Appendicitis	1	1		1										1				1							
VII. Disease Genito Urinary System.																									
Nephritis	3	5	3	3										1	3	4		3							5
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder	5	5		5											2	3	2								3
Diseases Male Genito Urinary Organs..																									
Pelvis Abscess																									
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors																									
Other Diseases Female Urinary Organs.																									
Renal Calculus																									
VIII. Puerperal Diseases.																									
Accidents of Pregnancy																									
Puerperal Hemorrhage																									
Puerperal Septicemia	1	1	1	1									1												1
Puerperal Convulsions	1	1	1	1					1																
Other Diseases Pregnancy	1	1	1	1																					

IX. Diseases Skin and Cellular Tissue.

Erysipelas
 Gangrene
 Other Diseases Skin and Adnexia

X. Diseases Infancy.

Congenital Debility 25 15 10 25 25 20 2 3
 Other Diseases of Infancy 23 10 13 23 20 3 20 3

XI. Diseases of Old Age.

Senile Debility 61 33 28 58 3 61 3 17 6 35

XII. Violence.

Suicide

XIII. Accident.

Fractures 4 2 2 4 1 3 2
 Gunshot 2 1 1 1 1 1
 Lightning
 Mining
 Railroad 1 1 1 1 1
 Burning 1 1 1 1 1
 Vehicles and Horses 1 1 1 1 1
 Sunstroke and Freezing
 Drowning 1 1 1 1 1
 Other Accidents 3 2 1 2 1 1 2 1 1
 Homicide

XIV. Causes Ill-Defined.

Exhaustion
 Fever 1 1 1 1
 Sudden Death
 Heart Failure 6 4 2 5 1 1 2 3 1 1
 Dropsy
 Surgical Shock 4 2 2 4 2 2 2 2 3
 Unknown or not specified 5 2 3 1 4 2 2 1 3

TABLE 43.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.											Nationality.									
		Male.	Female.	Marri-d.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pol-e.	French.	Italian.	Unclassified.	
LA CROSSE COUNTY.																										
Total Deaths	917	486	431	435	485	103	30	15	16	17	30	79	71	99	86	94	214	438	261	162	23	6	1	0	26	
Still Births	50	35	15															36	11	3						
I. Epidemic Diseases.																										
Typhoid Fever	15	9	6	5	10							1	1													
Smallpox	1													4	5	2	1	1								
Measles	1		1	1															7	5	2	1				
Scarlet Fever	1				1																					
Whooping Cough	2	1	1			2	1	1																		
Diphtheria	11	6	5		11	1	5	1											5	1	2					
Influenza	20	7	13	10	10														11	5	3					
Others	1	1	1																						1	
II. Other General Diseases.																										
Pyæmia and Septicæmia	10	3	7	5	5	1								2	4	1	1		1							
Rabies																										
Malaria																										
Syphilis	2	1	1	1	1								1						1	1						
Tuberculosis (lungs)	91	35	56	49	42					2	5	25	19	19	9	5	7	32	27	24	1					3
Tuberculosis (other)	15	7	8	1	14		1		1	2	1	7	1	1	1	1	1	3	12	4						
Rheumatism	15	11	4	8	7					1	1	1	1	2	2		4	3	9	3	1		1			1
Diabetes	5	2	3	2	2							1	1				1	1	5							
Anæmia Chlorosis	6	3	3	5	1		1								2		2	2	2							
Alcoholism	3	2	1	2	1									2	1				1							

TABLE 43.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
LA CROSSE COUNTY—Continued.																									
Biliary Calculi	3	1	2	3								1	1		1	1			2						
Peritonitis	16	6	10	7	9	1		1	1	2	2	3	2	1	3	9	5		2						
Appendicitis	21	13	8	7	14			2		3	8	3	4	1		14	4		3						
VII. Disease Genito Urinary System.																									
Nephritis	37	28	9	28	9	1			1	1	2	4	5	6	8	9	16	10	9	2					
Perinephritic Abscess	1	1		1										1		1	10								
Vesical Calculi																									
Diseases Bladder	4	4		4												4	1	1	2						
Diseases Male Genito Urinary Organs																									
Pelvis Abscess																									
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors	1		1	1										1				1							
Other Diseases Female Urinary Organs	1		1	1											1				1						
Renal Calculus																									
VIII. Puerperal Diseases.																									
Accidents of Pregnancy	2		2	2								2					1		1						
Puerpual Hemorrhage	2		2	2							2						2								
Puerperal Septicemia	1		1	1							1						1								
Puerpual Convulsions																									
Other Diseases Pregnancy	1		1	1						1									1						

TABLE 44.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.											Nationality.											
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.			
LAFAYETTE COUNTY.																												
Total Deaths	310	174	136	172	138	49	9	6	4	6	5	12	10	14	17	35	98	132	19	21	61					78		
Still Births	8	5	3															4								4		
I. Epidemic Diseases.																												
Typhoid Fever	5	4	1								1	2	2					3		1							1	
Smallpox					2			1			1							2										
Measles	2	1	1		2													2										
Scarlet Fever																												
Whooping Cough	5	2	3		5	2	3											2	1	1							1	
Diphtheria	2	1	1		2			1	1									2			1							
Influenza	11	6	5	8	3													5	1		1						4	
Others																												
II. Other General Diseases.																												
Pyæmia and Septicæmia	2	1	1	1	1			1										1	1									1
Rabies																												
Malaria																												
Syphilis																												
Tuberculosis (lungs)	18	11	7	13	5													2		2								5
Tuberculosis (other)	2	2			2	1	1											2										
Rheumatism	9	5	4	7	2													1	2	1								4
Diabetes	4	3	1									1	1	1				1			1							
Anæmia Chlorosis	3	2	1	3														1			1							2
Alcoholism	2	2		1	1							1	1					1										1

IX. Diseases Skin and Cellular Tissue.														
Erysipelas														
Gangrene	3	2	1	1	2	1				1	1	1	1	1
Other Diseases Skin and Adnexia														
X. Diseases Infancy.														
Congenital Debility	20	10	10		20	20						12	1	
Other Diseases of Infancy	7	3	4		7	5	1	1				5		7
XI. Diseases of Old Age.														
Senile Debility	32	16	16	30	2					1	31	7	1	1
XII. Violence.														
Suicide	3	3		2	1				1	1	1	1	1	1
XIII. Accident.														
Fractures	1		1	1								1	1	
Gunshot														
Lightning	1	1			1				1					1
Mining														
Railroad														
Burning														
Vehicles and Horses	1		1	1						1				1
Sunstroke and Freezing														
Drowning	2	1	1		2				1	1		1	1	
Other Accidents	6	3	3	2	4		1	1	1	1		1	4	2
Homicide														
XIV. Causes Ill-Defined.														
Exhaustion														
Fever														
Sudden Death														
Heart Failure	6	4	2	5	1			1			1	4	1	
Dropsy	1	1		1	1						1	1		1
Surgical Shock														
Unknown or not specified	6	4	2	6					1	1	4	2	2	2

IX. Diseases Skin and Cellular Tissue.															
Erysipelas															
Gangrene	1		1	1									1		
Other Diseases Skin and Adnexia.....															
X. Diseases Infancy.															
Congenital Debility	17	14	3		17	17							10	5	1
Other Diseases of Infancy	14	6	8		14	11	1	2					9	5	
XI. Diseases of Old Age.															
Senile Debility	11	7	4	9	2							2	9	3	2
XII. Violence.															
Suicide															
XIII. Accident.															
Fractures	2	2		2											
Gunshot	3	3			3			1	1						
Lightning													1	1	
Mining															
Railroad															
Burning	4	4		2	2				2		1	1		1	1
Vehicles and Horses															
Sunstroke and Freezing	3	1	2	1	2			1		1			2	1	
Drowning	3	3		1	2		1	1		1			2		
Other Accidents															
Homicide															
XIV. Causes Ill-Defined.															
Exhaustion	2	1	1	2						1			1		
Fever															
Sudden Death															
Heart Failure															
Dropsy	3	1	2	1	2						2	1		2	
Surgical Shock	3	3		3							1	1	1	1	2
Unknown or not specified.....	2		2	1	1				1				1	1	

TABLE 46—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Conjugal relation.		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
LINCOLN COUNTY.																									
Total deaths	229	118	111	100	129	36	15	7	7	4	16	20	22	20	9	23	36	73	83	26	6	.....	4	.....	37
Still Births	14	9	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	6	2	.....	.....	.....	.....	.....
I. Epidemic Diseases.																									
Typhoid Fever	7	4	3	3	4	.....	.....	.....	.....	2	3	.....	1	1	.....	.....	.....	2	1	1	1	.....	1	.....	1
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
Measles	2	.....	2	.....	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough	5	1	4	.....	9	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	2	.....	.....	.....	.....
Diphtheria	5	4	1	.....	5	.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza	2	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Others .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																									
Pyæmia and Septicæmia .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (lungs)	9	4	5	4	5	.....	.....	.....	.....	1	3	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (other)	5	2	3	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rheumatism	3	1	2	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diabetes	2	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anæmia Chlorosis	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alcoholism	2	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 46—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Conju- gal re- lation.		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Iri h.	Pole.	French.	Italian.	Unclassified.
LINCOLN COUNTY—Continued.																								
Peritonitis	3	3	1	2		1			1	1							3							
Appendicitis	5	4	1	4			1		2	1	1						1	4						
VIII. Disease Genito Urinary System.																								
Nephritis	12	4	8	5	7	1			1		1	1	3	1	2	2	4	3	1			1		3
Perinephritic Abscess																								
Vesical Calculi				1																				
Diseases Bladder	1	1		1											1		1							
Diseases Male Genito Urinary Organs.																								
Pelvis Abscess																								
Uterine Hemorrhage																								
Uterine Tumor																								
Other Diseases Uterus																								
Ovarian Cyst and Tumors	1		1	1									1											1
Other diseases Female Urinary Organs																								
Renal Calculus																								
VIII. Puerpal Diseases.																								
Accidents of Pregnancy	1		1	1								1												
Puerpal Hemorrhage	1		1	1									1				1							
Puerpal Septicemia	1		1	1																				
Puerpal Convulsions																								
Other Diseases Pregnancy	2		2	1	1					1	1						1	1						

IX. Diseases skin and Celluar Tissue.															
Erysipelas															
Gangrene															
Other Diseases Skin and Adnexia															
X. Diseases Infancy.															
Congenital Debility	22	13	9	22	22							11	3	3	5
Other Diseases of Infancy	4		4	4	3	1						1		1	2
XI. Diseases of Old Age.															
Senile Debility	14	5	9	13	1						1	13	7	2	3
XII. Violence.															
Suicide	3	2	1	2	1					2		1	2	1	
XIII. Accident.															
Fractures															
Gunshot	1	1		1						1		1			
Lightning										1					
Lightning										1					
Railroad															
Burning															
Vehicles and Horses															
Sunstroke and Freezing															
Drowning	3	2	1	3	1		1			1		1	1		2
Other Accidents	8	7	1	2	6	1		2	2	1	1	1	3	3	1
Homicide															
XIV. Causes Ill-Defined.															
Exhaustion															
Fever															
Sudden Death															
Heart Failure	1		1	1				1					1		
Dropsy															
Surgical Shock	1	1		1					1					1	
Unknown or not Specified	4	2	2	3	1			1			1	1	1	2	1

TABLE 48.—SHOWING DEATHS IN THE STATE WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal. relation		Age.										Nationality.							
	Male.	Fem. ♀.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
MARINETTE COUNTY—Continued.																								
Peritonitis	7	5	2	5	2					1				2	4		4	1						2
Appendicitis	9	5	4	2	7			1	2	3	1		2				2	3	1	1			1	
VII. Disease Genito Urinary System.																								
Nephritis	9	4	5	3	6			1					4	2	1	1	4		1	2			2	
Perinephritic Abscess																								
Vesical Calculi				1																				
Diseases Bladder	1	1		1																				
Diseases Male Genito Urinary Organs..																								
Pelvis Abscess	1		1		1						1											1		
Uterine Hemorrhage																								
Uterine Tumor																								
Other Diseases Uterus																								
Ovarian Cyst and Tumors	1		1	1									1				1							
Other Diseases Female Urinary Organs.																								
Renal Calculus																								
VIII. Puerperal Diseases.																								
Accidents of Pregnancy																								
Puerpal Hemorrhage	2		2	2						2							2							
Puerpal Septicemia	5		5	5						1	4						3					2		
Puerperal Convulsions																								
Other Diseases Pregnancy	1		1	1						1							1							

TABLE 49—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
MARQUETTE COUNTY—Continued.																								
Peritonitis	2	1	1	1						1	1						2							
Appendicitis																								
VIII. Disease Genito Urinary System.																								
Nephritis	2	2	1	1												2	2							
Perinephritic Abscess																								
Vesical Calculi																	1							
Diseases Bladder	1	1		1																				
Diseases Male Genito Urinary Organs..																								
Pelvis Abscess																								
Uterine Hemorrhage																								
Uterine Tumor																								
Other Diseases Uterus																								
Ovarian Cyst and Tumors																								
Other diseases Female Urinary Organs ..																								
Renal Calculus																								
VIII. Puerpual Diseases.																								
Accidents of Pregnancy																								
Puerpual Hemorrhage	1		1	1																				
Puerpual Septicemia	1		1	1							1	1					1							
Puerperal Convulsions																								
Other Diseases Pregnancy																								

IX. Diseases skin and Celluar Tissue.														
Erysipelas														
Gangrene														
Other Diseases Skin and Adnexia														
X. Diseases Infancy.														
Congenital Debility	9	6	3		9	9					6	3		
Other Diseases of Infancy	6	2	4		6	4	1	1			5		1	
XI. Diseases of Old Age.														
Senile Debility	15	6	9	11	4					1	14	8	5	2
XII. Violence.														
Suicide														
XIII. Accident.														
Fractures														
Gunshot	1	1			1				1				1	
Lightning	1	1		1						1				
Mining														
Railroad														
Burning	1	1			1				1			1		
Vehicles and Horses														
Sunstroke and Freezing														
Drowning	1	1			1				1			1		
Other Accidents	1	1		1						1		1		
Homicide														
XIV. Causes Ill-Defined.														
Exhaustion														
Fever														
Sudden Death														
Heart Failure	2	1	1	2							1	1	2	
Dropsy														
Surgical Shock														
Unknown or not Specified	1	1			1				1				1	

TABLE 50.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION AGE AND NATIONALITY.

CAUSE OF DEATH.	Sex.		Conjugal relation		Age.											Nationality.										
	Total Deaths.	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
MILWAUKEE COUNTY.																										
Total deaths	8302	4728	3574	3546	4756	1662	481	102	204	126	245	575	606	756	742	715	1261	3200	3567	98	429	619	18	39	313	
Still Births	738	457	341															449	266	3	6	56		7	11	
I. Epidemic Diseases.																										
Typhoid Fever	77	45	32	25	52			2	2	9	10	25	13	9	4	1	2	34	29	2	1	5	1		5	
Smallpox	1		1		1	1													1							
Measles	23	17	12	1	16	14	11	1	2				1					28								
Scarlet Fever	39	24	15		39	3	7	7	18	1	3							34	3		1					
Whooping Cough	37	14	23		37	24	9	2	1			1						9	19	1	1	6			1	
Diphtheria	90	46	44	4	86	6	22	16	30	5	3	3	2	1	1	1		45	34	1	1	9				
Influenza	91	41	50	73	18	5	2				2	2	7	11	13	12	37	16	52		14	7			2	
Others	7	6	1	1	6	1		1	2		1	1			1			3	3		1					
II. Other General Diseases.																										
Pyaemia and Septicemia	79	33	37	42	28	4	4	2	4	1	7	10	11	8	9	8	2	29	27		4	7			3	
Rabies	2	1	1	1	1								1						1		1					
Malaria	2	1	1	2										1	1			1	1							
Syphilis	17	10	7	4	13				1		1	2	1	1		2	1	10	5		2					
Tuberculosis (lungs)	556	301	252	307	246	8	2		21	3	46	152	131	76	61	36	20	165	261	14	34	49	3	2	25	
Tuberculosis (other)	234	159	75	87	147	11	12	3	10	7	27	58	27	36	23	15	5	124	70	2	18	20				
Rheumatism	31	18	13	12	19				3	4	5	3		4	4	1	3	8	13	1	4	3			2	
Diabetes	69	33	27	47	13													22	28	3	5	1		1		
Anemia Chlorosis	21	5	16	10	11	2			2	2	2	3	2	3	2	2	1	9	7	1	3			1		
Alcoholism	46	45	1	27	19							4	4	10	8	10	10	10	24		6	5			1	

TABLE 52.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
OCONTO COUNTY.																									
Total deaths	319	179	140	143	176	67	19	9	12	5	9	30	13	28	21	34	47	130	72	11	17	17	24	48	
Still Births	15	7	8															10	3			1		1	
I. Epidemic Diseases.																									
Typhoid Fever	4	2	2	3	1							2		1		1			1	2					1
Smallpox																									
Measles	2	1	1	1	1			1						1				1	1						
Scarlet Fever																									
Whooping Cough	1		1		1	1																			1
Diphtheria	3	3		1	2			2					1									1	1		1
Influenza	6	4	2	3	3	1	1							1	1		2	2	2	2					
Others																									
II. Other General Diseases.																									
Pyæmia and Septicæmia	10	4	6	6	4		1				1	4		1	1	2		6	2			1	1		
Rabies																									
Malaria																									
Syphilis	1		1	1								1							1						
Tuberculosis (lungs)	21	13	8	10	11	1			1		7	3	4	3	2			7	5	2	2		3		2
Tuberculosis (other)	6	6		3	3		1					1	2					2	3						1
Rheumatism	4	4		1	3			1	1			1						1	1						2
Diabetes	4	1	3	4											2	1	1		1						1
Anæmia Chlorosis	2	1	1	1	1					1	1							2							
Alcoholism	1	1		1										1				1							

IX. Diseases Skin and Cellular Tissue.														
Erysipelas														
Gangrene														
Other Diseases Skin and Adnexia														
X. Diseases Infancy.														
Congenital Debility	14	10	4		14	14					6	3	4	1
Other Diseases of Infancy	9	4	5		9	8	1				7	1	1	
XI. Diseases of Old Age.														
Senile Debility	8	5	3	7	1						8	5	1	2
XII. Violence.														
Suicide	2	2			2				2			1		1
XIII. Accident.														
Fractures	3	2	1	2	1				1	1		1	1	
Gunshot	6	6		2	4			1	1	2	1		1	2
Lightning	1	1		1					1				1	
Mining														
Railroad														
Burning														
Vehicles and Horses	2		2		2		1			1		1	1	
Sunstroke and Freezing	2	2			2					1				
Drowning	3	3		2	1			1	1		1	1		1
Other Accidents	7	7		2	5		1		2	3		1		4
Homicide												4	1	1
XIV. Causes Ill-Defined.														
Exhaustion														
Fever														
Sudden Death														
Heart Failure														
Dropsy	3	3		2	1						2	1	1	1
Surgical Shock														
Unknown or not Specified	3	3		2	1				1			2		3

TABLE 55.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.								
	Male.	Female	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
OZAUKEE COUNTY.																									
Total Deaths	284	150	114	162	101	34	8	6	3	5	2	17	13	21	20	26	83	63	173	1	16	.....	2	.....	9
Still Births	11	7	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	2	.....	1	.....	.....	.....	.....
I. Epidemic Diseases.																									
Typhoid Fever	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles	2	1	1	.....	2	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Scarlet Fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria	2	1	1	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Influenza	3	1	2	2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....
Others .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																									
Pyæmia and Septicæmia .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (lungs)	17	5	12	11	6	.....	.....	.....	.....	.....	.....	4	3	3	4	2	1	3	12	.....	2	.....	.....	.....
Tuberculosis (other)	9	4	5	3	6	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rheumatism	3	3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
Diabetes	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anæmia Chlorosis	2	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alcoholism .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 55.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
OZAUKEE COUNTY—Continued																								
Biliary Calculi	1	1	1	1													1	1						
Peritonitis	7	4	3	2	5	1	1	1	1		2	1		1			2	5						
Appendicitis	2	2			2			1									1	1	1					
VII. Disease Genito Urinary System.																								
Nephritis	9	7	2	8	1					1	2	1	1			4	1	8						
Perinephritic Abscess	1	1		1											1		1							
Vesical Calculi																								
Diseases Bladder																								
Diseases Male Genito Urinary Organs.																								
Pelvis Abscess																								
Uterine Hemorrhage																								
Uterine Tumor																								
Other Diseases Uterus																								
Ovarian Cyst and Tumors																								
Other Diseases Female Urinary Organs.																								
Renal Calculus																								
VIII. Puerperal Diseases.																								
Accidents of Pregnancy	1		1		1						1						1							
Puerperal Hemorrhage																								
Puerperal Septicemia	1		1	1							1						1							
Other Diseases Pregnancy																								

TABLE 56.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
PEPIN COUNTY—CONTINUED.																									
Cirrhosis Liver																									
Biliary Calculi																									
Peritonitis	5	3	2	2	3		1			1						1	1	2	1					1	
Appendicitis																									
VII. Disease Genito Urinary System.																									
Nephritis	2	1	1	1	1				1							1	1		1						
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder																									
Diseases Male Genito Urinary Organs																									
Pelvis Abscess																									
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors																									
Other Diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerperal Diseases.																									
Accidents of Pregnancy																									
Puerpual Hemorrhage																									
Puerperal Septicemia	1		1	1							1								1						
Puerperal Convulsions																									
Other Diseases Pregnancy	1		1	1								1					1								

TABLE 57.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.				Con- jugal relation	Age.											Nationality.								
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
PIERCE COUNTY.																										
Total Deaths	213	119	94	113	100	96	15	16	3	4	6	10	9	14	17	37	72	109	33	58	5	2	1	6		
Still Births	5	3	2														2	2	1							
I. Epidemic Diseases.																										
Typhoid Fever	1	1		1							1						1									
Smallpox																										
Measles	1	1		1		1																		1		
Scarlet Fever																	1	2								
Whooping Cough	2	2		1														2								
Diphtheria	3	1	2	2	1						1			1		1	2		1							
Influenza																										
Others																										
II. Other General Diseases.																										
Pyæmia and Septicæmia	2	1	1	1	1											1	1	1		1						
Rabies																										
Malaria																										
Syphilis																										
Tuberculosis (lungs)	17	8	9	7	10					1	2	7	1	2	1	3		10	2	3			1	1		
Tuberculosis (other)	2	2	2	2	2		2											2	2							
Rheumatism	3	1	2	2	1						1		1				1	2		1						
Diabetes	4	3	1	3	1						1		1	1		1		2	1	1						
Anæmia Chlorosis																										
Alcoholism																										

IX. Diseases Skin and Cellular Tissue.															
Erysipelas	2	1	1	2						2	2				
Gangrene	2	1	1	2						2	1	1			
Other Diseases Skin and Adnexia															
X. Diseases Infancy.															
Congenital Debility	4	3	1		4	4				2		2			
Other Diseases of Infancy	6	1	5		6	4	2			4		2			
XI. Diseases of Old Age.															
Senile Debility	21	8	13	14	7					21	9	5	5	1	1
XII. Violence.															
Suicide															
XIII. Accident.															
Fractures	2	2		2					1	1		1	1		
Gunshot	1	1		1						1			1		
Lightning															
Mining															
Railroad	2	2		2						2		2			
Burning															
Vehicles and Horses	1	1		1			1					1			
Sunstroke and Freezing															
Drowning	1	1		1					1			1			
Other Accidents	4	4		3	1		1		2		1	3		1	
Homicide															
XIV. Causes Ill-Defined.															
Exhaustion	3	2	1	3					1	2		1		2	
Fever															
Sudden Death															
Heart Failure	2	1	1	1	1					1	1			2	
Dropsy															
Surgical Shock															
Unknown or not Specified	2	1	1		2			2						2	

TABLE 58.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.										
	Total	deaths.	Male.	Female	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
POLK COUNTY.																											
Total deaths	199	110	89	111	88	19	12	4	8	6	7	16	19	11	17	27	45	60	24	73	8	5	30				
Still Births	9	6	3															6	1	1							
I. Epidemic Diseases.																											
Typhoid Fever	4		4	3	1							2	2					2		2							
Smallpox																											
Measles																											
Scarlet Fever	2	1	1		2		2											2									
Whooping Cough																											
Diphtheria	6	3	3		6		2	1	2		1							1		2				3			
Influenza	5	3	2	2	3		1	1							1		2	1		2	1			1			
Others																											
II. Other General Diseases.																											
Pyæmia and Septicæmia	3	2	1	1	2						1	1		1						1				2			
Rabies																											
Malaria																											
Syphilis																											
Tuberculosis (lungs)	18	9	9	11	7				1	1	5	7	2		1	1				11				6			
Tuberculosis (other)	7	4	3	4	3					1	1	4		1		1		1	1	5							
Rheumatism	4		4	1	3				1						1		1	2		2							
Diabetes	2		2	1	1					1				1						1				1			
Anæmia Chlorosis																											
Alcoholism	2	2		2										2					1	1							

TABLE 59.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relat on		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	Fre. ch.	Italian.	Unclassified.
PORTAGE COUNTY.																								
Total deaths	532	303	229	262	270	128	30	7	12	13	20	43	32	28	46	57	100	209	126	47	24	114	2	9
Still Births	16	10	6															6	2	1				
I. Epidemic Diseases.																								
Typhoid Fever	16	6	10	7	9	1		1	2	2		5	3		1	1		5	2	2		6		1
Smallpox																								
Measles	11	7	4	1	10	2	3		3	2		1						7	1	3				
Scarlet Fever	6	1	5		6		3	1	1		1							2	2					
Whooping Cough	4	3	1		4	2	2											2	1	1				
Diphtheria	2	1	1		2		1	1										2	1	1				
Influenza	14	6	8	9	5	1	1			1	1	2	1			3	4	8	1	1	3			
Others	1	1			1					1											1			
II. Other General Diseases.																								
Pyæmia and Septicæmia	3	1	2	2	1					1					1			2	1					
Rabies																								
Malaria	2	1	1		2						2							1		1				
Syphilis																								
Tuberculosis (lungs)	32	12	20	20	12		1		1	2	12	6	4	2	1	3		10	3	7	5	7		
Tuberculosis (other)	3	3		3			1		1	1								1	2					
Rheumatism	7	6	1	6	1			1				1		3		2		4	2	1				
Diabetes	1	1		1							1							1						
Anæmia Chlorosis	2	1	1	2														1						
Alcoholism	3	3		3								1	2					2	1		1			

TABLE 59.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
PORTAGE COUNTY—Continued.																									
Peritonitis	7	2	5	3	4	1	1	1			1				1		2	4	1	1		1			
Appendicitis																									
VII. Disease Genito Urinary System.																									
Nephritis	10	6	4	9	1				1			1		2	1	5	4	3				3			
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder	2	2		2												1	1	1							
Diseases Male Genito Urinary Organs																									
Pelvis Abscess																									
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																			1						
Ovarian Cyst and Tumors	1		1		1						1														
Other diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpeal Diseases.																									
Accidents of Pregnancy	1		1	1										1						1					
Puerpeal Hemorrhage	1		1	1										1				1	1						
Puerpeal Septicemia	1		1	1																					
Puerpeal Convulsions																	1	2	1			2			
Other Diseases Pregnancy	6		6	6							2	2	2				1	2	1						

IX. Diseases Skin and Cellular Tissue.																					
Erysipelas																					
Gangrene																					
Other Diseases Skin and Adnexa	1	1			1	1									1						
X. Diseases Infancy.																					
Congenital Debility	47	30	17		47	47							22	9		14		2			
Other Diseases of Infancy	38	24	14		38	32	6						18	7	1		12				
XI. Diseases of Old Age.																					
Senile Debility	24	13	11	22	2								1	23	8	5	1	3	6	1	
XII. Violence.																					
Suicide	3	3		3									1	2			2			1	
XIII. Accident.																					
Fractures	2	2		1	1					1				1	1	1					
Gunshot	1		1	1						1							1				
Lightning																					
Mining																					
Railroad	1	1		1								1				1					
Burning	2	1	1	1	1				1				1		1	1					
Vehicles and Horses	1	1			1	1										1					
Sunstroke and Freezing																					
Drowning	7	7		2	5			1		3	1		1		1	4			1	1	
Other Accidents	17	15	2	10	7		1			2	4		2	3	2	3	6	6		1	4
Homicide	1	1		1								1				1					
XIV. Causes Ill-Defined.																					
Exhaustion																					
Fever																					
Sudden Death																					
Heart Failure	5	5		4	1					1				3	1	2		2	1		
Dropsy	1	1		1							1						1				
Surgical Shock																					
Unknown or not Specified	6	5	1	4	2						1	1	3	1		2	4				

TABLE XXII.

CASH RENTALS AND TAXES—PRINCIPALLY FARM PROPERTY—(4 items) ("4").

COUNTIES.	No. returns.	Acres.	VALUES.		GROSS RENTAL.			DEDUCTIONS.				NET RENTAL 1. (Absolute.)			NET RENTAL 2. (Taxes not deducted.)			PER CENT. TAXES TO—				
			Assessed.	True, per supervisor of assessment.	Amount.	Percentage.		Ins.	Rprs.	Taxes.	Total.	Amount.	Percentage.		Amount.	Percentage.		Assessed value.	True value.	Gross rental.	Net rental 1.	Net rental 2.
						A. V.	T. V.						A. V.	T. V.		A. V.	T. V.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Adams	21	2,063	\$38,529	\$55,549	\$2,557	6.64	4.60			\$350								.65	.45	13.69		
Ashland	7	148	21,000	19,600	1,982	9.44	10.12			576								2.74	2.94	29.05		
Barron	54	5,327	85,047	90,864	7,751	9.11	8.53			1,282								1.51	1.41	16.53		
Burnett	11	1,330	8,765	10,760	710	8.10	6.60			201								2.29	1.87	28.30		
Calumet	4		14,445	15,700	732	5.07	4.66			76								.53	.49	10.41		
Chippewa	5		5,335	6,900	683	12.80	9.90			118								2.21	1.71	17.28		
Clark	63		145,100	185,650	7,468	5.15	4.02			1,391								.96	.75	18.62		
Columbia	108	11,591	726,885	879,942	39,495	5.43	4.49			4,401								.61	.50	8.89		
Crawford	4	700	9,950	12,475	655	6.58	5.25			155								1.56	1.24	23.65		
Dane	16	1,813	106,920	116,527	5,975	5.59	5.13			667								.62	.57	11.17		
Dodge	42	5,263	277,190	351,613	15,050	5.43	4.28			1,429								.52	.41	9.50		
Douglas	3	157	2,938	6,200	347	11.81	5.60			149								5.08	2.41	43.03		
Dunn	32	3,927	62,875	120,200	5,867	9.33	4.88			1,100								1.75	.91	18.74		
Eau Claire	14		68,510	94,169	9,963	14.15	10.29			1,767								2.58	1.87	18.23		
Fond du Lac	9		71,925	83,550	7,100	9.87	8.50			1,231								1.71	1.47	17.33		
Forest	2		740	1,100	125	16.89	11.36			19								2.54	1.71	15.01		
Green	149	15,797	688,938	866,251	57,650	8.37	6.65			4,821								.70	.56	8.36		
Iowa	35	6,386	228,419	241,739	14,193	6.21	5.87			1,429								.63	.59	10.07		
Jackson	5	555	17,135	17,963	707	7.07	6.75			308								1.80	1.72	25.45		
Jefferson	162	16,520	868,210	1,122,865	50,640	5.83	4.51			4,807								.55	.43	9.49		
Juneau	4	540	13,500	13,700	1,205	8.93	8.80			192								1.41	1.40	15.91		
Lincoln	6	400	4,729	6,450	309	6.53	.479			161								3.40	2.49	52.03		
Manitowoc	20	1,062	66,665	72,450	3,331	5.00	4.60			607								.91	1.84	18.21		
Marinette	2		1,450	1,900	312	21.50	16.42			31								2.17	1.66	10.09		
Marquette	15	1,330	28,960	49,700	3,203	11.06	6.44			377								1.30	.76	11.76		
Milwaukee	38	1,439	197,264	337,800	7,943	4.03	2.35			1,939								.98	.57	24.40		
Oneida	7		2,065	3,530	504	24.40	14.28			102								4.92	2.88	20.15		
Outagamie	46	4,067	206,286	259,200	8,715	4.23	3.36			1,468								.71	.57	16.84		
Pepin	8	785	15,375	23,198	803	5.22	3.46			236								1.53	1.01	29.33		
Pierce	21	2,143	48,370	78,855	4,121	8.52	5.23			641								1.32	.81	15.54		
Polk	17	1,580	21,845	22,950	2,024	9.26	8.82			358								1.64	1.56	17.70		
Richland	18	2,224	49,870	73,600	3,665	7.35	4.98			585								1.17	.79	15.97		
Rock	1,039		3,649,056	5,089,153	366,501	10.04	7.20			52,637								1.44	1.03	14.36		
St. Croix	31	4,954	111,270	127,998	8,302	7.46	6.48			1,440								1.29	1.13	17.35		
Sauk	34		134,300	171,130	8,086	6.02	4.72			1,246								.93	.73	15.41		
Shawano	1		2,175	5,000	150	6.90	3.00			42								1.91	.83	27.70		
Sheboygan	196	9,533	632,370	775,027	31,830	5.03	4.11			3,980								.63	.51	12.50		
Taylor	4	360	4,085	7,400	450	11.15	6.08			95								2.34	1.28	21.04		
Trempealeau	35		117,120	168,188	9,790	8.36	5.82			1,614								1.38	.96	16.49		
Vernon	23	1,397	34,030	39,920	3,150	9.26	7.89			433								1.27	1.08	13.73		
Walworth	151	19,079	941,830	1,292,410	58,837	6.25	4.55			6,360								.68	.49	10.81		
Washington	79	6,522	442,935	475,358	17,979	4.06	3.78			2,248								.51	.47	12.50		
Wood	27	1,807	30,113	38,415	2,328	7.73	6.06			484								1.61	1.26	14.54		
Total Counties.	38	2,568	\$10,204,469	\$13,432,949	\$773,423	7.58	5.92			103,552								1.01	.77	13.39		

TABLE 60.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.										Nationality.											
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
PRICE COUNTY—Continued.																											
Biliary Calculi																											
Peritonitis	1		1	1											1												
Appendicitis																											
VII. Disease Genito Urinary System.																											
Nephritis	4	2	2	3	1					1																	1
Perinephritic Abscess																											
Vesical Calculi																											
Diseases Bladder	1	1		1																							
Diseases Male Genito Urinary Organs.																											
Pelvis Abscess																											
Uterine Hemorrhage																											
Uterine Tumor																											
Other Diseases Uterus																											
Ovarian Cyst and Tumors																											
Other diseases Female Urinary Organs																											
Renal Calculus																											
VIII. Puerpeal Diseases.																											
Accidents of Pregnancy	1		1	1																							
Puerpeal Hemorrhage																											
Puerpeal Septicemia	1		1	1																							
Puerpeal Convulsions																											
Other Diseases Pregnancy																											

IX. Diseases Skin and Celluar Tissue.																	
Erysipelas																	
Gangrene																	
Other Diseases Skin and Adnexia																	
X. Diseases Infancy.																	
Congenital Debility	7	3	4		7	7					2	3	1				1
Other Diseases of Infancy	3	2	1		3	3					2		1				
XI. Diseases of Old Age.																	
Senile Debility	3	2	1	3						1	2		3				
XII. Violence.																	
Suicide	2	2		2						1	1			2			
XIII. Accident.																	
Fractures																	
Gunshot																	
Lightning																	
Mining																	
Railroad																	
Burning	1	1			1					1							1
Vehicles and Horses	2	2		2							2		2				
Sunstroke and Freezing	2	1	1			1		1				2					
Drowning																	
Other Accidents	1	1		1						1						1	
Homicide	5	3	2	3	2	1			1	3	1		3	2	1		
XIV. Causes Ill-Defined.																	
Exhaustion																	
Fever																	
Sudden Death																	
Heart Failure	4	3	1	2	2				1			1	2		2	1	
Dropsy	1	1		1									1		1		
Surgical Shock																	
Unknown or not Specified	5	3	2	4	1					1		1	2	1	2	3	

TABLE 61.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relat on		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
RACINE COUNTY—Continued.																									
Peritonitis	14	6	12	7	7	2			1		4		2		2	2	7	3							4
Appendicitis	15	8	7	7	8			1	1	3	1	3	1	2			6	3	2	2					12
VII. Disease Genito Urinary System.																									
Nephritis	38	24	14	28	10	1					2	3	7	7	4	14	12	12	3	5					6
Perinephritic Abscess																									
Vesical Calculi	1	1		1													1	1							2
Diseases Bladder	2	2		2												1	1								
Diseases Male Genito Urinary Organs									1								1								
Pelvis Abscess	1		1	1																					
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors	3		2	1								1	1		1		1	1							1
Other diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpeal Diseases.																									
Accidents of Pregnancy																									
Puerpeal Hemorrhage																									
Puerpeal Septicemia	3	3	2	1							3						1								2
Puerpeal Convulsions	3	3	2	1							1		2				1	1							1
Other Diseases Pregnancy	2	2	2								1	1					1	1							

IX. Diseases Skin and Cellular Tissue.																						
Erysipelas	4	2	2	2	2	1	1	1	1	1	3	1										
Gangrene																						
Other Diseases Skin and Adnexia	1	1	1				1				1											
X. Diseases Infancy.																						
Congenital Debility	37	20	17		37	37					25	8	1	3								
Other Diseases of Infancy	32	21	11		32	28	2	2			20	5	3	4								
XI. Diseases of Old Age.																						
Senile Debility	89	50	39	83	6						89	22	24	7	16	20						
XII. Violence.																						
Suicide	23	15	8	18	5			2	3	5	1	7	2	3	6	6	3	8				
XIII. Accident.																						
Fractures	2	2		1	1				1	1								1	1			
Gunshot	2	2			2				1	1									1			
Lightning															1				1			
Mining																						
Railroad																						
Burning	10	10		2	8				3	2	3	1	1	3	1				2	4		
Vehicles and Horses	3	3		2	1							2	1	1	3	1			2	1		
Sunstroke and Freezing	3	1	2		3	1	1		1						1	2			1	1		
Drowning	7	7		1	6			1	2	2					2		1			1	3	
Other Accidents	18	15	3	11	7		1	1	1	4	4	2	2	1	3	8	3	1	1		3	
Homicide	1		1	1						1					1						2	3
XIV. Causes Ill-Defined.																						
Exhaustion	7	6	1	3	4	1			1	1	1	1	1	1	4	1	1				1	
Fever																						
Sudden Death																						
Heart Failure																						
Dropsy	27	14	13	19	8	2				2	3	2	4	11	3	10	4	1	4			8
Surgical Shock	3	1	2	2	1					1				1	1		3					
Unknown or not Specified	9	7	2	3	6				1		5		3			4	2		3			

TABLE 63.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal Relatio		Age.										Nationality.										
			Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40 to 50 years.	50 to 60 years.	60 to 70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian	Unclassified.	
ROCK COUNTY.																											
Total deaths	765	503	262	42	358	125	31	14	14	16	24	71	59	69	65	119	141	667	157	48	65	15	1	1	16		
Still Births	33	19	14															32	1								
I. Epidemic Diseases.																											
Typhoid Fever	9	8	1	4	5				1		2	1	2	2				1	5	2		2					
Smallpox																											
Measles	10	6	4		10	4	5					1							9			1					
Scarlet Fever	6	1	5		6		1	2	2			1							4	1					1		
Whooping Cough	2	2			2	2																					
Diphtheria	11	5	6	1	10		2	1	2	2	3								8	2		1					
Influenza	15	10	5	11	4		1								2	1	4	7	14	1							
Others																											
II. Other General Diseases.																											
Pyæmia and Septicæmia	4	2	2	3	1					1		2							1	1	3						
Rabies																											
Malaria	2	2		1	1						1		1	1					2								
Syphilis	2	1	1		2														2								
Tuberculosis (lungs)	76	34	42	37	35	1		1	1	2	4	23	18	8	5	10	4		50	9	6	8				3	
Tuberculosis (other)	12	7	5	4	9	4	2				1	2	2	1	1				11	2							
Rheumatism	9	4	5	7	2						2	1	1	1	1	3	1		8			1					
Diabetes	13	6	7	8	5		1		1	1	1	1	2	2	3	1	10		10	1	2						
Anæmia Chlorosis	3	1	2	3							1								2			1					
Alcoholism	4	4		2	2									1	1	1			4								

IX. Diseases skin and Celluar Tissue.																							
Erysipelas	2		2	1	1	1							1										
Gangrene	1	1		1									1										
Other Diseases Skin and Adnexia																							
X. Diseases Infancy.																							
Congenital Debility	55	22	13		35	35								30	5								
Other Diseases of Infancy	31	17	14		31	23	7	1						24	4	2		1					
XI. Diseases of Old Age.																							
Senile Debility	92	40	52	79	13								1	91	61	9	5	15		1	1	0	
XII. Violence.																							
Suicide	3	2	1	2	1					1			1		1	1	1		1				
XIII. Accident.																							
Fractures	5	4	1	2	3			1		1					2	4			1				
Gunshot	3	2	1	2	1					2			1			2	1						
Lightning																							
Mining																							
Railroad	4	4		3	1					1		1		1	1	4							
Burning	4	4		2	2			1		1		1	1		4								
Vehicles and Horses	2	1	1		2			1	1						1								1
Sunstroke and Freezing																							
Drowning	4	4		2	2			1		1	1	1			3		1						
Other Accidents	22	14	8	6	16	3		1	2	1		4	3	1		2	5	16	2	1	2		1
Homicide																							
XIV. Causes Ill-Defined.																							
Exhaustion	1		1		1					1					1								
Fever															1					1			
Sudden Death	2		2	1	1				1														
Heart Failure	8	4	4	7	1								3	1	4	6				1			1
Dropsy	2	1	1	2											2		1			1			
Surgical Shock	2		2	2						1	1					2							
Unknown or not Specified	8	6	2	4	4					1	2		3	1	1	6				2			

TABLE 64.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total Deaths.		Sex.		Con-jugal relation		Age.											Nationality.									
	Total	Deaths.	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
ST. CROIX COUNTY.																											
Total deaths	246	116	130	137	109	18	4	5	8	13	16	22	12	21	28	36	61	96	37	65	33	.....	3	.....	12
Still Births	2	1	1															1		1							
I. Epidemic Diseases.																											
Typhoid Fever	1	1															1					1					
Smallpox																			2	1		1					
Measles	4		4	1	3		2			1									2								
Scarlet Fever	3	2	1		3				1	1	1								2		1						
Whooping Cough	3	1	2		3	3													1		1	1					
Diphtheria	9	4	5		9			1	3	2	3								4	1	1	1			2		
Influenza	1	1		1									1								1						
Others	3	3			3				1		1							2			1						
II. Other General Diseases.																											
Præmia and Septicæmia	9	2	7	4	5	1			1	1	1	2			1		1	1	3	3	3						
Rabies																											
Malaria																											
Syphilis																											
Tuberculosis (lungs)	22	7	15	10	12							3	7	1	4	4	1	2	6	2	12	2					
Tuberculosis (other)																											
Rheumatism	1	1		1													1					1					
Diabetes	1		1	1														1	1								
Anæmia Chlorosis																											
Alcoholism	1	1			1										1												

IX. Diseases Skin and Cellular Tissue.																				
Erysipelas																				
Gangrene																				
Other Diseases Skin and Adnexia.....																				
X. Diseases Infancy.																				
Congenital Debility.....	20	13	7		20	20						13	3	1	3					
Other Diseases of Infancy	22	13	9		22	18	3	1				10	11	1						
XI. Diseases of Old Age.																				
Senile Debility	86	44	42									3	83	39	27	14	1	1	4	
XII. Violence.																				
Suicide	3	2	1	1	2				1		1	1		1	1				1	
XIII. Accident.																				
Fractures	2	2		1	1				1		1			1	1					
Gunshot	1		1		1			1						1						
Lightning	1	1			1									1						
Mining	1	1			1									1						
Railroad	9	8	1	5	4					3	2	2		1	1	5	2	1	1	
Burning	2	1	1		2			1		1					2					
Vehicles and Horses																				
Sunstroke and Freezing																				
Drowning	3	2	1	1	2				1	1		1		3						
Other Accidents	16	14	2	8	8	1		1		1	1	2	1	3	3	3	9	4	3	
Homicide																				
XIV. Causes Ill-Defined.																				
Exhaustion	5	1	4		5				1	1			1	2	1	2	1	1		
Fever																				
Sudden Death																				
Heart Failure	3	3		2	1						1	2			1	2				
Dropsy	4	2	2	3	1						1		1	2		4				
Surgical Shock																				
Unknown or not Specified	7	3	4	3	4				1	1		2		2		1	1	4	1	1

TABLE 66.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.										Nationality.										
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
SAWYER COUNTY—Continued.																										
Peritonitis																										
Appendicitis																										
VII. Disease Genito Urinary System.																										
Nephritis		1		1	1																					
Perinephritic Abscess																										
Vesical Calculi																										
Diseases Bladder																										
Diseases Male Genito Urinary Organs..																										
Pelvis Abscess																										
Uterine Hemorrhage																										
Uterine Tumor																										
Other Diseases Uterus																										
Ovarian Cyst and Tumors																										
Other Diseases Female Urinary Organs																										
Renal Calculus																										
VIII. Puerpeal Diseases.																										
Accidents of Pregnancy																										
Puerperal Hemorrhage																										
Puerperal Septicemia																										
Puerperal Convulsions																										
Other Diseases Pregnancy																										

IX. Diseases Skin and Cellular Tissue.												
Erysipelas	1	1	1	1	1						1	
Gangrene	1	1		1						1	1	
Other Diseases Skin and Adnexa												
X. Diseases Infancy.												
Congenital Debility	1	1		1	1						1	
Other Diseases of Infancy												
XI. Diseases of Old Age.												
Senile Debility	1	1		1							1	1
XII. Violence.												
Suicide												
XIII. Accident.												
Fractures												
Gunshot												
Lightning												
Mining												
Drowning	1	1		1				1			1	
Railroad												
Burning												
Vehicles and Horses												
Sunstroke and Freezing	1	1		1				1				1
Other Accidents												
Homicide												
XIV. Causes Ill-Defined.												
Exhaustion												
Fever												
Sudden Death												
Heart Failure	1	1		1				1			1	
Dropsy												
Surgical Shock	1	1	1	1						1	1	
Unknown or not Specified												

TABLE 67.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.										
			Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yr. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
	SHAWANO COUNTY.																										
Total deaths	372	210	162	14	224	67	23	11	15	14	11	29	20	20	27	35	82	75	226	39	5	5	1	16	2		
Still Births	17	9	8																								
I. Epidemic Diseases.																											
Typhoid Fever	5	3	2		5				1	2		2						2	3								
Smallpox	1		1									1							1								
Measles																											
Scarlet Fever	9	6	3		9	1	1		5	2								4	4	1							
Whooping Cough	5	3	3		5	4	1																				
Diphtheria	6	2	4	1	5	2		1	2			1						1	4								
Influenza																											
Others	1				1				1										1								
II. Other General Diseases.																											
Pyæmia and Septicæmia	3	2	1	2	1					1			1		1				1	1	1						
Rabies																											
Malaria	1	1		1								1							1								
Syphilis	1	1		1																							
Tuberculosis (lungs)	20	8	12	15	5							1	9	4	4			2	4	12	4						
Tuberculosis (other)	8	2	6	1	7		2	2	2			1		1				4	2	4	2			1			
Rheumatism	6	3	3	1	5							1	1					2	4	2							
Diabetes	7	2	5	3	4					1	1	1						1	2	3	2						
Anæmia Chlorosis	1		1		1	1													1								
Alcoholism	2	1	1	2										1				1		1							

TABLE 67.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
SHAWANO COUNTY—Continued.																									
Peritonitis	6	3	3	4	1	1					1	1	2			3	1	5	1						
Appendicitis	12	12			1													1							
VII. Disease Genito Urinary System.																									
Nephritis	12	6	6	9	3	1					1	2	1		4	3	3	8		1					
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder	1	1													1				1						
Diseases Male Genito Urinary Organs..																									
Pelvis Abscess																									
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors																									
Other Diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpeal Diseases.																									
Accidents of Pregnancy	2		2	2									2					2							
Puerperal Hemorrhage																									
Puerperal Septicemia	5		5	3	2						3	1	1				1	3							1
Puerperal Convulsions																									
Other Diseases Pregnancy																									

IX. Diseases Skin and Cellular Tissue.														
Erysipelas														
Gangrene	2	1	1	2	1					1	2			
Other Diseases Skin and Adnexia.....	1	1	1							1		1		
X. Diseases Infancy.														
Congenital Debility.	20	14	6	20	20						7	12	1	
Other Diseases of Infancy	25	16	9	25	15	6	4				4	19		1
XI. Diseases of Old Age.														
Senile Debility	41	24	17	27	14					3	38	5	26	7
XII. Violence.														
Suicide														2
XIII. Accident.														
Fractures	1	1		1					1					
Gunshot	1	1	1						1			1		
Lightning	1	1	1									1		
Mining									1					
Railroad												1		
Burning														
Vehicles and Horses	2		2	1	1	1			1			1	1	
Sunstroke and Freezing	1	1	1									1		
Drowning	4	3	1	1	3	2			1	1		1		
Other Accidents	9	6	3	5	4		1	1	1	1	1	2	1	
Homicide									1	3	2	1	6	1
XIV. Causes Ill-Defined.														
Exhaustion	1	1		1				1						
Fever	1	1		1	1							1		
Sudden Death													1	
Heart Failure	7	4	3	4	3					1	2	3	1	5
Dropsy	5	3	2	3	2	1					3	1	1	3
Surgical Shock	1	1		1					1					1
Unknown or not Specified	1	1		1					1					

TABLE 68.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATIONS, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-juga relation		Age.										Nationalty.											
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
SHEBOYGAN COUNTY.																											
Total deaths	758	416	342	402	356	113	28	12	22	14	22	48	43	54	49	86	222	313	375	1	24	1	2	.....	41	
Still Births	49	31	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	14	.....	.....	.....	.....	.....	1	
I. Epidemic Diseases.																											
Typhoid Fever	12	7	5	5	7	.....	1	.....	.....	1	2	1	4	1	.....	1	1	4	7	.....	.....	.....	.....	.....	.....	1
Smallpox .....	.....	.....	.....	.....	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
Measles	3	.....	3	.....	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever	10	4	6	.....	10	.....	4	2	4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough	1	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria	4	2	2	.....	4	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
Influenza	7	1	6	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	6	1	4	.....	.....	.....	.....	.....	.....	.....
Others	2	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																											
Pyæmia and Septicæmia	14	7	7	8	6	3	.....	.....	2	.....	.....	3	2	.....	1	2	1	7	7	.....	.....	.....	.....	.....	.....	.....
Rabies
Malaria
Syphilis	1	1	1	1
Tuberculosis (lungs)	69	37	32	44	25	.....	.....	.....	.....	2	7	12	16	14	9	8	1	28	37	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (other)	18	8	10	2	15	3	2	1	2	2	1	6	.....	1	.....	.....	.....	11	6	.....	.....	.....	.....	.....	.....	.....
Rheumatism	8	6	2	7	1	.....	.....	.....	1	.....	.....	.....	1	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Diabetes	13	6	7	12	1	.....	.....	1	.....	.....	.....	.....	.....	.....	2	7	3	4	5	1	1	.....	.....	.....	.....	.....
Anæmia Chlorosis	3	2	1	1	2	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....
Alcoholism	2	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....

IX. Diseases Skin and Cellular Tissue.														
Erysipelas	3	2	1	1	2	2						1	1	2
Gangrene	6	4	2	5	1	1						1	4	1
Other Diseases Skin and Adnexia														1
X. Diseases Infancy.														
Congenital Debility	44	29	15		44	44							33	11
Other Diseases of Infancy	22	13	9		22	19	3						14	6
XI. Diseases of Old Age.														
Senile Debility	79	42	37	74	5							1	78	12
XII. Violence.														
Suicide	5	3	2	2	3				1	2	2			4
XIII. Accident.														
Fractures	7	3	4	5	2				1	2	2	2	2	3
Gunshot	2	2			2				1	1				1
Lightning														1
Mining														
Railroad														
Burning	2	2		1	1				1	1			2	
Vehicles and Horses	2	2		2						1		1	1	1
Sunstroke and Freezing	3	1	2	1	2	2					1	1	1	1
Drowning	1	1		1	1					1			1	
Other Accidents	4	4		1	3			1	1	1	1		2	2
Homicide	6	6		6					1	2		1	2	3
XIV. Causes Ill-Defined.														
Exhaustion	1		1		1				1					1
Fever														
Sudden Death														
Heart Failure														
Dropsy	13	8	5						1	2	1	1	7	1
Surgical Shock	4	2	2	4						1	1		2	1
Unknown or not Specified	2		2	1	1		1				1	1	1	1
	4	1	4							1		2	1	1

IX. Diseases Skin and Celluar Tissue.													
Erysipelas													
Gangrene													
Other Diseases Skin and Adnexia													
X. Diseases Infancy.													
Congenital Debility	8	3	5		8	8					3	5	
Other Diseases of Infancy	9	7	2		9	6	2	1			2	5	2
XI. Diseases of Old Age.													
Senile Debility	11	8	3	6	5						3	8	
XII. Violence.													
Sulcide	1	1			1					1		1	
XIII. Accident.													
Fractures	1	1		1							1	1	
Gunshot	1	1		1						1			1
Lightning										1			
Mining													
Railroad													
Burning	1	1			1								
Vehicles and Horses					1								
Sunstroke and Freezing													
Drowning													
Other Accidents	3		3		3	2	1				1	1	1
Homicide													
XIV. Causes Ill-Defined.													
Exhaustion													
Fever													
Sudden Death													
Heart Failure	3	1	2	2	1					1	2		
Dropsy	4		4	2	2					1	3		
Surgical Shock										1	3	1	
Unknown or not Specified	1	1		1							1	1	

TABLE 70.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relati- on		Age.										Nationality.									
	Male.	Female.	Married.	Single.	Under year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
TREMPEALEAU COUNTY—Continued.																										
Peritonitis	5	3	2	4	1							1	2		2			2	3							
Appendicitis	2	1	1	1	1				1						1			1	1							
VII. Disease Genito Urinary System.																										
Nephritis	2	6	2	4	4					1		1			3	3	1	3	4							
Perinephritic Abscess	1	1		1											1				1							
Vesical Calculi																										
Diseases Bladder	2	1	1	2								1			1			1	1							
Diseases Male Genito Urinary Organs.																										
Pelvis Abscess																										
Uterine Hemorrhage																										
Uterine Tumor																										
Other Diseases Uterus																										
Ovarian Cyst and Tumors	1		1		1									1				1								
Other diseases Female Urinary Organs																										
Renal Calculus																										
VIII. Puerpeal Diseases.																										
Accidents of Pregnancy																										
Puerpeal Hemorrhage																										
Puerpeal Septicemia	2		2	2						1	1						1	1								
Puerpeal Convulsions																										
Other Diseases Pregnancy																										

TABLE 71.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		AGE.										Nationality.								
	Male.	Female	Married	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American	German.	Norwegian.	Irish.	Pole.	French	Italian.	Unclassified.	
VERNON COUNTY.																									
Total deaths	236	135	101	87	149	28	7	7	10	4	8	10	18	15	13	29	78	196	24	14					2
Still Births	5	4	1															5							
I. Epidemic Diseases.																									
Typhoid Fever	2	1	1		2			1		1								2							
Smallpox	1	1			1												1	1							
Measles	1	1			1		1											1							
Scarlet Fever																									
Whooping Cough	2	1	1		2	2												2							
Diphtheria	9	5	4		9	1		2	4	1	1							7	2						
Influenza	5	2	3		3									1			4	4	1						
Others																									
II. Other General Diseases.																									
Pyæmia and Septicæmia	3		3	1	2		1			1		1						3							
Rabies																									
Malaria	1	1			1													1							
Syphilis																									
Tuberculosis (lungs)	14	3	11	6	8					2	4	5	2		1			12	2						
Tuberculosis (other)	2		2	1	1						1				1			2							
Rheumatism	3	3		2	1										2		1	3							
Diabetes	2	2		2	1											2		2							
Anæmia Chlorosis	1		1												1			1							
Alcoholism																									

IX. Diseases Skin and Celluar Tissue.														
Erysipelas	1		1	1										
Gangrene	1	1								1		1		
Other Diseases Skin and Adnexia	1	1		1	1							1		
X. Diseases Infancy.														
Congenital Debility	8	2	6		8	8						8		
Other Diseases of Infancy	3	1	2		3	2	1					1	2	
XI. Diseases of Old Age.														
Senile Debility	19	11	8							1	18	15	2	1
XII. Violence.														
Suicide	2	2			2					1	1	2		
XIII. Accident.														
Fractures														
Gunshot														
Lightning														
Mining														
Railroad	1	1		1							1		1	
Burning														
Vehicles and Horses														
Sunstroke and Freezing														
Drowning														
Other Accidents	5	4	1		5	1	1	1				2	4	
Homicide														1
XIV. Causes Ill-Defined.														
Exhaustion	1	1		1								1	1	
Fever														
Sudden Death														
Heart Failure	1	1			1							1	1	
Dropsy														
Surgical Shock														
Unknown or not Specified	2		2	1	1					1		1		1

TABLE 72.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.									
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over	American.	German.	Norwegian	Irish.	Pole.	French.	Italian.	Unclassified.		
VILAS COUNTY.																										
Total deaths	61	39	22	12	49	14	.....	2	.....	4	4	9	4	4	2	4	2	44	8	3	5	.....	.....	.....	1	
Still Births	6	1	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	2	.....	.....	.....	.....	.....	.....
I. Epidemic Diseases.																										
Typhoid Fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smallpox .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Fever .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough	1	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diphtheria	2	2	.....	.....	2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza	2	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Others .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. Other General Diseases.																										
Pyæmia and Septicæmia	4	1	3	1	3	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....
Rabies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syphilis	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (lungs)	1	0	2	1	6	1	.....	.....	.....	1	.....	3	.....	.....	.....	.....	.....	6	.....	.....	1	.....	.....	.....	.....	.....
Tuberculosis (other)	1	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Rheumatism	2	2	.....	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Diabetes .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anæmia Chlorosis .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alcoholism .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 73.--SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

C USE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.											Nationality.										
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
WALWORTH COUNTY.																											
Total deaths	564	300	264	262	302	9	7	12	7	15	25	35	29	42	68	87	228	400	77	23	58	1				5	
Still Births	12	7	5															12									
I. Epidemic Diseases.																											
Typhoid Fever	4	2	2	3	1									3	1			4									
Smallpox																											
Measles	4	1	3	1	3						2							4									
Scarlet Fever	5	4	1	5				2	1	2	1							3	2								
Whooping Cough																											
Diphtheria	1		1		1				1									1									
Influenza	19	7	12	9	10	2												10	3	2	4						
Others	2	2		1	1					1								1			1						
II. Other General Diseases.																											
Pyæmia and Septicæmia	7	2	5	3	4									1		2	1	3	5	1		1					
Rabies																											
Malaria	1		1		1						1							1									
Syphilis																											
Tuberculosis (lungs)	34	19	15	16	18					4	7	7	2	6	4	4	4	21	4	2	6					1	
Tuberculosis (other)	3	1	2	2	1						1	1		1	1			2	1								
Rheumatism	9	4	5	3				1			2							5	6	2	1						
Diabetes	2	6	2	4	4			1			1	1	1	1	1	2	1	6	1	1							
Anæmia Chlorosis	6	3	3	5	1						1			1	3	1	1	2	2			1					
Alcoholism	2	2		2													2										

TABLE 73.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
WALWORTH COUNTY—Continued.																									
Peritonitis	9	4	5	5	4						2	1			4	2	2	1							
Appendicitis	6	3	3	1	5		1		1	1	1					2	6								
VII. Disease Genito Urinary System.																									
Nephritis	22	14	8	14	8							1	2	3	5	11	16	1	1	4					
Perinephritic Abscess																									
Vesical Calculi																									
Diseases Bladder	2	2		1	1									1		1	1	1							
Diseases Male Genito Urinary Organs..	1	1			1											1	1								
Pelvis Abscess	1		1		1					1							1								
Uterine Hemorrhage																									
Uterine Tumor																									
Other Diseases Uterus																									
Ovarian Cyst and Tumors	2		2		2									1		1	2								
Other diseases Female Urinary Organs																									
Renal Calculus																									
VIII. Puerpal Diseases.																									
Accidents of Pregnancy	3		3	3						1		2					2	1							
Puerpal Hemorrhage																									
Puerpal Septicemia	2		2	2							1	1					1	1							
Puerpal Convulsions																									
Other Diseases Pregnancy																									

TABLE 74.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con- jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
WASHBURN COUNTY.																								
Total Deaths	65	34	31	16	49	25	2	1	2	1	5	2	3	5	3	6	13	39	2	11	1	2	1	3
Still Births	2	2																1	1					
I. Epidemic Diseases.																								
Typhoid Fever																								
Smallpox																								
Measles																								
Scarlet Fever																								
Whooping Cough																				1				
Diphtheria	1		1		1				1															1
Diphtheria	1		1		1																			
Influenza																								
Others																								
II. Other General Diseases.																								
Pyaemia and Septicemia																								
Rabies																								
Malaria																								
Syphilis																								
Tuberculosis (lungs)	5	2	3	2	3					2	1	1		1				4		1				
Tuberculosis (other)	1	1			1		1												1					
Tuberculosis (other)	1		1		1								1						1					
Rheumatism																								
Diabetes	1	1			1														1					
Anemia Chlorosis																1			1					
Alcoholism	1	1																	1					

TABLE 76.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.								
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.	
WAUKESHA COUNTY.																									
Total Deaths	575	287	288	304	271	81	14	4	13	10	16	35	36	45	46	61	191	348	163	18	32	2	2	1	10
Still Births	11	7	4															8	3						
I. Epidemic Diseases.																									
Typhoid Fever	7	2	5	2	5				1	1	1	2	2					5	2						
Smallpox																									
Measles	3	3			3	2		1										3							
Scarlet Fever	3	2	1		3			3										2	1						
Whooping Cough	2		2		2	2												1		1					
Diphtheria																									
Influenza	15	6	9	13	2								1		3	11		9	5	1					
Others	1	1			1										1			1	5	1					
II. Other General Diseases.																									
Pyæmia and Septicæmia	10	5	5	6	4				2	1			1	1		1	4	6	4						
Rabies																									
Malaria	1		1	1														1							
Syphilis																									
Tuberculosis (lungs)	43	20	23	17	26					3	12	11	7	4	4	2	24	14	5	2	1	2			
Tuberculosis (other)	11	7	4	3	8			2			1	2	2					5	5	1					
Rheumatism	11	6	5	5	6													4	5	2					
Diabetes	4	3	1	3	1						2		4					2	1	1					
Anæmia Chlorosis	7	1	6	5	2				1						4	1	5	2		1					
Alcoholism	2	2		1	1								1	2			1	1	1						1

IX. Diseases Skin and Cellular Tissue.																	
Erysipelas																	
Gangrene	3	2	1	3								3	3				
Other Diseases Skin and Adnexia																	
X. Diseases Infancy.																	
Congenital Debility	42	22	20	42	42							34	7	1			
Other Diseases of Infancy	10	6	4	10	7	1	2					9	1				
XI. Diseases of Old Age.																	
Senile Debility	53	22	31	41	12							53	18	19	1	11	4
XII. Violence.																	
Suicide	4	4		2	2					1	1	2	3	1			
XIII. Accident.																	
Fractures	6	2	4	5	1			1			1	4	3	2			1
Gunshot	4	3	1	1	3			2	1		(1	3	3	1			
Lightning	1	1			1					1			1				
Mining																	
Railroad	8	7	1	2	6			2	3		2	1	3	2		2	(1
Burning																	
Vehicles and Horses	1		1		1		1						1				
Sunstroke and Freezing																	
Drowning	9	9		2	7			1	4	1	1	1	1	5	3	1	
Other Accidents	8	7	1	4	4	1	1		1	1	1	1	2	4	3		1
Homicide																	
XIV. Causes Ill-Defined.																	
Exhaustion	2	1	1	1	1					1			1	2			
Fever																	
Sudden Death																	
Heart Failure	1	1		1								1		1			
Dropsy																	
Surgical Shock																	
Unknown or not specified	1		1		1											1	

TABLE 79.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY.

CAUSE OF DEATH.	Total deaths.		Sex.		Con-jugal relation		Age.										Nationality.							
	Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
WINNEBAGO COUNTY.																								
Total deaths	961	503	458	520	441	144	30	23	41	24	29	79	74	89	74	100	236	202	172	7	27	7	1	545
Still Births	9	3	6															2						7
I. Epidemic Diseases.																								
Typhoid Fever	10	6	4	4	6		1			2	1	1	1	1				3	2					5
Smallpox	1	1		1														1						
Measles	1	1		1														1						
Scarlet Fever	5	2	3	5	1	1	1	2											2					3
Whooping Cough	9	4	5															5	2					2
Diphtheria	32	11	21	32	2	5	6	16	3									5	2					17
Influenza	10	5	5	5	5				1	1	1	1	2	1	3			2		1	1			6
Others	3	3		1	2			1	1		1										1			3
II. Other General Diseases.																								
Pyæmia and Septicæmia	17	11	6	10	7	2	1	2	1	2	2	1	1	1	4	8	3							6
Rabies																								
Malaria																								
Syphilis	2	2		2								1	1											2
Tuberculosis (lungs)	86	40	46	46	40			4	2	7	21	24	9	11	3	5	20		12		1			53
Tuberculosis (other)	21	10	11	8	13	8	1	3			1	1	2				4		3		1			12
Rheumatism	7	4	3	4	3			1	1		4	2	1	2			4		1	1				3
Diabetes	12	3	9	7	5			1	1	1	1	1	1	1	1	1	1		3		1			3
Anæmia Chlorosis	8	3	5	4	4					2	1	1	1	1	2		1							5
Alcoholism	1	1		1							1						1							1

TABLE 79.—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION, AGE AND NATIONALITY—Continued.

CAUSE OF DEATH.	Total deaths.	Sex.		Con-jugal relation		Age.											Nationality.										
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
WINNEBAGO COUNTY—Continued.																											
Peritonitis	16	8	8	12	4		1			1	1	3		1	1	4	4	5	3			1					7
Appendicitis	7	3	4	3	4					1	1	3	1	1					2		1						4
VII. Disease Genito Urinary System.																											
Nephritis	28	20	8	19	9				2	2		4	1	3	4	3	9	7	4	1				1			15
Perinephritic Abscess	1	1			1					1								1									1
Vesical Calculi	2		2	2																							2
Diseases Bladder	9	9		9														2	2		2						3
Diseases Male Genito Urinary Organs																											
Pelvis Abscess																											
Uterine Hemorrhage																											
Uterine Tumor																											
Other Diseases Uterus																											
Ovarian Cyst and Tumors	2		2	1	1						1			1					1								1
Other Diseases Female Urinary Organs																											
Renal Calculus																											
VIII. Puerpeal Diseases.																											
Accidents of Pregnancy	2		2	2							1	1						1									1
Puerperal Hemorrhage	1		1	1																							1
Puerperal Septicemia	6		6	6								3	3	1													6
Puerperal Convulsions																											
Other Diseases Pregnancy																											

TABLE 80—SHOWING DEATHS IN THE STATE OF WISCONSIN DURING THE 21 MONTHS PRECEDING OCTOBER 1, 1904, ARRANGED WITH REFERENCE TO CAUSATION, SEX, CONJUGAL RELATION AGE AND NATIONALITY.

CAUSE OF DEATH.	Total Deaths.	Sex.		Con-jugal relation		Age.											Nationality.										
		Male.	Female.	Married.	Single.	Under 1 year.	1-3 years.	3-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	70 yrs. or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.		
WOOD COUNTY.																											
Total deaths	407	232	175	179	228	86	30	3	6	10	14	35	22	36	20	47	19	231	106	17	22	8	5	19			
Still Births	9	3	6															5	1		1			1			
I. Epidemic Diseases.																											
Typhoid Fever	8	6	2	5	3						1	4		1		2		4	3						1		
Smallpox	1	1																1									
Measles	3	2	1		3					1	2																
Scarlet Fever	2	1	1		2		2											3									
Whooping Cough	3	2	1		3														1								
Diphtheria	3	2	1		3														1								
Influenza	2		2	1	1	1						2						2	2		1				2		
Others																		1			1						
II. Other General Diseases.																											
Pyæmia and Septicæmia	2	1	1	2										1	1			1	2								
Rabies	1	1		1																			1				
Malaria																											
Syphilis																											
Tuberculosis (lungs)	24	9	15	14	10							9	6	6		1	2	11	7	4	1				1		
Tuberculosis (other)	3	2	1	1	2			1				1		1				3									
Rheumatism	2	2		1	1													1									
Diabetes	3	1	2	2	1									1	1			1		1	1						
Anæmia-Chlorosis																											
Alcoholism	1	1	1											1					1								

TABLE 81.—SHOWING DEATHS REPORTED IN WISCONSIN FOR THE 21 MONTHS PRECEDING SEPTEMBER 30, 1904. CLASSIFIED ACCORDING TO SEX, CONJUGAL CONDITION, AGE AND RACE.

	AGE.			CONJUGAL RELATIONS.		AGE.															NATIONALITY.							
	Total Deaths.	Total Male Deaths.	Total Female Deaths.	Total Married.	Total Single.	Total Number One Year.	AGE.															NATIONALITY.						
							1-3.	3-5.	5-10.	10-15.	15-20.	20-30.	30-40.	40-50.	50-60.	60-70.	70 or over.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italians.	Unclassified.			
Adams	135	68	69	60	16	3	0	2	5	4	4	15	6	8	12	16	33	96	15	7	5	1	1	0	0	11		
Ashland	550	381	169	173	377	64	34	19	13	13	17	21	09	31	51	48	35	210	66	102	32	15	1	0	122			
Barron	361	186	175	136	275	74	12	20	14	14	17	22	25	31	22	34	63	110	29	67	3	1	0	0	143			
Bayfield	86	41	45	32	54	22	6	2	2	2	2	5	3	12	2	4	7	47	3	25	3	0	0	0	5			
Brown	1027	545	482	448	579	245	54	23	15	15	21	78	66	55	64	79	453	193	27	55	28	1	0	0	264			
Buffalo	126	76	50	67	59	16	3	1	1	1	4	7	9	10	11	19	16	59	89	3	0	0	0	0	11			
Burnett	127	67	60	55	72	37	3	1	1	1	4	4	10	10	12	10	33	29	8	88	0	0	0	0	2			
Calumet	246	139	107	161	85	37	3	2	2	2	2	14	15	15	15	25	33	75	113	112	10	1	1	0	8			
Chippewa	397	222	175	168	229	57	17	9	9	9	14	34	34	32	32	37	52	191	90	45	27	1	1	0	40			
Clark	303	171	132	167	136	61	15	9	9	9	8	24	22	16	16	24	89	76	174	98	21	2	2	0	0			
Columbia	516	260	256	299	217	31	4	3	3	3	7	12	30	33	35	66	216	250	105	36	43	1	0	0	74			
Crawford	162	86	76	85	77	153	32	17	17	29	15	16	13	8	10	23	34	44	22	22	0	0	0	0	81			
Dane	1315	632	633	773	542	153	32	17	17	29	15	16	103	116	94	150	394	487	262	179	123	11	0	0	136			
Dodge	778	446	332	388	390	92	17	11	11	19	11	19	41	43	44	47	90	265	325	379	5	11	0	0	8			
Door	303	164	139	127	176	37	4	4	4	7	8	20	17	18	20	19	22	17	158	55	48	0	0	0	31			
Douglas	778	445	334	94	684	121	47	11	11	11	22	22	103	103	80	46	42	49	420	33	161	22	6	0	124			
Dunn	333	203	130	198	135	35	12	12	12	12	12	12	20	20	20	40	48	88	142	83	90	10	1	0	8			
Eau Claire	599	324	275	343	256	64	11	11	11	21	21	21	61	56	72	71	78	122	252	91	165	4	1	0	45			
Florence	50	34	16	15	35	11	1	1	1	2	2	2	4	4	5	5	18	8	8	20	0	0	0	0	1			
Fond du Lac	893	483	406	503	390	100	23	23	23	21	21	21	82	62	67	66	94	291	458	188	76	2	2	2	29			
Forest	38	22	16	16	22	17	1	1	1	1	2	3	3	6	6	6	0	3	5	5	2	1	1	0	2			
Gates	55	20	26	18	27	17	3	3	3	3	3	3	4	4	4	3	0	5	33	6	6	1	0	0	2			
Grant	561	264	297	358	303	57	30	30	15	7	9	11	35	38	23	29	72	393	109	82	31	6	0	0	5			
Green Lake	182	111	71	112	70	33	9	9	9	2	2	2	11	15	12	12	30	55	98	67	8	1	0	0	1			
Iowa	286	156	100	199	97	49	15	7	7	7	9	9	24	15	21	20	36	107	182	41	36	6	0	0	36			
Iron	171	106	65	51	120	58	15	7	7	7	9	9	13	13	13	14	10	8	60	23	22	5	5	0	10			
Jackson	325	181	144	166	159	88	22	22	22	7	7	7	13	25	26	28	38	101	177	98	92	9	0	0	204			
Jefferson	724	371	353	480	224	98	18	18	18	13	13	13	41	35	49	60	89	272	307	183	29	2	0	0	355			
Kenosha	486	262	224	211	275	87	17	17	17	10	10	10	37	50	31	33	47	108	104	89	18	3	2	0	121			
Kewaunee	393	210	183	199	194	103	30	15	16	17	30	3	19	19	20	14	42	128	170	93	10	1	0	0	26			
La Crosse	917	486	431	435	485	103	30	15	16	17	30	3	19	19	20	14	42	128	170	93	10	1	0	0	26			
Lafayette	310	174	136	162	138	49	9	9	9	6	4	4	12	10	14	17	35	98	132	19	21	6	1	0	13			
Lanclade	199	121	78	69	130	48	7	7	7	4	4	4	16	20	22	10	18	59	101	59	16	4	2	0	37			
Lincoln	229	118	111	100	129	38	15	15	15	18	18	16	24	22	22	9	23	36	73	83	26	6	4	5	6			
Marathon	732	404	328	289	443	108	33	19	16	11	22	43	69	43	43	37	35	33	160	254	415	13	14	5	19			
Marinette	504	295	209	182	322	31	6	4	3	2	2	4	8	9	5	5	15	58	290	81	67	13	6	17	3			
Marquette	124	66	58	61	63	31	6	4	3	2	2	4	8	9	5	5	15	58	290	81	67	13	6	17	3			
Milwaukee	8,302	4,728	3,574	3,546	4,756	1,682	481	102	204	126	245	575	605	756	742	715	1,261	3,208	3,567	98	429	18	39	313	3			
Monroe	406	235	171	252	154	60	15	15	15	5	5	5	26	26	26	28	53	136	287	87	14	1	0	0	48			
Oconto	319	179	140	143	176	67	19	9	12	7	6	6	30	23	28	21	34	47	150	72	11	17	17	8	8			
Oneida	193	119	74	70	123	44	10	10	10	2	2	2	7	7	7	16	13	4	96	28	53	18	8	2	23			
Outagamie	794	429	395	373	421	178	22	11	30	19	28	2	43	46	54	85	175	404	325	7	34	2	1	0	23			
Ozaukee	264	150	114	162	155	16	3	3	3	7	7	2	17	13	13	9	26	83	63	173	16	4	2	0	9			
Pepin	129	66	63	74	55	16	3	3	3	7	7	2	17	13	13	9	26	83	63	173	16	4	2	0	9			
Pierce	213	119	94	113	88	19	12	4	8	6	4	7	16	19	11	17	37	72	109	33	58	5	1	0	6			
Polk	192	110	89	111	88	19	12	4	8	6	4	7	16	19	11	17	37	72	109	33	58	5	1	0	6			
Portage	532	303	229	262	270	128	30	7	12	13	20	43	32	28	28	56	57	109	209	126	24	114	2	5	9			
Price	98	57	41	48	50	17	2	1	3	4	3	7	5	5	5	12	12	16	30	34	27	1	1	0	5			
Racine	1,122	627	495	557	565	148	46	14	25	23	41	100	101	83	91	126	250	470	263	62	82	1	0	0	243			
Richland	287	141	146	127	338	123	31	14	14	16	24	71	59	69	65	119	141	667	137	46	15	1	0	0	144			
Rock	765	403	262	427	338	123	31	14	14	16	24	71	59	69	65	119	141	667	137	46	15	1	0	0	144			
St. Croix	246	116	130	137	109	18	4	5	8	13	16	22	12	21	28	36	61	96	37	65	33	3	2	0	12			
Sauk	618	305	313	243	375	82	14	11	13	15	14	38	36	42	56	68	213	294	284	13	57	3	2	0	15			
Sawyer	51	24	7	24	5	7	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2		
Shawano	372	210	162	148	224	67	23	11	15	14	11	29	20	20	27	35	82	14	226	39	5	5	1	0	16			
Sheboygan	758	416	342	402	356	113	28	12	22	14	22	14	22	48	43	54	49	86	222	313	375	24	1	2	41			
Taylor	160	80	80	54	103	37	15	4	5	1	1	8	7	6	10	18	19	13	32	100	15	2	0	0	10			
Trempealeau	302	172	130	122	180	60	14	4	3	5	9	20	22	24	19	41	72	70	52	153	13	9	1	0	3			
Trempealeau	235	135	101	87	149	28	7	7	10	4	8	10	18	15	13	29	78	196	52	14	1	0	0	0	2			
Vernon	61	39	22	12	49	14	7	2	2	4	4	9	4	5	2	4	8	4	3	5	5	1	0	0	1			
Vilas	564	300	264	262	302	9	7	12	7	15	25	35	29	42	68	87	228	400	77	23	58	1	0	0	5			
Wausworth	65	34	31	16	49	25	2	1	2	1	2	2	3	3	3	6	13	39	9	11	1	0	0	0	3			
Washburn	389	215	174	219	140	35	12	4	9	10	15	18	26	25	36	45	146	93	258	2	19	2	0	0	9			
Washington	575	287	288	304	271	81	14	4	13	10	16	15	38	36	45	46	61	191	348	163	18	32	2	0	10			
Waukesha																												

IX. Diseases skin and Celluar Tissue.																	
Erysipelas	1	1	1									1	1				
Gangrene	1	1		1								1	1				
Other Diseases Skin and Adnexia																	
X. Diseases Infancy.																	
Congenital Debility	36	22	14	36	36							23	10	1	1	1	
Other Diseases of Infancy	21	13	8	21	16	5						10	8	1	1	1	
XI. Diseases of Old Age.																	
Senile Debility	35	17	18	23	12							35	13	11	4	6	1
XII. Violence.																	
Suicide	1	1		1								1					
XIII. Accident.																	
Fractures	1	1		1								1		1			
Gunshot	1	1		1			1					1		1			
Lightning																	
Mining																	
Railroad																	
Burning	3	3		2	1		1					1	1	1	1		
Vehicles and Horses	2	2		2	1		1					1	1	1			
Sunstroke and Freezing																	
Drowning	10	7	3	2	8	2	1	3	2	1		1	5	2	2	1	
Other Accidents	4	4		3	1	1						1	1	1	1	1	
Homicide																	
XIV. Causes Ill-Defined.																	
Exhaustion																	
Fever	1	1		1								1	1				
Sudden Death																	
Heart Failure	6	5	1	1	4	1					1	2	1	1	4		1
Dropsy																	
Surgical Shock																	
Unknown or not Specified	6	4	2	1	5		2		1	2		1	2	1			3

TABLE 83.—DEATHS FROM TUBERCULOSIS IN WISCONSIN FOR THE 21 MONTHS PRECEDING SEPTEMBER 30, 1904.

COUNTY.	Total deaths.	SEX.		AGE.							NATIONALITY.								
		Male.	Female.	Under 10.	10-20.	20-30.	30-40.	40-50.	50-60.	60-70.	70+.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
Adams	14	6	8	1	1	5	1	2	3	7	3	3	3	1					
Ashland	47	35	12	2	1	9	11	4	5	13	3	12	1						
Barron	41	19	22	4	6	6	10	4	3	12	3	7	2						
Bayfield	9	1	4	1	1	1	1	1	1	4	1	1	1						
Brown	75	55	44	3	3	6	10	4	3	12	3	11	3						
Buffalo	11	4	7	1	1	1	2	0	1	2	2	1	1						
Burnett	14	7	11	1	1	2	2	0	3	4	4	5	4						
Calumet	26	14	12	3	4	6	10	5	3	18	3	13	14						
Chippewa	36	15	21	3	3	6	11	4	3	11	1	10	5						
Clark	30	14	16	1	1	10	7	4	7	12	2	11	8						
Columbia	43	16	27	1	1	11	11	5	5	18	1	11	8						
Crawford	17	5	12	1	1	6	7	7	11	8	5	6	6						
Dane	151	56	75	12	17	41	16	9	11	8	8	8	8						
Dodge	55	33	22	3	4	12	35	12	9	8	6	27	15						
Door	33	19	14	4	4	12	12	4	9	3	6	23	3						
Douglas	80	44	36	11	8	15	19	4	1	1	1	15	6						
Dunn	33	16	17	5	5	10	19	2	1	1	1	5	2						
Eau Claire	69	30	39	2	3	9	15	6	2	2	1	13	15						
Florence	5	3	2	2	1	2	16	11	1	5	1	24	6						
Fond du Lac	95	49	46	5	9	32	19	11	9	5	5	1	3						
Forest	1	1										44	36						
Grant	4	3	4																
Green Lake	40	16	24	4	2	8	2	7	1	3	6	1	4						
Iowa	13	6	7	2	2	4	3	2	1	1	6	2	4						
Iron	26	13	13	1	4	8	2	5	2	2	4	1	1						
Jackson	13	11	2	2	1	2	2	4	5	2	4	17	5						
Jefferson	37	16	21	1	8	13	9	3	3	1	2	4	3						
Kenosha	71	29	42	3	4	22	13	13	9	2	2	23	11						
Kewaunee	35	20	15	1	4	6	7	6	2	5	8	29	14						
La Crosse	28	15	13	2	1	10	13	3	3	3	2	5	4						
Lafayette	106	42	64	10	10	32	20	20	10	1	2	10	9						
Lansdale	20	13	7	2	2	2	2	2	1	7	4	44	29						
Langlade	17	7	10	1	1	2	4	2	2	1	1	7	10						

Lincoln	14	6	8	1	1	3	5	1	3	3	5	3	1					2
Marathon	40	20	20	1	1	17	6	4	2	11	26	8	1					1
Marquette	45	23	22	7	3	10	11	6	2	1	26	8	1					1
Marquette	12	2	10	1	5	5	5	5	1	8	4	4						25
Milwaukee	787	460	327	64	83	210	158	112	84	51	189	16	52	69	3	2		25
Monroe	43	20	23	3	3	7	12	5	3	6	33	8	1					3
Oconto	27	19	8	4	1	4	4	4	3	2	9	8	2					3
Oneida	20	8	12	2	2	6	7	1	8	2	9	5	4					2
Outagamie	32	39	43	4	15	31	10	10	5	3	33	42	3					2
Ozaukee	26	9	17	4	5	3	3	6	4	2	7	15	4					2
Pepin	13	8	5	1	5	1	1	3	2	1	8	2	3					1
Pierce	19	8	11	2	3	9	1	7	1	3	12	2	2					6
Polk	25	13	12		3	7	1	3	2	2	1	16	7					1
Portage	35	15	20	5	2	12	6	1	2	1	11	5	5	7				1
Price	6	4	2	1	1	2	1	1	1	3	1	1	1					1
Racine	123	63	60	9	17	41	29	13	6	5	40	32	11	9	1			30
Richland	33	12	21	2	2	7	9	5	4	3	8	2	3					18
Rock	89	42	47	9	7	24	20	9	6	10	61	11	6	6				3
St. Croix	22	7	15	3	3	7	1	4	4	1	6	2	12					3
Sauk	47	20	27	2	5	16	7	3	7	5	21	19	3					3
Sawyer	1	1									1	1						
Shawano	28	10	18	6	2	9	5	4	2	2	8	14	5					4
Sheboygan	87	45	42	8	12	18	16	15	9	8	39	43	1					1
Taylor	11	4	7	1	1	2	2	1	2	1	1	8	5					1
Trempealeau	37	18	19	5	2	9	9	4	2	3	6	5	25					1
Vernon	16	3	13	2	2	5	5	2	2	2	14	2						
Vilas	8	6	2	1	3	7	3	2			7	2	1					1
Walworth	37	20	17		4	8	8	2	7	4	23	5	6					1
Washburn	6	3	3	1	2	1	1				4	1						3
Washington	37	22	15	2	4	6	12	7	4	2	7	1						3
Waukesha	54	27	27	6	4	13	11	11	4	2	29	19	1	2				3
Waupaca	44	18	26	6	3	11	8	5	4	3	7	9	3					1
Waushara	17	5	12	3	5	5	1	4		3	9	4	1					3
Winnebago	107	50	57	16	9	25	26	10	13	3	24	15	2					65
Wood	27	11	16	1	10	6	7	7	1	2	14	7	1					1
Total	3,304	1,658	1,646	269	329	905	757	472	284	213	1,313	937	421	174	83	7	12	366

TABLE 84.—DEATHS FROM PNEUMONIA IN WISCONSIN FOR THE TWENTY-ONE MONTHS PRECEDING SEPTEMBER 30, 1904.

COUNTY.	Total deaths.	SEX.		AGE.							NATIONALITY.							
		Male.	Female.	Under 10.	10-20.	20-30.	30-40.	40-50.	50-60.	60-70.	70+.	American.	German.	Norwegian.	Irish.	Pole.	French.	Italian.	Unclassified.
Adams	14	6	8	4		1	1	1		1	5	13	1					
Ashland	47	43	4	10		1	1	7		1	8	16	4					15
Barron	41	22	19	22	3	3		4		4	3	18	3				1	10
Bayfield	8		8					3				4	1					8
Brown	95	56	37	50	4	5		4	4	4	7	39	15	4	4	2	1	23
Buffalo	17	9	8	17	3			2		1		12	3					
Burnett	5	2	3	5				1	1	1		8	1					
Calumet	12	7	5	6				1	2	1	1	8	3					
Chippewa	35	17	18	14	3	3		1	3	2	7	11	9	6	1			5
Clark	26	12	14	15	1	1		2	1	1	1	17	8		4			
Columbia	28	24	4	14	2	2		1	8		8	20	17	1	6			4
Crawford	9	5	4	4	2	2				3	3	3	1					5
Dane	117	58	59	36	7	7	5	5	3	10	3	17	36	16	14			15
Dodge	70	37	33	17	2	2		3	7	6	8	31	21	1	1			1
Door	22	13	9	14	1	1		1	1		1	19	2					
Douglas	71	43	28	22	2	2	10	11	7	6	7	37	3	15	1			11
Dunn	23	18	5	3	3	3		3	3	3	8	11	4	7				1
Ban Claire	51	16	35	13	2	2	5	5	7	7	10	26	9	11	4			1
Fond du Lac	64	39	25	12	2	2	3	5	4	7	6	25	31	5				2
Forest	4	1	3	2	2	2					3	3	1					
Gates	7	5	2	4	1	1					3	3	1					
Grant	48	24	24	11	1	1		1	2	2	8	35	7	3	6			
Green Lake	14	8	6	3	3	3		4				7	7					
Iowa	20	11	9	4	1	1		2	2	2	1	8	4	2				
Iron	28	20	8			2		3	2	2	3	13	3	2				2
Jackson	37	18	19	18	1	1		3	7	4	3	12	5	7	1	1		2
Jefferson	49	27	22	2	2	1		2	1	3	2	24	3	6				2
Kenosha	48	26	22	18	1	1		3	5	5	2	20	9	1	4			10
Kewaunee	32	18	14	14	1	1		7	5	5	11	8	7	1	1			30
La Crosse	74	38	36	15	24	24		1	1	1	2	9	16	6				10
Lafayette	22	14	8	1	1	5		6	7	5	20	35	16	16	2			5
Langlade	8	3	5	10		1				2	5	7	1	2	1			4
Lincoln	23	11	12	5				1	1	1	1	4		1		1		4

Marathon.....	69	38	31	31	2	5	2	2	5	11	11	31	28	2	3	3			2
Marinette.....	40	24	16	24		5	2	2	4	3		23	6	8		1	1		1
Marquette.....	13	9	4	8			1				4	7	5		1				
Milwaukee.....	776	480	296	352	30	41	50	71	66	67	99	320	289	10	38	74	2	10	33
Monroe.....	54	31	23	21	1	2	2	3	4	6	15	45	8		1				
Oconto.....	25	14	11	15	1	1		3	3	3		7	4		2	3	2	6	
Oneida.....	21	10	11	8		1	3	2	4	1	2	13		3	4				
Outagamie.....	56	28	28	20	3	1	6	4	2	5	15	26	22		5				3
Ozaukee.....	21	13	8	10				1	1	3	6	6	11		3				1
Pepin.....	8	3	5	4						1	3	4		1	1		1		1
Pierce.....	13	5	8	2			1		3	4	3	7	2						1
Polk.....	14	9	5	6			1			3	4	4	5	5					
Portage.....	44	24	20	15	4	5	1	2	1	8		16	12	2	1	13			
Price.....	6	5	1	3							3	2	2		4				
Racine.....	117	78	39	38	2	9	7	16	10	9	26	38	33		10				27
Richland.....	30	12	18	8	1	2	1	2	1	5	10	10	1		1				16
Rock.....	68	33	35	17	3	5	3	9	7	9	15	50	8	5	5				
St. Croix.....	15	6	9	3	3	2	3	2	2	8		8	2		3				1
Sauk.....	53	19	34	25	2	1	5	5	1		13	24	17	4	5		1		2
Sawyer.....	5	4		3						2		3		2					
Shawano.....	26	14	12	8	5	3	1	1	2	1	5	3	17		3				3
Sheboygan.....	42	19	23	18	1		3	1	2	5	10	25	13		3				1
Taylor.....	6	2	4	3					1			1	2	2					1
Trempealeau.....	29	21	8	12	2	1		2	2	3	7	7	5	11	5	1			
Vernon.....	37	21	16	15	2	1	1		2	3	10	31	5	1					
Vilas.....	8	5	3	7		1						6			1				
Walworth.....	46	22	24	17	1		1	6	4	17		32	10		4				
Washburn.....	10	9		5	1		1	2	1	1		9		1					
Washington.....	39	16	23	7	1	3	3	3	4	2	16	7	26		4				2
Waukesha.....	37	18	19	15	2	2	1	1	1	7	8	25	8		2				1
Waupaca.....	30	16	14	15	2	1			2	2	8	7	15	3	2				3
Wausshara.....	21	13	8	8	1	3	2		3	1	3	13	4		1	1			2
Winnebago.....	75	38	37	28	3	6	2	5	7	10	14	10	12		1				52
Wood.....	42	28	14	20	6	2	1	3	5	1	4	30	6	1	2		1		2
Total.....	3,083	1,743	1,340	1,205	126	170	180	251	226	299	611	1,403	832	215	187	101	14	11	329

TABLE 85.—DEATH FROM CONGENITAL DEBILITY IN WISCONSIN FOR THE 21 MONTHS PRECEDING SEPTEMBER 30, 1904.

COUNTY.	Total deaths.	SEX.		AGE.							NATIONALITY.							
		Male.	Female.	Under 10.	10-20.	20-30.	30-40.	40-50.	50-60.	60-70.	70+.	American.	German.	Norwegian.	Irish.	Pole.	French;	Italian.	Unclassified.
Adams.....	5	3	2	5							5							
Ashland.....	15	6	9	15							9				1			1
Barron.....	23	14	9	23							7	1						11
Bayfield.....	2	1	1	2							1							
Brown.....	66	27	39	66							49	8	1	2				6
Burnett.....	4	4		4							3							
Calumet.....	15	10	5	15							14	1						
Chippewa.....	15	8	7	15							12	2	1					
Clark.....	8	4	4	8							5	3						
Columbia.....	10	5	5	10							8	1	1					
Crawford.....	1	1		1														1
Dane.....	30	19	11	30							23	1	5					1
Dodge.....	42	23	19	42							30	11			1			
Door.....	10	8	2	10							5	1	1					3
Douglas.....	25	7	18	25							19		3					3
Dunn.....	7	5	2	7							4	2	1					
Eau Claire.....	7	7		7							1	1	3					
Florence.....	5	3	2	5							1	3	2					
Fond du Lac.....	48	31	17	48							32	9		1		3		3
Forest.....	1	1		1							1							
Gates.....	1	1		1							1							
Grant.....	31	18	13	31							31							
Green Lake.....	15	8	7	15							10	3						1
Iowa.....	22	17	5	22							20	1	1		1			
Iron.....	10	8	2	10							3	1	1		1			4
Jackson.....	25	13	12	25							24		4					
Jefferson.....	41	19	22	41							26	7						
Kenosha.....	47	30	17	47							15	8			1	1	1	21
Kewaunee.....	25	15	10	25							20	2						3
La Crosse.....	46	20	26	46							35	6	2		3			
Lafayette.....	20	10	10	20							12		1					7
Langlade.....	17	14	3	17							10	5		1				1
Lincoln.....	22	13	9	22							11	3	3					5

Counties.	Population by U. S. Census 1900.	Deaths Reported for the 21 months preceding Sept. 30, 1904.	Death rate per 1000 Pop. for the 21 months.	Deaths under 5 years of age.	Per cent. of Deaths under 5 years to total deaths.
Adams	9,141	135	14.3	21	15.5
Ashland	20,176	550	27.2	112	20.3
Barron	23,677	361	15.2	92	25.4
Bayfield	14,392	86	5.9	30	30.4
Brown	46,349	1,027	22.2	312	34.8
Buffalo	16,765	126	7.5	24	19.0
Burnett	7,478	127	16.1	17	13.3
Calumet	17,028	246	14.5	47	19.1
Chippewa	33,037	397	12.1	81	20.4
Clark	25,848	303	11.7	75	24.7
Columbia	31,121	516	16.5	73	14.1
Crawford	17,286	162	14.4	38	23.4
Dane	69,435	1,315	18.9	202	15.3
Dodge	46,631	778	16.7	120	15.4
Door	17,583	303	17.2	82	27.1
Douglas	36,333	773	21.6	209	25.5
Dunn	25,042	333	13.3	55	16.5
Eau Claire	31,692	599	18.8	95	15.8
Florence	3,197	50	15.6	12	22.0
Fond du Lac	47,589	893	18.7	136	15.2
Forest	1,396	38	2.7	14	36.8
Gates		55		22	40.0
Grant	38,881	561	14.4	97	17.4
Green Lake	15,797	182	11.5	45	24.7
Iowa	23,114	286	12.4	48	16.7
Iron	6,616	171	25.8	71	41.5
Jackson	17,466	325	18.6	67	20.6
Jefferson	34,789	724	20.8	125	17.2
Kenosha	21,707	486	22.3	114	23.4
Kewaunee	17,212	393	22.8	113	28.7
La Crosse	42,997	917	21.3	148	16.1
Lafayette	20,959	310	14.8	64	20.6
Langlade	12,553	199	15.8	60	35.1
Lincoln	16,269	229	14.1	58	25.3
Marathon	43,256	732	16.9	196	26.7
Marinette	30,822	504	16.3	149	27.5
Marquette	10,509	124	11.8	41	33.0
Milwaukee	330,017	8,302	25.2	2,245	27.0
Monroe	28,103	406	14.4	85	20.9
Oconto	20,874	319	15.2	95	29.7
Oneida	8,875	193	21.7	56	29.0
Outagamie	46,247	794	17.2	211	26.5
Ozaukee	16,363	264	16.1	48	18.1
Pepin	7,905	129	16.3	22	17.0
Pierce	23,943	213	8.9	127	59.6
Polk	17,801	199	11.2	35	17.5
Portage	29,483	532	18.1	165	31.0
Price	9,106	98	10.7	20	20.4
Racine	45,644	1,122	24.5	208	18.5
Richland	19,486	287	14.7	43	14.6
Rock	51,203	765	14.9	168	21.9
St. Croix	26,830	246	9.2	27	10.9
Sauk	33,006	618	18.7	107	17.3
Sawyer	3,593	31	8.6	12	38.7
Shawano	27,475	372	13.5	101	29.8
Sheboygan	50,343	753	15.0	153	20.1
Taylor	11,262	160	14.2	56	30.0
Trempealeau	23,114	302	13.6	78	25.8
Vernon	28,351	236	8.3	42	17.7
Vilas	4,929	61	12.3	16	26.2
Walworth	29,259	564	19.3	28	4.9
Washburn	5,521	65	11.0	28	13.1
Washington	23,589	389	16.4	51	13.1
Waukesha	35,229	575	16.3	99	17.0
Waupaca	31,615	428	13.5	75	17.5
Waushara	15,972	176	11.0	44	25.0
Winnebago	58,225	961	16.5	197	20.4
Wood	25,864	407	15.7	119	29.2
Total, aprox.....	1,983,400	35,293	* 16,885	8,036	22.76

*Annual death rate 9.65 per 1,000 population.

REPORT

OF THE

State Hygienic Laboratory

From October 1st, 1903, to July 1st, 1904.

H. L. RUSSELL, Director.

G. J. MARQUETTE, Assistant.



LETTER OF TRANSMITTAL.

MADISON, WIS., July 1st, 1904.

DR. C. A. HARPER, *Secretary,*
State Board of Health,
Madison, Wis.

DEAR SIR:—I herewith transmit the Report of the State Hygienic Laboratory for the period covered by the present biennium.

Respectfully submitted,
H. L. RUSSELL,
Director.

SUMMARY OF REPORT.

ORGANIZATION AND OBJECT OF LABORATORY.

SCOPE OF WORK UNDERTAKEN.

DIRECTIONS FOR COLLECTION AND SHIPMENT OF SAMPLES.

1. Water Samples.
2. Blood for Typhoid.
3. Diphtheria.

SUMMARY OF LABORATORY EXAMINATIONS.

1. Water Examinations.
2. Blood Examinations for Typhoid.
3. Diphtheria Examinations.
4. Hydrophobia.
5. Tuberculosis.
6. Miscellaneous.

REPORTS ON EPIDEMICS.

1. Typhoid Outbreak at Mendota Hospital for Insane.

REPORT OF THE STATE HYGIENIC LABORATORY.

ORGANIZATION.

The State Board of Health, recognizing the necessity for laboratory study of various contagious diseases, requested of the Legislature of 1903 the passage of a law authorizing the establishment of a bacteriological laboratory in connection with the laboratories of the State University, in which examinations could be made to aid the local health officials in the determination of the cause of contagious diseases which affect the public health interests of the State. In Chapter 344, Section 4, the Legislature of 1903 authorized the establishment of such a laboratory, and on October 1st, 1903, this laboratory was open for service to the State. The appropriation for the biennial period, beginning July 1st, 1903, was \$1,500.00 annually.

The management of this laboratory was placed under the authority of the Board of Regents of the University of Wisconsin and H. L. Russell was appointed Director of the laboratory. Mr. G. J. Marquette was appointed Assistant in the Laboratory, his period of service beginning with the establishment of the laboratory, and continuing through the period covered by this report.

OBJECT OF THE LABORATORY.

The object of the laboratory is to assist the State Board of Health and local health officials in an accurate diagnosis of

the cause of various contagious diseases which may affect the public health. For this purpose, samples or specimens suitable for examination are to be shipped to the laboratory through the local health officer, said examination to be made by the laboratory gratis, and report to be made to the local official to guide him in his action in handling the disease in question.

Manifestly, the work of the laboratory should be confined to such work as is received through the regular official channels, and, therefore, no specimens are examined except such as are shipped by the regularly authorized health official of the locality.

DESCRIPTION AND EQUIPMENT OF THE LABORATORY.

Rather than to organize a separate laboratory for purposes of economy, the Hygienic laboratory has been united with the existing laboratories of Bacteriology situated at the State University. Arrangements were made by the Regents of the University for the granting of sufficient space for laboratory purposes, where the work could be carried on quite independently though closely connected with the existing laboratories in Bacteriology. In this way, the Hygienic Laboratory has been organized and operated at a materially less expense than would have been possible if the same had been placed upon an entirely separate foundation. The University has given, free of expense, a suite of rooms in South Hall for the use of the laboratory, and has maintained these, so far as heat, light and water are concerned, without cost to the Hygienic Laboratory. A commodious laboratory has thus been founded with all of the facilities necessary for the carrying on of the regular diagnostic work that is usually made in such institutions.

SCOPE OF WORK UNDERTAKEN.

In organizing this laboratory, the following lines of work were considered to be essential:—

(1) Examination of material sent to the laboratory to aid in the diagnosis and eradication of contagious diseases affect-

ing the public health. This naturally includes the major part of the work of the laboratory, and embraces the examination of the material sent in by the local health officials.

(2) The investigation of epidemics throughout the State, as to their origin, distribution and control.

Every year more or less serious epidemics of contagious diseases originate, such as typhoid fever, diphtheria, etc. It is of the utmost importance to the public health interests that the exact origin of these outbreaks be ascertained, in order that intelligent measures may be put into effect to control the spread of such diseases. This can be most effectively done by direct examination of the cases, and the study of the entire local conditions governing the same, and for this purpose it is to be hoped that the laboratory will be of service.

(3) Research work in connection with hygienic and sanitary problems.

It is now recognized on all hands that a laboratory is a most valuable aid to the executive officer in the matter of determining the cause and limiting the spread of contagious diseases. Problems, however, are continually arising, concerning which information is at present insufficient or vague, and, therefore, in every well-equipped, aggressive laboratory, it is highly important that research work on sanitary problems should be maintained. Of course, such work as this should not supersede in any way the regular routine work of the laboratory, but the further advance of sanitary science, and the improvements in the technical methods of procedure which are followed in laboratory practice, can only be accomplished by sound and solid research work.

CLASS OF MATERIAL FOR EXAMINATION.

At the present time, the laboratory is ready to undertake the examination of material as follows:—

(1) *Typhoid Fever*. In the diagnosis of typhoid fever, and in the determination of conditions liable to result in the production of epidemics of this character, the laboratory can be of most assistance. The work in relation to this disease covers the examination of two classes of material,—

(a) Examination of blood for direct diagnosis of typhoid fever, (Widal test). This consists of the examination of a drop of blood (usually dried), by which it is possible to tell with a marked degree of accuracy, whether or not a person is suffering with typhoid fever. In a case of typhoid fever, the blood of the patient undergoes a change which results in the production of certain substances, known as agglutinins. These agglutinins have a specific action upon typhoid organisms, causing the same to lose their power of motility and become massed together in small clumps. Such typhoid agglutinins are only found in the case of a person suffering from typhoid fever. They do not appear in the earlier stages of the disease, but only after the lapse of several days. They persist during the course of the disease, and for a varying period after convalescence. This test can be most satisfactorily performed directly, by mixing a drop of blood serum with a drop of broth in which there is suspended an actively motile culture of the typhoid bacillus. It is also possible to apply this test to dried blood, and for purposes of laboratory diagnosis, this is the most common way in which the examination is made. The examination of such material should be made in the case of persons suspected of having typhoid fever. Below definite instructions will be given for the collection and shipment of samples of this character.

(b) Inasmuch as typhoid fever is almost entirely a water-borne disease, it frequently happens that water serves as a medium for the transmission of such disease organisms. Therefore, an important part of the work of the laboratory is the examination of water supplies to determine whether or not they are polluted and are liable to cause disease.

Practically speaking, typhoid fever is the only disease which seriously affects public health, which is distributed in this way. Cholera is also spread in this way, but is not indigenous to this country. It is quite possible that other diseases of an intestinal character may possibly be produced by the use of contaminated water supplies, but from the standpoint of natural conditions as they obtain in this country, by far the larger

proportion of outbreaks of disease due to polluted water supplies is caused by this organism.

In testing a water, no attempt is made to discover the actual presence of the typhoid bacillus, as this is an impossible test under ordinary circumstances. The disease of typhoid fever is one which has such a long period of incubation that the question of infection rarely arises until a considerable length of time has elapsed since the actual occurrence of pollution. The specific organism in question is also so closely related to organisms that are commonly found in the intestinal canal, that it requires the use of very special methods to isolate the typhoid organism from those much more abundant types of germ life; moreover, the typhoid organism being a non-spore-bearing bacterium, is not endowed with powers of resistance which enables it to live in water for a long period of time. Therefore, the discovery of the typhoid germ itself is surrounded with such difficulty as to make it practically out of the question to search for this germ directly.

Under natural conditions, however, as in the case of disease outbreaks, the typhoid organism, spread by means of water supplies, passes into such supplies with other sewage organisms. It is possible by laboratory methods to determine readily whether a water supply has been contaminated by sewage discharges, and, consequently, in the examination of such material, an indirect method of proof is followed, viz.—the determination as to whether such water supply is polluted with organic matter presumably of human origin. If the evidence is conclusive that the water supply is thus contaminated, the possibility of typhoid infection is unquestionable. If, on the other hand, the examination of the supply shows the same to be in a state of normal purity, it is improbable that such supply can serve for the dissemination of the disease in question.

It is, however, impossible, to establish any fixed and definite standards to apply to all waters in question, and each case must be judged on the basis of local conditions. It is, therefore, of the utmost importance, in sending samples of water

for examination, that such sample be accompanied with full and complete details as to the surroundings from which it was taken, as these data affect materially the interpretation of the analytical results secured.

It is also highly important that the greatest care should be used in the securing of samples for such examination, and that said samples be handled during the period of time intervening between collection and examination so as not to alter seriously their essential characteristics.

In this matter, the local health officer must co-operate closely with the laboratory, in order to obtain the best results. He should, therefore, understand thoroughly the nature of such examinations, and how such material should be collected and handled so as to preserve it for diagnostic purposes.

(2) *Diphtheria*. The disease of diphtheria has now been largely shorn of its terrors through the wide-spread introduction of the anti-toxin treatment, and yet, it is of the utmost importance to the individual to recognize the presence of this disease as early as possible. Not unfrequently the attendant physician is unable to diagnose this disease with absolute certainty where reliance is based wholly upon clinical symptoms. Very fortunately, a laboratory process has been worked out whereby it is possible to tell with great accuracy whether the diphtheria bacillus is present or not. This consists in the examination of material taken from the nose and throat of the suspected case. The presence of this specific organism in question can be determined even prior to the development of the membranes, and often before the physician can be assured of the nature of the disease from the clinical aspect alone.

This diagnosis is made by a microscopic examination of a culture grown upon specially prepared blood serum which has been seeded with material taken from the throat of the suspected patient. Sterilized swabs in sterile glass containers and tubes of blood serum media are sent upon request from the laboratory to the attendant physician, and the swab is taken by the local physician and applied to the surface of the culture tube. The culture, together with the swab, is then

sent to the laboratory for incubation and examination. Only a few hours' incubation are usually necessary in order to secure sufficient growth to enable the test to be applied. The examination is then made microscopically, and the presence or the absence of the true diphtheria bacillus thus determined. Such examination as these are of especial importance in two types of cases,—viz. :—

(a) The determination of the diagnosis of the disease, in the first case. Not infrequently it is impossible to tell accurately from clinical symptoms alone, and then, it is sometimes a matter of judgment on the part of the attendant physician.

(b) Release of diphtheria cases from quarantine. The old method of quarantine required the patient to be kept isolated for a certain definite period of time on the theory that this period was necessary for the eradication of the diphtheria bacillus from the system and the restoration of the patient to a non-infectious condition. Manifestly, such a condition depends on the complete disappearance of the diphtheria bacillus from the throat and nose of the convalescent, and the much more scientific method of removal of quarantine would be on the basis of the examination of the throat and nose exudates, rather than the isolation for a certain definite period. The culture method is now used very largely for the determination of the actual disappearance of the specific organism in question, and all cases of diphtheria should be treated on the basis of this method. The customary procedure is to retain cases in quarantine until two successive examinations by cultures show the mouth and nose to be wholly free from the diphtheria germ.

It is found in some cases that this germ persists with wonderful pertinacity, while in other instances it readily disappears, and, therefore, in place of the hard and fast limit of the usual quarantine, cases of this character should be treated on the basis of the actual disappearance of the germ in question.

(3) *Rabies*. The clinical symptoms of rabies, or hydrophobia, as it is called, where the disease affects man, are often

so obscure as to make it difficult to determine the true nature of this disease, where reliance is placed wholly on physical symptoms. Pasteur, some years ago, succeeded in developing a laboratory test, by which it is possible, from the examination of the spinal cord, to determine whether or not an animal is affected with this disease. For purposes of making a laboratory examination of this character, it is necessary to send the head of the affected animal, and in removing the head, care should be taken not to injure the medulla oblongata at the base of the brain. The virus of the disease is centered especially in the tissue of the spinal cord, and by making an emulsion of this tissue, and injecting the same under the cerebral membranes of laboratory animals, it is possible to produce artificially the disease in such animals, and so secure a definite diagnosis.

The period of incubation of the inoculated disease in laboratory animals is from two to three weeks duration, and, consequently, this inoculation method is not of very much service where the character of the wounds is very severe except for confirmatory purposes. In a great majority of cases, however, where the bites from supposedly rabid animals are not severe, it is possible to secure a laboratory diagnosis in this way considerably in advance of the development of any symptoms which may occur, and, therefore, ample time is given for the employment of the Pasteur treatment, which is designed to prevent the development of the disease in the human.

(4) *Anthrax*. Anthrax is a disease which usually affects cattle, but man is also susceptible to it. Tanners, wool handlers, and persons engaged in the handling of skins and hides are more frequently exposed to this disease than any other class of operatives. In the case of animals supposedly affected with anthrax, and in which it is desirable to determine with certainty whether or not it is this disease, samples of blood can be sent to the laboratory for examination. If possible, these should be drawn under aseptic conditions. In the case of animals, the removal of the ear gives a sufficient quantity of blood for the determination of the germ in question. The

shipment of liquid blood is not of much service, as under ordinary conditions, this is sure to become polluted with putrefactive bacteria, and not infrequently, the anthrax organism is destroyed. The spore-bearing properties of the anthrax germ make it possible for this organism to retain its vitality in a dried condition, and, in some cases, the examination of soil or dried blood will permit of the detection of the disease germ.

DIRECTIONS FOR COLLECTION AND SHIP-
MENT OF SAMPLES.

(1) *Water Samples.* It is absolutely imperative for the local health officer to follow directions closely in the matter of securing samples of water and shipping the same to the laboratory for analytical purposes. A bacteriological examination is of no value unless the condition of the water on arrival is practically unchanged from its original condition. It is easily possible for the sample to become contaminated in the process of collection, consequently, great care must be taken to prevent the stopper from being polluted with the hands. The sample is to be collected in sterile bottles, and after collection and preparation should be packed in shipping cases, filling reservoir with ice, so as to maintain the temperature of the water as low as possible.

In the matter of water analyses, no samples will be analyzed except such as are collected in bottles which are forwarded from the laboratory. In case samples are shipped in miscellaneous bottles, no analysis will be made, as the results under such conditions are absolutely unreliable. It is expected that the local health officer himself will personally supervise the collection of the samples, and he should recognize the fact that as the analysis of the water involves a considerable expenditure of time, samples of water should not be sent for analytical purposes, unless there are good grounds for suspecting that they may be concerned in the dissemination of disease. The examination of water samples of heterogeneous origin for satisfying the curiosity of individuals is not a function of this laboratory.

The laboratory should be notified on the notification blank on the day prior to the shipment of the specimen. In this way the minimum delay in the matter of analysis will occur. For the wider dissemination of information regarding the collec-

tion and shipment of such samples, the following blank which is used in this laboratory is herewith appended.

NOTICE—Fill out the following blanks and mail to State Hygienic Laboratory, Madison, Wis., on the day preceding the shipment of the sample of water:

Were directions carefully noted in securing sample?.....
 Date of collection.....Date of shipment.....
 [Record day and hour.]
 Where from (Town).....County.....
 Source of supply.....Character of soil.....
 [Tap, well, spring, reservoir, lake or other source.]
 If a well, state whether dug, drilled or driven.....Depth to water.....
 If a well, is it protected from surface washings?.....
 State any possible sources of pollution (outhouses, barns, etc.), and distance of same from supply.....

 Is typhoid present in vicinity?.....If so, submit full details on back of this sheet as to number affected, distribution of cases, also sketch of location of cases with reference to source of supply.
 Health Officer.....P. O. Address.....

After the examination of the sample, a report is submitted directly to the local health officer.

(2) *Blood samples for diagnosis of typhoid fever.* Only a small quantity of blood is necessary for this examination. This may be collected in one of two ways.

(a) Upon application to the laboratory, a prepared aluminum foil and loop for the collection of blood will be sent to the local health officer, together with datum blanks for filling out the necessary data. The sample is generally taken from the finger tip, or the lobe of the ear by a simple puncture, the surface being cleansed thoroughly prior to the withdrawal of the blood. Allow a full sized drop to exude, and remove this by means of the wire loop, placing the same on the aluminum foil. Allow this to air dry before folding, so as not to cause the blood to spread out in a thin film. Enclose material collected, together with loop in the proper envelope for shipment by mail. The following blank should be filled out by the local health officer and returned with the sample.

WISCONSIN STATE HYGIENIC LABORATORY, MADISON, WIS.

Case No..... Physician's Name.....
 Patient's Name..... Address.....
 Health Officer's Name..... Address.....
 Has this case been reported upon before?.....If so, give former case No.....
 Patient's age..... Sex..... Temp.....degrees F.
 How long since disease commenced?..... Supposed source of infection.....
 When, if ever before, has patient had typhoid fever?.....
 Were instructions followed in securing blood sample?.....
 Physician's diagnosis..... Date of collection.....
 Do you desire telegraphic report at your expense?.....
 —Fill out this blank and return with blood specimen and wire loop to above address.

(b) In case there is not sufficient time to apply to the laboratory for the collecting outfit, sample of blood may be collected directly by the local health officer on any ordinary calendered paper in the manner as prescribed above. Several small drops should be collected, and especial care should be taken that the blood is allowed to air dry before folding paper for shipment. In such cases, it will be necessary for the laboratory to send datum blanks for the completion of the records.

(3) *Diphtheria*. Culture outfits are supplied directly by the laboratory to local health officers. These consist of a culture tube of sterile blood serum ready for inoculation, and a sterile swab in a sterile test tube. Upon the receipt of such an outfit, the physician will make the necessary infection of the swab, and apply the same immediately to the surface of the blood serum, taking care not to break the surface of the culture medium. After the inoculation of the serum, the swab should be returned to the sterile container which should be corked, and the whole sent to the laboratory for purposes of examination. The physician should remember that the taking of the sample should not be done immediately or soon after the application of local disinfectants, as the bacteria exposed on the surface membrane may thus be destroyed.

The accompanying datum bank should be filled out and returned with the culture outfit.

WISCONSIN STATE HYGIENIC LABORATORY, MADISON, WIS.

DATA TO ACCOMPANY SPECIMEN FOR DIPHTHERIA EXAMINATION.

Case No..... Date of making swab.....
 Patient's Name..... Address.....
 Health Officer Address.....
 Has this case been reported previously?..... If so, when?..... Case No.....
 Patient's age..... Sex.....
 How long since disease commenced?.....Is a membrane present?.....
 Has antitoxin been used?..... When?..... Amount.....
 What antiseptics have been used in mouth or throat?.....
 Physician's diagnosis
 Do you wish telegraphic report at your expense?.....
 Return this blank properly filled out with culture outfit by mail to State
 Hygienic Laboratory, Madison, Wis.

SUMMARY OF WORK DONE IN LABORATORY DURING BIENNIAL PERIOD.

Inasmuch, as the laboratory was not organized for work until October 1st, 1903, there is only a nine months' period of this biennium that can be included in this report. Naturally, the work of the laboratory at the outset was limited, as it required some time to disseminate information among all of the health officials as to the conditions under which analyses of materials could be conducted.

In the presentation of a report on the nature and amount of work carried on in the laboratory, the regular work of examination will be given precedence.

RESULTS OF EXAMINATION OF WATERS.

The character of the water samples submitted varied much in nature. The majority of them are submitted by the local health officers to satisfy local demands, the larger proportion of cases being suspected, with varying reasons, as containing evidence of pollution. In addition to these miscellaneous supplies, in some cases, a number of stated examinations have been made to determine the constancy of the character of municipal supplies.

In table 1 is given a list of samples tested, as to their origin, by counties, also as to character of samples examined, with the findings as to whether said samples were found wholesome or unsuitable for use. In those cases marked (+), sample submitted was regarded as unsuitable, or at least suspicious; where marked (—), it was considered as wholesome.

TABLE I.—Distribution of water samples tested, by counties, with results of examination.

COUNTY.	No. of sources examined.		WELLS.						Springs.		Lakes.		Streams.	
			Dug.		Drilled.		Driven.		+	-	+	-	+	-
	+	-	+	-	+	-	+	-						
Adams		2		1		1								
Ashland	1	2	1	1		1								
Buffalo	2		2											
Barron		3		1		1		1						
Columbia	1				1									
Dane	1	3				2		1			1			
Dodge	6	2	4	1	2	1								
Fond du Lac		1						1						
Gates	1				1									
Grant		2				1								
Green		1		1				1						
Green Lake	2		2											
Iowa		5		1			4							
Jackson	6		1						4				1	
Marathon		2		1										1
Marinette		3							1					
Milwaukee	7	1	3	1	2	2					2			
Monroe		2				2								
Oneida	1		1											
Polk	3	2	1	1		1			2					
Portage		1								1				
Racine		1		1										
Richland		2			2									
Sauk		6		6										
Shawano		1		1										
St. Croix		1				1								
Vernon	1	1		1	1									
Vilas		2							2					
Walworth	1	1		1										
Washington	4	4	3	2	1	2								
Waukesha	1		1											
Waupaca	1	3		1				1			1			1
Winnebago	1		1											
Wood		1		1										

From these cases submitted, it appears that well samples of one character or another are most frequently subjected to analysis. Of the total number of samples examined (95), 43 per cent were regarded as unsuitable for domestic use, either positively bad or at least suspicious.

In table 2, the analytical data are arranged on the basis of the use of the supply, as to whether the same was of purely public or private character. This table includes only the numbers of sources of supply that were examined, and not the number of examinations. It includes supplies actually in use at time of examination and not those made to determine whether or not certain sources would be suitable for municipal purposes.

TABLE 2.—Classification of sources of supply of water samples examined.

County.	Municipal supplies (water works systems).		Semi-public supplies (school, village, hospital and hotel wells).		Private sources.		Use not stated.	
	+	-	+	-	+	-	+	-
Adams								
Ashland			1	1		2		
Buffalo					2	1		
Barron	1			1				1
Columbia				1				
Dane			1	1		2		
Dodge								
Fond du Lac		1	1	1	4	1		
Gates	1					1		
Grant				1				
Green								
Green Lake			1		1	1		
Iowa					1			
Jackson	1			1	1	5		
Marathon		1						
Marquette		1						
Milwaukee	1		2	2	2	1		
Monroe		1				1		
Oneida					1			
Polk						2		
Portage				1	1			
Racine				1				
Richland								
Sank		6				2		
Suawano							1	
St. Croix				1				
Vernon	1	1						
Vilas					1			1
Walworth							1	
Washington					3	4		
Waukesha					1			
Waupaca		2			1	1		
Winnebago					1			
Wood				1				
Total	18		19		43		3	

Summary: Supplies regarded as unwholesome or suspicious. 30
 Supplies regarded as satisfactory

From the foregoing table it appears that a large part of the examinations were made on supplies that were public in character, municipal supplies actually in use, or those of a distinctively public nature. A considerable number of private wells were also examined, at the instance of the local health official, but the great majority of these examinations was asked for on the basis that typhoid existed in the home, and it was desired to find whether the water supply was a fault or not. It should be noted in these cases that the percentage of such waters regarded as unfit for use was larger than in the case of the public supplies. In most of the public school wells, ex-

amination was doubtless asked for as a precautionary measure.

It may be interesting to note the results obtained in water samples where typhoid was actually present in the vicinity, and therefore where there was a possibility of the water supply being infected. These data are presented in table 3 in which the various sources, but not the number of detailed examinations are given.

TABLE 3.—Results of water examinations where Typhoid infection was actually present in vicinity.

County.	Source of supply.	Result of Examination.	
		+	-
Adams	Well dug		1
Adams	Well drilled		1
Ashland	Well dug	1	1
Ashland	Well drilled		1
Buffalo	Well drilled	1	
Dane	Well driven		1
Dane	Well drilled		1
Dane	Lake	1	
Dodge	Well dug		1
Dodge	Well drilled	1	
Dodge	Well dug	1	
Green	Well dug		1
Iowa	Well drilled		3
Iowa	Cistern		1
Milwaukee	Well	1	
Milwaukee	Lake Michigan	1	
Milwaukee	Well drilled	2	
Milwaukee	Well dug		1
Polk	Well		1
Polk	Well dug	1	
Polk	Well drilled		1
Portage	Spring		1
Rock			1
Shawano	Well dug		1
Vernon	Well drilled	1	
Vilas	Well driven	1	
Washington	Well drilled	1	2
Washington	Well dug	2	1
Washington	Well		1
Winnebago	Well dug	1	

The results shown in this table indicate, even where typhoid is present in the immediate vicinity, that many of the sources of water supply indicate no suspicious or undesirable condition. It was impossible to secure complete data as to the suspected origin of the typhoid cases in question, but presumably many of them were imported from other localities, and could not, then, have had any direct association with the water supply.

BLOOD EXAMINATIONS FOR TYPHOID.

During the fiscal year covered by this report, 102 examinations of samples of blood from cases of suspected typhoid fever have been made in the Hygienic Laboratory. With the exception of the epidemic at the State Hospital for the Insane, at Mendota, in June and July, 1904, and in the city of West Bend, most of the cases under observation were sporadic in nature scattered throughout the State. Of the 102 examinations made, 45 were included in the epidemic which occurred at Mendota, and 14 at West Bend.

TABLE 4.—*Distribution of cases by counties.*

County.	No. of cases tested.	Positive.	Negative.	Doubtful
Adams.....	1		1	
Barron.....	3		3	
Brown.....	2	1	1	
Columbia.....	1		1	
Dane.....	60	39	11	10
Forest.....	1	1		
Jefferson.....	4		3	1
La Crosse.....	3	1	2	
Lincoln.....	1		1	
Milwaukee (excluding city).....	5	2	2	1
Monroe.....	3		2	1
Vernon.....	3	1	2	
Walworth.....	1			1
Washington.....	14	8	4	2
Total.....	102	53	33	16

It would appear from a consideration of the results obtained, as to a positive or negative diagnosis, that excluding the epidemics at West Bend and Mendota, the number of positive findings was not large.

It is to be hoped that the local health officers will avail themselves more generally of the opportunities for laboratory diagnosis in this disease, than has been the case this year.

It is of some moment to know how long the disease must develop before the blood reaction becomes positive. In order to study the results of the tests made on samples of blood, the data collected as to stage of the disease are presented in Table 5. In the same table are also incorporated the results of the Mendota outbreak.

TABLE 5.—*Classification of positively reacting Typhoid bloods on basis of time period of disease.*

Period of sickness when blood examination was made. (Days.)	Number of cases.	Number of cases in Mendota outbreak.
4	0	1
5	2	1
6	5	1
7	12	9
8	5	5
9	4	1
10	5	3
11	1	0
12	4	1
14	7	3
17	1	0
20	1	1
21	1	1
Over 30	5	2

In the majority of cases, a diagnosis was made about the end of the first week, although in some instances, a positive finding was secured at even an earlier date.

In a number of cases two or more examinations were made to secure a positive correct diagnosis. These cases are of more interest than usual, inasmuch as they indicate the special value of the test. In order to show the relation of the diagnosis to the period of development of the disease, these cases are grouped together.

TABLE 6.—*Records of cases on which duplicate tests were made.*

Case No.	Day of the disease.	Result.
{ 65	?	+ (?)
{ 66	?	+
{ 150	?	—
{ 155	?	—
{ 194	4	— (?)
{ 202	6	—
{ 219	10	—
{ 223	14	—
{ 231	9	+ (?)
{ 237	12	+
{ 244	6	—
{ 246	8	+
{ 290	8	— (?)
{ 294	11	—
{ 322	10	+ (?)
{ 361	30	+
{ 342	14	—
{ 356	20	—
{ 379	39	—
{ 389	44	+
{ 346	3	—
{ 354	6	+
{ 366	12	—
{ 371	16	—

These data tend to verify the accuracy of the Widal test to a marked degree. In all cases where the primary diagnosis was positive, or suspiciously so, the subsequent examination confirmed the diagnosis. In a few cases where the period of incubation had not been long enough to result in the formation of agglutinins, a second test showed positive results. One instance was somewhat remarkable. Three successive tests were made on 14, 20 and 39 days after disease developed, without obtaining any positive reaction, although the clinical history indicated strongly typhoid fever. A fourth trial made 44 days after the disease showed a positive reaction.

EXAMINATIONS FOR DIPHTHERIA.

During the nine months covered by this report, only 20 examinations have been made. These have been distributed in various counties as follows:

TABLE 7.—Cases of diphtheria by counties.

COUNTY.	No cases examined.	NO. OF SPECIMENS EXAMINED.		RESULTS.		
		For diagnosis.	For release.	Positive	Negative.	Doubtful.
Clark	1	1			1	
Dane	5	5	4	2	6	1
Lincoln	4	4		1	3	
Osceola	1	2		2		
Waukesha	1	3			3	
Wood	1	1		1		
Total	13	16	4	6	13	1

The value of this test in the determination of an accurate diagnosis was shown in the case of a child at Dousman, Waukesha County. The attending physician had diagnosed the case as showing a clinical picture of diphtheria, but the culture test failed to reveal any diphtheria bacillus. A second test applied three days later gave the same result. The case was then referred to a Milwaukee physician, who was also unable to convince the local health official. A third test applied four weeks later also showed complete absence of diphtheria bacilli.

The advantage of the test as a release from quarantine was shown in the case of a child here in Madison. After a run of the disease for ten days, the child was declared free from the disease, but school authorities refused to permit resumption of attendance. Cultures were made 10th, 14th and 19th days after disappearance of membrane, but diphtheria bacilli were invariably found. On 22nd day after they had completely disappeared.

HYDROPHOBIA.

During the period covered by this report there have been an unusual number of cases of rabies or hydrophobia reported. In the summer and fall of 1903, a large number of cases were recorded in the daily press. The laboratory received a number of samples for examination, but this number was only a small percentage of the cases that were reported through the medium of the press. This was probably owing to the fact that the laboratory had been but recently established, and it was, therefore, not generally understood that material of this character could be sent for diagnosis.

In the nine months from October, 1903, to July, 1904, thirteen cases have been received at the laboratory for diagnostic purposes. Of these, nine have been diagnosed as cases of positive rabies. In Table 8 are recorded the data relative to these cases, giving the town from which the tissue was received, with the results of the diagnosis; also the period of incubation necessary to determine the character of the tissue submitted for examination.

TABLE 8.—*Cases of suspected Rabies sent to laboratory for examination.*

October 1st, 1903—October 1st, 1904.

Case No.	Location	Date Received.	Diagnosis.	Time of Incubation.
10	Wausau	Oct. 12, 1903	+	21 days.
12	Waukesha	Oct. 15, 1903	—	—
17	Madison	Oct. 29, 1903	—	—
49	West Allis	Dec. 2, 1903	+	18 days.
76	Husti-ford	Jan. 11, 1904	+	22 days.
119	Wausau	Feb. 10, 1904	+	21 days.
135	Medford	Feb. 25, 1904	—	—
149	N. Milwaukee	Mar. 8, 1904	+	20 days.
154	Tigerton	Mar. 10, 1904	+	30 days.
212	De Forest	Apr. 23, 1904	+	36 days.
230	C. W. Farm	May 5, 1904	+	18 days.
261	Hartland	June 1, 1904	—	—
386	Boscobel	July 13, 1904	+	20 days.

In all of these cases, the animal method of inoculation was followed, which consists of removing the upper portion of the spinal cord at the base of the brain, making an emulsion of this tissue in sterile broth. The emulsion is then introduced

hypodermically into a rabbit under the brain membranes, which operation is performed by trephining the animal, removing the small button of the brain case, and introducing a few drops of the liquid beneath the cerebral membranes. In this way, the virus of the disease is brought into direct contact with the most susceptible tissue, and the period of inoculation measures in an approximate way the virulence of the case.

As is evidenced from the foregoing table, it appears that the average period of incubation of the positive cases was 23 days, with a range from 18 to 36 days.

The disease virus is found especially in the central nervous system, and for purposes of diagnosis, it is advisable that the head and upper portion of the neck be sent to the laboratory in as fresh condition as possible. While the virus of the disease is capable of withstanding putrefaction, or decomposition for a limited period of time, much more reliable results are liable to be secured if the spinal tissue is examined in a fresh condition. We would request correspondents who send such tissues for examination, to expedite the shipment of the same by all possible means.

In this disease the dog is almost always the only animal that is concerned in its active distribution, although it can be imparted to practically all kinds of mammals, including man. So far as the domesticated animals are concerned, cattle and sheep acquire it more frequently, due to the fact that they are more naturally exposed to the bites of rabid animals. Swine, on the other hand, are less likely to be affected, and it would appear from statistical evidence that they are not so susceptible to the disease.

In the cases here submitted, nearly all are instances in which the distributor of infection belonged to the canine race, and in those cases where the material was other than from the dog, this domestic animal was concerned, either directly or indirectly, in the distribution of the disease. It not infrequently happens that an affected animal may bite a considerable variety of other animals with which it may come in contact, and so distribute the virus of the disease to widely different species. In Table 9 are presented the data of the cases examined, on

TABLE 9.—*Distribution of hydrophobia by species of hosts bitten.*

Oct. 1st., 1903—Oct. 1st., 1904.

Case No.	Location.	Distributor of infection.	Species and number of individuals bitten.
10	Wausau.....	dog +	1 pig, 1 dog and kitten.
12	Waukesha.....	dog —	1 mau, 1 cow, 1 dog, chickens.
17	Madison.....	dog —	nobody.
49	West Allis.....	dog +	2 children and father; cats.
78	Hustisford.....	dog +	1 girl: one chicken killed.
119	Wausau.....	dog +	1 man.
135	Medford.....	dog +	1 boy, several dogs; cattle.
149	No. Milwaukee.....	dog +	1 boy, several dogs, 1 man.
155	Tigerton.....	dog +	1 man, 2 dogs, 3 horses, 1 cow.
212	De Forest.....	dog +	chickens.
230	U. W. Farm.....	sheep +	sheep bitten by a rabid dog; sheep bit other sheep.
261	Hartland.....	pig —	had been bitten by dog.
386	Boscobel.....	dog +	a child; also several dogs.

the basis of the distribution of the disease in various species of animals, including man. It will be noted in a considerable number of instances that human beings were bitten by rabid animals. On account of this relation, these cases are invested with more interest than those in which animals alone were bitten. In a number of instances the bites were not of a severe character, and no treatment other than cauterization of the wound was resorted to. In some cases, however, the Pasteur treatment was immediately taken, and in one instance this treatment was not begun until after the positive diagnosis was made of the material sent to the laboratory.

Table 10 presents the data with reference to those cases in which human beings were bitten, giving the number of persons affected and the location, character and severity of bites. In those cases where human beings were bitten, we have attempted to secure data as to whether or not any further trouble resulted from the bite. In no case where the Pasteur treatment has been taken have we found any instances in which symptoms of the disease developed, and also in the few cases in which the Pasteur treatment was not taken, no development of the disease occurred.

The danger of infection, and the likelihood of the development of the disease depends upon the effect of a variety of factors. Children are more likely to develop the disease than adults, on account of the fact that they are more susceptible

TABLE 10—DATA AS TO CAUSE OF RABIES IN WHICH PERSONS WERE BITTEN.

Case No.	Diagnosis.	Period of incubation.	No. of people bitten.	Location of bite.	Character and severity of bite.	Cauterized or not.	Was Pasteur treatment taken?	How long after infection?	Result in human host.
12		1	Bet. ankle and knee.	Through cloth; slight skin wound.....	.....	.....	.....	.....
49	+	18 days..	3	Hands....	Light wounds.....	No.....	.....	.....	.....
76	+	22 days..	1	Hand.....	Presumably only one wound; severity not stated.....	.....	Yes.....	Immediately.....	Had returned from treatment. O. K., 8-1.
119	+	21 days..	1	Leg... ..	Dog held; had to be beaten off; wounds insignificant.....	Yes.....	No.....	.....	.....
135	--	1	Leg.....	Flesh badly torn.....	Within few hours after bite.....	Yes.....	Immediately.....	.....
149	+	20 days..	2	Leg.....	.....	.....	Yes.....	Boy within 3 days after bite; man not till result of diag. was known. 33 days.....	Both returned cured. Letter 5-26.
154	+	30 days..	1	.....	Tooth marks in skin, one gash entering flesh.....	Yes.....	Yes.....	.....	Returned and was O. K., 7-16.
386	+	20 days..	1	?	?	?	?	?	?

to attacks from dogs, and are also more liable to bites on the head. The bite of an animal upon the naked skin is attended with much more danger than where the teeth first pass through the clothing. In the latter case, it frequently happens that the clothing protects the body, so that the disease virus is thus removed, and, therefore, the gravity of the bite is much greater when the wound is made upon the hands, neck or face.

SYMPTOMS OF DISEASE IN DOGS.

Inasmuch as the dog is by far the most common agent in the distribution of the disease, it is deemed important to give the general symptoms of this disease, with relation to this species, so that it may be of possible aid to health officers in preliminary diagnosis. The period of incubation of the disease in different animals varies considerably, but in none of the domestic animals does it often exceed 50 to 60 days. In dogs, the disease develops with considerable rapidity, ranging from 20 to 40 days, while in cats, this period is even shorter. In a dog, the disease assumes two types which are designated as 1, furious, and 2, the dumb, or paralytic type. By far, the most common type is the furious, or rabid type, in which the animal is especially dangerous. The disease manifests itself in the initial stages by a condition of restlessness and distress, the animal becoming excited. The tone of the voice is modified materially, assuming an unnatural bark of prolonged and high pitch. The appetite diminishes, and food is taken with difficulty, the animal often being unable to swallow. This often gives rise to the theory that the animal has a bone in his throat, and not uncommonly may lead to an examination of the throat of the animal to find out the source of the trouble. During this last season a case of this sort came to our attention where the owner of the dog contracted the disease by examining the throat of the animal to remove what was apparently an obstruction. In the dog there is no fear of water that is so commonly observed in the human being, and from which the disease receives the popular name of hydrophobia.

These earlier stages are followed by the development of the

more furious symptoms, in which the animal may attack its cage, or any object with which it may come in contact. Frequently it swallows dirt, straw, stones and other miscellaneous objects, and at this stage is apt to wander from its accustomed place, attacking any other animals with which it may come in contact. As this stage develops, paralysis is apt to follow, in which the hind legs are first affected. This marks a condition of weakness and stupor and the disease terminates rapidly in death. The course of the disease is more rapid in the dog than in most other animals affected, the period of time between the development of the initial symptoms and death ranging from 5 to 10 days.

Inasmuch as this is true, it follows that the disease may be frequently diagnosed with a greater degree of certainty and much more readily where the dog is kept in confinement, than where the animal is shot, and the head sent to the laboratory for diagnosis. In all cases where possible, a dog suspected of rabies should be kept in confinement until death supervenes, as it is thus frequently possible to make the diagnosis from the symptoms alone, and where such cannot be done with certainty, the likelihood of securing positive diagnosis from laboratory findings is much greater where the disease runs a natural course, than where the malady in the animal is cut short by killing.

In a limited proportion of cases, about one-fifth, the paralytic type of the disease is noted in the case of dogs. This is much less dangerous than the furious type, as the animals do not develop the tendency to bite. The early symptoms of the disease are similar to those described previously, but paralysis begins much earlier, and the course of the disease terminates in a few days in death.

The following detailed history of the various cases submitted for examination is herewith presented:

HISTORY OF CASES SUBMITTED FOR EXAMINATION.

Case No. 10.—Wausau. About June 1st, a stray dog bit a pig. The dog was killed without further damage, but in a short time the pig began to act strangely, and was killed and burned. The carcass was not entirely consumed, and a shepherd dog of the owner ate some of the unburned flesh. About September 20th, this dog began to show unusual symptoms. playing with some kittens he threw these about, pinching some of them. The next day the dog left the premises, and was killed by other persons on account of exhibiting symptoms of apparent madness. The kitten did not show any wounds, but on the 7th day of October, began to act in an unusual manner, at which time it was caged. The animal died on the 9th. The carcass of the kitten was sent to the laboratory for examination. A rabbit inoculated with an emulsion from the spinal cord of this animal on October 12th, died on November 2nd of characteristic symptoms of hydrophobia.

This case is interesting on account of the chain of circumstances. It is certain that the shepherd dog was not bitten by the dog which bit the pig. Whether it was by the pig or not is not certain, but in any event it is known that this consumed part of the unburned carcass. This history of the case seems to indicate that the kitten contracted the disease from this shepherd dog.

Case No. 12.—Waukesha. A ten-year old shepherd dog on October 12th, bit a man on the leg between the ankle and knee. The teeth passed through his garments, but did not penetrate the skin, although it was pinched so severely that a drop of blood oozed out. This same dog bit a cow, and in passing through the yard of the owner, had a fight with another dog. The animal was captured, confined, given food and water, of which it partook in small quantities on the 13th, and seemed to sleep most of the time. On the afternoon of the 14th, paralysis of the hind legs set in, and the animal died on the afternoon of that day in a very quiet way. The head of the animal was sent to the laboratory for examination, arriv-

ing on October 15th, but inoculation of a cerebral emulsion did not result in the production of the disease in the laboratory animal.

Case No. 49.—West Allis: A three-months old Newfoundland dog, previously healthy, and always docile, on the morning of the accident here reported attacked two cats. Two children attempted to interfere, and were bitten superficially on the hand. The father was also slightly bitten. Health officer reports number of young dogs in vicinity affected with illness, but in no previous cases has any human being bitten. The wounds were not cauterized. Head was received at laboratory on December 2nd and inoculation made. Rabbit died of rabies on December 20th. Up to the time that the diagnosis was reported, the Pasteur treatment had not been taken by the children who had been bitten.

Case No. 76.—Hustisford. A dog bit a girl on the hand, also killed a chicken after biting the child. He was then chased and killed and head sent to the laboratory for diagnosis, arriving on January 11th. Inoculation made immediately; animal inoculated died on February 1st of rabies. The child showed only a single mark on the hand, but was sent to the Pasteur Institute immediately, returning from treatment on February 4th.

Case No. 119.—Wausau: A strange dog entered the express office, and as the Agent attempted to pet him, the animal bit the person in the leg making rather insignificant wounds, which however were cauterized immediately. The dog was found dead a day or two after this incident, and head was sent to the laboratory, arriving February 10th. Emulsion made from the spinal cord, and inoculated into a rabbit on this date caused the death of the experimental animal on March 2nd. The person bitten by the dog was unwilling to submit himself to the Pasteur treatment, and upon inquiry, as late as Aug. 1st, 1904, showed no symptoms of the disease, although from the laboratory record there is no question but the animal had hydrophobia.

Case No. 135.—Medford: Dog bit boy, also several other dogs and several head of stock. The boy, who was bitten in

the leg, below the knee having the flesh badly torn, was sent to Chicago to take the Pasteur treatment. Animal received at the laboratory February 25th; inoculation made, but no positive result reached.

Case No. 149.—North Milwaukee: A dog bit a child and a man, also several other dogs. The wounds of both individuals were cauterized within three hours after the bite. The boy took the Pasteur treatment within three days from the time that the bite was incurred. The adult waited until the diagnostic report was received, then went to the Pasteur Institution for treatment. The head of the animal was received at the laboratory on March 8th, inoculated immediately; on March 28th, the inoculated animal died of hyrophobia. In both cases, the human beings bitten took the Pasteur treatment and no further trouble developed.

Case No. 154.—Tigerton: The dog in this case came from the town of Wyoming, Waupaca County. He bit three horses, two of which developed the disease and were shot. Two dogs and one cow were also bitten; also a person, who had nine well-defined teeth-marks penetrating the skin, and one gash, two inches long, entering the flesh. His wounds were immediately cauterized. He did not take the Pasteur treatment until after receiving the report of the laboratory diagnosis. Four other people were bitten by a strangely acting stray dog in this neighborhood, and the wounds of all were cauterized. It is not known, however, whether or not these came from this same case. The head of this dog reached the laboratory on March 10th, and tissue inoculated into a rabbit resulted in the disease, causing the death of the experimental animal on April 9th. On April 12th, the man who was bitten in this case went to the Pasteur Institute for treatment.

Case No. 212.—De Forest: A dog belonging to a farmer had been bitten several weeks before by a stray dog, and began to show peculiar actions, but was not confined. Finally upon further development of symptoms, he was caught and tied up for observation. The animal died, but prior to its death, would bite anything within reach. The head of the dog, sent to the laboratory, arrived April 23rd. Laboratory animal in-

oculated with tissue from spinal cord developed symptoms of rabies, the same dying 36 days after inoculation on May 29th.

Case No. 230.—Madison: This case was a sheep at the University Farm. The animal was bitten in the face by a stray dog, leaving a large wound at place of bite. This accident happened on April 19th. The wound was sewed up, but no further symptoms noted. This same animal also bit very slightly another sheep at the same time, and killed several ducks in an adjacent field. The more severely bitten sheep began to show symptoms of cerebral disturbance on May 2nd, jumping and pawing the floor, and bunting its head against the walls of the pen. On May 4th it broke down the wall of its pen and bit another sheep in an adjoining enclosure. The animal died on May 5th, and was tested immediately by the animal method of inoculation, the inoculated rabbit dying from rabies in 18 days.

Case No. 261.—Hartland: The head of a pig was received from Mr. Flannigan, of Colgate, who had a number of pigs bitten by a dog, and all of the injured animals died shortly after. No definite data were secured. The head was received in poor shape on June 1st, and animal inoculations made in the usual way, but no symptoms developed.

Case No. 386.—Boscobel: A dog suspected of rabies bit a child and bruised another in the face jumping on it, also bit several other dogs in the neighborhood. Animal was killed and head sent to the laboratory for examination. Inoculations made in rabbits resulted in the death of the experimental animals in 20 days. About this same time several of the dogs which had been previously bitten by this originally affected animal went mad and ran wild through this country, one of them traveling for a distance of 20 miles. No persons happened to be bitten by this animal, but a number of animals were attacked.

EXAMINATION OF SPUTUM FOR TUBERCULOSIS.

The following examinations have been made of sputum for the tubercle bacillus.

COUNTY.	No. samples examined.	RESULTS.	
		Positive.	Negative.
Dane	17	9	8
Dodge	1	.....	1
Juneau	7	3	4
Lincoln	2	.....	2
Milwaukee	1	1	.....
Rock	1	.....	1
Waukesha	1	.....	1
Total	30	13	17

MISCELLANEOUS EXAMINATIONS.

Three samples of certified milk have been sent in on which a bacterial count has been determined, also one specimen of tissue supposed to be affected with hog cholera, one with anthrax, and two with tuberculosis.

REPORTS ON DISEASE OUTBREAKS THROUGH- OUT THE STATE.

It was impossible to engage in any field work to amount to anything during the short period covered by this report, as the original law governing the establishment of the laboratory was interpreted in a way which made it impossible to expend any of the resources of the laboratory in this class of work. During the months of May and June, 1904, a severe outbreak of typhoid fever occurred at the Mendota Hospital for the Insane, which was investigated at the special request of the State Board of Control.

The report submitted to them under date of July 30, 1904 is herewith submitted.

REPORT ON CONDITIONS PREVAILING AT MEN- DOTA HOSPITAL ACCOUNTING FOR TYPHOID OUTBREAK, ALSO SUGGESTIONS AS TO PER- MANENT IMPROVEMENT.

At the request of Dr. Chas. Gorst, Superintendent of the Mendota Hospital for Insane, the Director of the Laboratory made a thorough personal examination of the sanitary conditions which obtain at the State Hospital, which in his judgment were of importance in explaining the origin of the outbreak of disease which occurred in 1904.

EXAMINATION AS TO ORIGIN AND SPREAD OF TYPHOID EPIDEMIC.

The simultaneous occurrence of a considerable number of cases of sickness in May and June led the previous Superintendent, Dr. Bullard, to have a sanitary examination made of the artesian well supply and later the lake supply. The result of these tests showed the well supply to be wholesome and

pure, while the lake supply as furnished in the taps in the building was grossly polluted.

The examination of the blood of a number of patients was then made and the diagnosis of typhoid fever microscopically demonstrated.

Next the attempt was made to determine whether contamination occurred at the mouth of the intake or from a break in the suction pipe near shore.

Two series of lake water samples were analyzed from various points off shore in the bay. These examinations showed the condition along the shore to be that of dilute crude sewage and that evidence of sewage pollution could be traced to some distance from the shore. In the sets of analyses made on June 20 and June 29 the water at the mouth of the intake was somewhat infected but not nearly as much as were the samples taken from the lake water taps at the Hospital, as is shown by the following bacterial determinations.

	Bacteria per cc.		Fecal Bacteria per c. c.	
	Mouth of intake.	Tap at pump house.	Mouth of intake.	Tap at pump house.
June 20, 1904.....	459	14,000	5	20-24
June 29, 1904.....	575 235	2,500	2-3	12-15

This increased germ content and the larger number of colon or fecal type found in tap water over that of water taken directly at the mouth of the intake indicates beyond all question that the intake pipe is receiving part of its supply from the badly polluted water nearer the shore. This leaky condition, is also shown by pumping air into the intake pipe when bubbles of gas can be seen rising along the line of the pipe.

It is important to know whether the intake pipe itself is extended into the lake sufficiently to render pollution at its open mouth unlikely to occur, assuming that it is water tight throughout its submerged portion. The two previous tests on the quality of the water in the neighborhood of the intake were

taken when the wind was in a southerly or southwest direction, i. e., when wind currents would drive the sewage along the shore away from the intake. They were therefore most favorable to the prevention of contamination and yet the quality of the lake water at this point was not above suspicion, colon or fecal organisms being found in small numbers.

A third test of the extent of pollution throughout the bay was made on July 22 with a strong northerly breeze blowing. Nine samples were taken from different portions of the bay and the results of these showed an appreciable degree of contamination to a point as far as the intake.

It appears from the tests that the pollution of the bay is not entirely uniform, that in general the nearer the shore the greater the pollution, although tongues or streaks of polluted water extend out into bay for considerable distances. Even at the distance which the mouth of the intake is from shore, the normal purity of the lake water is materially impaired. When this pollution is known to be directly associated with unpurified human sewage the use or raw untreated lake water must be regarded as a distinct menace.

CONDITION OF THE HOT WATER SUPPLY.

The lake supply has been used partly in a cold and partly in a heated condition and the attempt was made to determine if possible, whether the water in the hot water system which supplied the laundry, kitchen, baths, etc., showed evidence of pollution. Several analyses were made of this heated water but they appeared to be free from evidence of pollution. These samples were taken since the attempt was made to thoroughly heat the hot water and consequently the temperature may have been somewhat higher than was ordinarily the case. To test whether the water in the heaters was at all times subjected to a sterilizing heat so far as typhoid was concerned, a direct experiment was made.

The destruction of disease bacteria requires not only an exposure at a certain temperature but the time limit must also be considered. A temperature of 135° F. is fatal to the typ-

hoid germ if the period of exposure is not less than 10 min. An increase in temperature to 185° F. materially reduces the period of exposure necessary to insure thorough destruction.

TESTS OF THE HOT WATER HEATERS.

In order to test the efficiency of the heaters to practically sterilize the lake water as far as typhoid organisms were concerned, the valves of the three washing machines in the laundry were opened wide and the hot water wasted. In this way the outflow was all that the inlet pipes to the heaters could carry and consequently the temperature of the heater water was reduced to a minimum. Under no normal condition would the use of hot water be as great as this rate of flow so that ordinarily the temperature would be higher and the period of heating longer than in this test. When first tested the temperature of water in the laundry tubs was 162° F. A test for 40 minutes was maintained with the valves of all three machines wide open and it was not possible to lower the temperature of the waste below 123°. In a bath tub in female ward 6, the farthest removed from the heaters, the temperature of flowing water at this time showed 140° F., thus indicating that the temperature reached, together with the period of exposure necessary to flow this distance was sufficient to result in the destruction of the typhoid infection in the lake water.

As this test was conducted under much more severe conditions than would obtain in practice, it would seem that if the lake water is heated with steam to a temperature of 140° F. or above that it will be sufficiently sterilized so that no danger need be apprehended from its use for ordinary hot water purposes. That the heated lake water has not been instrumental in disseminating the disease is also shown by the fact that no cases have developed among the laundry or kitchen attendants.

ORIGINAL SOURCE OF INFECTION.

Having shown that the cold lake water was the way by which contagion was distributed in this epidemic the attempt was then made to locate the original source of the outbreak.

Although raw untreated sewage has been discharged into the lake for years and presumably the intake pipe of the lake system has been for some time in a condition where leakage was possible, yet the present outbreak could not originate spontaneously. The original source of infection must have come from the outside and the most likely source is from the discharges of some person who was convalescing from the disease at time of admission or who developed the disease soon after entrance. With the aid of the resident physicians, Drs. Chaney and Green, the hospital records have been studied for some clue of this sort. Before detailing these findings, the following table giving the time distribution of cases is presented.

TABLE 12.—*Distribution of cases on basis of time when disease was first observed.*

May 19	+		June 5		June 21	+++
20			6		22	
21	+		7	+	23	
22			8	++?	24	+
23			9	+	25	
24			10	+	26	
25	+		11	++++	27	
26			12	++++	28	++++
27			13	+	29	
28	++		14		30	
29	+		15	+++	July 1	+
30			16	+++	2	+++
June 1	+		17	+	3	
2	+		18		4	
3			19		5	
4			20		6	+
					7	+
					8	
					9	
					10	+
					11	
					12	
					13	+
					28	++

NOTE.—Each case is designated by +.

From this table it appears that the maximum development of the disease occurred from June 7 to the early part of July. Before June 7, only eight cases had been recognized, the first case appearing on May 19. As the fecal or urinary discharges of these earlier cases were not disinfected, it is undoubtedly true that they were the cause of the sudden increase of the disease in June. The difference in time (about 2-3 weeks) coincides with the usual period of incubation of this disease which is subject to some variation in different cases.

But this does not explain the origin of the first case reported on May 19. This man entered the Hospital as a patient on April 23, so he was in residence a period of 26 days when he came down with the disease. This period is somewhat longer than the average period of incubation, and the presumption is quite strong that he acquired the disease subsequent to his admission to the Hospital. This hypothesis receives confirmation from the fact that another case developed on May 21 and another on the 25th, still others later, showing a condition of incipient general infection to be existant at about that time.

In conference with the resident physicians, it developed that an employee was taken sick in April and was sick for a period of 10-12 days. He had a temperature several times of 102° F. but this marked fever did not persist for more than a few days. He was in bed for several days but typical typhoid symptoms did not develop. The period which elapsed between the time of his sickness, which extended to about April 25th and the development of the first symptoms in the cases occurring in May is but little longer than the average period of incubation of this disease. As the dejecta were not disinfected, it was probable, if he had a slight attack of typhoid fever, that bacilli might have been discharged from the body subsequent to his convalescence. From this clinical history it seems quite probable that the origin of the cases occurring in May might be due to infection derived from the undisinfected discharges of the employee which were carried through the sewer daily for a period beginning about April 13th. Fortunately we have now a medium of securing definite data as to the presence of previous cases of typhoid.

The Widal or blood test which is applied to the diagnosis of this disease can also be used after convalescence. The agglutinating substances produced by the development of the typhoid bacilli, which give to the reaction its special value, remain in the system of a person for considerable time after convalescence. An examination of this employee's blood was therefore made, and a moderately strong reaction was obtained nearly four months after he had this run of fever. This finding

leaves no doubt in my mind that this case was a mild type of typhoid fever. Some weeks previous to the attack of fever this attendant had been out of the Hospital on a visit for a few days, and the presumption is that at this time he might have acquired infection.

RECOMMENDATIONS.

The instructions received from Supt. Gorst asked that recommendations be made as to what should be done in the immediate future to effectually check the progress of the outbreak and insure safety for the present; also as to what course should be followed in the future in the way of permanent improvement that would effectually prevent any possibility of epidemic disease arising from the water supply.

PROVISIONAL MEASURES FOR THE IMMEDIATE PRESENT.

1. The cold lake water must be completely cut off from all use as soon as pipe connections can be made. No water should be used for drinking purposes except the artesian supply.

2. The heated lake water may be used for culinary, bath, laundry and boiler purposes, provided the same is heated so as to have an initial temperature at the laundry of not less than 150° F. where ordinary amounts of water are used.

3. Since the onset of the outbreak, the milk from the dairy has been boiled as a precautionary measure. As the conditions in the dairy are above suspicion and it is entirely impossible in this case for milk to serve as a distributor of contagion it is unnecessary to continue longer this precautionary measure.

4. In view of the extensive lake pollution this season of a dangerous character, the recommendation was made that the ice supply cut this coming winter be taken from a point well out in the lake from Governors Island and to the westward.

RECOMMENDATIONS AS TO PERMANENT IMPROVEMENT.

In outlining what should be done in the future to prevent a recurrence of the disastrous condition that has prevailed

this season, it is necessary to consider the question of sewage disposal as well as that of water supply. All possibility of danger can only be eliminated in one of two ways, viz.

- (1) abandoning the lake water connection or
- (2) purifying the sewage of the institution.

The objections to a complete abandonment of a lake connection are quite numerous.

1. While the artesian supply is adequate for drinking purposes it is not so certain that a single well would give an ample supply for sprinkling and all other general purposes. Doubtless the supply from the artesian well can be materially increased by improved methods of pumping. Since the suction pipe has been lowered in the well, the entire supply for the Hospital has been furnished from this source and the head of water in the well has not been lowered only about $2\frac{1}{2}$ feet at which point it appears to remain stationary, but during the present period no water has been used for sprinkling or general flushing purposes.

2. The artesian supply is materially harder and is therefore not as well adapted to general domestic use in laundry, kitchen, bath and in the boilers as the softer lake water. A comparison of the two waters as to hardness and incrusting ingredients shows the following results.

Analysis of lake and artesian waters as to hardness.

	Lake.	Artesian.
Total hardness (expressed in degrees)*.....	11.3	26.6
Permanent hardness (Calc. sulfate).....	8.6	13.3
Temporary hardness (Calcium bicarbonate).....	2.7	13.3

*Degrees hardness = no. of grains of calcium and magnesium salts per gallon.

The use of the harder artesian water would involve a considerable increase in expense for soap in the laundry; more care and expense in keeping the boilers clean, as well as the general objections to the use of hard waters for ordinary domestic purposes.

3. As long as a double system of piping is already installed, it would be more economical to continue the use of lake water

for lawn, boiler and general purposes if it can be rendered wholesome for ordinary domestic use. Even if the intake pipe were perfectly tight, it would still be hazardous to use the system as at present, for the reason that the configuration of the bay is such that pollution must in large measure remain in the bay until it is oxidized. The examinations made of the lake water contiguous to the mouth of the present intake show that the water is not infrequently polluted at a considerable distance from shore. No permanent safety could be secured as long as the sewage is discharged untreated into the bay. If however this source of pollution was removed, there would be no objection to the use of the lake water for general domestic purposes. The drinking water supply of the institution should however be wholly drawn from artesian sources.

REMOVAL OF THE SEWAGE FROM THE LAKE.

These objections to the abandoning of the lake supply are also fortified by very cogent reasons as to the removal of the crude sewage from the lake. This should be done as soon as possible for the following reasons.

1. The proper treatment of the sewage would permit of the retention of the lake connection and the use of this water with perfect safety for all general purposes other than a drinking water supply.

2. The discharge of the untreated sewage is a constant and serious menace to the purity of the ice supply. It is true that the ice supply could be taken from the main body of the lake or from Westport bay off Farwell's Point but with the present location of the ice house it is much more convenient to secure it from Woodard's Bay. The typhoid organism is capable of retaining its vitality for a number of months in a congealed condition in ice and with the continual inflow of crude sewage during the ice-forming season it is easily possible for these organisms to be frozen and retain their vitality into the following summer.

3. The possibility of direct infection from bathing, boating, etc., is not to be wholly ignored.

4. The fouling of the lake shore along the front approach to the Hospital grounds is to say the least unsightly and highly undesirable.

These reasons pertain primarily to the safety and general well being of the inmates of the Hospital itself, but in some measure at least they have a direct bearing on all citizens who live in this vicinity. They are of sufficient weight to warrant the early removal of the crude sewage from the lake but there are still other considerations that should enter in.

5. Since the adoption of the city of Madison of a modern method of sewage disposal, removing all municipal wastes from Lake Mendota, the Hospital is practically the only important factor in the continued pollution of the lake. As long as the city has done its part, the work should be completed on the part of the state in this state institution.

6. The state has a certain moral obligation to perform in connection with the administration of public institutions, more particularly in the asylums, charitable and penal institutions. She must certainly see that the lives of the inmates of these institutions are safe guarded in every possible way by placing them in the best possible hygienic surroundings. The state cannot expose her own wards to sanitary conditions that would not be tolerated by her own citizens.

The foregoing reasons are ample to warrant the early removal of this element of danger and the next question is as to the best method of obtaining the desired efficiency at a minimum cost, not only as to construction but to operation.

METHOD OF SEWAGE DISPOSAL RECOMMENDED.

Numerous methods have been devised for the purpose of purifying domestic sewage, but while some of these systems are efficient under certain conditions they have proven to be limited in their scope and could not therefore be successfully applied except under restricted conditions. Some of them also are expensive in operation. The method of widest applicability and fortunately the cheapest to construct and operate is the method of purification by bacterial activity. This

method consists of (1) a septic tank (mason or concrete construction) in which the sewage is allowed to remain for a short time to undergo the digestive or liquefying action on the solids; (2) filtering beds made of sand or cinders into which the liquefied sewage is discharged intermittently, there to undergo conversion into mineralized matter which removes the putrescible and dangerous elements. The effluent from such a treatment is rich in nitrates (plant food) and may be discharged directly into the lake without danger to health. The conditions which obtain at the Hospital are very favorable for the installation of such a system, there being ample fall so that the entire process could be operated by gravity. The relative low cost of construction, the greatly diminished operating expenses, together with the high degree of efficiency and general adaptability of this system makes it unquestionably the most desirable for your purposes.

Respectfully submitted,

H. L. RUSSELL,

Director.

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