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The Wisconsin lumberman, devoted to the lumbering interests of the northwest. Volume II. Number 1 April, 1874

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April, 1874

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THE
Wisconsin Lumberman,

DEVOTED TO THE

LUMBERING INTERESTS OF THE NORTHWEST.

APRIL, 1874.

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SITUATED ON

CONANT RAPIDS, at CITY OF STEVENS POINT, WIS.

In consequence of my continued ill health, I now offer for sale the

Most Valuable Mill Property on the Wisconsin River.

This Mill adjoins the town plat of the city of Stevens Point, and within one and one-half miles of the city. Has one large double Rotary, capable of cutting fifty thousand ft. per day of eleven hours, with Gang Edger, Cutting-off Saws, etc. This Mill is new, with the latest improvements; was run only last summer. Also one Stock Gang, one Slabbing Gang, and Shingle, Lath and Picket Mill.

There is eleven foot head of water the year round; Water Wheel of Rotary Mill never freezes; can saw in summer and winter, and never lacks power. Each mill has its own separate flume, enabling you to saw with either Mill alone.

Connected with the Mill is a Store, Blacksmith Shop, Boarding House, double Residence and large Barn, Ice House, and eight Tenement Houses.

The Boomage is now capable of holding from six million to eight million feet of logs, and with a very small expense, would be capable of holding twenty million feet. The Piers, Dams and Mill all rest on rock foundation, and in good order.

In short, this is the most complete lumbering establishment on the Wisconsin river, and presents an opportunity to any one desiring to go into business seldom met with.

Also an immense water power, capable of running a number of mills of various kinds, which is now valuable, belonging to the property.

For further information enquire of the subscriber at the mill, or A. EATON, Esq., at Stevens Point.

Stevens Point, Wis., March 1, 1874.

J. M. ROBISON.

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THE

WISCONSIN LUMBERMAN.

VOL. II.—APRIL, 1874.—No. 1.

THE LOG CROP OF 1874.

The actual amount of logs cut the past winter in the pineries of Wisconsin and Minnesota is somewhat greater than it was believed would be cut when operations first commenced last fall. The winter has been unexceptionably favorable and loggers have been enabled to get in their logs at considerable less expense per M. than is ordinarily possible; hence firms who had calculated on certain investments in logging have accomplished more work than they really intended at the commencement of the season. From careful and reliable information we conclude that the amount of this season's cutting in Wisconsin and Minnesota is about seventy per cent. of the cut of 1872—3. In Michigan the new log crop is less in proportion than that of the Wisconsin and Minnesota pineries; so much so as to warrant the assertion that notwithstanding the large amount of old logs left over, the manufacturers will not have a full and complete stock for the season's sawing. A very significant fact to be considered in estimating the amount of logs that will be manufactured this season, is that the logs have been cut this winter

high up on the streams and there will therefore be unusual work in getting them to the mills; in fact, there must be as favorable a spring for driving as there has been winter for logging, or else a much larger per cent. of logs will be "hung up," than usual. Allowing that the spring driving season shall be favorable there is scarcely a possibility that there can be any serious overstock of logs for the season of 1874. There must be an unusually favorable driving season or there will be a deficiency of logs if we consider the favorable condition of the present and prospective demand for the manufactured lumber. It is of course well understood by lumbermen that the product of Michigan pineries is usually nearly double the amount produced by Wisconsin and Minnesota together. A serious falling off of the amount manufactured in Michigan must therefore mean a scarcity of lumber when the same per cent. taken from the usual product of Wisconsin and Minnesota would scarcely be noticed in the markets. The actual sawing at Michigan mills during the season of 1873 was nearly or quite 2,500,000,000 feet. The very highest estimate of amount of old logs left over is now less than one billion feet,

while the best opinions place the amount of new logs at not more than 1,500,000,000 feet. Indeed, if the entire crop of old and new logs could be delivered at the mills the amount would not exceed the actual manufacture of 1873. Appearances now indicate that even a greater proportion of logs will be "hung up" on the drives than usual, owing to the fact that the new logs are cut higher up the streams and on smaller streams, and that there is no indication or probability of an unusually wet spring. In eastern Michigan there are even well-informed persons who anticipate a "log famine," notwithstanding the reports last fall that there were over 800,000,000 in old logs left over in that locality. As indicative of that feeling we quote the following article from the *Saginaw Enterprise*, a journal appreciated for its accuracy and reliability:

"The question of over-supply is not likely to trouble lumbermen this year, as the mills will, in all probability, experience some little difficulty in getting a sufficient supply for the season. The opinions of experienced lumbermen, however, are that the Valley will not suffer from a log famine, as the quantity of lumber cut this summer will bear no comparison to former seasons, as many of the largest mills on the river will not commence operations until about the first of May. On the other hand, the *Bay City Chronicle* apprehends a log famine, as many of the streams are too low for log driving. That journal states that it has taken some pains to gather the best information on the subject, and concludes that not over 200,000,000 feet of logs will come to the river mills this season. It says: "It has been the custom to speak of the amount of these logs as

400,000,000 feet, but the fact is that that figure is nearly double the true one. Information collected from log owners and the boom company, which is as near strict accuracy as it is possible to get, shows that not over 230,000,000 feet of old logs remain in the Tittabawassee. The past winter's lumbering on this stream and its tributaries did not exceed 75,000,000, and not over one-half of these logs are likely to come out, unless the prospects materially improve. Say that two-thirds of the new crop will come down, and we have only 280,000,000 of old and new logs, instead of 400,000,000 of old logs alone. A similar scrutiny of the resources of the other streams which supply the river mills give the following as the

TOTAL SUPPLY OF LOGS

for this year, which may come to the mills if there should be a change in the prospects for driving sufficient to make a first rate running season. These, however it will be conceded by well-informed persons, are the outside figures, the possibilities ranging below the total here given, even down to 200,000,000 feet.

From the Tittabawassee.....	230,000,000
From the Cass.....	60,000,000
From the Bad River and Beaver Creek.....	10,000,000
From the Swan Creek.....	3,000,000
From the Kettle River.....	3,000,000
From the Au Gres.....	35,000,000
From the Auwacolin.....	6,500,000
From other shore streams.....	6,000,000

Total..... 438,500,000

The above figures are liberal in amount in all cases, and perhaps too high in some. For instance a large operator on the Cass informs us that 30,000,000 will cover the past winter's operations on that stream, and there were 20,000,000 feet left over. There are, however, some small lots put into the Cass, which may have been restored in the above estimate, and we have put the figures about 5,000,000 higher than the majority of estimates of which we have heard. The figures throughout are neither the highest nor the lowest we have

heard, but they are as close to the fact as it is possible to make them with the advantage of very full information from all the localities.

THE SHORE STREAMS.

The Rife and AuGres will probably bring down their logs all right, though some of the 35,000,000 which we credit to the AuGres is doubtful of delivery. There is less uncertainty about the Rife, from which all the logs will come, with the possible exception of a few millions in the west branch.

ON THE OTHER STREAMS,

the promise is not just now cheering, to say the least, and some lots have been abandoned until a decided change appears. Rains with no snow on the ground to maintain a rise are poor dependence, as before said. A long wet spell, if it is wet enough, would do the business for the amount of logs we have given above. Any one who can figure the chances of a wet spell, can tell very nearly where the probabilities of the log supply will be this year between the 200,000,000 feet sure to come, and the 438,000,000 which may possibly be got out."

While the personal information of the WISCONSIN LUMBERMAN differs from the foregoing inasmuch as the amount of old logs left over is in excess of the figures given, yet it agrees to the fact that the spring driving season must be exceedingly favorable if that State affords even a fair proportion of its usual lumber product.

It is impossible to give an absolutely accurate report of the amount of new logs cut in Wisconsin, but a very near approximate is as follows:

Menominee river.....	107,000,000
Amount handed by the Menominee River Boom Co. in 1873.....	122,088,520
Green Bay district, proper, including the Oconto, Peshtigo, Pensaukee, &c.....	120,000,000
Wolf river, (highest estimate).....	118,000,000
Wolf river 1873.....	205,000,000
Wisconsin river (about).....	30,000,000
Wisconsin river, 1873, (about).....	90,000,000

Yellow river.....	17,000,000
Yellow river, 1873.....	60,000,000
Black river, the estimates vary from	90,000,000 to 120,000,000
Black river, 1873.....	250,000,000
Chippewa valley.....	275,000,000
Chippewa valley, 1873.....	375,000,000
St. Croix.....	140,000,000
St. Croix, 1873.....	165,000,000

The amount of logging done on the lines of the Wisconsin Central, Green Bay & Minnesota and West Wisconsin railroads is variously estimated at from fifty to sixty million feet.

The entire new log crop of Wisconsin will not reach nine hundred and fifty million feet. The log crop of 1872-3 was at least one billion, four hundred and twenty million ft.; or nearly five hundred million feet in excess of the present new crop. The amount of old logs now on hand is estimated at about five hundred million feet, distributed as follows:

Menominee river.....	10,000,000
Green Bay district.....	110,000,000
Wolf and tributaries.....	71,000,000
Wisconsin river.....	19,000,000
Yellow river.....	17,000,000
Black river.....	150,000,000
Chippewa valley.....	110,000,000
St. Croix river.....	28,000,000

It will be seen that the entire new and old log crop must reach the mills if the amount of lumber that would be possible to place upon the market should equal the actual cut of 1872-3. The amount of lumber manufactured in Wisconsin during 1873, exceeded one billion, two hundred million feet, and included all that was manufactured from the cut of 1872-3 and from the logs remaining over from the cut of 1871-2. If the usual per cent. of logs fail to reach the mills it will be impossible for Wisconsin to manufacture the present season over one billion feet. As the prospects now are that less than the usual per cent. of logs will be brought out on the drives, it is reasonable to suppose

that the amount to be furnished this season from Wisconsin will be even less than one billion feet.

In Minnesota the comparative amount of logging done is hardly equal to that of Wisconsin. The estimated amount of new logs to come from the Upper Mississippi (the St. Croix is credited to Wisconsin) does not exceed 150,000,000 ft., while some estimates place the amount as low as 130,000,000 feet. The amount of old logs left over is about 27,000,000 feet; giving as a total not over 177,000,000 as the highest estimate. The actual amount manufactured in 1873 was 200,000,000 feet.

As before stated, the larger portion of the logs cut the past winter have been logged high up on the streams and with an average driving season there will be a much larger per cent. than usual that it will be impossible to get to the mills this season. Should the summer trade continue as active in proportion as has been noticeable during the spring months, there will be a demand that the summer's sawing will be just fairly able to supply. Should the summer trade be considerably less active than now seems likely, there cannot be an overstock for the spring trade of 1875. The supposed large overstock on hand January 1st, 1874, has been rapidly diminished and the market is ready to receive the usual spring runs and shipments.

THE NATIONAL ASSOCIATION.

The *Boston Lumber Trade* has labored earnestly and consistently to awaken an active interest among lumbermen in the matter of the establishment of a National Association which shall represent the lumber interests of the country. Just now Mr. HENRY SYMONDS, editor of the *Lumber Trade*, is doing even more than using the influence of his pen towards the organization of such an Association, and is visiting the principal lumbering centers at the East with a view to personal effort in behalf of the project. Mr. SYMONDS has recently visited Williamsport, Pa., and it is now proposed to hold the first meeting in that city some time during the coming June. The benefits to be derived from a National Association of Lumbermen, have been so often discussed and urged that we will not repeat them now. It is sufficient that a large number of prominent manufacturers and dealers are thoroughly interested in the matter, and will form a nucleus to which will be attracted in course of time, representatives from all the important lumbering localities. Once established, the Association will be a success and will prove of incalculable benefit to the trade generally. Mr. SYMONDS is entitled to more than passing credit for his efforts towards the consummation of the desired object of a National Association, and we are glad to be able to extend the congratulations of the WISCONSIN LUMBERMAN to his energy which is now likely to result in permanent good.

Subscribers possessing all the No's of Vol. I. of the WISCONSIN LUMBERMAN should preserve them by binding.

RULES OF INSPECTION OF THE CHICAGO LUMBERMAN'S BOARD OF TRADE, 1874.

The rules governing the inspection of lumber, as adopted by the Chicago Lumberman's Board of Trade, are complete in the minutest detail and will protect both buyer and seller. We publish in full the standard of qualities, rules of inspection and inspectors' fees.

SECTION 1.

First Clear White Pine Lumber shall be not less than eleven inches in width, and no imperfections allowed unless fourteen inches wide or upwards; will then allow imperfection equal to *sap*, one inch on one side, extending the whole length of the piece, on pieces fourteen inches wide and well manufactured, but the face side must be perfect; as width increases will allow larger imperfections in proportion to the width, but not imperfections enough to decrease the value below the above-described piece.

SECTION 2.

Second Clear White Pine Lumber shall be not less than ten inches wide and perfect up to eleven inches in width; will then allow imperfections equal to *sap* one inch on one side of the whole length of the piece, if well manufactured; as width increases will allow other or larger imperfections in proportion to the width, but not imperfections enough to decrease the value below the above-described piece.

SECTION 3.

Third Clear White Pine Lumber shall be not less than eight inches in width, and perfect up to ten inches; will then allow imperfections equal to *sap*, one inch on one side of the whole length of the piece, if well manufactured. The imperfections in this quality shall not exceed *one hundred per cent.* over those allowed in *second clear*.

SECTION 4.

Select White Pine Lumber shall include all lumber that is better than *common* and of poorer quality than *third clear*. The imperfections in this quality shall not exceed *one hundred per cent.* over the imperfections allowed in *third clear*.

SECTION 5.

Clear White Pine Flooring shall be one inch thick, six inches wide, and no imperfections.

SECTION 6.

Second Clear White Pine Flooring shall be in thickness same as *clear flooring*, and will allow of one small *knot* or *sap* three-quarters ($\frac{3}{4}$) of an inch on one side, with clear face.

Clear and second clear flooring rejected on account of thickness to be classed as *common flooring*.

SECTION 7.

Common White Pine Flooring shall be of the width and thickness of *first and second clear flooring*, and may have three small, sound *knots*, with *sap* one inch on one side, but if less than three *knots*, then *sap* equal to two inches on one side, and shall be free from rot, splits and shakes.

Four-inch flooring strips, equal in quality to *first and second clear flooring*, shall be classed as *common six-inch flooring*.

SECTION 8.

Common Pine Lumber includes all boards, plank, joists, scantling, timber, fencing, and four-inch strips that are of a generally sound character, well manufactured, and not included in the foregoing qualities. Boards and plank should be square-edged on one side at least, full thickness, and have no large, loose *knots* or bad *shakes*. In wide boards, twelve inches and over, will allow a straight split one-sixth (1-6) the length of the piece when otherwise sound. Fencing should be of good, sound character—pieces that will not break easily, six inches wide and one inch thick. Scantling, joists and timber

should not have imperfections that would weaken the piece so that it cannot be used for substantial building purposes, and uniform in width and thickness. Timber should be measured at the small end, and, if much wane on the piece, reasonable allowance made for it.

Norway pine lumber shall be classed as *common* lumber, unless otherwise agreed upon.

SECTION 9.

All badly stained white pine lumber, that is otherwise better than common, shall be inspected into a lower grade than when bright and free from stain.

SECTION 10.

All lumber described in the foregoing Rules of Inspection shall be not less than one inch in thickness, and not less than twelve feet long.

SECTION 11.

Culls.—A quality that cannot be received into any of the foregoing, consisting of even lengths of ten feet and upwards, and so imperfect as not fit for ordinary uses without waste.

Mill Culls.—Refuse lumber.

SECTION 12.

All cargoes sold under *straight measure* shall consist of lumber twelve feet and over; and where, by imperfection of manufacture, such lumber is reduced in grade so as not to answer the purpose for which it was intended, it shall be measured at only one-half ($\frac{1}{2}$) the amount in the piece for which it was intended. And all pieces containing auger holes, if fourteen feet in length and over, and bored only at the ends, shall be measured in full, excluding two feet in the length of the piece; if bored in the centre it shall be measured for only one-half ($\frac{1}{2}$) the amount in the piece. All lumber less than twelve feet to be subject for special contract between the parties. *Mill Culls* excluded in all cases. All boards and strips to

be at least one inch thick; joists and scantling two or three inches thick.

SECTION 13.

SHINGLES.

Pine or Cedar—Sawed or Shaved, Warranted A or Star, shall be sixteen inches in length, not less than three-eighths ($\frac{3}{8}$) of an inch thick at the butt, and none less than three inches in width—all perfect. *Number One* shall be sixteen inches in length, not less than one-third ($\frac{1}{3}$) of an inch in thickness; may admit of forty shingles in *M.*, if perfect, less than three inches in width, or the same number of clipped, clips not to exceed three inches. All shingles to be smoothly sawed or shaved, and packed in good order.

Culls.—Are a quality manufactured from *winding, worm-eaten, shaly or dry-rot* timber, badly manufactured or less than sixteen inches in length.

It is recommended that one-fourth ($\frac{1}{4}$) *M.* bunches be packed in bands twenty inches in length, with twenty-five courses; one-half ($\frac{1}{2}$) *M.* bunches in twenty-five inch bands with forty courses. Shingles shall always be full count, and pay shall be collected only for the number of shingles actually delivered, regardless of the pretended number contained in each package or bundle; or, in other words, there shall be exacted in every instance for one thousand shingles the equivalent of one thousand pieces four inches wide.

SECTION 14.

LATH.

Number One—Should be four feet (no more, no less) in length, not less than three-eighths ($\frac{3}{8}$) of an inch thick, and one and one-half ($1\frac{1}{2}$) inches wide, free from shakes, rot, wane or worm-holes.

Number Two—Same length as *No. 1*, may be less than three-eighths ($\frac{3}{8}$) of an inch thick, and must be not less than one and one-quarter ($1\frac{1}{4}$) inches wide, will admit of wane and worm-holes not to exceed ten pieces in a bundle of one hundred.

Culls.—All that will not pass in the above-named qualities.

INSTRUCTIONS TO INSPECTORS.

It is understood that where the term *strips* is used in the sale of cargoes, the said strips shall be six inches in width, unless otherwise specified. All tapering pieces of lumber to be measured one-third ($\frac{1}{3}$) the distance from the narrow end, when twelve inches and over in width at the centre, and when less than twelve inches wide in centre to be measured at the narrow end. All lumber to be measured in even lengths (except culls) from twelve to thirty feet inclusive in length, and above that length timber shall be counted for what it will measure.

Culls commence ten feet in length and then measure the same as other qualities. Manufacture should be taken into consideration in all qualities, and if badly manufactured should reduce the grade.

Pieces of lumber that have auger-holes near the end should be measured for length between the holes, if twelve feet and over, and what it so measures be called in its proper quality; if auger-holes in the centre as well as at the ends, should go into *culls* and be measured full.

Inspectors are instructed that the rule herein given as to width and thickness is the standard width and thickness for merchantable lumber of each grade.

But when some slight deviation either in width or thickness should occur by accidental manufacture, so long as it will not hinder the lumber from being used for the purpose for which it was intended, such lumber shall not be reduced in grade on account of such deviation—it being the purpose of the foregoing Rules of Inspection to grade lumber so that the grades sold on the lumber market and out of the yards shall be the same.

Inspectors and measurers inspect-

ing or measuring any cargo of lumber, shall have full control of the unloading of the lumber, so far as determining how fast the lumber shall be delivered of the vessel.

In no case shall *mill-culls* be considered a quality, for the purpose of increasing the inspection fees.

Inspectors shall be required to draw six shingles from each end of each half thousand bunch, and three shingles from each end of each quarter thousand bunch, and to put his brand on each bunch.

After the chief inspector, or assistant chief inspector, has received his instructions from both buyer and seller, given together, no attention shall be paid to any different instruction or suggestion from either party, given singly.

When either inspector or measurer has been ordered on a cargo of lumber, and they should be delayed in doing the work, either from want of dock or any other cause that might have been avoided by either buyer or seller, then, and in that case, the actual damages arising from such delay shall be added to the fees for measuring or inspection such lumber.

All inspectors who inspect lumber by grades under the foregoing rules, in this market, shall mark the quality upon all lumber so inspected.

Inspectors or measurers shall call out in quantities of not over sixty feet (in ordinary cases) and be answered back by their tally man, distinctly.

Neither the chief inspector, assistant chief inspector, deputy, or any person employed by the Chicago Lumberman's Board of Trade for the purpose of inspecting or measuring lumber, shall be directly, or indirectly, interested in the business of buying or selling lumber, either for himself or other parties; nor shall any one so employed by this association receive other than the legal compensation for inspecting or measuring such lumber, and no person shall,

directly or indirectly, offer to such chief inspector, assistant chief inspector, deputy, or other person employed by this board, any sum of money, or gratuity, other than the fees established by the board.

The chief inspector shall keep the original tally sheets, with date, name of vessel, names of buyer and seller, and names of inspectors or measurers, and tally-men, at the general office for at least one year, and the said tally sheets shall at all times be accessible to any of the parties interested therein.

The chief inspector is required to include the entire cargo in his certificate, including lumber, lath, shingles, posts, etc.

FEEES.

1. The maximum charges for measuring and tallying lumber shall be thirteen cents per M. for straight measurement, or in two kinds; in three kinds fifteen cents per M.; in four kinds eighteen cents per M.; in five kinds twenty cents per M.

2. Twenty cents per M. for inspecting and marking two qualities; twenty-five cents per M. for inspecting and marking three or four qualities, and thirty cents per M. for inspecting and marking five or more qualities.

3. For measuring billstuff, the price charged shall be fixed, in each case, according to the time taken in doing the work.

4. For inspecting and branding shingles ten cents per M.; for counting shingles two cents per M.

5. For inspecting lath three cents per M.; for counting lath two cents per M.

6. For counting split posts two dollars (\$2.00) per M.; for counting round posts two dollars and a half (2.50) per M.; for inspecting and counting posts three dollars (\$3.00) per M.; for inspecting counting and measuring posts five dollars (\$5.00) per M.

7. For car-load lots three dollars

(\$3.00) for one car, and two dollars (\$2.00) for each additional car inspected at the same place, and on the same day. For hardwood car-load lots three dollars (\$3.00) per car.

The cost of measuring, tallying and inspecting shall be paid equally by buyer and seller, fees to be collected from the seller.

THE SHEERING BOOM PATENT CASE.

The March number of THE WISCONSIN LUMBERMAN contained an extended article on the "Sheering Boom Patent Case." In that article statements were made criticising the course of the Eau Claire Lumber Co. in their efforts to appropriate certain mechanical principles and works, to the detriment of others whom we believed to be exercising legitimate rights in using the Sheering Boom with the fin or rudder attachments. The Eau Claire Lumber Co. have, through an officer of the company, replied to the assertions of THE WISCONSIN LUMBERMAN, and attempt to disprove the statements made. The Eau Claire Lumber Co.'s reply will be found commencing on page 20 of this number. We have no particular desire to re-assert our former statements in reply to the communication from the Eau Claire Co., and will patiently await the action of the courts as sustaining or disproving our version of the case. But we will state that during an editorial trip on the Mississippi river from St. Louis to St. Paul, we had opportunity of conversing with many prominent lumbermen who are familiar with the history and merits of the controversy in question, and on every occasion.

we were assured that the statements as published in the March number of **THE WISCONSIN LUMBERMAN** were substantially correct.

"SECTION II."

The famous section of pine land bought of Mr. Sawyer last fall by Capt. John Lynch and partners, has thus far yielded 7,500,000 feet in very superior logs, and it is estimated that there is a still greater amount of standing pine. Capt. Lynch and Mr. Riley of Oshkosh have recently added materially to the amount and value of their pine land possessions by the purchase of 4,800 acres, near Mosinee, Marathon Co., Wis., from the firm of Burr, Emmons & Co., Stevens Point. The tract of 4,800 acres is estimated at 40,000,000 feet stumpage, and the gentlemen who have just invested their \$36,000 in its purchase have made a fortunate bargain. The tract of timber mentioned is worth, to-day, not less than \$50,000, and will increase rapidly in value, for within four months, at farthest, the Wisconsin Valley railroad will pass through a portion of the timber, thus affording unusual facilities for shipment, south and west.

VOLUME II.

For convenience in building and preserving the **WISCONSIN LUMBERMAN** it has become necessary to follow the usual custom of the larger monthly publications and divide the year's issue into two volumes. We therefore commence the seventh month's issue of the **WISCONSIN LUMBERMAN** as Vol.

II, No. 1. The increasing patronage bestowed warrants the regular enlargement of this publication with every successive number, and it is fair to presume that with the addition of the complete "Lumberman's Register" to the May number, we may be obliged to claim that the **WISCONSIN LUMBERMAN** is the largest monthly publication in the United States.

A NEW SAW MILL.

We have seen at the Reliance Works of Messrs. E. P. Allis & Co., of Milwaukee, two large iron frame double circular saw mills, which this establishment has just completed from a design of Mr. S. M. Hinkley. This design seems to comprise several new and important ideas, which are especially interesting to mill men. The mill is very heavy, is of comparatively simple construction, has feed and gig-works all complete within the mill, and is finished in every detail. The first mill of this make was shipped to the Superior region on such an urgent order that we were unable to obtain a photograph in time to procure cuts for this number. In the May number of the **WISCONSIN LUMBERMAN** we hope to present our readers with a handsomely illustrated and complete description of this very complete invention.

Many new mills are reported as being built along the line of the Wisconsin Central railroad north from Stevens Point. The quality of the pine tributary to the line of the Wisconsin Central, is of superior quality

THE KILBOURN DAM SUIT.

The rights of the lumbermen of the Wisconsin and Yellow rivers have been partially vindicated, in the matter of the Kilbourn Dam nuisance, by the recent trial in the United States Court before Judge Hopkins at Madison, wherein the jury gave a general verdict for the plaintiffs, J. W. Bradford, *et. al.*, for \$1,100 damages. A special verdict was also given by the jury that the dam was not built in accordance with the provisions of the charter of the Kilbourn Manufacturing Co., and also *that the dam is not a material obstruction to raft navigation.*

Of course the special verdict was rejected by Judge Hopkins, inasmuch as the separate clauses of the special verdict were in direct antagonism. By the verdict of the jury, however, as sustained by Judge Hopkins, a signal victory has been achieved by the lumbermen, and we believe they should be satisfied that their rights in the future will be fully sustained. We consider that the result of the trial is, practically, the destruction of the Kilbourn dam. Certainly the Kilbourn Manufacturing Co. will soon tire of paying the damages sustained by lumbermen in getting their rafts over the nuisance and obstruction, and will be obliged to forego the expensive pleasure of ruining the lumber interests of the Wisconsin and Yellow rivers. Nearly every lumber manufacturer in Central Wisconsin has sustained heavy damages from the necessity of hazarding their lumber in its passage over Kilbourn dam, and it is very probable that the

suit just decided is the commencement of the prosecution of a series of claims that will compel the Kilbourn Manufacturing Co. to end the contest by authorizing the removal of the dam.

POETIC JUSTICE.

We owe it to ourselves, if not to our readers, to mention that the WISCONSIN LUMBERMAN proof-reader who allowed one hundred and four thousand feet to represent the amount in pile at Minneapolis Jan. 1st, 1874, who insists that Chicago's receipts the present season will actually exceed *twelve million* feet, who credited Anson Eldred with logging on the Oconto to the extent of half the product of that large producing stream, and who had President Grant *inaugurated* for the second time on the 9th of June, 1872, has been rowed out to the middle of the Kinnickinnick and thrown overboard with seventy pounds of em quods attached to his neck.

LUMBERMEN'S REGISTER.

With the May number of the WISCONSIN LUMBERMAN will be commenced an accurate register of the lumbermen of Wisconsin, Minnesota, Iowa, Nebraska, Missouri, Kansas, and probably Michigan and Illinois. The names will not only be classified in accordance with post office address but also as manufacturers, jobbers, stave manufacturers, &c. Much time and labor has been expended in perfecting this register and it will prove of decided value to our readers.

Subscribe for the LUMBERMAN.

AN OPINION.

The WISCONSIN LUMBERMAN believes, as stated in several editorials in this issue, that the amount of lumber to be placed upon the market during the season of 1874 from the states of Michigan, Wisconsin and Minnesota, will not exceed seventy per cent. of the amount which was virtually upon the market in 1873. Allowing for arguments sake that an equal amount may be placed upon the market this year with that of 1873, and the conclusion is yet evident that lumber must, during the year meet with easier sales than it did last year. Reasons for these conclusions may be briefly stated.

The sales throughout the west since January 1st, have been far more than usually active.

The yard stocks in all the important markets north of St. Louis have been pretty effectually cleared of fencing, common and dimension lumber and shingles.

The farmers have bought and used a much larger proportion of lumber than usual, and therefore the interior yards have had large sales.

The present stocks of the interior yards is comparatively small, excepting where recent spring stocks have been received.

Interior dealers are recognizing the fact that now is their most favorable time for purchasing and are anxious to make contracts at present prices.

Money, in comparison with last year is abundant.

There is no probability of such a monetary scare as characterized the fall of 1873.

There is better prospects for general activity in most branches of trade than there was last year at this time.

Every log that can be bought from its bank and delivered at the mill, will be sawed up as rapidly as the means, will and convenience of the manufacturer will allow, as has been and always will be the case, yet we believe that the manufactured boards will meet with far more ready sale at even advanced prices than they did last year. In most cases in Wisconsin and Minnesota where there has been an abundance of snow, logging has been accomplished at less than usual expense and although the logs are higher up the streams they should, on account of reduction in price of labor, be delivered at about the usual cost of driving. The prospects certainly are that, on the average, manufacturers will be enabled to produce their lumber at a trifle less cost than usual, meet with quicker sales and receive better terms and prices than characterized the season of 1873. We do not look for exceeding great prosperity among manufacturers, but we do expect that the season of 1874 will be fairly profitable and successful and that the close of the present year will witness that all manufacturers and dealers are in better financial condition than has been their fortune within the past two years.

We invite discussion in THE WISCONSIN LUMBERMAN in reference to any and all matters of interest to the lumber trade; although, of course, we are not responsible for the opinions of correspondents.

A PROMINENT LUMBERMAN'S VIEW OF THE SITUATION.

No lack of Logs for the Summer's Sawing—
A larger amount in Pile at the Principal
Distributing Markets than ever before—
Manufacturers should delay shipping—
The Activity of the Market.

CHICAGO, March 27th, 1874.

EDITORS WISCONSIN LUMBERMAN:

The uncertainty that always precedes the close of the logging season has finally been dispelled by the announcement that the supply of logs is ample at all points and in some sections really an excess of the wants of manufacturers.

This being correct it is not only desirable but necessary that lumber manufacturers should carefully study demand and supply before proceeding farther in their season's business.

The lack of information as to the probable supply of logs has placed many men in an uncomfortable position, as they now learn that, contrary to their expectations their competitors are equally provided with stock with themselves, and that sections they supposed were almost entirely destitute of logs, have in fact more than a good supply.

For many years lumber has found a ready market for cash, and as a natural result it has caused capital to engage in its production, until too many mills have been built and when once erected they will be operated until disaster overtakes their owners. Unfortunately these mills are suited to no other business and cannot be converted to other use, and until new territory is opened to require their product will embarrass the general lumber trade.

The success or failure of the lumber trade of the present year rests wholly with the mill owners.

No one of their number doubts the following to be a correct state of the trade at this time.

FIRST.—That a larger amount of lumber is unsold and piled at the principal distributing markets than at any former time, when new lumber would arrive in the spring.

SECOND.—That if all the day sawing capacity of the mills is employed this season, that the amount piled must increase.

THIRD.—That sawing and shipping will commence early and new lumber will be placed on the market before stocks are sufficiently reduced to cause the urgent demand for cargoes, which a late season involves.

FOURTH.—That so large an amount of capital remains in lumber unsold of last season's production that large shipments if pressed upon the market would probably result in inaugurating a system of credit for lumber afloat or the alternative of low prices for cash.

These propositions if correct will be heeded by prudent men and mill owners may yet prevent disaster from the overstock of logs and still do no injustice to consumers of lumber, who in any event will have moderate prices.

No arrangement can be made to reduce the manufacture of lumber that would embrace all that are engaged in it. Many must saw and convert their stock for reasons wholly beyond their control, but all should delay shipping, when sales are to be forced and should the market decline,

if possible withdraw from it until a more favorable time. A still better plan, is to carry as many logs into 1875 as possible, rather than saw them at a loss.

It is well understood that the proceeds, derived from the sale of the last half of a season's logs, is reinvested in logs during the winter following and there seems no good reason why so much timber cannot be saved, rather than disposed of without profit.

The few cargoes of lumber already sold in this market the present year have shown an advance of nearly three dollars per M as compared to the closing prices of 1873. This is accounted for in part by the relative change in the money market, also by the lack of an assortment of dimension lumber.

In all the principal markets sales of lumber have been active since January, and at prices quite satisfactory. This state of the market can be continued if the supply is adjusted to meet the demand, but even with the present easy money market large receipts of lumber will result in a sure and early decline.

Through the medium of the lumber journals, all interested in the manufacture and sale of lumber can obtain correct information as to logs, lumber &c., and can operate much more understandingly than in former years, and if they persist in overstocking the market, they know in advance the penalty they incur.

Each must act for himself, and not follow the example of his competitor should he decline to reduce his business. This has been the greatest obstacle to overcome, but I do not despair of success.

AMOUNT OF PINE LANDS IN WISCONSIN.

In October last the WISCONSIN LUMBERMAN published an article in relation to the area of the pine lands of Wisconsin and the amount of standing pine in the state. In that article it was claimed that Wisconsin possessed nearly 40,000,000,000 feet pine stumpage. The estimate was quoted by many newspapers and was considered correct. In view of the published statements of our valued contemporary, the *Northwestern Lumberman*, to the effect that sixteen or eighteen billion feet of pine comprises the entire amount in Wisconsin, and also as we have received many letters calling our attention to the wide disparity between the statements made in the WISCONSIN LUMBERMAN and the *Northwestern Lumberman*, we will again give our estimate of the amount of pine in the state and also our authority for the figures. Hon. Almansen Eaton, of Stevens Point, was for fourteen years receiver of the United States Land Office in what is now known as the Wausau Land District. During that time Mr. Eaton made careful and reliable estimates of not only the amount of pine lands in the district of which he was receiver, but also of the area of pine lands in the state. From that gentleman we have received our facts and figures and they are considered very correct by the best informed lumbermen and land-lookers in the state. We will take the Wausau Land District as the basis of our calculations; the limits of that district are: Town 15 to state line, Range 2 to 11 east, inclusive. The estimated amount of pine in the

district is 2,000,000 acres. Including of course all that is accessible or inaccessible. The area comprises just about one-fourth the pine lands in the State. We estimate, therefore, that there are eight million acres of pine lands in Wisconsin, including all that portion cut over during the past three or four years. It should also be understood that the estimate includes many thousand acres of pine that is practically (for the present, at least,) inaccessible. The usual estimate of stumpage where so large a number of acres is considered, is 5,000 feet per acre. If there are 8,000,000 acres in the state, the estimated amount of stumpage would be 40,000,000,000 (forty billion) feet. There are intelligent gentlemen in the Chippewa valley region who claim that 28,000,000,000 feet is not too high an estimate of the amount of pine in that valley. If that estimate was correct Wisconsin could certainly claim even more than 40,000,000,000 pine stumpage. We are disposed to give more than usual credence to the estimates as furnished us by Mr. Eaton, as that gentleman not only possessed unusual facilities for obtaining accurate information, but is also thoroughly competent to deduce conclusions.

MILWAUKEE'S LUMBERMAN MAYOR.

The re-election of Mr. Harrison Ludington as mayor of Milwaukee, on an independent ticket, by a decided majority over the strongest available "regular" candidate, when all the rest of the succeeding candidates were as decidedly "regular," is simply a gratifying tribute to an exceptionally efficient public officer.

Mr. Ludington is an admirable specimen of the pioneer western settler. He is a man of action rather than ideas, of character rather than culture. His talent is especially executive. His manners have something of the waywardness and artlessness of a child; his performances are characterized by the vigor and tenacity and decision of that quality of real manhood which the average man likes to see. While he is by no means unexposed to criticism, it must be conceded by his severest critics that the purposes of Harrison Ludington are pure, that his foibles, like those of Noll Goldsmith's parson, have a virtuous inclination, that his blunders reveal a degree of character that is wholesome and refreshing. The administration of Mayor Ludington, like that of Ex-governor Washburn, has been such as to compel the respect and applause of his opponents, by convincing them equally of his sincerity and determination.

It is not unlikely that this latest demonstration of Mr. Ludington's personal strength in the metropolis, the ancient democratic stronghold, of Wisconsin may give him a current value in the politics of the state. If nominated on a sufficiently broad platform, against an average specimen of the new style of "reformer" or "anti-monopolist"—to-wit, some veteran Bourbon lawyer who has imbibed the pap of railroad corporations since the period of his professional infancy—there is little cause to doubt but that Harrison Ludington might be called on to transfer his residence from the shores of Lake Michigan to those of Lake Monona and to exercise his executive capacity in a somewhat wider sphere than that of resistance to the claims of Thilmeny pavement and cement sewer pipe. The main element of Mr. Ludington's weakness in state politics would be that which lately overthrew our lumberman Governor Washburn—the fact that he has not the confidence of the great railroad corporations.

LUMBER TRADE AT THE EAST.

The spring trade in the eastern markets is reported as very active, and at the principal shipping points the shipments this season as compared with those of last year, must be thoroughly appreciated by our readers. The Williamsport, (Pa.) *Daily Gazette* furnishes us with interesting statistics from which we compile as follows: For the week ending March 28, there was shipped from the Williamsport market 6,748,039 feet, being an increase of 649,879 feet over the amount shipped during the preceding week in March. The grand total shipped from Williamsport since January 1st, is 52,440,799 feet, showing an increase over the shipments last year, during the corresponding period, of over *eighteen million* feet. At all points on the Susquehanna the trade has opened under most favorable auspices and an excellent season is anticipated by the lumbermen of that locality. In reference to the situation on the Susquehanna, the Lock Haven *Republican* says:

It is estimated that about 700 rafts came down upon the recent flood. Quite a number of these are tied up between here and Queen's Run, awaiting sale or high water. Prices for square timber have been well maintained, first-class commanding from 18@22 cents per foot.

The drives are hung up in the mountain streams, and will remain so until another freshet.

With the fact before us that no logs were carried over last season, except such as were in the ponds connected with the mills, the limited number which can possibly reach us this season, the immense shipments already made and the demand for lumber for building purposes, our lumbermen on

the Susquehanna are sanguine of a heavy trade with good prices throughout the year.

TOLL RATES ON THE WISCONSIN.

At a recent meeting of the Wisconsin River Improvement Co., at Stevens Point, the following toll rates for the passage of lumber over the rapids were established for the season of 1874.

Big Bull Falls, lumber per M,	10	cts.
Little Bull Falls, " " "	10	cts.
Grand Rapids, " " "	7½	cts.
Lower Rapids, " " "	7½	cts.

The toll rate on shingles is the same on any of the improvements, and is placed at 2 cents per thousand on each of the rapids above named.

THE OPENING OF INLAND NAVIGATION AND ITS EFFECTS ON BUSINESS.

The *United States Economist* says: The indications are favorable for an early resumption of inland navigation. The winter has been what is generally known as an open one. The season has now well advanced, and although very cold weather may be looked for in April, yet it will neither be so bitter nor so prolonged as to materially retard the breaking up of ice in our lakes, rivers and canals. Last week the Hudson river was open to navigation. A week previous the ice in the Kennebec river, in Maine, broke up nearly a month earlier than was ever before known. We hope to be in a position to record the opening of the New York canals during the latter part of the present month.

The early opening of inland navigation this year would be an almost incalculable boon to commerce and business. It would put an end to the dead-lock that has so long prevailed in general business, and impart a new era of activity to almost every branch of trade. It is almost certain that the foreign export trade this year will be, if anything, heavier than last year. Europe will require every bushel of wheat we can get to the seaboard from this until October next, and probably longer, for the harvests in England and on the Continent must be largely above the average to cause any important reduction in the present demand. It is now definitely known that notwithstanding the enormous movements of breadstuffs last year, there still remains a

heavy surplus in the west and southwest. Correspondents who investigated the subject during the winter were much surprised at the large stocks of grain still held by farmers—stocks which would seem to cover with suspicion the official reports of the department of agriculture respecting the yield and consumption of grain in the west. This fact affords another illustration of the tendencies of business men and operators to overlook the amount of reserved stocks that may be retained in the hands of producers or owners, and which can be brought out by a brisk demand and good prices. The west has been by no means exhausted by the heavy exports of last year, and still retains stocks sufficient for the requirements of foreign consumers.

We may therefore expect a considerable activity on the resumption of inland navigation. Fortunately, there is money enough lying idle in the banks to move the surplus breadstuffs of the west, even without the aid of the extra \$44,000,000 of greenback reserves. The circulation of the money required to pay the farmer for his produce, and the various forwarding interests will be felt in every branch of trade, diffusing new life and activity. All doubts and uneasiness respecting the immediate future dissipate in view of the great fact that our people possess hundreds of millions of dollars' worth of products which other nations want to buy and for which they are ready to pay us cash.

As the time comes for a more active movement of our cereal, cotton and other productions to the seaboard, the interior trade between New York and the west and south will rapidly improve. Country buyers will be more bold and liberal in their operations. It is known that, comparatively speaking, stocks in the interior are very low. Country merchants have been afraid to carry anything but goods required for immediate consumption, and extra requirements consequent on an improvement in the condition of the purchasing capacity of western and southern farmers and planters can only be made up by increased purchases in the east. It will thus be seen what an important connection there is between the speedy resumption of inland navigation and a general return of business activity.

RESPONSIBILITY OF INDORSERS.

Among the cases recently decided by the supreme court of Pennsylvania in one of great importance in explanation of the extent of the responsibility of indorsers. The mercantile law provides that indorsers upon notes or bills of exchange shall be responsible in case on non-payment by the makers. But to fix this liability upon

them it must be shown that demand was made of the maker "within a reasonable time" after the note or bill was due, and that payment was refused or neglected. Under the custom in Pennsylvania the time for demand has generally been held to be the day on which the note or bill was due. In the case which called for the opinion of the court the demand had been made of the maker, it is alleged, on the part of the plaintiff, on the day when the note was due. The reply was, that if such demand was ever made it was not at a reasonable time, at proper hours, nor of the maker, nor of any of his clerks. The defendant, in fact, alleges, against the notarial certificate sought to be made available, that the demand was not made in business hours at his place of business, nor in reasonable hours at his residence. The decision of the court seems to sustain the position that the demand must be made at a business place in ordinary business hours, but that it will be good if made out of such hours if the maker of the note has clerks and agents at either place where the demand is made. A demand of payment at the place of business is not sufficient at improper hours. In regard to a demand at the dwelling of maker, the court lays down the following rule in relation to the time: "Where it is payable at a private house it should be demanded at a reasonable time, and not so late in the day or so early in the morning that it may be presumed the family is in bed. * * * Expect to find business men in their banks and offices only during business hours, and to make the demand at such places out of such hours would be a useless formality. So to make the presentation at a man's house at midnight is to make it when, from the nature of things, the maker is unprepared to pay, although he may have the will and the means to do so."

Now is the time to advertise in the
WISCONSIN LUMBERMAN.

SUMMER PROSPECTS FOR LUMBERMEN.

The WISCONSIN LUMBERMAN, during the panic months which marked the fall season of 1873, repeatedly, argued that the spring lumber trade of 1874 would be characterized by unusual activity. As early as October it became evident that the farmers of the country were in a most prosperous condition, notwithstanding that the ghost of havoc seemed stalking through financial circles. It also became evident that lumbermen as a class lacked both money and inclination to prepare for a heavy winters logging work. Careful calculations proved that the lumber markets generally with the exception of St. Louis were not so seriously overstocked as has appeared from the fact that the fall trade was exceedingly dull and unremunerative. The extreme low price of common lumber was also considered. The facts enumerated induced editorial argument in the WISCONSIN LUMBERMAN, claiming that the prospects for active trade in the spring were at least more favorable than most lumbermen would admit. The predictions offered have been fulfilled, and the lumber trade for the season since January 15th has been very active indeed. The trade thus far has been most noticeable. As a natural consequence the spring advancement in prices has been mostly confined to shingles and the lower grades of lumber. The questions now to be discussed refer to the summer prospects for demand, supply and prices. It is absolutely certain that the amount of logs cut this winter in the pineries of Michigan, Wisconsin and Minnesota, is not above seventy per cent, at the very highest estimate, of the cut of 1872-3. It is also certain that the amount of old logs left over in Wisconsin and Minnesota is not a greater per cent. than usual, for it should be remembered that the spring drive of 1873 was unusually large. In Michigan there is undoubtedly a larger amount of old logs on hand than ever before, but it is now evident that a less proportion of new logs have been cut there, than even in the Wisconsin and Minnesota pineries. We consider, therefore, that with the old logs on hand and the new logs cut this winter, the three great lumber producing states of Michigan, Wisconsin and Minnesota will each average about the same per cent of material for manufacture this season. It cannot be expected, from present indications, that the driving season of 1874 is to be any more favorable than was that of 1873, so that it is presumable that only the usual per cent of new logs will be got to the mills. The WISCONSIN LUMBERMEN believes, then, that the present season of manufacturing will not produce over seventy per cent of the amount of lumber manufactured in either 1872 or 1873. The spring demand for lumber thus far has been decidedly more satisfactory than lumbermen generally expected and is greatly superior to that of 1873. The question is, will the demand still continue active? The farmers trade will soon decline, but western dealers well know that the present time is their best opportunity for replenishing their exhausted yards and are now, and will for several months to come, be anxious to improve the ad-

vantage of present prices. Railroad and city demand may not be quite equal to that of the two preceding seasons, but there is every indication that the general demand will continue its present activity to a sufficient degree to render the seasons trade much more satisfactory than that of 1873. Even with the same demand that characterized 1873, there is not the same danger of an over stock, and therefore prices should not only continue to rule firm, but advance gradually from present quotations until manufacturers can be paid fairly remunerative interest on capital invested and reasonable business profits. There is undoubtedly a sufficient amount of lumber and logs on hand to fairly and easily meet the demands of this season, and therefore there is no prospect of fancy prices; but it is just as certain that there cannot be as great an overstock of lumber placed upon the market this season as there was last. We may therefore predict fair sales and reasonably remunerative prices as likely to obtain during the present season. There is no use in urging manufactures to saw less lumber; their logs are cut, will be got to the mills if possible and will be sawed. The only advice the WISCONSIN LUMBERMAN has to offer is: Get fair prices for your boards for there is no doubt but if you are able to hold them they will be worth at least as much per M the remainder of the season as they now are.

Subscribe for the WISCONSIN LUMBERMAN. The only periodical of its class in the west.

LOCK HAVEN LUMBER TRADE.

The *Republican* says that advices from Clearfield, and up the river, indicates that about two-thirds of the logs will be brought in with the first freshet, thus making matters particularly lively. There has not been as much activity in building rafts, as in getting logs upon the banks, and consequently there may not be as many rafts come down this season as heretofore.

Below are the shipments of lumber from Lock Haven, as reported in the *Republican*, for the week ending on the 7th instant:

ROUGH LUMBER		
	Cars	Feet.
Shaw & Co.....	13	180,000
Pardee & Cook.....	3	30,000
Thomas & Mason.....	11	110,000
Towns, Shaw & Co.....	2	20,000
Furst & Co.....	2	20,000
E. A. & W. D. Irwin.....	3	30,000
Saylor, Day & Co.....	5	50,000
Best & Hopkins.....	4	40,000
Ross, Rockey & Co.....	1	10,000
Merriman & Co.....	2	20,000
Gossler & Co.....	2	20,000
SHINGLES.		
Furst & Co.....	1	10,099
Total for week.....	49	490,000
Previously reported.....	198	19,181,108
Total for 1874.....	427	19,671,180

NEW SAW MILL ENTERPRISE.—Messrs. E. P. Welles and D. J. Bachelder, recently of the Clinton Lumber Company, and L. B. Wadleigh, a Council Bluffs lumber dealer, have purchased the Haun distillery property in Lyons and will convert the same into a saw mill by the addition of suitable machinery. The price paid for the property, we learn, was unusually low, and the new proprietors have already put twenty-five or thirty men at work making repairs and preparing for lumbering operations, and have given orders for the necessary machinery. The new firm is composed of practical mill men, who have had abundant experience to enable them to do a profitable business.—*Clinton (Iowa) Herald.*

AN IMPORTANT LAW.

From the Stevens Point Journal

The law given below is one in which every man who runs the river, as well as those running dams, etc., is peculiarly interested. Its need has long been felt by pilots and raftsmen, but nothing was done in the legislature towards securing it until this winter, when D. R. Clements, of this county, took the matter in hand. The bill was introduced early in the session, and at once strong opposition was developed. Through the active efforts of Mr. Clements it was finally carried, however, and for his efforts in this direction he is deserving of, and will receive, the thanks of every raftsman on the Wisconsin.

[Published March, 21, 1874.]

CHAPTER 165.

AN ACT to secure the safe navigation of the Wisconsin river.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

Section 1. Every person or persons, or corporations, municipal or private, who now control or maintain any dam or bridge across the Wisconsin river, shall, within nine months from and after the publication of this act, construct at one side of the slide over such dam, and at each end of the span of such bridge extended over the channel of such river, guide boom or booms and extend the same up and diagonally across the river towards the banks thereof, in such a manner and of sufficient length to secure the safe passage of all lumber and crafts over the slide of such dams and through the channel span of bridges, and each boom shall be attached securely to a pier at the upper end thereof, or to some other firm structure.

Section 2. All dams and bridges hereafter built across said river shall have constructed therewith, at the end of their erection, the guide booms provided for in the first section of this act.

Section 3. Any person maintaining or controlling any dam or bridge across said river, or who may hereafter build, either under any contract, lease or as tenant in common or any occupancy by which said person is liable to account in any manner for the value of the use thereof, shall, in

case the owner neglects or refuses for nine months after the publication of this act to construct such piers and booms, build them himself, and the cost and expense thereof shall constitute a set-off against any claim for rent or claim for the use thereof, and such occupant may also recover the same by action against the owner.

Section 4. In all cases of injury to property by reason of neglect or refusal to make the piers and booms as herein provided, or in case such piers and booms shall be so built as not to afford the safety and protection intended hereby, and injury to property thereby ensue, the owner of such property may recover treble damages thereof against the owner and occupant of such dam and or bridge, jointly or severally, as he may elect, and such judgment may be enforced as a personal judgment, and shall also, when docketed in the proper county, constitute and be a lien upon the whole of such dam, including its abutments and shore line and upon the mill and fixtures situated therewith, and upon such bridge and its approaches, whenever owned by a person or a private corporation, and such judgment may be enforced against such dam or bridge by sale thereof as is provided by law for sale of real estate.

Section 5. In all cases where injury to person, loss of limb or life occurs, caused by the neglect or refusal to provide such piers and guide booms, or by the insufficient or defective construction thereof, such persons, or his heirs or widow, may maintain an action against the owner and occupant thereof, in the same manner and with the same remedies both as to the action and to enforcing the judgment as is provided in this act for injury to personal property.

Section 6. This act shall not in any manner be construed so as to discharge or affect the liability of persons owning or controlling any dam, bridge, or other structure in or across said river, for damages, as now determined by law in respect to matters not herein provided for, nor shall the provisions of this act apply to any bridge upon said river below Portage City until channel span has been established by the government engineer who may have control of the improvement at said river.

Section 7. This act shall be in force from and after its passage and publication.

Approved March 7, 1874.

SHEERING BOOM CONTROVERSY.

STATEMENTS OF AN OFFICER OF THE EAU
CLAIRE LUMBER COMPANY.

He Vigorously Salls Into the "Wisconsin Lumberman"—Claims that Mr. Pond Really Did Invent "Improved Device For Sheering Booms"—That the Act of Congress Only Refers All Parties to their Legal Rights, and that Messrs. Carpenter and Sawyer Have Only Done Their Duty—An Able Presentation of the Other Side of this Question.

Correspondence Wisconsin Lumberman.

EAU CLAIRE, WIS., March 20, 1874.

Gentlemen:—Our attention has been called to an article published in the *Wisconsin Lumberman* of March and republished in the *MILWAUKEE JOURNAL OF COMMERCE*.

We have read it with surprise and regret, that on a mere *ex parte* statement any journal could so misrepresent an inventor, the patentees, Representative Sawyer, Senator Carpenter and congress, and glorify the acts of a combination of infringers with their counsel as disinterested benefactors to lumbermen.

It is not our purpose, in noticing your article, to enter into an argument stating facts and law to show the validity of the patent. The press can take sides and bandy assertions but is not in a position accurately to arrive at the truth in this case. Reliable facts can only be reached, under the rules of evidence and under the sanctity of an oath, in the judicial atmosphere of a court. And this case must turn upon the facts. To present these facts, omitting the loose gossip on which your article was indited would require much time and space, and then, being *ex parte* would accomplish no result except to influence public opinion, which is no part of our purpose. We rely simply upon our rights and are anxious to submit them to the courts for adjustment. After the suit now pending is tried which we hope will be soon, you will have an opportunity to place the truth before the public.

On that occasion we expect to establish beyond a question the fact, that Levi W. Pond was the ingenious inventor of this most valuable invention, that the rights secured to the patentees through the patent and the act of June 10th, 1872, were in strict conformity to the patent law and congressional usage, and that the equities, not the avaricious desires, of the public were carefully and fully protected thereon. The counsel for these in-

fringers who allege that congress ignorantly and hastily passed this act, have recently been to Washington and procured the introduction of two bills in congress, one for the amendment of this act—a sort of commune measure to relieve their clients from liability—and the other to repeal the act in toto, a sort of drag-net to bring to its support all representatives whose constituents might be benefited thereby—communism on a little larger scale.

These able counsel were given an early and patient hearing before the committee, presented their superior knowledge of congressional usage and patent law, and after they had done and said all, they could not convince congress that any right or equity of the public was invaded by the act. After a simple statement of the facts on which the act was granted the senate committee reported against both bills and the senate confirmed their judgment.

You say "Mr. Cottrill instead of resorting to the courts and subjecting his clients to years of expensive litigation to have these acts of congress over-ruled as unconstitutional, has appealed directly to congress to repeal the law or to modify it so far as the vested rights of his clients are concerned." We say by this feint he has not accomplished his intended purpose. By what process of reasoning he reached the learned conclusion that congress was the proper tribunal to decide upon the constitutionality of a law two years upon the statute books and then awaiting judicial decision, is beyond ordinary comprehension, or how he could reasonably have expected congress to modify the law to suit the interests of his clients is equally unaccountable. Congress, on a simple request, will not vote a poor man's ingenuity to be the property of the public. Perhaps through a similar magnanimity he has furnished you for publication what we are forced to characterize a tissue of mis-statements in expectation of forcing us, by means of a perverted public sentiment, to give his clients the free use of the invention. Indeed, before this raid was made on congress or this skirmishing was commenced in your journal, we were told that unless we gave this Mississippi Logging Company the free use of this invention, they would wipe this act from the statute book, and keep this case in the courts for ten years. From some undisclosed cause, this company are fortunate in finding lawyers and agents without a parallel in devotion and self-sacrificing benevolence. From our stand-point, this whole proceeding smacks of fillibustering, bullying people out of their rights, and a watchful looking for something to turn up to relieve this company from liability, while at the bottom is a fearful apprehension of impending justice.

The trouble with this company is that they don't want to pay, are afraid of the courts, have no defence and want congress to manufacture one. But this proceeding will fail of its purpose. In the usual way we applied to this company to pay for the use of this inven-

tion. They declined and we were compelled to commence a suit, and while we can raise money to pay lawyers (we don't expect them to work without pay) we shall push this suit to a trial. You affirm that Mr. Pond was not the inventor of this sheer boom, that it was constructed in 1869, by one Randall, that Mr. Pond was then in the employ of said Randall, that meanwhile he entered the service of the Eau Claire Lumber Co., and was "an inventor of considerable genius, as well as an appropriator of the inventions of others." You also add "it is not known who invented it." Our answer to these assertions is that not one of them is true, and if true the courts are the proper tribunal to consider them. You seem to think it is a very suspicious circumstance that Mr. Pond did not commence suits before. It is easily explained although the delay is not in the least unusual. You will bear in mind that the Beef Slough Co. did not use this boom until 1868, after the application for the patent. They failed in 1869 or 1870. It was no object to sue them. The Mississippi Logging Association leased their works, did little in 1871, something more in 1872, and after the spring drive in 1873, having in the meantime exhausted efforts for a settlement, the suit was commenced. The suit was brought against them in preference to others because they were able and ready to defend, and were deriving from the use of this boom, ten-fold more benefit than all the other unpaying loggers on the Chippewa river.

The Beef Slough Company through their agent were in negotiation for the right to use this boom when they failed, but this Mississippi Logging Company regard it as more just to pay lawyers than inventors—a policy seemingly in conformity with the general scope of their proceedings.

In the year 1872 this company by some unaccountable means obtained from the state of Wisconsin the right to the exclusive use of one of the two mouths of the Chippewa river, a stream twelve miles in length and in two surveys at a long interval declared navigable. They have appropriated this river to a log depository, to the exclusion of the public. Without this sheer boom to conduct the logs across the channel and out of the main river the project would be a failure. With it and one man to handle it they can place in the depository annually three, four or five hundred million, as we are advised, charging a dollar per M for boomage.

Having temporarily, at least, ousted congress of its sovereignty over this navigable stream, if through congress they can oust Mr. Pond of his rights as an inventor, with this double wrong holding virtually a lien of a dollar per M feet, on the pine timber in the Chippewa valley, they will practically have reached their seeming business motto "unjustly to keep what you have got and get what you can is the chief end of these Mississippi mill lumbermen." After setting forth the

act of June 10th, 1872, you use the following language: "Senator Carpenter now says that he was entirely ignorant of the scope, nature and intention of this extraordinary bill. He claims to have been misled by the statements of the prominent member of the Eau Claire Lumber Company, who went to Washington to secure the passage of the bill. From the course of affairs it seems that the committee on patents as well as both houses of congress were about as ignorant of the nature of this bill as Senator Carpenter."

Perhaps a statement of facts will present this matter in a different light and in the place of subjecting congress, Representative Sawyer, Senator Carpenter, and others to the charge of ignorance, carelessness and duplicity will fix upon you the character of an inexcusable libeller.

In February 1871, J. G. Thorp, the president of the Eau Claire Lumber Company, applied to Senator Carpenter to present to congress a bill containing the first section of the act in question.

Senator Carpenter examined it and said it ought not to pass in that shape as it might interfere with equities in the public. For the purpose of protecting the interests of the public and securing to the patentees their rights under the patent Senator Carpenter added the second section to the bill. In this shape the bill was introduced into the senate in February 1871, was referred to the patent committee, by them reported upon favorably, passed the senate, went to the house, was referred to the house committee, reported favorably but failed to be reached by the house before the adjournment of congress. On the assembling of congress, in December 1871, the bill was again introduced, was thoroughly considered both by the senate and house committee, just passed the senate and in June 1872 (several months after) passed the house. This bill was before the 41st and 42d congress, was approved virtually and unanimously, by four committees on patents, and after nearly two years became a law. How long a time would you desire congress or expect Senator Carpenter to devote to the consideration of this bill?

Again you say "the final haste and manifest ignorance with which this important act was passed appear from attention to the following circumstance, president Grant was inaugurated for the second time June 9th, 1872, when the senate reassembled the following morning and fifteen minutes before its long adjournment sine die, it was moved and carried that the committee on patents, be discharged from the further consideration of bill 624. The bill was then read a third time, passed and sent to the president who signed it that afternoon."

But for the fact that you make the all-absorbing interest surrounding the inauguration of the president, the occasion for the above fabrication we should not be disposed to call

your attention to the inexcusable errors contained in the above paragraph. Instead of the 10th of June, 1872, president Grant was inaugurated the second time on the 4th of March, 1873, nearly nine months after his signature was placed to this bill. It had passed the senate some three or four months previous, after which it passed the house and then received the approval of the president. As the circumstances on which you predicate and vindicate your defamatory comments, did not and could not exist, it follows that your conclusions are equally erroneous.

You further say that "Mr. Cottrill has just prepared a statement of facts for the use of members of congress, which proves by annexed affidavits that this method of sheering booms, was in use prior to the date of plaintiff's application for a patent as follows," and there are given the names and places. That James Perry or Jacob Spaulding in 1862, used this invention as patented we deny. That it was used by two other parties prior to the application for the patent in its imperfect state we admit. That several parties, whose affidavits you claim to have, certified to Levi W. Pond being the inventor, we are prepared to show. That the Mississippi Logging Co., did not use it until 1871, over three years after such application for the patent we affirm and and your affidavits omit to state, but you will observe that the act does not seek to make liable any one who had used it prior to the application for the patent, nor does it extend to the patentees any rights except such as existed by virtue of the patent. It does not interfere with any defence going to show Mr. Pond was not the inventor. It simply applies a general principle to a particular case which congress could do, and it was usual for them to do, and the courts could not, and in so doing they framed the act in conformity to the patent law. It grants, confirms and extends the rights described in the patent to the patentees for two years, notwithstanding that said invention may have been to some extent possessed and enjoyed by the public prior to the date of the application for said letters patent, and then provides "that any person who had more than two years prior to the date of application for said letters patent (following the usage of the patent law) bona fide erected or constructed any such machine or structure for the purpose of putting said invention into use in any of its modifications shall have and enjoy the right of using said invention in any such specific machine or structure, &c., &c., in all respects as though this act had not been passed."

As we understand it the act is remedial and has in view three things: To relieve the invention from constructive abandonment through the discretionary right of congress to apply to the case a general principle, to extend the patent for an additional term of two years, and to protect from liability in conse-

quence of the act that portion of the public who had bona fide invested their money in this invention two years prior to the application for the patent. In this way every equity in the public was preserved to the letter and spirit of the patent law.

The Mississippi Logging Company claim that inasmuch as under the arbitrary law of patents the parties using the invention prior to the specified time may technically have acquired some rights, therefore those who did not use it, acquired similar rights. This claim is unreasonable unjust and in violation of the intent of the patent law. Invention is as much the property of the inventor as logs of the logger. The peculiar quality of this property required peculiar laws for its protection from injury, and it is the policy of the government to extend to inventors every security not expressly prohibited by the patent law.

It is within the discretion of congress, if the case called for it, to grant an independent act for a patent, but while they would decline to do this they could not reasonably hesitate to grant the legislation asked for in this case. Having passed this act the patentees regarded it as authentic and permanent and sold rights guaranteeing the exclusive use of this invention in several localities. Any interference by congress with this act now two years upon the statute book might work great injustice to patentees and purchasers, inflicting a thousand-fold more of injury than remedy, as by so doing they would subject the patentees to large liabilities undertaken in consequence of the act and invade vested rights of third parties who have purchased the exclusive right to use this invention in certain localities and invested their money in mills, gathering around them small villages all hanging upon this boom.

The Mississippi Logging Company complain of one thing and ask another, they declare the act unlawful and without reference to the remedy ask that it be amended to relieve them from liability, carrying out the juvenile saying which we must be pardoned for paraphrasing, as it aptly illustrates the case of all the lumbermen family:—like ourselves the best if we can plunder this boom, the devil may take the rest.

In its special drift and intent the general character of your article is unaccountable. You accept *ex parte* statements as established facts, which are the matters in dispute, and with these for your vindication assail private citizens, representatives, senators, and the legislative department of the government generally, and then through the leverage of interest call upon all lumbermen to unite and co-operate, right or wrong in divesting the patentees of their rights and investing them in the public. We say without reference to right or wrong, because you were not in a position to decide that question.

Until convinced to the contrary, we shall be

slow to admit that lumbermen as a body can be induced to join in such a lawless crusade.

Respectfully Yours,
AN OFFICER OF THE EAU CLAIRE LUMBER COMPANY.

NATIONAL ASSOCIATION OF THE LUMBER TRADE.

From the Boston Lumber Trade.

It may seem to some of our readers that we have recently given to this subject an undue amount of space. Our apology for continuing the discussion at this time consists in the fact that our own convictions of its importance are so strong, and that these are shared by gentlemen, in every section of the country, of the largest experience and influence in the trade, as has been evinced by the numerous letters, which we have received from them, a part of which we have published and by the highly commendatory notices of our articles and the proposition contained in them by several of our contemporaries published, wholly or in part, in the interest of the trade. One of these came to hand last week, the number for March of the WISCONSIN LUMBERMAN, the ablest journal, in our estimation in the northwest, devoted to this interest. It quotes several letters from our columns, with the following among other introductory remarks:

"The WISCONSIN LUMBERMAN has repeatedly produced editorial arguments in favor of such a national association, as well as both state and local organizations, and we are pleased to note that an increasing interest in the matter is being felt throughout the lumber localities of the country."

An exception to this, otherwise universal, approval of the proposition is found in the February number of the *Lumberman's Gazette*, published at Bay City, Michigan, which we should have noticed before, but it was not received at our office till this week. On opening its pages and reading its references to our articles, published the first of them, Feb. 16th, we naturally supposed that the March number of the *Gazette* had reached us in tolerably good season. A glance at the imprint, however, corrected our error.

A leader in this number of the *Gazette* is devoted to this subject of a national lumber association, in which this sentence—a rather remarkable one—appears:

"It seems to us that those who have given expression to their views have done so without first considering what sort of

a body they would expect to see assembled."

As this sentence together with the whole article clearly has reference to the articles—our own and those of our correspondents—which we have recently published, it may be proper to quote a few expressions which may indicate whether or not we, and those who have so strongly coincided with us in the expressions have "first considered" what we were talking about. In our article of Feb. 16, we say:

"So strong have been our own convictions of the very great advantage which would accrue from the proposed organization to manufacturers and dealers in all sections of the country, that it has seemed clear to us that thinking men, belonging both classes, must have the same convictions."

In the same paper we give the letter of Col. T. L. Kinsey, president of the southern lumber and timber association, in which he says:

"I have noticed at different times your views as to the great benefit to be derived from a unity of feeling on the part of manufacturers and dealers in lumber, and most cordially endorse them."

In our issue of Feb. 23, we say:

"Thoroughly convinced, as we have been from the outset of our connection with the trade, that, more perhaps than any other of the leading business interests of our country, such an association is not only of the utmost importance, but even absolutely essential, especially as promising the solution of many open questions, and those having a vital connection with the interests of both manufacturers and dealers."

In the same paper Hon. N. B. Bradley of Bay City, Mich., speaks very strongly of one probable advantage of such an association:

"That there may be a better understanding, by the *producers* and *dealers* from time to time, as to the amount of stock on hand, and that will be needed, from time to time, in order to keep the market supplied."

Messrs. Shepard, Davis & Co., leading men in the lumber interests of Vermont, say:

"In relation to the forming of a national association of *Lumber Manufacturers* and *dealers* would say, that we are favorably inclined to it."

Other letters were published in our issue of March 9th, too late, however, to

have come under the notice of our brother editor, in season for his article, referring to the same idea. In that number, also, a concern well-known as among the largest manufactures in Michigan, and also doing a very large business in Albany, N. Y., as wholesale dealers, say:

"We have long cherished the idea of a National Association" and the sooner one is formed the better, as the advantages gained must be patent to all who have considered the subject."

Our contemporary expresses a doubt of the feasibility of the proposition, because "the interests of wholesale dealers in lumber and the interests of lumber manufacturers are as much at variance as can well be imagined. What common interests have the Michigan manufacturer and the Albany dealer." To say nothing now, of the fact that, as in the case named above, the manufacturer of Michigan and dealer of Albany may be, identically the same person or persons, we would now suggest that it is because interests are diverse and need to be harmonized, and can be harmonized in no other way so well as by periodical gatherings and a free interchange of opinions of leading gentlemen in all branches of the trade, whose personal character would give assurance of such decisions of all questions as would be equitable and for the general good, and whose relation to all the varied interests concerned would give authority to those decisions.

All the great business interests of the country are divided, and of necessity, into producers of the raw material, manufacturers, wholesale dealers, jobbers and retail dealers, and while many of their interests are identical, others of them are variant, divergent, or even opposed to each other. This is as true, but no more so, of the lumber trade, as of other leading interests. We instance the iron trade, including miners, founders, manufacturers of machinery and hardware, and dealers in the latter articles; so with the shoe and leather association, which includes manufacturers of leather, also of boot and shoes (a distinct and in some respects opposing interests), and dealers. As in the lumber trade, so with the shoe and leather interests, there are many very large and influential concerns, which cover all branches as manufacturers and dealers, while others are restricted to a single branch. We might name other interests, as illustrations of our argument.

But this will suffice, and we can only express our surprise that any who should "first consider" would assume so untenable a position, as that of our contemporary.

ANNUAL MEETING OF THE EAU CLAIRE LUMBER COMPANY.

From the Eau Claire Press Press.

The annual meeting of the stockholders and directors of the Eau Claire lumber company has just been held at their office here.

The directors and officers remain the same as last year, with the exception that N. C. Chapman, Jr., takes the place of his late father, as director, and J. G. Chapman, as treasurer.

The following resolution was introduced by J. T. Gilbert, and passed unanimously:

WHEREAS. At the re-assembling of the stockholders of the Eau Claire lumber company, at their annual meeting, the empty seat of our esteemed associate, Nelson C. Chapman, painfully reminds us of our irreparable loss, we deem it proper to record in the archives of this company, our sentiments of appreciation, esteem and deep sorrow. He was one of the firm of Chapman, Thorp & Co., the founders of the business which merged into the Eau Claire lumber company. Although in charge of the distributing department of the business at St. Louis, he never failed to be present at the annual meetings of the company, imparting wise and conservative counsel, and by his genial and animating presence, inspiring his associates with confidence and renewed energy. Perhaps, to a greater extent than any other, he was the life of the business, and contributed largely to its success. He was always at his post, unceasing and untiring in his efforts, and possessed great executive ability. As a co-worker, we can hardly estimate his loss. He was born June 24th, 1811, at Durham, in the state of New York, and departed this life September 12, 1873, in the city of St. Louis, leaving a large property, an honored name, an unblemished character and carrying with him a spiritual wealth gathered in through the discipline of years.

LUMBER PROSPECTS.—A very heavy crop of logs has been banked upon the Chippewa and also upon the St. Croix and tributary rivers. There

have not been quite so many logging camps this winter as formerly, but on account of the greater number of days of good sleighing, a very large amount of logs have been hauled. Logs and lumber cannot be expected to bring the high prices of former years, but the loggers this winter have had everything in their favor, good sleighing for over 140 days, cheap labor and cheap feed for teams, and no epizootic, so that the expense of cutting and hauling the logs per thousand feet has not been much over half that of last year. Up to the commencement of the present week logs have been hauled at every camp, but we learn that the soft weather of the last few days has impeded operations.—*Hudson, Wis. True Reporter.*

TIMBER CULTURE.

N. Y. Shipping List.

The president lately sent to the house of representatives a message in favor of appointing a commission for the encouragement of timber culture. A bill for that purpose has promptly been passed by both houses, and we trust that, unlike many other measures, it will not be permitted to become a dead letter on the statute. The rapid thinning out of the forests has everywhere attracted attention, as a proper regulation of this matter has not only a direct influence on the supply of timber, but has a most important bearing on the climatic condition of the country. In some countries the proof is undoubted that the rain fall has been so seriously affected by the cutting down of trees that their fertility has been completely destroyed, what were formerly fertile and well watered districts being now arid and desert. The time has come when the question must be confronted here. In some of the old settled parts of the country the destruction of timber has been complete and the work is extending. Year by year the lumbermen have to go further back in search of suitable timber, and although the quantity in some sections is still large, yet it must be remembered that the area of the country is enormous, and that if large tracts are denuded of trees, the existence of well-wooded dis-

tricts elsewhere cannot make up for this. What can be done by well directed effort to preserve as well as to improve woodlands is shown by the result of the efforts made in Germany. In that country the forests, owing to reckless and improvident treatment, were becoming exhausted, but they are now in a position not only to supply the country's wants, but also to export at a fair profit. The subject of timber preservation and culture in our own country is one which should engage earnest attention from all who are interested, either directly or indirectly. There are thousands of acres of land unfit for agriculture, but which are suitable for timber culture. Were care taken that a new growth should replace that which is removed, and this could be done at a small expense, a permanency would be given to timber culture which is now wanting. There is nothing theoretical about this; it has been tried successfully elsewhere, and whatever objection might be made now, the time will come when the matter must be attended to under much more advantageous circumstances.

LOGS AND LUMBER AT ALPENA.

The *Saginawian* says: By private letter from Alpena we learn that about 50,000,000 feet of new logs have been cut during the past winter which, with the 30,000,000 feet of old logs carried over will give a full stock for operations during the mill running season of 1874.

Eight million feet of lumber have been sold during the past fortnight, part at \$6 and \$12, culls and common, and part at 6.50, \$13 and \$35. Besides these sales, Richardson, Avery & Co. have sold a large quantity on private terms, but the figures were no doubt as good as those given in other sales.

About 8,000,000 feet of logs have been sold at figures corresponding with rates on lumber, all of which are far better than the closing market last fall indicated, and the lumber interest at Alpena is buoyant and hopeful.

THE MICHIGAN LAND ASSOCIATION.

The Meeting at Lansing, March 10 and 11—Pine Land Owners in Attendance—The Proposed Organization—Articles of Association.

From the Saginaw Courier.

The meeting of pine timbered land men adjourned from the previous day, was held at Mead's Hall, Lansing; at 9 o'clock Wednesday morning, Col-Stockbridge in the chair. Many of the delegates left the previous evening, but several came in from Detroit on the evening train, so that on assembling there was quite a respectable attendance, or in fact nearly as large as the previous days.

The committee of five—Newell Avery, chairman—appointed Tuesday to revise the articles of association, and who had been in session until a late hour Tuesday night in the performance of their work, submitted their report, which was read, accepted and the committee discharged. The only material or radical change from the articles of association and by-laws, as first reported, was the preamble. The other changes are of a minor character.

After the acceptance of the report, Hon. Wm. L. Webber, in a brief speech, showed the importance of the subject, and the necessity of a full consideration of it before final action is taken, offered the following which was adopted :

Resolved, That the foregoing articles of association and by-laws be approved and recommended to those interested in timber lands and in the honest execution of the tax laws, and the laws providing for the honest expenditure of the public money, as a basis for permanent organization, and further than the general organization of those interested in these matters substantially on the basis of said articles is desirable; and further, that for the purpose of such general organization this meeting adjourn to meet at East Saginaw on the fifteenth day of April, 1874, at 2 o'clock P. M., and that in the meantime a committee of seven, consisting of Newell Avery of Detroit, Thomas Palmer of Detroit, L. B. Town-

send of Ionia, Jos. A. Whittier of East Saginaw, David Ward of Pontiac, James Shearer of Bay City, and D. M. Benjamin of Grand Rapids, be appointed to cause the said articles of association and by-laws to be printed in circular form, and in the newspapers, such circulars to be addressed and sent to such persons as may be known to the committee to be interested, and that the co-operation of all interested be invited to the end that the organization may be so general as to command success; that said committee invite the views of persons interested, and report at the said adjourned meeting, with such recommendations as to them may seem proper.

It being deemed advisable to transact no further business, the meeting adjourned.

THOSE IN ATTENDANCE.

The following is not a complete list of the delegates in attendance, but is sufficiently complete to show the character and standing of the men engaged in this work :

W. R. Burt, Saginaw.	O. W. Barnes, Mason.
Arthur Hill, "	P. E. L. Pierce, G. Rapids.
G H Van Eitten "	S C Hall, Muskegon.
C L Ortman, "	G A Mitchell, G Rapids.
C H Davis, "	D M Benjamin, "
J A Whittier, "	D R Shaw, Pontiac.
Edwin Eddy, "	Eugene Smith, St. Claire.
D J Smith, "	L B Townsend, Ionia.
A P Brewer, "	J T Brown, Big Rapids.
John McGraw, "	T D Stimpson, Big Rapids.
H W Sage, "	W S Gerrish, Hersey.
N S Lockwood "	Newell Avery, Detroit.
H M Bradley "	F B Stockbridge, Sa'gat'k.
James Shearer "	W C Hoyt, Detroit.
D W Rust, "	J L Woods, Lexington.
W J Bartow, "	J C Waterbury, Lexington.
Wm Callum, "	Geo W Pack, Cleveland.
T H McGraw, "	David Ward, Pontiac.
Wm L Webber "	S Rothschild, Detroit.
Ezra Rust, "	H H Getty, Muskegon.
J E Shaw, "	S N Wilcox, Chicago.
W C Yawkey, "	W H Bradley, Muskegon.
J H Hill, "	C E Reesegnie, Ludington.
Thomas Nester "	Fred Hall, Ionia.
S G M Gates, "	E Hall, Detroit.
G B Whitman, "	N Sheppard, Stanton.
N Barnard, "	E B Moore, "
Thomas Merrill "	T W Palmer, Detroit.
M M Stanton, Detroit.	David Preston, "
J D Standish "	N McGraft, Muskegon.
E Heather, St Paul.	J H Kidd, Ionia.
	Charles W. Butler, Lansing.

The above list represents over 3,000,000 acres of pine lands, and nearly, if not quite, \$50,000,000 in capital.

THE PROPOSED ORGANIZATION.

Following is a draft of the articles of association and by-laws agreed upon by the committee, and which

will be submitted to the meeting to be held in this city April 15th, for adoption :

WHEREAS, In the act admitting Michigan into the Union, it was provided that the lands of non-residents should never be taxed higher than the lands of residents, which provision is still in force, and

WHEREAS, The laws of Michigan provide that monies raised by taxation shall be honestly applied to purposes for which the same was raised by taxation, and also provides limitations upon the power to raise taxes for local purposes, all of which provisions have been systematically violated in the newer portions of the state, for a period of years, and to such an extent as to have become the usage rather than the exception, thereby imposing upon the owners of lands in those sections of the state, a burden which has become unbearable, and is so general as to require associated effort, and for the advancement of the interests of the timber owners of the state, the subscribers hereto associate themselves together under the name and style of Michigan Timber Land Association, of which the following are the

ARTICLES OF ASSOCIATION.

ARTICLE 1. The name of this association shall be the Michigan Timber Land Association.

ART. 2. We, the persons whose names are signed to the following articles, do hereby agree, each with the other, that we will each pay the membership and annual fees fixed in said articles, and will also pay such sums as may be assessed to us and each of us from time to time, and that we will use our efforts individually to carry out and promote the objects of this organization.

ART. 3. All who shall sign these articles of association, or may hereafter be recommended by the executive committee may become members of this association by signing these articles and paying to the treasurer an admission fee of ten (10) dollars and the annual dues of ten dollars in advance.

ART. 4. The officers of this association shall consist of a president, five vice-presidents, a recording secretary, a corresponding secretary and treasurer, all of whom shall be members of this association, and the president and a majority of the executive committee shall be residents of the state of Michigan.

ART. 5. For the appointment or election of all standing committees the by-laws shall provide.

ART. 6. Each person signing these articles shall set opposite his name the number of acres of timbered land which he owns or represents or is interested in.

ART. 7. All money necessary to carry out the purposes of this organization shall be raised by an assessment against each member on the basis of the number of acres owned, represented or controlled by each respectively, and from admission fees and annual dues.

ART. 8. The by-laws of this association shall only be amended or changed at the regular annual meeting.

ART. 9. The officers of this association shall be elected in such manner and at such times as the by-laws may provide, and shall hold their offices for one year or till their successors are elected.

ART. 10. These articles of association may be changed and amended at any annual meeting as may be provided for by a resolution by two-thirds vote of all the members present.

BY-LAWS

of the Michigan Timber Land Association.

SECTION 1. The regular annual meeting of the members of this association shall be held in the city of Lansing, on the second Thursday of January in each year, at 10 o'clock A. M., two weeks notice of such annual meeting being given by the secretary through mail, and if for any cause the annual election of officers shall not be held, the president shall order the election to be held on some other day, of which twenty days notice shall be given.

Semi-annual meetings shall be held at Saginaw and Grand Rapids alternately. These meetings to be held on the third Tuesday in September, in each year. Notice, as above, being given through the mail.

SEC. 2. The officers of the association shall be a president, five vice-presidents, recording secretary, corresponding secretary and treasurer, who shall be elected by ballot at the annual meeting.

The officers of the association after the ones elected at its organization shall be chosen at the annual meeting, and shall hold their offices unless they shall resign or become disqualified for the current year for which they are elected or till their successors are chosen.

SEC. 3. The duties of the president

shall be to preside at all meetings of the association, preserve order, and regulate discussions according to the usual parliamentary rules, shall have general supervisory care and advise over the duties of the secretary and treasurer, shall call all special meetings of the members of the association, and be subject to such other duties as may be prescribed from time to time by the members of the association, for the promotion of the business for which the organization is perfected.

SEC. 4. The duties of the vice presidents shall be to assume and perform the duties of the president in his absence and shall act in the order in which they are elected.

SEC. 5. The duties of the recording secretary shall be to take charge of the books and records of the association, and keep such accounts and memoranda, as shall be required by the president of the association, and shall attend all meetings of the association, and shall keep a record of all their proceedings.

SEC. 6. The duties of the corresponding secretary, who shall be one of the executive committee, and clerk thereof, shall be to conduct all correspondence, and draw all orders for the payment of money upon the treasurer, specifying to whom to be paid, and shall so arrange the several accounts and bills and vouchers by numbers and other references, so that the members may at any time understand the several accounts. He shall keep a cash account, showing date of all receipts, payments and disbursements, stating in what account and from whom received, and on what account and to whom paid. He shall deposit all moneys received with the treasurer, keep a correct account of all deposits so made from time to time. He shall be required to attend to such other duties as the executive committee may require of him.

SEC. 7. The duties of the treasurer shall be to receive all moneys belonging to the association, and pay it out on the order of the corresponding secretary, and shall keep an account of the same, showing from whom received, the date when, and for what paid into the treasury, and, in payments, shall state to whom, and when paid, and on what account, so that the books will show, at all times, the condition of the treasury.

SEC. 8. There shall be an executive committee composed of seven members of the association, of which the president

and corresponding secretary shall be members, and the president shall be chairman of the same, and the said members shall be elected by ballot of the association at a regular meeting. The committee shall be appointed at each annual meeting, and shall serve one year or until their successors are elected.

SEC. 9. The duties of the executive committee shall be to supervise the gathering of statistics as to the amount of pine timber in the state, and as to the amount cut annually, with the average price received for the same, also perform such other duties which the association may from time to time instruct them to gather. They shall audit all accounts and present to the association for consideration from time to time such matters as in their judgment would inure to their benefit. They shall have full power to employ such aid as in their judgment may be necessary, but no liability shall be incurred beyond the amount in the treasurer's hands, except on the vote of the association. They shall also examine and pass on any application that may be presented to them for membership. In all cases of illegal or excessive taxation upon the lands represented of any members of the association brought to the notice of the executive committee it shall be the duty of the committee to undertake the prosecution and punishment of such cases; if in the judgment of the committee such course will be conducive to the general object aimed at by the association.

SEC. 10. All standing committees shall be appointed by the president, the number of members of which any such committee shall be composed, shall be fixed upon by the members of the association at any regular meeting.

SEC. 11. Special meetings shall be called by the president on written request of twenty members, the request to state the business for which the meeting is called, and only such business shall be acted on at that meeting, twenty days notice written or printed, to be given to each member of the association by personal service or by depositing a notice in the post office, directed to such member at his place of residence or business, postage prepaid. The president may call a special meeting at any time on like notice being given, without request.

SEC. 12. All officers shall be elected by ballot.

SEC. 13. The compensation of the

president shall be five dollars per day for time actually employed, and his expenses while so employed.

SEC. 14. The compensation of the corresponding secretary shall be one hundred dollars per annum, and actual expenses while employed.

SEC. 15. The compensation of members of the executive committee shall be five dollars per day for time actually employed and actual expenses while so employed.

SEC. 16. The compensation of any officers or members of the committees may be fixed or changed at any annual meeting of the association, and the compensation of any employees shall be fixed by the executive committee.

SEC. 17. Twenty members shall constitute a quorum for the transaction of business.

SEC. 18. Any member who shall fail to pay his annual dues or any assessment made against him within sixty days after being notified by the corresponding secretary as to the amount, shall cease to be a member until reinstated upon payment of dues, which may be done by the executive committee.

SEC. 19. Every member of the association shall be entitled to one vote. Every member shall be entitled to one additional vote for each three thousand (3,000) acres of timbered land which he owns or represents in the state; but no member shall be entitled to more than ten votes.

SEC. 20. At each annual and semi-annual meeting of the association, the executive committee shall make a report of the condition of the finances, and submit a statement of all receipts, and disbursements by items since the date of the last report.

SEC. 21. Any member may withdraw from the association by giving thirty days notice in writing to the president, and after such withdrawal shall not be liable for any dues or assessments not previously levied.

\$3.00 in fare is saved by travelers from Milwaukee desiring to reach eastern cities, by taking the Detroit & Milwaukee railroad line. We call attention to the season's arrangement for 1874, as published in this number of THE WISCONSIN LUMBERMAN.

SOFT WEATHER IN MICHIGAN.

The Prospect of an Early Opening—The Manufacturers and Dealers of Manistee.

MANISTEE, March 28th, 1874.

EDITORS WISCONSIN LUMBERMAN:—

Since our last writing we have had a couple of flurries of snow here which have enabled loggers to put in a good many logs—that is to say, such loggers as had shady woods where the bottom did not all thaw out on the first of this month. But for the past five days the weather has been all in all like May, and if it continues ten days longer we will see navigation open in Manistee lake.

As there is no other news of importance, I will give you the names of lumber dealers and manufacturers at this place. First in order, commencing at the mouth of the river and proceeding upwards, we have—manufacturers—Canfield & Wheeler, ten million per season, Cushman, Calkins & Co., fourteen million, Green & Millmore, fourteen million, Wheeler & Magill, ten million, Lewis Sands fourteen million, Shrigley & Co., seven million, Dunham & Dennet, six million, Stronich Lumber Co. fourteen millions, Davis & Co., six million, Filer & Sons, fourteen million; Horace Jaber, twelve millions; Neal Leach, seven million; Chas. Rity Bros., twenty-five million; R. G. Peters & Co., fourteen million; Engleman, Babcock & Lalling, fourteen million; Gifford, Raddock & Co., nineteen million; Jyson, Sweet & Co., thirty-four million.

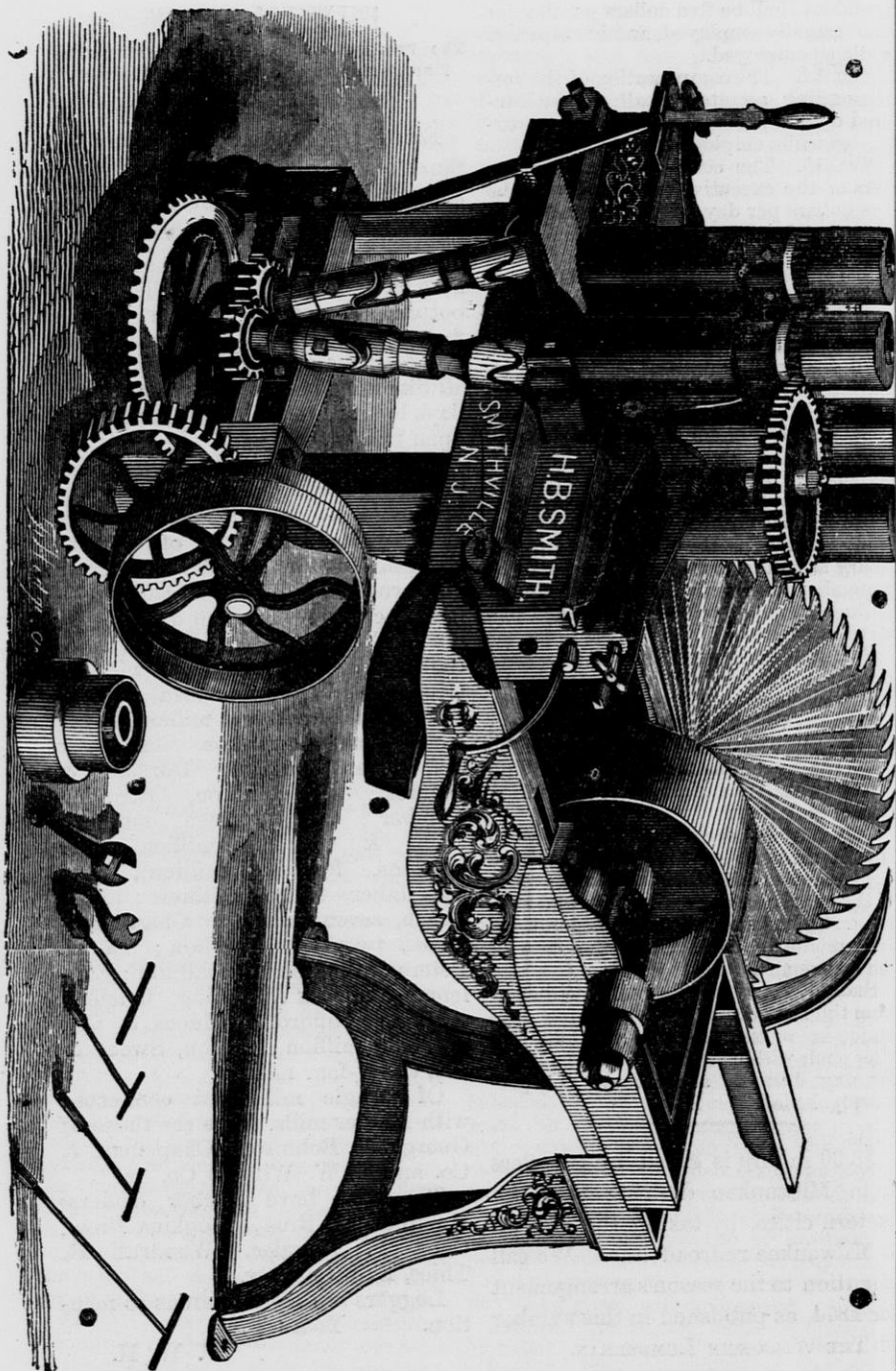
Of shingle mills not connected with lumber mills, there are those of George W. Robinson, Chapeman & Co. and G. W. Wing & Co.

Then we have lumber dealers: Huennekens Bros., Hopkins Bros., Chos. F. Ruggles, Woodruff H. Thies, E. J. Copley.

Loggers are too numerous to mention.

Yours Truly,

F. W. H.



HEAVY RE-SAWER.

One of the most complete re-sawing machines now in use is that of the patent and manufacture of H. B. Smith, and known as "Smith's Heavy Re-sawer." On the opposite page we give an illustration of the machine that mill men may be enabled to judge of its appearance. The points of utility and superiority claimed for this machine may be mentioned as follows:

It will do every kind of work that can be done with any re-sawing machine, and some kinds of work which cannot be done by any other.

It will centre any thickness of stuff from $\frac{1}{4}$ to 6 inches in thickness, and do it accurately—or the feed works can be made rigid on either side, so as to take off any thickness required, leaving the opposite rolls yielding, and the rolls are so arranged as to be set for any bevel ever required, always working free and easy.

The feed works are very powerful having four feed rolls with power applied to them all.

The arbor is very heavy and stiff, to prevent springing, which is very necessary to a good working saw. The arbor is held in a moveable frame, to slide up to the feed rolls as the saw wears down, or to use a smaller saw, if required.

The machine is very heavy and the strongest machine in use, being built of iron and steel.

The factory prices for the four sizes manufactured are:

With 24 inch saw	\$250.00
" 30 " "	275.00
" 36 " "	300.00
" 42 " "	

O. L. Packard, Milwaukee, is agent for these machines and will give any desired information on application in person or by letter.

CHICAGO & MICHIGAN LAKE SHORE RAILROAD.

Tribute to its Projectors—Description of the Road—Its Relation to the Lumber Interest of Michigan.

From the Northwestern Lumberman.

Prominently associated with pioneer railroad enterprise in western Michigan must stand the name of A. H. Morrison, of St. Joseph. Were we inclined to pen a eulogy upon that gentleman instead of merely giving the brief sketch of the Chicago & Michigan Lake Shore railroad which we are about to do, we could find glowing sentences in which to tell of his untiring energy, spirit and devotion in the work of making a thoroughfare to the great lumbering regions of western Michigan.

The organization of the company and building of the road may be briefly summarized:

Articles of association were filed April 24, 1869, the capital stock being \$1,000,000. The Grand Rapids & Lake Shore railroad company was incorporated with it in September 1870, and the Muskegon & Big Rapids company in October 1872, the name Chicago & Michigan Lake Shore railroad, being preserved, and the proposed termini Manistee and Indiana. Work was commenced upon the road immediately after the articles of association were filed, and the sections between New Buffalo and St. Joseph, along which lies some of the finest fruit lands in Michigan, was completed and trains running thereupon in January, 1870, or in less than nine months after ground was first broken.

Men were not wanting when the enterprise was commenced, to predict that the road would not pay, and it was not unfrequently hinted that "Mr. Morrison had an elephant on his hands;" but that gentleman's business capacity, energy and pluck, were not counted in the reckoning when such remarks were made, and the remarkable short space of time in which the line was completed and in successful operation, gave matters quite a different aspect. In January, 1871, it was completed to Grand Junction, and in April, 1872, to Pentwater. In July 1872, to Grand Rapids *via* Holland, and in July 1873 to Big Rapids. The road, as far as completed, passes through the famous "Fruit Belt," and some of the finest pine lands in Michigan.

The following list shows the number of

saw mills situated on the line of the road and its branches:

STATION.	NO. MILLS.	Robinson.....	2
Town Line.....	1	Spoonville*.....	1
Wilkinson.....	1	Nunica.....	1
Chikaming.....	1	Fruitport.....	1
Troy.....	3	Nortons.....	1
Browns.....	2	Muskegon*.....	24
Bridgmans.....	3	Dalton.....	1
Moins.....	2	Calif.....	1
Stevensville.....	3	Sweets.....	2
St. Joseph*.....	2	Whitehall*.....	5
Benton Harbor*.....	2	Montague*.....	7
Coloma.....	2	Greenwood.....	1
Watervliet.....	2	New Era.....	2
Hartford.....	2	Shelby.....	1
Deerfield.....	1	Collins.....	1
Bangor.....	3	Mears.....	2
Breedsville.....	1	Round Lake.....	1
Thompsons.....	1	Pentwater*.....	7
Grand Junctions.....	2	GRAND RAPIDS BRANCH.	
Wrights.....	1	Zeeland.....	2
Sweets.....	1	Hudsonville.....	1
Black River.....	1	Grandville.....	1
Dailys.....	1	Grand Rapids.....	4
Hoppertown.....	3	BIG RAPIDS BRANCH.	
Sherman.....	2	Twin Lake.....	1
Clyde.....	1	Dolton.....	1
Fenns ville.....	1	Fremont.....	5
Richmond.....	1	Morgan.....	1
Holland*.....	4	Alleyton.....	1
Blendon.....	1	Hungerford.....	1
Olive.....	1	Big Rapids.....	5
Ottawa.....	1		

Mills marked * are also located on the lake.

Daily capacity of mills on main line which ship* exclusively by rail..... 684,000 feet

Daily capacity of mills on Big Rapids Branch..... 340,000 feet

Total capacity of mills shipping by rail... 974,000 feet

This does not include the capacity of the Lakeport mills, or the shingle and stave mills, many of which are attached to saw mills. There are also twelve or fifteen mills not directly on the same line of the road, the product of which is shipped exclusively by rail, the lumber being hauled to the stations by teams. Outside of lumber, one-fourth of the tonnage of this road consisted, in 1873, of railroad ties, long timber and piles, in all amounting to 130,000 tons of forest product.

The company has extensive machine-shops at St. Joseph and will soon erect others at Muskegon. The St. Joseph shops keep in constant employment over thirty men. The round-house capacity along the line is, New Buffalo, three stalls. St. Joseph, Grand Junction two, Holland two, Muskegon four, Pentwater two, and Big Rapids three. The rolling stock consists of,

Locomotives.....	25
First class coaches.....	7
Second class coaches.....	5
Baggage cars.....	7
Cabooses.....	8
Box cars.....	135
Platform cars.....	465

The passenger traffic in 1873 averaged something over \$1,000 per day, freight about \$1,500.

The entire length of completed road is two hundred and fifty miles. Hon James F. Jay, of the Michigan Central, is president of this road. Mr. Morrison is vice president and general manager. The freight department is under the efficient and exceeding able management of Mr. A. M. Nichols, at Muskegon, a thorough gentleman, of large experience in his calling, and whose courteous, genial manner wins the respect of every one with whom he is brought in contact. Mr. Nichols is also assistant superintendent, being assisted in the freight department by Mr. H. L. Brown of St. Joseph. The company's interests are represented in this city by Mr. L. D. Campbell, general western agent, who was for some time connected with the road in the the capacity of train despatcher.

A LARGE OVERSTOCK IN ST. LOUIS.

Delay in the Opening of the Market for White Pine—A Suggestion of the "Wisconsin Lumberman" Indorsed.

Correspondence of the Wisconsin Lumberman.

EDITORS WISCONSIN LUMBERMAN:

SIR—The market in White Pine has not opened, the weather being inclement and the running of rafts from their winter quarters not yet entirely safe. There can be, however, no doubt as to the opening of the market. It must be unsatisfactory to the manufacturer, as our stocks here are still very large and whatever has been sold since October, 1873, has been disposed of at ruinous prices. We feel safe in predicting that lumber will bring as high a price above Burlington as here, at least in the fore part of the season. We hope that the idea of the WISCONSIN LUMBERMAN to withhold lumber from this market will be carried out.

Yours Respectfully,
METHUDY & MEYER.

CHICAGO LUMBERMANS' BOARD OF TRADE.

Chicago lumbermen have organized an association, under the style "CHICAGO LUMBERMAN'S BOARD OF TRADE," which will certainly prove beneficial to lumbermen, if the declared intentions of the association "to regulate transactions, adjust differences, promote fair dealing, and furnish all possible information that can benefit its members" are faithfully carried out. As capable, efficient and honorable men as are to be found in Chicago appear as prime movers in the organization, and their names are sufficient guarantee that the objects and declarations of the "Chicago Lumberman's Board of Trade" will be fulfilled as indicated in the following preamble and rules of the association :

The officers of the association are :

President—A. C. Calkins.
Vice President—C. M. Charnley.
Secretary—C. A. Street.
Treasurer—A. G. Van Schaick.

DIRECTORS.

A. C. Calkins.	G. C. Benton.
C. M. Charnley.	A. R. Gray.
C. A. Street.	M. McDonald.
A. G. Van Schaick.	W. D. Houghtelling.
J. C. Brooks.	A. A. Carpenter.
Alex. Officer.	B. L. Anderson.
J. B. Goodman.	

COMMITTEE OF ARBITRATION.

A. P. Kelley, J. A. B. Waldo, J. T. Noble, E. A. Lord, W. Bushnell.

COMMITTEE OF APPEALS.

J. Beidler, T. M. Avery, E. W. Brooks, R. P. Derickson, E. Crepin.

COMMITTEE OF INSPECTION.

M. McDonald, Jas. C. Brooks, J. McMullen, Geo. C. Benton, J. H. Swan.

The following preamble and rules of government were adopted :

Chicago having become the great lumber market of the northwest, situated midway between the pineries of the lakes and the sections that are destitute of lumber, enjoying unsurpassed facilities of transportation, both by lake and railway ; with this vast business employing an amount

of capital second to no other branch of trade ; we deem it important that an organization should be effected which should embrace this entire lumber interest ; and further believing that this organization is demanded, to regulate transactions, adjust differences, promote fair dealing, and furnish all possible information that can benefit its members : We hereby organize an association, and adopt the following rules and by-laws :

RULE I.

This association shall be called the "Chicago Lumberman's Board of Trade," and shall be for the benefit of all lumber dealers who may become members thereof ; and shall have its office and place of business at Chicago, Illinois.

RULE II.

SECTION 1. The government of the association shall be vested in a president, a vice president, (who shall also be president and vice president of the board of directors), and eleven directors. There shall also be chosen a committee of arbitration, and a committee of appeals, each consisting of five members ; all of the above being lumber dealers and residents of Chicago.

SEC. 2. A president and vice president, the first board of directors, and the several committees, shall be elected at the meeting at which a constitution is adopted, and all subsequent elections shall be held at the annual meeting, to be held on the second Monday in February of each and every year thereafter ; and the term of office shall commence on the Monday succeeding the election.

SEC. 3. For president and vice president, a majority of the whole number of votes cast shall be necessary to a choice ; but the eleven persons receiving the greatest number of votes for directors, the five receiving the greatest number for committee of arbitration, and the five re-

ceiving the greatest number for a chairman "pro tem" shall be committee of appeals, shall be declared elected.

SEC. 4. The manner of election shall be by ballot; and the term of office one year, or until successors are elected.

SEC. 5. If at the annual meeting there should be a failure to elect a president or vice president, another election shall take place on the following day, at the same place; and if, at such election, there should be a failure to elect such officer, another election shall take place on the day thereafter, when the person receiving the greatest number of votes for president or vice president shall be declared duly elected.

RULE III.

DUTIES OF PRESIDENT.

SECTION 1. It shall be the duty of the president to preside at and preserve order at all meetings of the association, or of the board of directors, to direct the minutes of the previous meeting, reports of committees, or other papers, to be read, or to call extra meetings when he or the board of directors may deem it expedient; notice of such meeting being given through the mail to each member, one week in advance.

SEC. 2. Upon the written request of ten members he shall call a meeting of the association, notice of the same to be inserted in at least two of Chicago daily newspapers for three days immediately preceding such meeting.

SEC. 3. He shall, in the absence of the secretary, appoint one of the members to officiate in his place for the time being.

RULE IV.

DUTIES OF VICE PRESIDENT.

SECTION 1. It shall be the duty of the vice president to perform the duties of the president in case of his absence or disability. In the absence of the president and vice president,

RULE V.

DUTIES OF THE DIRECTORS.

SECTION 1. All the financial and business concerns of this association shall be managed and conducted by the board of directors, and be wholly under their supervision and direction.

SEC. 2. Said board of directors shall appoint a secretary, a treasurer, an inspection committee, and such other committees as may seem desirable, and may employ such agents and clerks as they may deem necessary, and change them at discretion. They shall also provide a suitable room or rooms for the use of this association, and a place for the safe keeping of all books, papers and documents, to be under the care and supervision of the secretary, and the same shall be used by him as an office, and the place of meeting for the said association, and board of directors.

RULE VI.

DUTIES OF THE SECRETARY.

SECTION 1. The secretary, under the direction of the board of directors, shall keep a fair and regular journal of the proceedings of the association; take charge of the books, papers and property belonging to the association; keep a correct account of the lumber imports and exports of the city, by lake, canal, railroad or otherwise; collect and record valuable statistical information pertaining to, or that may benefit the lumber interests of the city of Chicago, and post the same in the rooms of the association daily, and at the annual meeting in each year, make to the association a full report of the lumber business of the city for the preceding year, ending December 31st, with such other information as may be in his possession that may be of interest to its members. He shall furnish the chairman of each committee a copy of the reso-

tutions whereby he was appointed, and under the direction of the president shall give notice of meetings; conduct the correspondence of the association, and read such records or papers as he may direct; shall himself, or by substitute, attend meetings of committees of arbitration or appeals, and of the board of directors, and keep an official record of their proceedings; give notice when their services are required, issue the necessary notices and papers to parties, and render copies of the verdicts to the parties in a case. He shall collect all moneys due the association for assessments, fines, fees, or otherwise, and pay the same over to the treasurer; shall keep his office (which shall be at the association rooms) open during usual business hours, shall see that the rooms and property of the association are kept in good order, and perform such other duties as the board of directors may from time to time direct.

RULE VII.

DUTIES OF THE TREASURER.

SECTION 1. The treasurer shall receive and keep a correct account of all moneys belonging to the association, deposited with him, and shall disburse the same on the order of the secretary, countersigned by the president. He shall make a quarterly report to the board of directors, on the second Monday in May, August, November, and with his full report to the association at its annual meeting on the second Monday in February of each year.

RULE VIII.

ARBITRATIONS.

SECTION 1. The duty of the committee of arbitration shall be to investigate and decide all disputes and difficulties of a financial, mercantile, or commercial character which may be submitted to it. The statements of the principals and witnesses in each case shall be made under oath,

and, having been recorded, the committee shall proceed to decide the case.

SEC. 2. The decisions of the committee of arbitrations may be appealed from, and the case carried to the committee of appeals for its revision within ten days after the judgment of the former committee shall have been delivered to the parties concerned, by notice of such appeal being given to the secretary or chairman of the committee of arbitration, in writing.

SEC. 3. The duty of the committee of appeals shall be to review such written evidence and decisions of the committee of arbitration, as may be demurred to and formally brought before it, and its decision shall be final and binding upon the parties. They shall, however, before their decision, receive such statements in writing, or in person, under oath, that either party may wish to introduce, and if, in their judgment, any new evidence is produced that will justify a rehearing of the case by the committee of arbitration, they shall remand the case to the committee of arbitration for a new trial; but any final decision of the committee of appeals shall be based on the record of the committee of arbitration only.

SEC. 4. The committee of arbitration and the committee of appeals shall render their awards, in writing, to the parties in controversy, through the secretary of the association, within one week after their decision shall have been made; such awards shall be signed by the chairman of the committee, and shall be certified to by the president, or vice president, and the secretary.

RULE IX.

MEMBERSHIP.

SECTION 1. Any individual, firm, or company, dealing in lumber, may become a member of this association after application in writing to the president, and the same having been

approved by the board of directors, or executive committee, and subscribing to these articles, and paying their membership fees, and may withdraw from the same by notifying the chairman of said board of directors, in writing, of its intention so to do, three months before such withdrawal takes effect; but the individual, firm, or company, so withdrawing, shall be liable for all assessments made by the board of directors against such individual, firm, or company, for the payment of any liabilities existing at the date of such notice.

RULE X.

FEES.

SECTION 1. The initiation fee for each member shall be fifteen dollars, and the annual dues, ten dollars, additional, payable semi-annually in advance.

SEC. 2. The board of directors shall raise, from time to time, whatever further sums may, in its judgment, be necessary to meet the expenses of this association, by assessing the same equitably upon its members.

RULE XI.

DISCIPLINE.

SECTION 1. Any member of this association failing to make payment of any annual dues, or of any assessment made upon him by the board of directors, in pursuance of these articles, for the space of one month after being notified of the same, by the secretary, shall, at the discretion of said board of directors, have all his rights to the benefits and assistance of this association suspended, and shall thereafter be restored to the same only upon such terms as said board of directors may prescribe.

RULE XII.

QUORUM.

SECTION 1. Twenty of the members of this association shall constitute a quorum for the transaction of business at any regular or called meeting

and for any meeting of the board of directors five of such board shall constitute a quorum. In the case, however, of the committee of arbitration, or that of appeals, three shall constitute a quorum, and a majority decision of such quorum shall be binding.

RULE XIII.

The benefits of this association, as herein contemplated, shall be granted to all its members in every respect alike.

RULE XIV.

which we did not obtain, provides for the filling of vacancies in case of death, resignation, or removal of officers, &c.

HEMLOCK EXTRACT FACTORIES IN MICHIGAN.

The manufacture of hemlock for tanners' use is now being carried on very extensively in Michigan under patents of Johnson, Goedell & Co., who are proprietors of a process for evaporation used by several factories in that state and in Wisconsin. The office of the firm is in East Saginaw, Mich., and T. W. Johnson who spent some three months recently among Massachusetts tanners introducing his extract, writes as follows to the *Saginaw Courier*:

"Some 300 tons of Michigan extract have now been used by those who have indorsed its merits, an amount abundantly sufficient to establish its reputation beyond all cavil, and set at rest all questions as to the perfection of our process over all other devices employed in the manufacture of hemlock extracts. Let those who may regard these claims as mere assertions not forget that they are now fully substantiated by the concurrent testimony of the highest authority in the leather trade. With the foregoing we also have the corroborative indorsement of Prof. S. Dana Hays, state assayer for Massachusetts, who, after testing by analysis our goods taken at various times from some twenty shipments from Michigan, has over his official signature given our extract the highest degree of strength and purity as compared with other makers.

For my own as well as for the information of those interested in this new man-

ufacturing enterprise, I have been careful to learn to what extent extract is now being used, with a view to its production and to the wants of the trade. My opportunity in this regard has been most excellent, as during the past month I have, in the course of our business, visited personally about all the tanneries within a radius of forty miles of Boston, and I find that in this and the adjacent parts of New England alone the annual consumption of tanning exceeds the product of over half a million cords of bark, and that over one hundred tanners within the forty miles radius are using extract, and at least fifty of these would use the entire product of fifty extract factories like ours in Michigan, could they depend upon a supply sufficient to carry them through the season, and not have to resort to the use of bark.

The facts I have herein attempted to set forth I wish to be given to the public, as they are intended to correct any erroneous impressions prejudicial to the production of this new branch of industry in Michigan, which was first established by the valuable aid of that paper in laying claim to an industry before unknown, and now so fully developed. The Boston consignees of Michigan extract are now shipping to Europe. Last year's exports from the Canadian dominion alone amounted to 15,000 barrels, and there were manufactured and sold last year by the twelve factories in the states and Canadas upward of 50,000 barrels. The demand for the present and coming year, at home and abroad, is computed from most reliable data to be more than four times the above amount per annum; hence, when it is understood that each small factory thus far produces but about 3,000 barrels per year, we have room for an expansion of this great enterprise commensurate with the wants of the leather trade. The great forests of hemlock in the states of Michigan, Wisconsin and Pennsylvania comprise about all that is left available to this manufacture, hence I need not impress upon the minds of owners of hemlock lands and upon capitalists generally that these great forests embraced within the boundaries of the above states constitute new elements of wealth, now being recognized at home and abroad. Having labored hard in the last two years in making our friends comprehend the reliability of our statements, we are beginning to see our reward in the realization even sooner than I expected.

AN INDEPENDENT RAILROAD.

What the Chippewa Valley Must Have.

From the Chippewa Herald.

With the last vestige of hope gone "where the woodbine twineth," that the St. Croix land grant will be of any benefit to the Chippewa valley (or any other place, for that matter) comes the moral certainty that the only chance of a railroad here is by making some arrangements with the Wisconsin Central to build from the "elbow"—this side of Stevens Point, down the valley through Chippewa Falls and Eau Claire to the Mississippi. It would strike Clark county and go through the towns of Edson and Sigel in Chippewa—making a short line to Milwaukee, Chicago and Lake Superior, besides giving us a route to the Mississippi—something that is sorely needed.

To Milwaukee and Chicago, this route would be a few miles nearer than the present one by the West Wisconsin, Northwestern, or St. Paul roads. It would furnish competition, and open up the whole Lake Superior country to this valley.

It would furnish an outlet by rail down the river for lumber, ties, timber, etc., which would keep a market open here during the winter season; whereas, now, almost everything closes up with navigation. It would develop the wealth of the Chippewa valley an hundred fold—and build up a large city here. The objections usually urged against a road running up into the pineries, would not be applicable to this route, for the line would necessarily have to be through Sigel and Edson to the Wisconsin Central track.

In a short time, everything will be placed in tangible shape, and then the people of Chippewa, Eau Claire, Pepin, etc., can look at the matter in a business light.

¶ We believe this is the only mode by which a railroad can be secured in this valley. The Wisconsin Central is in a healthy condition now, and wants to build this road. The managers know well that it will be an object to them, as well as to every one here. It would pay; of that, there can be no reasonable doubt.

And so, we say to all, when the time comes for action, don't hesitate to put your shoulder to the wheel.

CHICAGO'S LUMBER TRADE.

The Business Done Last Season and Prospects for the Next—Firms Engaged in the Business—Their History, Location and Classification.

From the Chicago Journal of Commerce.

Among the four specialties of trade in which Chicago outranks the commercial metropolis of the American continent, if not of the commercial world, the lumber trade would probably be placed last on the list; nevertheless it can by no means be termed the least in importance to her interests. While the grain trade, the provision trade and the cattle trade, placing those engaged in it in commercial connection with the east and with Europe, gives these a greater prominence, the market is more or less affected and controlled by other markets. The lumber trade being with the territory immediately adjacent is more of a local character; consequently its enormous transactions are really more an indication of the solidity of Chicago as a centre of trade. The exhibit shows, too, the immense development of the country of which Chicago is the base of supply. Her propinquity to the vast forests of Wisconsin and Michigan places her in the position to collect into her numerous yards, situated with special reference to cheapness of transportation, handling, re-shipping over the railway lines radiating in every direction, the productions of the mills that line the lakes' shores; these combined facilities make this the cheapest market for buyers. The lumber, too, is one that is not subjected to such evils by over-speculation. The large amounts of business done is the direct results of the great and ever-increasing demand from the country that deals directly with this city—"corners" are unknown among the "bulls" and "bears" of

THE LUMBER EXCHANGE,

which has had an existence of four years. Its present officers are: A. J. Van Schaick, president; C. B. White, vice president; J. J. Borland, treas-

urer; Wm. L. Southworth, secretary. The annual election took place the first Monday in March.

The membership roll is as follows, comprising both manufacturers and buyers or dealers: M. McDonald, R. K. Bickford, Jno. M. Laren, Wm. Blanchard, A. A. Carpenter, S. A. Irish, Artemus Carter, Jas. G. Townsend, Wm. H. Bush, Andrew Dalton, M. B. Hull, E. E. Crepin, B. L. Anderson, Wm. B. Phillips, E. K. Hubbard, Thos. Williams, J. W. Calkins, J. H. Swan, J. T. Young, L. K. Aarhus, C. M. Charney, W. D. Hough-teling, S. Goodenow, Chas. Denning, Wm. Eneglade, D. H. Jones, J. W. Skinkle, E. B. Rice, J. B. Goodman, J. D. Joseman, C. J. Davis, J. D. Joseman, C. J. Davis, J. S. Wheeler.

The report of the secretary, just completed, gives returns from 108 yards, the entire number in the city, as on hand and for sale January 1, 1873:

Sawed pine lumber and timber, ft.....	327,877,742
Hewn pine timber, ft.....	640,000
Pickets, ft.....	1,582,580
Lath, pcs.....	28,880,150
Cedar posts, pcs.....	79,745
Sawed shingles, m.....	29,542

The present amount of stock on hand compared with the report of the preceding year is as follows:

1874. Lumber, ft.....	327,877,742
1873. ".....	321,948,282
Increase.....	5,984,510
1874. Shingles, m.....	29,542
1873. ".....	40,801
Decrease.....	10,759

The following table shows the comparative receipts of lumber and shingles by lake and rail for the years 1873 and 1872:

1872.	Lumber, ft.	Shingles, m.
Lake.....	1,017,319,000	802,628
Rail.....	166,840,288	808,201
Total.....	1,188,659,288	610,824
1873.	Lumber, ft.	Shingles, m.
Lake.....	1,020,638,000	294,548
Rail.....	102,780,671	228,875
Total.....	1,123,368,671	517,923

The above indicates a slight decrease in the shipments by rail but an increase of shipments by lake.

THE PROSPECTS

open favorably for a large increase

the coming season. Mill men are looking forward to an unusually early opening of navigation. Several firms owning steamers are fitting them out for active service. Experts at estimating, say the receipts for the season of 1874 will largely exceed 12,000,000 feet.

THE HARDWOOD

manufacture is becoming a very important feature of the trade as a perusal of the sketches of the firms will show. In the eastern markets the black walnut wood is rapidly superseding mahogany. Chicago manufacturers are filling very extensive orders in that wood for that market. Besides that this is becoming the market of supply for wagon makers' material for eastern cities. The demand for western markets has, within the past two or three seasons, grown very rapidly. It is becoming a distinct branch of the business.

AVERY, MURPHY & CO.,

on the corner of Fisk and Twenty-second streets, are probably the most extensive manufacturers of lumber in the west. They have mills at White Lake, Montague, Bay City, Saginaw, Alpena, and Port Huron. The amount of lumber turned out from all of them will exceed 100,000,000 feet annually. The firm was established twenty years ago, has continued under the same name to the present day, and is likely to for the future. Starting in business so far back, this firm can be classed among the pioneers of the now vast lumber trade of Chicago. Its extensive pioneers extended deeper into the then vast wilderness. It has put up more mills than any other concern in the west. It maintains quite a fleet of lake craft, requiring for the yard on Twenty-second street 700 feet of dockage. From the tracks in the yard cars are loaded for all parts of the west to the uttermost points to which the railways extend. Large shipments are made to dealers at all the eastern cities—even to Boston.

The number of men directly and indirectly engaged in the service of this firm will go into the thousands. Indeed, it might almost be said to maintain a small army and navy. Though this is a Chicago firm, it has an office and extensive yard at Detroit under the superintendence of Messrs. Newell Avery and S. J. Murphy. The eastern trade is with that branch. Mr. E. E. Cregan is the manager at headquarters in this city. Mr. Joseph Heald, at Whitehall, Mich., might be termed the manager of the mills and timber cutting. The vast business of this firm is of natural growth, its (the firm's) habits being of rather a conservative character. Under such careful management, combined with steady industry, has come the almost unparalleled success and unprecedented prosperity. The concern is one that Chicagoans may feel proud of as being one that extends an important element in her trade to a high position in the eastern cities. Revolutions do not go backward, nor will the prosperity and high standing of the commercial world of one of Chicago's leading firms retrograde more than Chicago herself, after rebuilding on her ruins in two years a new city, the pride of the nation, the wonder of the civilized world become, as some envious rivals whose snail-like movements keep them forever in the background, fain would prophesy, the "home of the bats and owls;" nor more than will the wonderfully unprecedented, unparalleled prosperity and commercial standing retrograde to that of those envious rivals or to that of the early days of the existence of the pioneer firm of Chicago's lumbermen.

HANNAH, LAY & CO.

This is one of the largest, most successful and a somewhat remarkable firm in the trade. It was organized and began business May 1, 1850, by Perry Hannah, A. Tracy Lay, James Morgan. These gentlemen have continued in business together for twenty

four years. The firm is the same in 1874 as it was in 1850. These pioneers in the lumber trade of Chicago began their manufactory by purchasing a small water mill on the Boardman river, Michigan. They started out in their enterprise with a cash capital of \$6,000, and an unlimited amount of capital in indomitable energy, pluck, perseverance and other qualifications for success. Before the end of the year they began the erection of a steam mill. By the spring of 1852 both mills were in full operation. At that time this portion of Michigan was a vast wilderness of desolation. There was, with the exception of a small one at Manistee, no settlement north of Croton, an unimportant village in Newaygo county. There was only one mail per month. In 1853 Messrs. Hannah, Lay & Co., established a post-office, giving the contract for carrying the mail to an Indian named "Joe," who with the leathern pouch upon his back made the dreary journey on snow shoes. Their prospecting parties traveling through the woods made their journeys in the same manner. The first roads were laid out by them. Chicago at that time had a population of considerably less than 100,000. Her railway system was in embryo. The vast territory west, to which the millions of dollars worth of merchandise is shipped monthly, was then almost as unknown to those who handle it as the wilds of Africa. The business of the firm increased to such an extent that in 1857, the year of panic, financial disaster, collapsing of firms and floods of wildcat bank bills, a second mill was erected. Traverse City was laid out in 1855. The members of this firm helped organize the present county. The mills cut that year between five and six million feet of lumber. At present the concern are cutting upwards of twenty million feet annually. Nearly the entire amount is sold at the yard on Lumber street, near the Twelfth street bridge.

The office numbers are 76 and 78 Lumber street. The number of acres cut over for the twenty-four years will exceed twenty thousand. The dockage at the yard is 400 feet front. The propeller *Traverse City*, having a carrying capacity of 700,000 feet, is owned and run by this firm. Besides their receipts are uninterrupted by the close of navigation, as a track from the mill connects it with the Grand Rapids and Indiana Railroad. There are two tracks at the yard. There are usually on hand at the yard from nine to ten million feet and at the mill six to eight million feet, making a total stock on hand to fill all extra orders of about fifteen to eighteen million feet. This firm has extended the sphere of its business greatly in the twenty-four years of its existence. It now uses the power of what was designated as the Boardman Mill, for running the machinery for the manufacture of sashes, blinds and doors, also planing machines. As the country became settled up by farmers, as extra quality of wheat was raised upon the cleared tracts of pine regions of northern Michigan. The firm put up a flour mill with five run of stone, which proved a very useful auxiliary to their business. Besides doing a large amount of custom work the firm manufactured and shipped flour as far south as Reed City. The firm have established and now own seven stores at Traverse City, each selling a separate line of goods and managed by a separate manager, clerks and bookkeepers. There is a grocery, a dry goods, a hardware, a boot and shoe, a furniture, a provision and a lumbermen's supply store, whose annual sales reach \$400,000. Besides these the firm have an interest in four stores on the "city" side of the river whose sales amount to \$200,000 per year. The mills give employment to over 200 men, while the yards, stores and various auxiliaries to the business give, directly and indirectly, a livelihood to the people of a large por-

tion of that former desolate wilderness now a prosperous country.

FERRY BROTHERS,

on the corner of Lumber and Eighteenth streets, near the bridge, ranks among the largest manufacturing lumber concerns in the west, as well as among the earliest firms in the Chicago trade. This enterprising firm owns four mills, two at Montague, Mich., of a capacity of twenty-five million feet, and two on Black Creek, having a capacity of five million each, all of which are worked up to their full capacity. Another mill is also in process of construction. The concern owns large tracts of pine lands in Michigan adjacent to the mills. The firm commenced business in 1847, under the name of Wm. M. Ferry & Sons and in 1863 the present name of the firm was adopted. The two brothers have carried on business together without any further changes since then. Their annual sales on orders in Chicago are over twenty million feet. They usually sell on the market four to six million feet. Their freighting from the mills to the yard keeps two schooners, the Lumberman, one hundred and sixty thousand feet capacity, and the Maj. N. H. Ferry, one hundred and fifty thousand feet capacity running during the season. Besides these schooners several barges are employed with a capacity of one hundred and fifty to two hundred and fifty thousand feet each. To accommodate these craft there are 650 feet of dockage on the river north of 18th street running from the bridge to the Union elevator. In addition to their yard business this firm cut great many private orders at the mills. The shingles of Ferry Bros., are considered the best on the market, bringing 25 to 50 cents more than any others; they dispose annually of twelve to thirteen millions of them and fall far short of supplying the demand. The mills give employment to 100 men. At the yard more than 100 more are employed, then the schooners and

barges necessitate the employment of quite a number more men receiving wages. The members of this firm are quite prominently known in commercial circles. The senior partner is the well known United States senator from Michigan. Both gentlemen are noted for liberality in their business transactions and are among the most popular men in the trade. They have combined energy with careful management and as a consequence have been able to maintain a widely extensive business with singular success. Starting when the now great metropolis of Chicago was comparatively a small town and most of its present prosperous commercial territory almost an unsettled wilderness roamed over by the wolves they have grown up with the city, with its territory and with its vast lumber trade and they are closely identified with them, ever ready to enlarge and improve as the demands of the trade among so progressive a people require of them.

BIGELOW BROS.,

are at the corner of Fisk and Twenty-second street. This firm consists of three brothers who have been in business together uninterruptedly for eleven years, manufacturing their own lumber at their mills from timber off their own lands; they also make large purchases of logs. The firm have been noted for doing a careful business, as a consequence it has met with small losses during the eleven years of its existence. The first year it handled four million feet; the sixth year the amount had doubled; now it exceeds fifteen million annually, including lath and shingles. The stock is made especially for shipment by weight; most of the stock kept on hand is of choice lots which are in greatest demand in eastern markets, where this firm do a very heavy trade; they have a fleet of vessels running, from the earliest opening of navigation till the very close, which enables them to lay their lumber on the dock at the low-

est possible rates. The yard has tracks running its whole length and 510 feet of dockage front, thus giving the most complete arrangements for handling assortments of lumber; running on the choicer grades of pine the firm have established a reputation in the markets where the demand for those grades is the largest. The aim of the members of the firm has been to rather confine their business to this specialty; their care in keeping their stock of choice lumber up to the full standard of the inspection has been the means of their meeting so few losses; buyers of that class are usually prompt payers of bills; this firm receive large orders from that class. The mills are at Muskegon, where are employed 40 men; at the yard are employed some 60 more men, making a total force of 100 laboring men employed by this firm.

LOWELL & DALTON

have been in the business four years under their present title, at the corner of Fisk and Twenty-second streets. Prior to the organization of the present firm Mr. Dalton was with Artemus Carter and Mr. Lowell was of the firm of Lowell & Barker. This firm purchases its timber and hire it cut by contract; about 40 men are employed in the yard, which has complete track room and 400 feet of dockage. The sales from the yard reach ten million feet annually, besides upwards of fifteen million shingles. A general stock of pine lumber is kept on hand for the market; there is also a fair business done on orders; the trade is principally in Indiana and Illinois, though heavy shipments are made west and south. Comparatively this firm have been in business but a short time, yet their commercial standing in the trade will bear comparison with many of the older firms; both members are men of liberal views, enlarged ideas and full of energy—the proper men for Chicago

trade. Appearances indicate that their trade will be largely increased, and with a proper forethought they are preparing to meet it. Promptness in delivering orders is a characteristic that very soon popularizes a firm in the rapidly settling up of western states, one too that is very essential in order to successfully establish and maintain a trade with western people. Like most of the firms in the lumber district this one does all handling, loading and labor of delivering free of charge to its customers; their track system and dock arrangements are constructed to especially facilitate this and enable them to handle the various assortments with quickness and dispatch.

HATCH, HOLBROOK & CO.,

consisting of R. Hatch, J. Holbrook and W. S. Keith, are the largest dealers in hardwood lumber in the city, having two yards in Chicago and one in Milwaukee. Their extensive stock consists of ash, oak, hickory, black walnut, cherry, butternut, maple and whitewood lumber. Their lumber is cut by contract; their ash, oak and whitewood is cut in Michigan, their walnut in Indiana, while their hickory is brought from Ohio. The past season their sales reached ten million feet; they have already many orders on hand for the coming season which will average one million feet per month; their orders come from all over the west; they are now filling extensive orders for California, Texas and the Territories; they are dealers in all kinds of agricultural implement, wagon and cabinet lumber, also cut bills to order for railroads, bridges, etc., and are contractors for telegraph poles and railroad ties. They make, too, a specialty of kiln dried walnut and hardwood flooring, they also do a commission trade making advances on consignments from country manufacturers of walnut and whitewoods. Their principal yard and main office is on West Twelfth street, near the bridge, which

is fitted out with ample track room ; the Chicago branch office is at the corner of Erie and Kingsbury streets, located principally with reference to their large city trade. The Milwaukee yard and office is 499 River street in that city.

HOLBROOK & CO.,

are located at 45 Grove street, between 17th and 18th streets. They have been in partnership since 1854. They purchase timber and lumber to suit their orders. Cabinet makers, wagon and carriage makers, and manufacturers of agricultural implements are their special customers. There are 300 feet of dockage at their yard and ample track room. Their trade is in Illinois, Wisconsin, Iowa, Minnesota, Nebraska, Kansas, and further west. The filling of special orders requiring special and unusual specifications in their particular line of trade. It might not be out of place to state that this is the oldest hardwood firm in the city. Theirs being a special line of woods they have restricted their trade pretty much to their special class of customers. The growth of their trade depends upon the growth of certain manufacturing interests in the west ; their trade increases with the increase of the appurtenances of civilization rather than with rapid settlement of the country. To establish and maintain trade like that of this firm requires special skill and a long experience. With their experience of twenty years these gentlemen have established a trade that indicates their reputation and bears comparisons in the statistics of the trade of this city.

HENRY N. HOLDEN

is located at 211 South Market street, corner of Jackson. He commenced business in 1856, making his a concern of eighteen years standing. There is on hand at the yard a heavy stock of oak, ash, whitewood, maple, hickory, black walnut, cherry, basswood, and butternut, in addition to

which is a good stock of mahogany and Florida cedar. The lumber is cut to order by contract. Mr. Holden has probably the greatest variety of lumber of any yard in the city. His stock is largely composed of stuff for cabinet makers, agricultural implement manufacturers and wagon builders, who comprise a large class of his customers. The stock, too, comes from more sections of the country and from further abroad than that of any other Chicago concern in this line. The city trade is very old and very large. His country trade is mostly in the northwest or near home but is exceeding, as they are settled up, into the Territories. The yard is located with special reference to combined city and country trade, being nearer the business center of the city than the locality known as the lumber district. It has a dock of 500 feet river frontage and a wide space running back to the opposite yard, giving ample room to assorting lumber.

HOLMES & CO.,

have a yard on Grove street, running from 18th to 19th streets, with a branch yard on canal street, near Van Buren. The firm was organized in 1860 under the title of Wallace & Holmes. In 1864 Mr. Wallace withdrew. The business has been carried on by the present firm ever since. This concern makes its purchases from the mills in the country. A branch yard was established November last on South Canal street, between Van Buren and Polk streets. The operations of the firm are confined almost exclusively to hardwood and whitewood. Railroad bridge contractors are largely among the customers of the firm who also take contracts to build bridges. Its city trade is quite extensive. Its country trade has been mostly in Illinois, Iowa and Wisconsin. Within the past year or so it has been acquiring a fine trade in Nebraska. Some heavy shipments have been made to California. Its facilities for handling both for city

and country orders are most excellent; its arrangements for this being a specialty of this firm. The variety of the receipts and shipments and the diversity of its trade requiring more than ordinary facilities for handling. Its trade has been acquired by skill combined with long experience.

OGLESBEE & MATTINGLY.

This is a firm that has only existed about seven years but have used energy and perseverance, which, with good business management, has given them a capital that affords them a basis amply sufficient to operate their business to advantage to all concerned. Their reputation for furnishing dimension lumber, suitable for car and bridge building, pump lumber and wagon material, etc., etc., is wide spread. At their yards, corner Canal and Eighteenth streets, and corner Twenty-second street and Union Place, directly opposite Messrs. Palmer, Fuller & Co.'s extensive manufactory for sash, doors, blinds, etc., etc., they keep stocks of lumber—seasoned—including all the varieties of hardwood lumber. Also at Plymouth, Indiana, they keep a good stock of lumber in their line of trade, and besides, their own facilities, have arrangements with numerous mills in that vicinity which enables them to reliably undertake to furnish bills for dimension oak and other kinds of hardwood lumber in any quantity in reasonable time. The Indiana branch of their business makes a specialty of furnishing dimension lumber. They handle about six million feet of lumber annually.

ADAMS & LORD.

This firm has a yard on Lumber street. The office number is 368. The yard was established in 1862, by A. T. King. The present firm succeeded to the business in May, 1872. This firm own no land nor mills but buy the logs and have them cut by contract. The sales go over seven million feet annually. In addition to a track running into the yard the

firm occupy about 300 feet front of dockage on the river. Though the firm has on hand at their yards, at all times, a general stock of pine lumber it rather makes a specialty of boards and strips. Its trade is exclusively with country dealers, and of their specialties it make a fair number of shipments east. It finds this to better further its ends than to seek for city and immediate trade.

J. P. MERRILL,

at 345 Lumber street, does a trade of eight to ten million feet a year. Mr. Merrill commenced business in 1854 as the "Co." of the firm of Holbrook, Elkins & Co.. In the spring of 1860 the firm became Elkins & Merrill and in February, 1868, Mr. Merrill bought the interest of Mr. Elkins and formed a partnership with Mr. Skeeles, under the style of Merrill & Skeeles. Mr. Merrill has just purchased the interest of Mr. Skeeles, who retires from business. He purchases his logs and has his cutting done by contract. A track runs into the yard, besides he owns a dock 183 feet front. His trade is mostly in the finer grades of seasoned boards and strips, shipping principally to Missouri and Kansas.

LOVELAND, SPENCER & CO.,

on the corner of Lumber and Twenty second streets, deal exclusively in Michigan pine; they buy from the mills in lots to suit their trade; their largest trade is in the finer grades for the eastern market, making rather a specialty of flooring, siding and ceiling, running a planing mill to dress their own lumber. They have been in business seven years, meeting with fair success; their yard is well supplied with shipping facilities, having ample track room and 200 feet of dockage. As has been remarked before their heaviest trade is in the finer grades of pine lumber; that being the case their customers are in the older and longer settled up sections of the country.

M. & T. LORDON,

on Maxwell street near the lumber tracks of the P. & F. W. railroad have

been in the trade together twelve years; they do a business of about a million a year in oak, walnut and whitewood; their trade is mostly in the city and in Illinois, the same customers continuing with them from year to year. They always keep on hand for orders a large supply of wagon stuff and also deal considerably in hoop-poles and staves. This firm might be classed among the local business firms of Chicago and Illinois whose trade has grown up with the growth of the wood manufacturing interests of the city and state.

MC ARTHUR, SMITH & CO., have just established a yard on Laffin street, near Twenty-second street. They have been running mills at Cheboygan, Michigan, for the past six years, cutting on an average twelve million feet annually. They own about 18,000 acres of pine lands, situated along the lake shore in northern Michigan. They have been selling on the market previous to this; their sales at the yard will be of lumber of their own manufacture, which is considered of a better grade than the usual run, owing to the superior quality of the timber on their lands. They have a track running in their yard and 450 feet of dockage. They have capacity for handling twenty million feet a year.

JOHN SHERIFF & SON, corner of Bush and Taylor streets, are the oldest firm but one in the city of the dealers in pine lumber, having been in the trade twenty-five years. Their sales exceed ten million feet a year, and they generally have about that much stock on hand, employing about forty men in the yard. Their lumber is mostly purchased from the mills on Green Bay and Saginaw Bay. The firm started business under the name of Sheppard & Sheriff, on Randolph street, south of the bridge. Afterward the firm became Sheppard, Sheriff & Smith, on Canal street, under which name it continued until the Messrs. Sheriff bought out their part-

ners and assumed the present firm name.

E. J. DODGE & BRO., do a combined hardwood and pine lumber business. They have a large city trade in dry walnut, oak, cherry, ash, hickory, maple and whitewood. They have a yard on West Twelfth street—also one on Judd street—the office number is 111 Twelfth street, where they have been established for six years. They have a mill at Ligonier, Ind., where they manufacture their hardwood lumber. Their mill has been established fifteen years. In addition to manufacturing several million feet for the Chicago market they do a large amount of custom work at the mill for their own local customers. The firm own a mill in Montcalm county, Michigan, where they cut pine lumber. Its orders from the country trade are filled direct from the mill. In all the concern employs about 25 men.

DOORS, SASH, ETC., AT SOUTH BEND, IND.

The following are the reports in this interest:

	Amount of sales.	No. of hands.
Eagle Manufacturing Co.....	\$95,000	35
Hertzell & Hartman.....	50,000	25
Walworth and Lawton Manufacturing Co.....	94,927	25
W. H. Miller.....	20,000	13
Total.....	\$259,927	98

The increase in sales is about \$15,000 the number of hands employed being the same as last year. The firm of Walworth & Lawton manufacturing company. W. H. Miller, having sold his premises to the Singer Manufacturing Co., retires from business. The Eagle Co., received 230 car loads of lumber and 1,000 boxes of glass, paying over \$7,000 railroad freight. The Walworth & Lawton Manufacturing Co., received 243 cars of lumber and increased their business about one-third. Hertzell & Hartman, received 106 car load of lumber and show an increase of business.—*Ex.*

SOUTHERN LUMBER FIELDS.

BY J. J. EITZGERRELL.

From the Gazette, Bay City, Mich.

During the writer's last tour through the southern lumber fields, while in the office of Cox, French & Co., sash, door and blind manufacturers, at Mobile, Ala., he was shown through their establishment. They were using native woods exclusively in their factory, principally cypress. Cypress is a wood that among lumbermen, even in the south, is not fully understood. It grows in the swamps to a great height. The body from the ground often from ten to fifteen feet is of an irregular shape, causing the choppers to scaffold up to a point where the body of the tree becomes round. The timber is usually cut during the dry season, and "poled" out during the rainy season to the bayou or river, then rafted and run to the mills to be sawed up. The timber is often "pecky," that is, the sawn boards look as if they had been worm eaten through and through. A thorough woodsman can tell the difference between a tree that is "pecky" and one that is sound. The body of the cypress grows tall and straight with a few limbs branching out from the top of the tree. The timber is soft and "brash," and easily split, the tendency to split being the great objection to the wood. When seasoned it is about the same weight as white pine, belonging to the cedar family. It makes an excellent shingle, either shaved or sawn, while for outside work such as for floors for porticos and verandas, the cypress is the best that can be used, for the reason that it will not "cut up" by the action of the sun, and for the same reason it makes an excellent shingle, besides a roof made from cypress shingles will last much longer than white pine. The cypress rives very easily. I have often noticed the humble cabin of the slave, and lately the freedman, made from the cypress boards rived out of-

ten ten to twelve feet in length, while for pickets for the garden and yard they are commonly used on the plantation. They enter largely into the manufacture of sugar hogsheads on the sugar plantations in Louisiana. While in Pensacola, Florida, one of the prominent commission lumber dealers there informed me that he had tried the experiment of sending a few square sticks of cypress to France along with a consignment of yellow pine, for the purpose of attempting its introduction in Europe. After examining and working the wood the French manufacturers were well pleased with it, since which time he had several orders for cypress logs, and expects to build up quite a trade in that timber in time to come.

I see quite a discussion going on among the different wiseacres that are corresponding with the press of the country regarding the "approaching timber famine." I shall give no estimates, nor enter into the discussion, but remark, that being myself a young man, I shall undoubtedly be an old man before I shall see the white pine of the northwest depleted, and when it is gone the yellow pine, the cypress, poplar, cotton wood, oak, maple, walnut, basswood, ash, gum, pecan and hickory of the southern states will form a reserve that will last for many years to come. The cypress and poplar of the south together with the upper qualities of yellow pine will constitute the woods manufactured into shingles, sash, doors and blinds, and finishing lumber. Already large manufactories are established in the southern cities using the native woods; even as far north as Memphis native pine and cypress are used exclusively. As to the extent of the southern forests I would say that having often made the trip from Minnesota to New Orleans by river, distance 1,200 miles, the entire country for many miles on both sides are densely covered with

forests of magnificent timbers, peculiarly southern, while the many rivers pouring into the Mississippi are all lined with forests that at the present time are in their virginity, while the great states of Louisiana, Mississippi, Arkansas, Tennessee, Kentucky, southern Missouri and Illinois, are all, strictly speaking, timber states, while Texas, so little known as a timber state, embraces a territory as large as the state of Illinois that is heavily timbered. The interior of the southern states has not been developed by railroad. There are millions upon millions of valuable timber in the interior that will in the distant future be turned to man's use, acting as a reserve after the many millions of feet of timber that line the banks of the many rivers and bayous of the south are exhausted. Often have I—while rowing in my skiff on the bayous of the south, winding through the interminable cypress and gum swamps listening to the stillness of nature, only broken by the cry of the alligator or the notes of birds of prey, the dense foliage coming down to the water's edge, while the grey Spanish moss hanging in long veils from every limb and tree gave the forest a dense, solemn appearance, relieved somewhat by the mistletoe, the emblem of immortality—often I say have I wondered if those apparently inexhaustible stores of timber, of idle wealth, would ever be called upon to contribute to the wants of man. The Red river country of the south and its tributaries contain large bodies of pine and cypress, while gum, which makes an excellent furniture, and is used for framing timber in the south, is looked upon as worthless. This timber is in inexhaustible quantities. Timber land throughout the southern states is very cheap. I see tracts of valuable pine land in the Red river country that can be bought at from ten cents to fifty cents per acre, while along the tributaries of the different rivers that empty into

the Gulf of Mexico, valuable pine lands can be bought at from ten cents to one dollar per acre. Many tracts are held of course at a higher price, but excellent pine can still be bought at very low figures, while cypress timber, that is, swamp lands, can be bought at very low figures, while cypress timber, that is, swamp lands, can be bought at a very low prices. As an instance of the price of lands, the Pensacola Lumber Company, of Pensacola, Florida, bought in 1873, 46,000 acres of pine land, selected from the M & M. R. R. in Florida and Alabama for \$26,000. There are quite a number of localities along the southern gulf coast where the milling business can undoubtedly be successfully conducted, returning large profits on the investment.

The *Chippewa Herald* says: We are glad to announce that the works at Eagle Rapids are now so far completed that it is safe to say they will be all right when the river breaks up. The booms, piers, and all the necessary paraphernalia are finished, while two weeks more on the dam will be ample time to put it in working order. There are 100 men at work, and matters are moving along in a business like manner.

O. H. Ingraham, of Eau Claire, is president of the Improvement Company, and has devoted considerable time to the matter. He is an old, experienced lumberman, and familiar with the wants felt on the Chippewa.

The Eagle Rapids Company have expended, thus far, about \$150,000. This includes land, booms, dam, piers, buildings, etc. It is money well expended, and will largely encourage manufacturing on the Chippewa. It will make logging on the river more safe and permanent, because there will not be much danger of losing any stock by floods or ice gorges. We consider it one of the best investments for the Chippewa valley that has ever been made.

CULTIVATION OF TIMBER.

Message from the President of the United States—Resolution by the American Association for the Advancement of Science—Communication from the Commissioner of the General Land Office.

Through the courtesy of Mr. Alexander Mitchell we have obtained the text of the following interesting documents which were presented to the senate, February 20, 1874, read, referred to the committee on public lands, and ordered to be printed:

EXECUTIVE MANSION, }
Feb. 19, 1874. }

To the Senate and House of Representatives.

I have the honor to transmit herewith a memorial upon the cultivation of timber and the preservation of forests, and a draught of a joint resolution prepared by the American Association for the Advancement of Science, together with a communication from the commissioner of the general land office upon the same subject.

U. S. GRANT.

DEPARTMENT OF THE INTERIOR, }
WASHINGTON, D. C., Feb. 18, '74. }

SIR :—I have the honor to transmit herewith a memorial from the American Association for the advancement of Science, upon the cultivation of timber and the preservation of forests, together with a draught of joint resolution prepared by the memorialists.

These papers were referred to the commissioner of the general land office, and a copy of his report on the subject is herewith inclosed. Concurring in his views, I would respectfully suggest the propriety of laying the matter before congress for their consideration.

Very respectfully,

C. DELANO,

The PRESIDENT.

Secretary.

Memorial from the American Association for the Advancement of Science

upon the cultivation of timber and the preservation of forests.

At the meeting of the association for the advancement of Science, held at Portland, Me., on the 22d day of August, 1873, the following resolution was passed :

Resolved, That a committee be appointed by this association to memorialize congress and the several state legislature on the importance of promoting the cultivation of timber and the preservation of forests, and to recommend such legislation as may be deemed proper for securing these objects. Also that this committee be instructed to co-operate with national associations for a similar object.

The committee appointed consisted of Franklin B. Hough, Lowville, N. Y.; George B. Emerson, Boston, Mass.; Prof. Asa Gray, Cambridge, Mass.; Prof. J. D. Whitney, San Francisco, Cal.; Prof. J. S. Newberry, New York City; Hon. Lewis H. Morgan, Rochester, N. Y.; Col. Charles Whittlesey, Cleveland, Ohio; Prof. William H. Brewer, New Haven, Conn.; and Prof. E. W. Hilgard, Ann Arbor, Mich.

Under this appointment consultation has been had among members of this committee, who have requested the undersigned, on their behalf, to represent as follows :

That the preservation and growth of timber is a subject of great practical importance to the people of the United States, and is becoming every year of more and more consequence, from the increasing demand for its use; and that while this rapid exhaustion is taking place, there is no effectual provision against waste or the renewal of supply.

We apprehend that the time is not distant when great public injury must result from this cause, and we deem it to be our duty to urge upon the government the importance of taking timely action in providing against the evils that must otherwise follow.

Besides the economical value of timber for construction, fuel, and the

arts, which is obvious without suggestion, and must increase with the growth of the nation, there are questions of climate that appear to have a close relation to the presence or absence of woodland shade. The drying up of rivulets, which feed our mill-streams and navigable rivers and supply our canals, the failure of the sources which supply our cities with pure water, and the growing tendency to floods and drought, resulting from the unequal distribution of the rain-falls since the cutting off of our forests, are subjects of common observation.

In European countries, especially in Italy, Germany, Austria, and France, where the injuries resulting from the cutting off of timber have long since been realized, the attention of governments has been turned to this subject by the necessities of the case, and conservative measures have in many instances been successfully applied, so that a supply of timber has been obtained by cultivation, and other benefits resulting from this measure have been realized.

Special schools of forestry have been established under the auspices of government, and the practical applications of science in the selection of soil and conditions favorable for particular species, and in the planting, care, and removal of timber, are taught and applied, with the view of realizing the greatest benefits at the least expense.

There is great danger that, if not provided against, the fearful changes may happen to our largest rivers which have taken place on the Po and other large rivers of Italy, France, and Spain, caused by the destruction of the forests from which came their tributaries. These forests had retained the water from the snows and rains of winter and spring, and supplied it gradually during the summer. Since their destruction the rain falling in the rainy season comes down almost at once, bringing with it earth and stones, deluging the banks of the larger

streams, but leaving a very insufficient provision for evaporation and against the consequent draught of summer.

Thus, when the forests about the sources of our great rivers shall be cut away, the water from the melting snows and early rains will be liable to come down in vast floods, overflowing the banks and carrying ruin and destruction in their course, while the affluent streams in summer will diminish or disappear, to the great injury of the country through which they flow.

We deem it highly important that the true condition and wants of the country in this regard, and the injuries that may result from the destruction of the forests and the exhaustion of our supplies of timber, should be known in time to provide a remedy before the evils are severely felt. There are facts of the greatest importance in relation to the past and present destruction of forests, the pressing want of timber trees in states without natural forests, and the changes that have taken place, or are taking place, in consequence of the destruction of the forests, that should be carefully collected and be widely and familiarly known.

A knowledge of these facts would be everywhere of great value. They should be gathered, arranged, and so widely published as to reach the intelligent inhabitants of all the states. There is not a state or territory without a direct interest in the subject. We should know the experience of other countries, and be able to apply whatever may be found therein suited to our soil and climate and consistent with the plan of our government and the theory of our laws.

Individual or associated effort, unless organized and directed by authority, could not be expected to conduct these inquiries, or make known the results with that fullness which the investigation would require. We therefore recommend them as worthy of the attention of congress, as the immedi-

ate guardian of the territories and the proper source of power in whatever concerns the interests of the whole country.

We would therefore respectfully request the passage of a law creating a commission of forestry, to be appointed by the president and senate, and that it should be required to ascertain, from the most effectual and reliable means within its power, and to report to congress upon the following subjects :

First. Upon the amount and distribution of woodlands in the United States, the rate of consumption and waste, and the measures that should be adopted to provide against the future wants of the country in the preservation and planting of timber. With this there should be an inquiry concerning the importation and exportation of lumber and other forest products.

Second. The influence of forests upon the climate, and especially as to what extent their presence or absence tends to affect the temperature, rainfall, and other atmospheric conditions upon which agricultural success depends.

Third. A full statement of the methods practiced in Europe in relation to the planting and management of forests, and an account of the special schools of forestry that have been established in foreign countries.

Respectfully submitted,

FRANKLIN B. HOUGH,
GEO. B. EMERSON,

On behalf of the Committee of the American Association for the Advancement of Science.

WASHINGTON, D. C. Feb. 6, 1874.

Joint resolution for the appointment of a commission or inquiry into the destruction of forests, and into the measures necessary for the preservation of timber.

Whereas it is asserted that the supply of timber within the United States is rapidly diminishing, and that great public injury must result from its continued waste, without adequate means being taken for its preservation and production: Therefore,

Be it resolved by the senate and house of

representatives of the United States of America in congress assembled, That the president be, and he is hereby authorized and required to appoint, by and with the advice and consent of the senate, a man of approved scientific and practical acquaintance with statistical inquiries, to be commissioner of forestry.

SEC. 2. *And be it further resolved, That it shall be the duty of said commissioner to prosecute investigations and inquiries on the subject with the view of ascertaining the annual amount of consumption, importation, and exportation of timber and other forest products; the probable supply for future wants; the means best adapted to its preservation and renewal; the influence of forests upon climate, and the measures that have been successfully applied in foreign countries for the preservation and restoration of forests; and to report upon the same to congress.*

SEC. 3. *And be it further resolved, That the heads of the executive departments be, and they are hereby, directed to cause to be rendered all necessary and practicable aid to the said commissioner, by access to the public records and otherwise, in the prosecution of the investigations and inquiries aforesaid.*

DEPARTMENT OF THE INTERIOR,

GENERAL LAND OFFICE,

WASHINGTON, D. C., Dec. 24, 1873.

GENTLEMEN: The secretary of the interior has concluded to change the present system of timber agencies, and to devolve the duties connected therewith upon the officers of the local land districts. By his direction therefore, you will, upon the receipt of these instructions, take charge of the timber business within the limits of your land district, as a part of the general duties of your office; and it is accordingly, hereby assigned to you as such, with the understanding that, hereafter, it is to be considered and held as a proper incident to, and in fact a part of your general duties, covered and satisfied by the salary which the law provides for your respective offices.

That you may understand the nature of this part of your duties, your attention is directed to the following :

1st. Attorney-general Writ, in an opinion of the 27th of May, 1821, holds as follows: "Independent of positive legislative provisions, I apprehend that, in relation to all property, real or personal, which the United States are authorized by the constitution to hold, they have all the

civil remedies, whether for the prevention or redress of injuries, which individuals possess. (See 3 Wheaton, 181.) So the United States, being authorized to accept and to hold these lands for the common good, must have all the legal means of protecting the property thus confided to them that individuals enjoy in like cases.

* * * * They are, therefore, in my opinion, entitled to the injunction of waste by way of prevention, and to the action of trespass by way of punishment, in like manner as individuals similarly situated are entitled to them."

2d. Attorney-general Taney, now chief justice of the United States, in an opinion of 22d August, 1833, cites this opinion of Mr. Wirt, and concurs in it.

3d. Attorney-general Mason, in a communication of 16 July, 1845, refers to the opinion of attorney-general Nelson, of the 11th August, 1843, and, in concurring in it, states that, "when the right of pre-emption exists, the settler who has complied with the provisions of the act of 4th September, 1841, has a right of occupancy for twelve months, within which he may perfect his title by paying the minimum price of the land. Like the settlers under the armed occupation act, his right is inchoate only; and he has only those rights of property which are necessary to the perfecting of his title. He may clear the land, build on it, and inclose it with a view to cultivation. For these purposes he may use or destroy any trees which may be necessary, but within these restrictions, and necessary fire-wood, he is confined."

The penal act of 2d March, 1831, provides "for the punishment of offenses committed in cutting, destroying, or removing live oaks and other timber or trees preserved for naval purposes."

This act of 2d March, 1831, you will find fully considered in the case of the United States *vs.* Ephraim Briggs, (9 Howard, p 351,) in which the supreme court decided that the said act authorized the prosecution and punishment of all trespassers on public lands by cutting timber, whether such timber was fit for naval purposes or not.

4th. Under no circumstances will you compound or compromise with any such trespassers, or receive any pay or compensation from them as acquittal or discharge therefrom, or in any other manner; neither will you give any permission to cut timber or otherwise trespass on the public

lands, as there is no authority for any such proceeding; but all such offenses against the law must be prosecuted and tried by the authorities duly constituted for that purpose.

5th. Should you find such trespass committed on swamp lands, or those which are rendered unfit for cultivation by overflow, you will take no further action than to notify the governor of the state, as all such lands inure to the state under the act of 28th September, 1850.

6th. In the enforcement of the said act of 1831, you should be careful not to interfere with pre-emption rights under the act of 4th September, 1841, the settler, with a view to cultivation, having the right, as hereinbefore indicated, to use or destroy trees in clearing roads and constructing bridges, or for any other purpose connected with the improvement of his homestead.

7th. While thus liberal to the honest settler, you should be vigilant to detect and arrest the speculator, who, in the guise of a settler, and under the sanction of a declaratory statement, may contemplate the spoilation of timber, and unless arrested might seriously injure the public interest.

8th. Where the trespassers are unknown or known, and timber has been cut or removed off the public lands, you will cause it to be seized and sold at auction to the highest bidder, under such regulations as sound discretion may suggest.

9th. All moneys, the proceeds of the sale of timber, received by you, must be deposited in some one of the United States depositories, to the credit of the judiciary fund, without abatement, and an immediate report made of the same to this office, with a full statement of all particulars duly verified.

10th. In the prosecution of your duties you may, upon any pressing emergency, depute a reliable person to investigate and report the facts involved in any supposed case of trespass, and allow a per diem of three dollars and a mileage at the rate of ten cents per mile.

In making any such appointment you will report the fact instanter, and the necessity for it, and will require, in the affidavit of the employee, a statement of the time actually occupied in the service and the distance traveled. An account verified by the party and certified by you should be reported to this office for payment.

Where there is no pressing emergency for the appointment of an agent, you will refer the facts to this office for consideration and await instruction.

11th. In returns to this office of sales of timber you will be careful to designate the places of seizure, the quantity and kind of timber, whether in logs or manufactured, price per foot, with the names and residences of purchasers, and cause the same to be verified by a certificate from the party making the seizure and sale.

12th. You are directed to make a report at the end of each quarter, the first to be rendered on 1st April next, of the proceedings of your office pursuant to those instructions, and showing the operations of this system as preventive means; also the number of acres entered by trespassers through its constraining influence.

You are requested to acknowledge the receipt of this, and advise me of such preliminary steps as you may take with a view to a compliance with the foregoing instructions.

Very respectfully,
your obedient servant,
THOMAS A. HENDRICKS,
Commissioner.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
WASHINGTON, D. C., Feb. 17, 1874.

SIR:—I have the honor to acknowledge the receipt, by reference, of a memorial from the American Association for the Advancement of Science, signed by Franklin B. Hough and George B. Emerson, on behalf of the committee appointed by said association at a meeting held at Portland, Me., on the 22d day of August, 1873, to memorialize congress, with a view to elicit legislation upon the subject of cultivation of timber and the preservation of forests.

The commissioner of the general land office has from time to time, in his annual reports, invited the attention of congress to the subject of preservation and growth of timber on the public domain as one of great practical importance to our people, and becoming every year of greater consequence on account of the increasing demand for its use, while

exhaustion is going on, and no provision existing against waste or for a renewal of supply. Great public injury must sooner or later result from this cause.

"Besides the economical value," so say the memorialists, "of timber for construction, fuel, and the arts, which is obvious without suggestion, and must increase with the growth of the nation, there are questions of climate that appear to have a close relation to the presence or absence of woodland shade. The drying up of rivulets, which feed our mill streams and navigable rivers, and supply our canals, the failure of the sources which supply our cities with pure water, and the growing tendency of floods and drought, resulting from the unequal distribution of the rain fall since the cutting off of our forests," &c. For these and other potent reasons set forth in said memorial the association for the advancement of Science urge upon the government the importance and necessity of taking timely action in providing against evils that must inevitably follow.

In this connection a brief review of the legislation already had as regards timber may not be out of place, its protection being an incident to the land administration.

In 1817 (stats., vol. 3, p. 347) congress passed the first act for the preservation of live oak and red cedar for naval purposes, with penalties for cutting and destroying trees, &c.

In 1831 (stats., vol. 4, p. 472) another act was passed to arrest spoliation. By judicial rulings and departmental decisions these laws were construed to protect all the timber on the national domain. A system of agency was then established for "protection of trees," but resulted in no substantial advantage.

In 1855 the management of the timber interests was transferred to the general land office, and the registers and receivers of the different

land districts were subsequently charged, but without compensation, with the duty of protecting our timber. See circular of instructions issued by this office December 24, 1855; copy herewith.) This was an improvement upon the old system, with all the instrumentalities at hand, to effectually correct the evil. The means are not adequate to fully suppress and put an end to the depredations and waste constantly committed, and I recognize the necessity of invoking legislation authorizing the appointment of a "commissioner of forestry," as suggested in the joint resolution submitted by the aforesaid committee for your consideration.

The act of 1873, (stat. 18, p. 607,) the last legislation relative to our timber interests, merely protects individuals in their right to a quarter-section of land who shall plant, protect, and keep in healthy condition for a period of ten years, &c.

While this may serve to encourage the growth on western prairies, some legislation appears to be indispensably necessary to prevent its wanton destruction where it now exists, and to secure a renewal thereof as it may be taken for use. I therefore heartily concur in the plan suggested for securing the necessary information as a basis for further and more adequate legislation, not only to produce but to encourage the growth of timber in all sections of our country.

The memorial and joint resolution are herewith respectfully returned.

With respect, your obedient servant,

WILLIS DRUMMOND,
HON. C. DELANO, Commissioner.
Secretary of the Interior.

Several companies have bought 6,000 acres of land in Burnett county, Wisconsin, for cranberry marshes, and have already dug 10 miles for ditches. They have picked 6,000 bushels of cranberries during the past season. About 40,000 barrels have been shipped from Green Lake county. They go to Chicago and St. Louis, where they are worth \$5.00 per bushel.

MARQUETTE LUMBER CO.

We made brief mention last week of a new steam saw mill to be erected near the water works by W. L. Wetmore. We have since learned that the projectors of the enterprise are F. P. Wetmore, W. L. Wetmore and John L. Gillett, who have associated themselves together as equal partners under the name and style of the Marquette Lumber Company. They have purchased from the Lake Superior Iron Company, for a consideration of \$10,000, 150 feet water front, where the rink stands, with land near it 250x450 feet. The capital to be invested in dock, mill, machinery, and timber lands, including site, is \$50,000. The mill will be 100 feet long, calculated to saw timber of any desired length, and with a capacity of 30 to 35,000 M per day. The engine and boilers are being made by D. H. Merritt—engine 18x24—boilers, of which there will be two, 24 feet long and 44 inch diameter. The other machinery will be made by the Stearns Manufacturing Company, of Erie, and will be of the best kind. The building will be roofed with slate, and will stand over the water so that logs can be drawn up directly from the water, 100x150 feet with a roadway 20x400 feet. This is an improvement much needed here, and one which will doubtless return handsome profits to the owner.—*Marquette Mining Journal.*

WHAT CONSTITUTES A CAR-LOAD.

Some one who has been investigating the subject says that in general 20,000 pounds is a carload, of 70 barrels of salt, 70 of lime, 90 of flour, 60 of whisky, 200 sacks of flour, 6 cords of hard wood, 7 of soft, 18 to 20 head of cattle, 50 to 60 head of hogs, 80 to 100 head of sheep, 6,000 feet of solid boards, 17,000 feet of siding, 13,000 feet of flooring, 40,000 shingles, $\frac{1}{2}$ less hard lumber, $\frac{1}{4}$ less green lumber, 1-10 less of joists, scantling and all other large lumber, 340 bushels of wheat, 360 of corn, 680 of oats, 400 of barley, 360 of flax seed, 360 of apples, 480 of Irish potatoes, 360 of sweet potatoes, 1,000 bushels of bran. The foregoing table may not be exactly correct, for the reason that railroads do not exactly agree in their rules and estimates, but it approximates so closely to the general average, that shippers will find it a great convenience as a matter of reference.

MILWAUKEE'S WOOD-WORKING INDUSTRIES.

Planing Mill, Box and Pump Factory of Brockhaus & Bradley—Reformation of the Menomonee Marsh and Other Prodigals—Mr. S. A. Bradley as a Temperance Reformer.

That entertaining history, the *Chronicles of Milwaukee*, describes the Menomonee marsh as it appeared in the year 1837, in these words. "The city was approached by nearly two miles of tortuous channel through a wet morass; the little steamers having to paddle through the maze of wild rice and grass from the mouth of the river to Wells street." A very pretty parallel might be drawn between the early days of this once dissolute and good-for-nothing locality and the youth of more than one of our staidest and most valuable citizens. Both for a considerable time wasted their opportunities, as young people will, and devoted their energies principally to the production of wild oats. Both, later on, have seen the error of their ways, abandoned their riotous living and seriously settled down to business. The vicinity of the Menomonee marsh is now scarcely surpassed in value by any business property in the city. Individual enterprise and the enlightened policy of parties in whom the title to the land is vested are rapidly filling it up with large manufacturing establishments of many varieties. The planing mill and box factory of Messrs. Brockhaus & Bradley at the corner of Park street and Seventh avenue is one of the finest among them. It will also be generally admitted by those conversant with the business to be the handsomest and most complete establishment of its kind in the city. It is located in the midst of the lumber district and opposite the extensive yard of G. G. Houghton. There is a view, in front, of crowded masts, the marsh humming with industry and the solid part of the city in the distance. Next door is the handsome establishment of the Milwaukee Agricultural works, and a block or two east, that of Sanger, Rockwell & Co. better known under the auspices of the late John Hiles.

THE SEVERAL BUILDINGS.

of the Brockhaus & Bradley works are: the engine room, 24x28 feet—separated from the rest for greater security in case of fire; the mill 24x42, and the factory 36x80 and two stories in height. The total

frontage on the two streets is 108 feet. The regard for appearances manifested both inside and out is particularly noticeable, neatness and orderly arrangement being so rarely characteristic of the wood butchering business.

THE MILL

contains a Merchant surfacer, a matcher of the same make, a siding saw and a heavy hand rip-saw. There is room for two more machines which will shortly be put in place. A large fan and blower carries all the chips and saw-dust resulting from the work to the fuel house.

THE FACTORY

contains in the principal story, three rip saws, two cross cut saws, two cutting off saws, a hand matcher and a Whitney planer. This latter will finish a board two feet wide as smoothly as an ordinary panel planer. In the second story are contained the turning lathes, moulding machinery, a dove-tailing machine (of Mr. Bradley's invention), a rod machine, a horizontal borer, a pump planer and a heavy pump borer.

CHARACTER OF MACHINERY.

All of these machines are new, the best of their respective kinds and in perfect running order. The Merchant surfacer mentioned will dress 50,000 feet of lumber per day.

DEPARTMENTS OF THE BUSINESS.

The mill is devoted to flooring, matching, resawing work, &c., which the firm claim to be able to do quicker and as cheaply as any similar institution. The factory makes packing boxes, all kinds of mouldings, and building work, patent fencing, newel posts and balusters, hitching posts and the well known Badger pump and does all kinds of turning and scroll sawing. The patent fence is a simple and ornamental contrivance. The rod machine used in its manufacture turns out 3,000 pickets per day. The Badger pump is a first-class white wood suction pump. The planer used in its production is a neat working machine which eight squares a stick from 10x10 inches down.

A NOVELTY IN THE BUILDING LINE.

The firm are making arrangements to carry in stock a full line of bases, cornices, door and window casings and general interior finish for the use of builders. This will prove both a very great convenience and a saving of expense over the old method of getting out these details to order. They can be had at a moment's

notice, of any required shape and size and considerably below the ordinary prices.

THE FIRM.

Mr. T. W. Brockhause is an old East Water street merchant. Before commencing his present enterprise he has been known in connection with the hardware business for the last eighteen or twenty years. M. S. A. Bradley is a genial, whole-souled gentleman popular among his workmen and associates and cram full of activity and business enterprise. Like most of the best men in the west Mr. Bradley is a self made man and is proud of it.

MR BRADLEY INTERVIEWED.

Our reporter after going the rounds of the works stopped for a few moments' conversation at the office.

Reporter—I don't profess to be a judge in other respects, Mr. Bradley, but your place is certainly the neatest concern of the kind I have ever visited.

Mr. Bradley—Well, that's what we are here for.

Rep.—Do you want to give me some figures about the extent of the business.

Mr. Bradley—Are you one of these short hand fellows ?

Rep.—No, I am one of these fore-handed fellows.

Mr. Bradley—Well, we have about \$22,000 invested here. We handle from three to five hundred thousand feet of lumber per month on orders and one hundred thousand on our own account. We will run say a million and a half per year of our own.

[At this point a colossal truck like a car of Juggernaut loaded with packing boxes drove by.]

"There," said Mr. Bradley, "is the best driver in this country. He can handle 20,000 feet of lumber a day. Did I ever tell you how I cured one of my drivers of drinking?"

Rep.—No, I believe I have'nt had the pleasure.

Mr. Bradley—He was in the habit of going on a spree about once a month. I did not know it when he first came to me. He was just as good a man as you would want to see. After he had been with us about two months he sent down word one day that he was sick. I went up to see him and found him in bed. I did not disclose that I knew what was the matter but sympathized with him, gave him some money and told him if he wanted anything to let me know. When he came back three or four days after I

asked him what the trouble had been. "Oh! kind of erysipelis or somethin'," said he looking sheepish. 'Now,' said I, 'that is all right, I know all about it. You have been on a tear. I don't find any fault. If you think you enjoy yourself that way, all right. I want however to propose a little arrangement so that I shall not interfere with your business nor you with mine. Whenever you want to go on a spree, you just come and let me know. Then I can get a man to put in your place till you get through and everything will be all satisfactory. He hasn't been on one since. He shut right down from that minute. His former employers had always sworn at him up and down. Coming to look at it in a business like way, he asked himself whether it pays and made up his mind that it don't.

Our reporter had by this time untied his cutter and was getting under way.

"The JOURNAL OF COMMERCE is the best beaver dam paper in this city" said Mr. Bradley as a parting salute.—*Milwaukee Journal of Commerce.*

YELLOW PINE BUSINESS OF PENSACOLA, FLORIDA.

During the month ending December 31, 1873, there arrived at the port of Pensacola, from all parts, 74 vessels of an aggregate tonnage of 42,882.07, and 1,056 seamen. There were cleared 64 vessels, 28,470.73 aggregate tonnage, employing 681 seamen. Those arriving were chiefly in ballast, our merchandise being in the main brought here by rail. Our exports have been generally of timber; indeed we might say altogether so, and of quantity as follows; Yellow pine timber, 1,103,961 cubic feet, valued at \$38,018 65; yellow pine lumber, 3,738,950 feet, valued at \$54,875.26; sundries, being white oak timber, shingles, etc., valued \$2,721.17. There are now here and to arrive during the season nearly 300 vessels, to work which in loading and handling, the cargo will require nearly 1,000 men; in miscellaneous work about the bay will be employed about 300 men—in all about 1,300 men, at an average pay of \$2.50 per day. This estimate includes the men required upon the tugs, lighters, and other small craft upon the bay that are in constant requisition of which there are about 200, of an aggregate tonnage or about 25,000. It is estimated that 200,000 feet lumber and 6,000,000 cubic feet timber will be required to supply the demand.—*Ec.*

THE SOLID NONPAREIL HARDWARE MERCHANT OF THE WEST.

Opening of the Largest Hardware Store in the World—One of Milwaukee's Go-Ahead Citizens Receives an Ovation from Go-Ahead Milwaukee—What All the Papers Say About It.

From the Milwaukee Journal of Commerce.

Of Milwaukee's many strong trades, the hardware trade probably takes the lead. This city abounds in wholesaleships, and heavy hardware houses that are broad and staunch and enterprising. Competition in this branch of trade in Milwaukee is incessant and severe; and competition, as the broad-minded merchant everywhere knows, is the life of trade. The achievement, therefore, of Mr. John Nazro in crowning the ambition and care and industry of twenty-five years with so noble an edifice, and with a trade of such vast proportions and such perfect systemization, will be appreciated no less as a general benefit by his friendly rivals in the trade than by the citizens of Milwaukee, of Wisconsin, and of the north-west at large. It is a happy law of the world's economy that the individual best serves the common welfare in honorably seeking his own. This law is universal in its application, where the operations of commerce are unobstructed. In this sense, as well as in others, Mr. Nazro is a public benefactor. By his success he has fortified the hardware trade of Milwaukee, he has advertised the reputation of this metropolis for commercial facilities, substantial wealth and judicious enterprise, and he has set an example of diligence and integrity and energy in business which is worth more to the community even than the architectural monument with which he has adorned it.

Mr. Nazro may be personally described, by the term most familiar to printers, "solid nonpareil." Like the type of this article, he is compact, substantial, clean-cut and comprehensive. There's a good deal in him, with no space wasted. Like a number of the most eminent merchants of the country, he is somewhat under the usual size. He has black hair, a full beard beginning to show the tinge of iron grey, and a brown, alert but usually pleasant eye. There is something in the hue, or make-up, or the movement, of this hardware merchant—it is hard to say precisely in what the quality resides—that suggests certain lines of the steel goods in which he deals. Perhaps it is the air of perennial newness, strength and brightness, which marks the middle-aged merchant as notably as it marks the establishment that he has just opened to the trade.

Mr. Nazro possesses in an unusual degree the faculty of throwing off the weight of business from his mind after business hours. He is an appreciative and critical patron of Milwaukee's noted musical resources. He is a devoted supporter of Mr. Harry Deakin in his efforts to maintain a high dramatic standard in the Grand Opera House. He takes a keen interest in every enterprise, whether public or private, that he deems calculated to forward the growth and progress of Milwaukee. If he sometimes treads on the toes of powerful men—as every man who believes enough in himself, and enough in push to get on in the world, is apt to do—he has often made the fortunes of men who were deserving, poor and young. While man enough to have made enemies, Mr. Nazro has been humane enough to have won many friends, in his course through life. And there is probably not an individual in either class who will deny him the credit of his successes or claim that they have not been fairly earned.

For a conception of the new store of Mr. Nazro, we have preferred to refer our readers to the concurrent and spontaneous testimony of our contemporaries. We have done so without the knowledge of Mr. Nazro, and this display will probably be more of a surprise to him than to any other of our readers. We have taken this means to impress

upon the minds of our mercantile readers in all the states of the great west the fact that the proportions and elegance of this establishment cannot well be exaggerated in print, and to assure them that it is worth going far to see. And while we render what is due to the character and achievements of John Nazro, we take this occasion to reassert that Mr. Nazro's is only one out of many great hardware houses in Milwaukee, and that Milwaukee is the greatest, best and cheapest hardware market in the country, for the merchants of the west.

JOHN NAZRO.

The Leading Hardware Merchant of the West —Who Build Up the Wealth and Prosperity of Milwaukee.

From Advance Sheets of the Milwaukee Monthly for April.

Thirty-five years ago! It is but a brief period in history; yet what marvelous results have those few years produced in our great, wonderful west! Cities have sprung up as if by the wave of the magician's wand, rivaling in wealth and splendor many of the centuries-old cities of Europe.

Within that period the wilderness and marsh environed Milwaukee, the home of the red savage, has risen into a rich and prosperous commercial and manufacturing city, ranking, with her hundred thousand inhabitants, as the third largest between the Alleghanies and the Pacific coast.

To a country unsurpassed in fertility, yielding all that man requires, and a class of sagacious and enterprising merchants and mechanics to assist the industrious farmer in developing its resources, is the rapid growth and prosperity of the city indebted. But to no one class is Milwaukee more a debtor than to her liberal and large minded merchants. The leading merchants to-day are those who in the earlier and doubtful period of her infancy, cast their lot with her, and by honorable dealings have risen from small beginnings, till now some of them stand with the merchant princes of the land. The low, wooden, country-like stores have given place to capacious and lofty warehouses, to fill some of which requires the capital of millions.

Such an one is the magnificent building just erected by one of Milwaukee's most enterprising citizens, Mr. George Burnham, for and occupied by the noted firm of John Nazro & Co., and such a stock crowds its acres of storage.

The reader may form some idea of the proportions of this warehouse—which is said to be the largest hardware store in the world—when he is told that its capacity for the storage of goods amounts to upward of one million of cubic feet (1,048,500 ft.)—large enough, if used for a military hospital, to accommodate 3,500 patients, with their beds and all necessary offices; and four full regiments of soldiers—a Brigadier General's command—could be put through the manual of arms on its capacious floors.

But before entering into a full description of this gigantic establishment, which we intend to do, we will first briefly refer to the history of the hardware house of which, Mr. John Nazro is the principal. These items were furnished through the courtesy of Mr. Nazro himself; and we use them to illustrate the fact that a man of extraordinary business qualifications and commercial acumen can in this country, and especially in the west, though beginning with a small capital and in a small way, and keeping pace with the wants and developments of the country, build up a trade almost limitless in extent. The man who possesses these necessary requisites for success must be a genius. He must have the force of natural qualifications and talents, as well as the education for commercial pursuits. Such is Mr. Nazro justly regarded among his brother merchants; and the uninterrupted success he has achieved, and the gigantic (we can use no more suitable adjective) business his house now transacts, under his sole

management, is proof of the correctness of this view. It is undoubtedly true that it requires more real genius, larger brain, and more executive talent, to manage so large a business successfully, as is done by the house of which we are writing, than to design and execute the most famous work of art in the Old World. If poetry, oratory, mechanical inventions, and the fine arts, are the products of genius, no less so is it to achieve wealth and celebrity as a merchant.

HISTORY OF THE HOUSE.

On the first of May, 1844, Henry J. Nazro originated the house since become so famous; and in company with Henry U. King, from Troy, N. Y., purchased the hardware stock of Clark Shepardson, occupying a small wooden building on the site of which was afterward built the wholesale hat store of "Uncle Ben" Troop, and now occupied by the enterprising drug firm of Drake Bros., on East Water street. The original building was removed, and is now owned by a benevolent association and occupied as the "Home for the Friendless." It is situated on Van Buren street in the third ward. In 1846 Nazro & King, having enlarged their stock and business, moved into the store built by Thomas Fitzgerald, thirty by eighty feet, and then known as No. 141 East Waterstreet, and now occupied by the old drug firm of Bosworth & Sons. On the 15th day of February, 1847, Mr. John Nazro, Jr., then a very young man, came from Boston to Milwaukee, at that time a small but promising town, and entering the hardware store of H. J. Nazro, took possession of the books of the concern. In the meantime, the junior partner, King, had retired from the firm of Nazro & King. Mr. Nazro remained in charge of the books one year, when, in 1848 (May 1st) Henry J. Nazro and John Nazro, Jr., bought out J. C. Cramer & Co.—H. J., furnishing the capital, as John Nazro had no other capital than his brain, and remarkable talents for business, combined with untiring industry and a determination to build up for himself a business and reputation as a merchant. They—Henry J. and John Nazro, Jr.—then occupied 142 East Water street, opposite the store also occupied by Henry J. Nazro, 141 East Water street, in the old United States block, long since destroyed by fire. The firm was known as John Nazro, Jr., & Co. Their sales for the first year in this store amounted to \$11,000, which in the following year had increased to \$35,000. May 1st, 1850, this concern was closed out and H. J. and J. Nazro were partners under the firm name of H. J. Nazro & Co., at 141 East Water street.

Through the energy and enterprise of Mr. John Nazro, whose far-reaching perception saw the necessity for expanding the business to meet the requirements of the country, the large, commodious, and beautiful store on East Water street, known as the "Nazro Block," and until very recently occupied by him was begun, and completed in the summer of 1855. This building is a double store, 60 by 120 feet, with four stories and a large basement. But, large as it is, it is now considered too "cabineted, cribbed, confined," for his present immense business; and he has caused to be erected the large store he has just moved into, a fine cut of which appeared in our March number. In 1854 the health of Mr. Henry J. Nazro, making a change of residence necessary, he removed to New York—thus throwing the entire burden and responsibility of the large business upon Mr. John Nazro, who was then twenty-seven years of age. In May, 1860, the title of the firm was changed to that of John Nazro & Co., (in consequence of the non-residence of Henry J. Nazro,) Mr. J. Nazro justly deeming that as he had to bear the brunt of the battle, his name should be in the van and reap the honors of the fight. On the 1st of March, 1870, he bought out the interest of Henry J., and a partnership, pleasant in all its relations, of twenty-two years was dissolved—Mr. Nazro paying in full for the interest of the senior partner. Under the skillful generalship of Mr. John Nazro the sales of this house have increased from the eleven thousand dollars of 1848 to the enormous sum of one and a quarter million of dollars during the year of 1873.

During the month of February last Mr. N. removed his stock to his new quarters, which have been built expressly for him, and fitted and furnished in a manner making it the most elegant and commodious hardware store in the country.

THE BUILDING.

The store is situated at the corner of South Water and Reed streets, in the Fifth ward. It is 101 feet on S. Water and 140 on Reed st., and erected on land redeemed from the deep marsh. Twenty feet below the floor of the basement lies buried, where it sunk the hull of a wrecked vessel; and the writer has fished on the identical spot. The waters, once navigable, in this vicinity, have long since disappeared, and the made ground is covered with depots and large business houses, lumber yards, etc.

The building is five stories high above the basement, with a hollow sidewalk on each street, fifteen feet wide and two hundred and seventy-one feet long. The heights of the different stories are as follows:

Basement	9 feet in the clear.
First story	18 " "
Second " "	14 " "
Third " "	13 " "
Fourth " "	17 " "

Total height from top of sidewalk to top of cornice is 69 feet. To the top of pediment 79 feet. The basement is well lighted on the alley and both fronts, including glass in sidewalk. The basement is divided by two walls lengthwise, which support the first story joists, including 55 fluted iron columns with Corinthian caps. The upper stories have each also 55 columns. The South Water street front is supported on thirteen heavy iron columns. This front of 101 feet on the first story: between columns is filled with best French plate glass, giving this a fine light and pleasant appearance.

The building was commenced about the first of May, 1873, and finished ready for occupation last January. To secure a good foundation upon this made land, a close row of oak ties 12 feet long by 10 inches thick were laid crosswise, bedded in sand, upon which 4 or 5 layers wide of 12 by 12 oak timber were laid, from 30 to 60 feet long, firmly bedded in cement. Upon this mass of timbers was laid the stone foundations, which consisted of three layers of stone; the first five feet wide, the second four feet and six inches wide, the third three feet and ten inches in width. Upon these followed a stone wall two and one-half feet thick to the top of the first story. Above this point the walls are of the celebrated pressed cream brick, manufactured by George Burnham, and which have given the cognomen of "Cream City" to Milwaukee. The style of exterior architecture is of a mixed character, uniform on both streets, ornamented, not elaborate; and gives a frontal appearance alike of 241 feet; consisting of the fine Corinthian iron columns on South Water street, and faced plates to harmonize with the columns on Reed street. The water-table and steps are of cast-iron; the first story cornice and main cornice are of galvanized iron, separated by ornamented trusses. The dentils and pediment bearing the figures 1873 and words hardware in bold, gilded letters on both fronts. The numerous pilasters facing streets, above first story are brick, carried up to the cornice, and trimmed with handsome blocks of sandstone, to relieve the belt-courses of the different story windows, which are circular in form, containing each a keystone. The roof, from which may be had a magnificent view of city, lake and surrounding country, with the fleets of vessels crowding the harbor beneath you, is covered with closely-soldered sheets of heavy tin, the work of C. A. Buttles, 355 and 357 East Water street. For the purpose of preventing any dampness coming up from the basement, furnace slag one and a half feet deep was filled in and covered over one foot of cement, and joist bedded in them; over these was laid a heavy plank flooring. This substantially built and handsome store was erected at the cost of \$100,000, and is considered very cheap at that.

We are indebted for the above facts to Mr. John

Rugee, the architect, who with Herman Rugee, the contractor for the carpenter work, and John Bentley & Son, the contractors for the brick and stone work, have erected, in this large and conspicuous building, a lasting monument of skill as designer and builders.

If the patience of the reader is not already exhausted, we invite him to accompany us in a stroll over this extensive establishment, while Mr. W. G. Byron, one of the courteous clerks of the house, acts as our chaperon.

Being on the first floor, we step with him into a small apartment, he touches a cord, and in a moment we find ourselves in the large basement. First he calls our attention to the sidewalk elevator for receiving and shipping the class of goods stored in this large room. It is divided into three compartments. In one is stored tons of sheet iron, zinc, tin, and other heavy metal goods. The others contain nails by the thousand kegs, horseshoes, drag-teeth, chains, cordage, large stock of the celebrated Nazro brand of white lead, and wheelbarrows and other contractors' supplies. We now examine the beautiful steam engine, of Milwaukee work, (built by James Sheriff) which runs as smoothly and noiselessly as a watch, whose sole duty is to run the elevators on which are raised and lowered the employes, and goods received and shipped. By means of this elevator much labor and many steps are saved to clerks and porters; and the handling of goods is greatly facilitated. It has a thousand advantages over the old-fashioned mode of hoisting and lowering packages.

The same boiler that furnishes steam to the engine also warms the entire building—beautiful gilded and marble-topped registers being distributed through the first story. We re-enter the elevator and return to the first floor, and find ourselves in the receiving room, where a clerk checks off packages received from drays and cars. This room is thirty-three by twenty-three feet. * From the receiving room we enter the shipping room, under the charge of a clerk, with his porters. This apartment, including within it the clerk's office, is of the same size as the room previously mentioned, and communicates with the main room, and through it with the principal office. The main room of this floor is divided into a front lobby or reception room, from whence ascends a broad and beautiful staircase to the upper rooms. It is lighted by the large plate-glass windows in front, and has suspended from the ceiling a magnificent bronze chandelier of six burners, with cut glass globes. From this lobby a door opens into the main office, as also does another from the main room. This room is one hundred and forty feet by sixty-eight feet, and contains near the front a tastily arranged and convenient office, occupied for the transaction of city business, in charge of four clerks. In the rear of this office runs a long double table, almost the entire length of the room, on which are checked off the light goods ordered, previous to the packing, which work is done on the same floor, and gives constant employment to ten clerks and porters. The east end of this room is shelved and devoted to the reception of cutlery and other fine shiffoods. This is a beautiful airy room, where the numerous clerks and packers have ample room to perform their duties. It is lighted at night by twenty-four double-bracketed gas-burners suspended from the ceiling. The office *par excellence*—that occupied by Mr. Nazro and his sixteen assistant clerks, is situated on the Reed side of this floor, and is a perfect gem of a room. We think Mr. Nazro is deserving of a large gold medal for designing so beautiful and luxurious a business place. If we were one of his clerks, we would be very proud of our quarters. Indeed, we have no doubt they are. It seems as if no expense had been spared in fitting up and furnishing this splendid office. The desks and chairs, tables, etc., are of the most beautiful and costly kinds, and all of Milwaukee manufacture. The partitions and other wood-work is tastily grained and varnished, and the office at night is lighted by artistically designed

chandeliers of Grecian bronze, whose cut-glass shades cast a soft and agreeable light down upon the desks. Mr. Nazro's special desk is a *chef-d'œuvre* of cabinet art. This, also, we believe, with its ornaments and conveniences, was designed by Mr. N., who has an eye not only to business, but to the beautiful and artistic in his surroundings.

The second story is devoted to the sample room, and to a general stock of shelf-goods, where everything of the best and latest improvements in that line are to be found. The sample room, which is situated directly over the main office, is one of the most beautiful to be found anywhere. To describe it as it ought to be would occupy more space than can be given in this magazine. It is finished in the most elaborate style of ornament, with marble columns and frescoed ceilings, and the samples are arranged in an artistic manner producing a most pleasing effect. Here the customer can see at a glance specimens of any article he may wish to purchase in those particular lines. The room entered from the main room staircase, and corresponding with the reception room below, is devoted to the exhibition of samples of every tool used by the workers in wood and metal. This is lighted at night, as is also the principal sample room, with costly chandeliers. That in the center of the latter is a highly ornamental six-lighted Grecian bronze, glass-shaded chandelier.

Another ride upon the elevator, and we step upon the third floor, where we find original packages, axes, shovels and spades, by the thousands, heavy hinges, wheels for barndoor-slides, wheel-wheels, mill-saws by the ton, piles of Russia sheet-iron, bench-planes, hand-trucks by the hundred, a full line of Fairbank's scales, and a multitude of other goods, to enumerate which would require pages.

Another ascent brings us to the fourth floor, where are stored all kinds of farmers' tools, buck-saws, neck-yokes, baskets, and wooden ware generally found in a heavy hardware stock.

This completes our hasty inspection of this extensive hardware house; and stepping once more into a closet, where we are reminded of the magic carpet of the Arabian Nights, we are transported in a moment to the lower floor, to find our way through the crowd of busy clerks and porters to the front.

While looking over this line and extensive establishment, our attention was called by Mr. Byron to the perfect arrangement, planned by Mr. Nazro, for fire protection against fire. In each end of each store, have been fixed large water pipes with rubber-tubes attached, all under control of the engineer, which can instantly be brought to throw twelve large streams of water, not only within and upon the building but upon any of the surrounding buildings, and thus avert a fire in its incipient stage—before a public engine could be brought to the spot.

As we leave the building we cannot but carry away with us admiration for the man who by large executive talents has built up so extensive a business, which extends all over the western portion of the continent; and has perfected a system of management which, like perfect machinery, works without friction, and where among the forty-seven employees, every man knows his special duties, and performs them, without in the least interfering with one another. As we have said at the commencement of this article, genius and brain are requisite to so large a business. Unlike some other merchants we might mention, Mr. John Nazro did not, to use a nautical saying, climb through the cabin windows to obtain command of the ship, but came in the regular way from the fore-castle, and learned the ropes, and earned his present position by years of experience. Besides being one of the leading merchants, he is prominent in every object intended for social and moral improvement, as well as those promotive of the interests of our city. The erection and occupancy of the new store has enhanced real estate in its vicinity one hundred per cent, and such a man as John Nazro, with his extensive business, is justly regarded as a public benefactor. Do Milwaukeeans appreciate such a man as they ought? S. COMPTON SMITH.

THE HARDWARE KING.

Formal Opening of the Establishment of John Nazro & Co.—Thousands of Citizens Visit and Admire the Magnificent Store—The Largest Hardware House in America.

From the Sentinel, March 6th.

Yesterday was a proud day for John Nazro & Co. Their immense store on the corner of Reed and South Water streets was thrown open to the public, who to the number of something like six thousand availed themselves of the opportunity to inspect the magnificent establishment just taken possession of by this house. Without doubt it is the finest hardware store in the country, and has been pronounced such by those who have seen the best ever erected on this side the ocean. The *Sentinel* has hitherto given quite extended notices of the

DIMENSIONS OF THE BUILDING,

but on the event of its formal opening it is appropriate to recapitulate. The building is 101x140 feet, four stories high above the basement. It is symmetrical, substantial and altogether a handsome structure, and yesterday, as the stary banner floated from the flag-staff above it, it was pronounced beautiful in itself, and an ornament and credit to Milwaukee, by the admiring thousands who visited it.

THE GUESTS.

In order to show his visitors the utmost attention and give them an opportunity to inspect the establishment fully, Mr. Nazro suspended business for the afternoon entirely, and distributed his clerical force in such a manner as to contribute most completely to the pleasure of those who came by thousands, despite mud and unpropitious skies, to see him in his new and magnificent quarters. Among his guests were not a few of those who remembered the occasion when he took possession of his really commodious quarters on East Water street, and little dreamed then that the business he was conducting would, even under his skillful management, grow to such dimensions as his present accommodations are designed to meet.

AT THE FOUNDATION.

A thorough inspection of the premises naturally leads one in the first instance to the basement. Here is found a twenty-horse power engine, with boiler located under the sidewalk, which furnishes the motive power for hoisting purposes. This was supplied by James Sheriff, of this city, and is a beautiful piece of mechanism. Not only does this room embrace the dimensions of the building itself, but takes in the space under the sidewalk on each street front. Tin plate, nails, sheet-iron, copper, horse-shoes, wheelbarrows, etc., find a lodgment here, arranged in systematic order. By an easy stairway the ascent is made to the

FIRST FLOOR.

Here are located the offices, extending along the Reed street front, 32x70 feet, and containing thirteen desks. At the southern extremity of the room is the private office of Mr. Nazro, 12x16 feet in dimensions. This is separated from the main office by a partition of matched pine about eight feet high, ornamented with butternut, and handsomely set off with ground glass panels, the work of Mr. Frederick Mason. This cozy spot is furnished with a black walnut desk, chairs and lounge to match, a brussels carpet and elegant gas fixtures. The whole general office is supplied with handsome desks from the establishment of A. D. Seaman & Co. The balance of this floor is devoted to the getting out, packing and shipping of goods. Everything is sent to this floor for shipping, and here, too, is the receiving room. Extending nearly the entire length of the east side of the building is shelving filled with cutlery and light shelf hardware. Through the centre of the room provision is also made for placing goods which the limited time since the removal has not admitted of coating. The handsome iron columns which sup-

port the floor above are from the foundry of George L. Graves & Co., of this city. This firm furnished all the iron work of the building, and have done themselves credit by its grace and excellence.

SECOND FLOOR.

A broad and graceful stairway leads to the second floor and a room devoted to the exhibition of samples of all kinds of goods kept in the establishment. It is painted and frescoed in a most tasteful manner by Collingbourne. It is a charming spot and buyers will delight to visit it. On the west wall are exhibition boards lined with black velvet where polished steel goods are to find a place. Stepping out from this room and on the same floor one is greeted by a wilderness of house-furnishing goods, brushes, tacks, screws, builders' and mechanics' hardware, builders' material of all kinds, etc.

THIRD FLOOR.

This is devoted to the storage of pumps, shovels, spades, Russia iron and winter goods, such as skates, sleigh-bells and the like.

FOURTH FLOOR.

Here we found a profusion of goods for summer wear, such as scythes, snathes, cradles, rakes, corn-planters, etc. In this department a young lady yesterday saw a corn-planter which somewhat resembled a telescope. Seizing hold of it she said, "Ma, let us look out on the lake," and suiting the action to the word she brought the machine to her eye before she discovered her mistake, and then she wilted.

WATER SUPPLY.

Each floor has a pipe connected with the water-works, and 74 feet of hose. This is also led to the roof, so that on occasion a shower of artificial rain may be thrown over it. The danger of fire is thus wholly obviated, and particularly as the entire building is heated by steam.

GAS-FIXTURES.

In this branch of furnishing the good taste of Wm. E. Goodman is apparent. Chandeliers, pendants and brackets are chosen not merely for use, but for ornamentation as well, and the design is admirably carried out.

THE DESIGN AND WOOD WORK.

Mr. Rugee, the architect and contractor for the wood-work has acquitted himself most admirably in his work. It is especially creditable.

THE FINISH.

The inside of the building is painted with Nazro's brand of white lead, which makes a finish so beautiful as to attract attention from all visitors.

A BRILLIANT SCENE.

The illumination of the store last evening was a brilliant affair. There was music, flashing lights and a crowd. Fairly launched on the commercial sea in this new craft, the hope of the many friends of John Nazro & Co. is for increased success for them.

JOHN NAZRO & CO.

His Mammoth Hardware Establishment—A Description of the Finest Concern of the Kind in the West—The Grand Opening Yesterday which Everybody and his Family Attended.

From the Milwaukee Daily Times, March 6th.

Enterprise has been a quality that has been denied to Milwaukee merchants and business men by their Chicago boosters, and from what is said and written about us in that puffed up and vain city, a stranger would obtain the idea that we were a mere lubbering boy city—green, diffident and contrifed. This misrepresentation accounts for the general surprise manifested by all visitors to this city who are strangers, regarding our business activity, our resources, wealth, population and extent. As an additional proof of the falsity of the statements of our Chicago maligners, John Nazro & Co., have branched out grandly in the hardware business, and have shown an enterprise that throws in the shade the flimsy

pretenses of the bankrupts to the south of us. Messrs. Nazro & Co., have contemplated this move for a number of years, and within the last six months, the greatest exertion and activity has been practiced to bring their mature plans to actual completion. The result of this energy, has been a grand brick block, 140 feet long, by 100 feet wide, looming up four stories, with a basement of sufficient capacity, to accommodate any ordinary hardware store in the state. This mammoth establishment is situated on the corner of South Water and Reedstreet, at the centering point of railroad and ship transportation with every facility for sure and speedy receipts and shipments of goods.

In order to carry out so extensive a business as that of Messrs. Nazro & Co., the greatest system has to be adopted in the management of their affairs. Each story has its particular kind of goods, and these are arranged and classed according to quality and grade. The first floor contains the office, the receiving and shipping rooms, and a large department devoted to the storing of table and pocket cutlery, and to large packing tables. The office as a work of art has no equal in this or any other city. With a space 32 by 72 and 18 feet high, it is embellished by various kinds of woods, beautiful French glass, handsome chandeliers and fine upholstery. Eighteen desks of different sizes, and various makes are distributed at intervals throughout the office. A large book-case stands out against the east side, and in the back part an elegant little room is partitioned off in pine and butternut, as the *sanctum sanctorum* of Mr. Nazro, himself. On this apartment Mr. Thos. Mason lavished the best skill his long experience in the carpenter trade had given him. Here Goodman placed his choice chandelier, Seaman, his select furniture, Collingbourne his brightest colors, and Goldsmith his richest tapestry. In the future, creditors, (if such there be) or perchance newspaper solicitors will approach this little room through the long file of clerks, and attaches with somewhat of the awe and dread that the ancient Hebrews approached the Holy of Holies in the tabernacle.

From the receiving room a large elevator worked by steam is ready to take goods to any floor in the building. The shipping room communicates with a small elevator by which the stock is lowered.

The second floor contains the stock and sample rooms. In the first room four of the finest bulkheads are lined with samples of every description. The walls also, are adorned with large frames displaying specimens of smaller goods. In the second room there is 500 feet of shelving, by far the greater part contained in the store. These shelves are loaded with goods assorted for inspection.

The third floor is devoted to boxed goods, packages of Russia Iron, spades, shovels, etc. There is besides about 100 feet of shelving.

The fourth and last floor is a full loft 40x100 without any break. Here all manner and kinds of farm machinery is stored, from a hand rake up to the most approved cradle. Descending on the elevator at the rate of a mile a minute one soon (in about a minute) finds himself in the basement wandering among boxes of horseshoes and nails, and huge bundles of tin plate and sheet-iron. The basement extends out under the pavement increasing its capacity considerably. Off from the basement the engine-room is constructed, and a neat 20 horse power engine, made by James Sheriff of this city will perform all the elevating that may be required the year round.

The arrangements in this immense establishment which we have now given in detail, for providing against fire are very complete. Two large hydrants run up the inside of the building, at the northwest and southwest corners, and on each floor sufficient hose is attached to reach any nook or corner of the respective floor. May the time be far distant, when these provisions will be brought into requisition.

The splendid ovation paid the business enterprise of Mr. Nazro was something wonderful, and the radiant countenance of the proprietor, gave full evidence that this handsome tribute was thoroughly

appreciated. By actual count 1,000 persons visited the establishment every hour during yesterday afternoon; and in the evening admiring throngs filled every floor. Messrs. Severance & Williams' band was engaged, and all together was a splendid reunion of sentiment. Fine art and commerce, joined hands, and John Nazro, Esq., performed the wedding ceremony.

Nazro's New Mercantile Palace.

TRANSLATED FOR THE MILWAUKEE JOURNAL OF COMMERCE.

From the See Bote, March 6.

Nearly thirty years ago, Milwaukee had hardly climbed the first steps to city development. On the first day of May, 1844, Messrs. Henry J. Nazro and Henry U. King, both from Troy, New York, established in an ungalley looking house on East Water street, on the same spot where now the firm of Drake Bros., druggists, is situated, a hardware business which they removed in the year 1846 to the store No. 141, which was expressly built for them by Thomas Fitzgerald. Shortly after this Mr. King separated himself from the concern and Mr. Henry Nazro remained exclusive proprietor, and on the 5th of February, 1847, engaged John Nazro who was then only 20 years old for the purpose of keeping his books. In this capacity the talented, untiring, busy man proved himself so capable, that his employer took him into partnership on the first of May 1848. The company then bought out the firm of Cramer & Co., and moved to No. 142 East Water street, United States Block, which was subsequently consumed by fire. At this place the receipts of the firm of Nazro amounted, during the first twelve months to \$11,000, but increased in the following year to \$35,000, and since then has continued to grow in a most astonishing manner. In 1854, the senior partner, on account of his health removed east, and the weight of the already very important business, rested solely on John Nazro. Continually active he was far from tiring or allowing himself to pause for a moment. On the contrary, his energies and speculative enterprise and genius grew with the growth of his more and more complicated business. In the summer of 1855 he built the well-known Nazro Block on East Water street; a building which in spite of its vast dimensions proved to be too small for the business, of which in 1870, on the first of March, John Nazro had become the sole proprietor. The man, who seeing his efforts crowned by success in a manner seldom met with, the man on whom all Milwaukee may look with justified pride, created another sphere for his untiring efforts and this, his latest work looms up now complete, in the form of an imposing palace on South Water and Reed streets, on the south side, the finest monument to commercial industry in the city.

Yesterday afternoon thousands upon thousands of our fellow citizens made use of the invitation extended to the public at large, and inspected with manifest astonishment the premises, of whose gigantic extent one gets an idea when informed that the front of the building on Reed street, is 140 feet and on South Water 101 feet.

THE BASEMENT

has a height of 9 feet and extends 15 feet under the sidewalk. It is especially used for storage of kegs containing all kinds of nails, white lead, etc. In the southwest corner a twenty horse power steam engine works the double elevator which serves for the expedition of goods up to the highest loft, and is able to carry the heaviest loads. The boiler does not only supply the power but also by means of an elegant steam heating apparatus, heats the house in all parts.

THE SALESROOM AND OFFICE

in the first story (18 feet high) excell in the splendor of its equipment without doubt all stores of this kind in the United States, New York and Chicago not excepted. Costly panes of mirror glass constitute the north and west wall, the ceiling is tastefully frescoed, and the shelving looks neat and simple. The office.

facing Reed street, contains twenty writing desks, and the most exquisitely furnished sanctum of John Nazro, where he receives personal visitors. A costly Turkish carpet covers the floor; the furniture comprise besides a magnificent desk, a lounge and four cushioned chairs covered with fine leather. Below the office the safe vault is situated.

THE SAMPLE HALL

in the second story is not less elaborately furnished than the lower apartment. Black velvet sample cards with fine steel goods are fastened to the walls. In the center they are arranged in a desk-like manner, and display innumerable articles from the heavy axe to the fine tooth saw. The complete furnishing of this department will not be effected before the next five months. The value of samples alone is estimated at \$10,000, and the total goods represent about a value of \$500,000. Adjoining the sample room, is the depository of screws, hooks, locks, in short all articles figuring under the name house-trimming goods.

THE TWO UPPER STORIES

are chiefly used for storage of agricultural and domestic implements. Washing machines, kettles, tubs, coffee mills, mince-meat cutters, cooking pots, pumps, scales, lanterns, planes, skates, bells, hay and manure forks, rakes, sickles, etc., although arranged in model order, constitute here a conglomeration, to name all the single parts of which, is impossible. From the fourth story one has a fine view over a great part of the city. Every story is supplied with hose which for immediate use is screwed to the main water pipes, which perpendicularly extends through the whole building—an arrangement worthy of being recommended to all business concerns.

THE EMPLOYEES

of John Nazro, count nearly sixty heads, and among them the following gentlemen are at the head of different departments:

- O. Benedict, head clerk.
- Henry Stocks and Frank Hartwell assistants and three invoice clerks.
- George Greenleaf, general bookkeeper, with two assistants.
- J. G. Steever, cashier.
- C. H. Carter, buyer.
- W. H. Starkweather, in charge of prices and travelers.
- W. G. Byron, head salesman.
- L. W. Coe, in charge of sample room.
- Wm. Bloodgood, in charge of stock room.
- Charles Durr, in charge of packing room.
- Frank Schallock, German salesman.

THE TRAVELING AGENTS

are traveling without cessation, through Wisconsin, Michigan, the northern part of Illinois, Minnesota, Iowa, Dakota and Nebraska, taking orders for the firm, whose yearly receipts amount to the respectable sum of \$1,500,000.

ILLUMINATION.

Yesterday evening, at 10 o'clock, all windows of Nazro's mercantile palace were illuminated in a fairy-like manner, which again attracted numerous visitors, of whom the younger improvised a social dance, Severance's band furnishing the music.

Nazro's Mercantile Palace.

TRANSLATED FOR THE MILWAUKEE JOURNAL OF COMMERCE.

From the Banner and Volksfreund, March 6.

Being opened yesterday afternoon for public inspection it was visited by hundreds. The four-story building, situated corner of Reed and South Water streets, and erected for the exclusive use of the firm of John Nazro & Co., is, with its 241 feet front, one of the finest and grandest buildings of the city. The interior is arranged in a substantial manner, lacking neither light nor ventilation. For the handling of the heavy iron masses, it is supplied with steam pulleys, elevators and other contrivances of a similar kind. The house employs at present seven hundred and forty clerks, and its annual business exceeds two million dollars.

MILWAUKEE'S INDUSTRY AND TRADE.

Hardward Establishment of John Nazro & Co., Corner Reed and South Water Streets, Milwaukee, Wis.

TRANSLATED FOR THE MILWAUKEE JOURNAL OF COMMERCE.

From the Milwaukee Herald, March 6.

Although it is unnecessary to speak of the extension and spread of the above business, inasmuch as hardly a firm exists in the northwest which has not had transactions with the same, it may be of interest to many of our readers, to give a small synopsis regarding the foundation and extension of this fine mercantile house, before we enter into a description of the largest and finest local structure in the city.

It was in the year 1844 when Mr. Henry Nazro, cousin of the present proprietor, established a small hardware business at 144 East Water street. Everything this gentleman undertook was a decided success, so that when in 1855 his cousin, the present sole proprietor, became his partner, their business had to be removed to 319-323 East Water street. Here both worked with untiring efforts for about two years, when Mr. John Nazro took entire charge of the business and made the growth of the same his special labor and object. The establishment ships goods to all parts of the northwest and the territories. Its receipts during the past year amounted to over one and a quarter million dollars. It is undeniably the biggest concern of the kind this side of New York and even New York can hardly show its equal. One may get an idea of its size when he takes into consideration the fact that it took six weeks, day and night, and that it required more than 700 wagon loads to move merely the old stock from East Water street to the south side.

The large new flag was just being hoisted, amid loud cheering, when we entered the building. Almost 100 young people, among them many Germans, are employed by the establishment. Of these, Mr. Frank Schollock is perhaps the best known to our German citizens. He is the German head clerk and has been in the business for over a period of 13 years. All German customers will do well to apply directly to him, and may be assured that they will be treated in a satisfactory manner. This gentleman had the kindness to show us the premises and acquaint us with all details. We now enter the basement, extending on both sides, as well on South Water as on Reed street, 15 feet under the sidewalks, whereby a space of 200x15 is gained. There we find machinery for elevators, steam heating and fire extinguishers. Upon the former we may return to the upper air. All contrivances adding to comfort, closets, washbasins, etc., are here. Here are stowed away all manner of heavy hardware, iron, hemp ropes, etc.

The first story comprises the offices, and a general stock of nails, scales, cutlery etc.

The offices, towards the right, when you enter the store from South Water street, are magnificently furnished, especially the private office of Mr. Nazro is a perfect little gem; green carpet, dark furniture, from the factories of Matthews Bros. and Seaman & Co., and all other possible comfort.

In the centre of the store, in an isolated office, we can find our friend Schollock and other German gentlemen.

The fourth and last story contains agricultural implements, and everything in the line of stove dealers, such as stove-pipe, iron etc. This loft we recommend to all business men coming from the country. We sit down on the smaller elevator, for there are two—one exclusively to move persons, the other heavy goods—and return to the basement. The steam engine here is an 18 horse power, and supplies the house with heat, and feeds in case of fire the fire extinguishing apparatus. Two hydrants are affixed in every story, each with hose fifty feet in length, besides 1,000 feet of hose kept in reserve. Mr. Williams, the able engineer, showed us everything

connected with one of the best steam engines in the city of Milwaukee. Besides there is other machinery, used for transporting cases direct from the basement into the street, and *vice versa*. Here is also the storage room of John Nazro's white lead, manufactured by the concern, claimed the best in the market.

Now we have wandered about the building and seen everything, we are convinced that John Nazro has done that for the south side, which Walker did when the south side first was founded—he has given it a push forward, which is of incalculable benefit to the whole city, and for which all fellow citizens owe him their thanks.

JOHN NAZRO & CO.

The Largest Hardware Store in the United States—Grand Opening of the Establishment Yesterday—A Brilliant Ovation—Thousands of Visitors in Attendance.

From the Milwaukee News, March 6.

The new and massive building on the corner of South water and Reed streets, now occupied by John Nazro & Co. as a hardware store, is a structure in which all citizens of Milwaukee feel a natural pride. Situated as it is, contiguous to the railway depots and steamboat and vessel docks, it not only possesses all the advantages and conveniences necessary to facility in transacting business, but presents an appearance so grand and imposing that the mammoth block may well be considered from an architectural point of view an ornament to the city. Its massive walls and substantial appearance at once impress the spectator, while the ceaseless tide of business now visible at this point makes it an object of interest to all.

When one recalls the Milwaukee of a score of years ago, as compared with the city of to-day, the transition from the one to the other seems indeed remarkable. They are no ordinary men who have brought about this noticeable change. They have given years of toil, and devoted lives of energy, enterprise and public spirit to the work. How well they have succeeded a casual glance at the records of the city's business and prosperity at once will demonstrate.

Surpassed by none of these, and standing in the foremost rank of Milwaukee merchants, is John Nazro. His name is a familiar word throughout the length and breadth of the great northwest, and wherever it is spoken, his sterling integrity, business enterprise and marvelous success are acknowledged. His prosperity is Milwaukee's gain, and his successes redound not only to the city's credit, but to that of the state at large.

The formal opening of Mr. Nazro's new store yesterday, seems to furnish an appropriate occasion for the foregoing remarks, and as they are felt by every citizen of Wisconsin it is no more than justice that they should be uttered.

During the whole of yesterday forenoon and until a late hour last night the building was thronged by ladies and gentlemen, and every department was thrown open to their inspection. A description of the building, as it is unquestionably the largest hardware establishment in the United States, will not be uninteresting at this time. The building has a frontage of 101 feet on South Water street and a depth of 140 feet. It is four stories high, exclusive of the basement, which is a marvel of neatness and convenience. The building is of brick trimmed with Cleveland stone, and is surrounded with an elegant gable-pediment cornice. In the gables are the figures "1873," and underneath, in large block letters of gold "Hardware." As before stated, the outside appearance is very commanding and reflects great credit upon the architect, Mr. John Rugee, of this city.

THE BASEMENT

extends the entire length and breadth of the building as well as under the sidewalks. This room is of

great capacity for storage, and is entirely free from dampness and darkness. There are sidewalk elevators on the Reed street side, operated by hand, which are used for the purpose of lowering or hoisting goods from the basement. In one corner is a handsome twenty-horse power horizontal stroke engine which drives the elevators. The boilers are under the sidewalk. On this floor are stored heavy goods of all kinds, stoves, tin, sheet iron, &c.

THE FIRST FLOOR

is the principal room in the building. The ceilings, which are eighteen feet high, are supported by cordons of iron columns, of which there sixty in this room. The South Water street front is entirely of plate glass, and the effect of this may be imagined when one recalls the fact that there is a frontage of over one hundred feet. The office is located on the Reed street side of this spacious room and is thirty-two feet in width and seventy-two feet long. It is furnished in an elegant and costly manner, and affords desk room for eighteen clerks. Mr. Nazro's private office, which is partitioned off from this room, is small but neatly arranged. A flight of stairs from the office lead down to the vault, which is as secure as one could wish. A large cloak room affords the clerical force ample facilities for making their toilets. In the rear of the office on the first floor is the shipping room, and to the rear of that the receiving room, in which the elevators tors run. The stock on this floor consists of light hardware, shelf goods, cutlery, etc. In the center of the room are long tables arranged with due regard for convenience, and divided off into sections for the purpose of marking and shipping light packages, and for the convenience of the salesmen who are all stationed on this floor. The apartment is heated by steam and furnished with gas and water. At each end of the building on every floor a hundred feet of good-sized rubber hose are constantly attached to a stand pipe, with which the entire building could, in the event of fire, be flooded in a very short space of time.

THE SECOND FLOOR.

Passing up a winding stairway of exquisite workmanship, situated in the front of the building, the visitor is ushered into an apartment furnished in marvelous taste. It is the sample room of the great establishment, and contains everything in the shelf hardware and fixture line of which the mind can conceive. This room is an inclosure forty-eight feet wide by ninety feet long, and receives its light from the Reed street front. The remainder of the floor is stocked with tinners' goods, mechanics' tools, miscellaneous housekeeping articles and builders' hardware. Thirty-five pillars support the floor above.

THIRD AND FOURTH FLOORS.

The third and fourth floors while not furnished in such a costly manner as those below, afford ample opportunity for the transaction of business. On the third floor are spades, shovels, pumps, axes, coffee-mills, Russia sheet iron, skates planes, hollow and enameled ware, and an endless variety of other goods. On the fourth floor summer goods, farming implements, &c., are stored. A flight of stairs leading to the attic, and from thence to the roof is but a few steps. From the roof a beautiful view of the city and bay is afforded. Descending to the fourth floor again, and entering the elevator, the explorer is soon landed in the main store, where he finds himself surrounded on every hand by a large concourse of ladies and gentlemen, all bent on the same tour of inspection.

During the afternoon thousands visited the establishment, and were conducted through the various rooms of the extensive building.

THE EVENING.

In the evening the great structure was gorgeously illuminated from attic to foundation. Severance's full band furnished the music, and all who desired participated in the evening festivities which lasted until a late hour in the evening. The number of visitors present during last evening is variously estimated at between three thousand and four thousand.*

In conversation with a *News* reporter Mr. Nazro

said that the grand ovation tendered him by the citizens of Milwaukee, would, if he had no other incentive, urge him on to renewed exertions to place his establishment far ahead of all others in the United States.

IN CONCLUSION,

it may well be remarked that the compliment paid Mr. Nazro yesterday by his fellow citizens was a very flattering one, and one which shows plainer than words can possibly express that his great works in this fair city are not unappreciated. May success continue to be the reward of all such men.

[† The silver-plated panels of these windows are the work of William Strueder, of the south side, the leading show case manufacturer of the northwest.—Editors MILWAUKEE JOURNAL OF COMMERCE.]

[* 4,600 people entered the front doors within 55 minutes after they were opened in the evening, when the attempt to keep count was abandoned. The throng increased until late in the night. It is estimated that there were in the building at one time fully 10,000 people.—EDITORS MILWAUKEE JOURNAL OF COMMERCE.]

THE OPENING.

The Largest Hardware Store in the United States.

From the Evening Wisconsin, March 5th.

This afternoon the new hardware store of John Nazro & Co., corner of Reed and South Water streets, was thrown open to the public, formally. The chief part of the opening will come this evening, however. During the day, and especially during the afternoon, crowds of citizens visited the elegant building and were courteously received by the gentlemen connected with the establishment and shown around "the largest hardware store in the United States."

THIS EVENING

many ladies are expected—a band of music will be in attendance and it will not be at all surprising if the young folks tread the merry measures of the dance. At least, Mr. Nazro says it will be entirely proper for them so to do.

THE STORE.

This elegant store contains four stories and a basement, having a total frontage of 241 feet.

The first floor is devoted to office rooms and packing counters. It is 101 by 140 feet, and the space can be imagined. The offices are by far the finest in the city—occupying fully one-third of the first floor. The head salesman has his office immediately fronting the door, where everything comes under his notice. On the east side of this floor is shelving filled with light cutlery. In the rear of the office, are the receiving and shipping rooms, opening to the two elevators.

The second story contains the handsome sample-room (which presents the appearance of an art gallery) and the lighter shelf goods—among which we observed an immense stock of the "American Screw Co.'s" screws.

The third floor is occupied by full cases of the opened goods to be found on the second floor—and these include everything in the way of light hardware.

The fourth story is used for storing farming tools, in all their variety. In the basement are heavy iron goods, chains, sheet-iron, lead, horse-shoes, nails, etc., etc., and also Nazro's brand of English White Lead. The boiler, used in heating the building and supplying the engine, is located under the sidewalk; the engine is used simply for hoisting.

GENERAL

We can barely give an outline, in this sketch, of this magnificent establishment. Suffice it to say that it is by all means, the most complete establishment of its kind in the United States, as well as the largest. Forty-seven men are employed, and everything is under the personal supervision of Mr. Nazro. That

old-time success will attend this enlarged business, none doubt.

More About "The Opening."

From the Evening Wisconsin, March 6th.

Last evening John Nazro & Co.'s new store, of which a description was given in yesterday's *Wisconsin*, was brilliantly illuminated. Severance's band was in attendance, and a large number of the citizens of Milwaukee paid Mr. Nazro the compliment of visiting his building and congratulating him upon his success. All felt a pride in seeing that the business of one of Milwaukee's merchant princes required the use of a store which is considered the largest and most complete in the United States.

During the afternoon and evening large crowds were to be seen traversing the building from the basement to the top story. The number of visitors is estimated at over 10,000, for it is known that 5,000 people ascended on the elevators. So dense was the crowd in the evening that it was impossible to leave the room without falling in a line and waiting one's turn. The music was so inviting that many were tempted to enter into the merry dance and "light fantastic" was tripped for several hours. Mr. Nazro has been in business in Milwaukee for nearly twenty-six years, and all wish that his success in the next quarter of a century will be greater than in the past.

LOGGING IN THE SIERRAS.—Messrs. Bragg & Folsom, at Camp 18, have had men at work nearly all winter cutting saw logs and hauling them on to their chute or slide on the summit of the mountain opposite their mill. The loggers have had from three to six feet of snow to contend with, but by great exertions have been able to keep their logging roads open. The chute, down which the logs descend to the river, is about 1,600 feet long and very steep. The first snows rendered the chute so slippery, and so lessened the friction, that the logs slid down with such rapidity that many of them "bounced" out of the groove and failed to reach the river. To remedy this difficulty heavy iron spikes were driven into the logs composing the chute at various places. These spikes would be left with a projection of an inch or so above the logs into which they were driven. Then the saw logs in making the descent would have their bark caught on the spikes, thus retarding their velocity somewhat. As the snow fell deeper, however, this precaution for keeping the logs in the chute proved unnecessary. Every fresh snow that fell in the chute was ploughed out by the descending logs and banked up on either side, until now the snow is solidly packed five or six feet higher than the chute so that it is impossible for a log to jump out of the deep cut thus formed. The rapidity with which they make the descent of 1,600 feet is a sight worth witnessing. Greased lightning is nothing compared to it.—*Truckee, (Cal.) Republican.*

MILWAUKEE'S WHOLESALE GROCERY TRADE.

Goodrich, Terry & Co.—History of the House—Its Methods of Doing Business—Progress and Enterprise on A Conservative Foundation.

The wholesale grocery trade is one of Milwaukee's commercial strongholds. There are in this city more sound and old grocery houses, in proportion to its population and in proportion to its other trades, than in any other western city. Relatively, more capital and business talent are invested in the wholesale grocery trade in Milwaukee than in any other city of its size in the whole country. Our wholesale grocers constitute a leading element in the Milwaukee Merchants' Association, which is certainly an admirable body of men that would be an ornament to any business community. This body represents the solid wealth, the mercantile interests and the conservative thought, of the whole community. When the Milwaukee Chamber of Commerce entered its protest against General West's bill to derange elevator charges, the legislature hesitated. It knew how slight an interest that body of grain speculators have in the permanent development of Wisconsin and Milwaukee, how dependent they are upon the favor of one or two railroads and banking institutions, and how easily they are apt to be swayed by narrow and temporary considerations. When the Milwaukee Merchants' Association joined in the protest, then it appeared that the MILWAUKEE JOURNAL OF COMMERCE had really expressed the sentiment of the great commercial interests of this city, of its iron manufacturers, its wholesale hardware, grocery, drug and dry-goods trades—and the Wisconsin senate gave it quietus to the shallow scheme of an aspiring politician.

The firm of Goodrich, Terry & Co. is ONE OF THE OLDEST GROCERY HOUSES in Milwaukee. The senior member of this firm, Mr. T. W. Goodrich, has been the longest in the wholesale grocery trade of any merchant in Milwaukee. He commenced business in 1850, in the firm of Goodrich & Hunter which was for several years exclusively a commission sugar house, having the agency for Belcher's sugar refinery of St. Louis, and supplying all the grocery houses of this city as well as those of the larger towns throughout the northwest. In 1856 the late F. H. Terry formed with Mr. Goodrich

the firm of Goodrich & Terry, which then entered the general grocery trade. The firm of Goodrich, Terry & Co. was formed in 1867 by the accession of Mr. Allan Johnson, a gentleman who has followed the grocery business since 1849. This is a brief history of one of the oldest, largest and most widely known grocery houses in the west.

ITS PRESENT BUSINESS.

occupies Nos. 314 and 316 East Water street. The store has a front of 40 feet, a depth of 110 feet, three stories and a capacious basement. This establishment makes a specialty of the importation of Japan teas, which are obtained from first hands in Yokohama by way of San Francisco and the Pacific railway. Purchasers of teas have therefore the advantage, in dealing with Goodrich, Terry & Co., of saving the expenses of a series of middle-men. The opening of the overland route has achieved some notable changes in the tea trade. A few years ago the sales of Messrs. Goodrich, Terry & Co. were principally of Young Hysons. Now three quarters of their tea trade is in Japan.

Sugars are also a large item in their trade. They sell all grades, keeping a large variety in stock and following the market closely in prices. We understand that their sales of sweets form nearly one third of the gross amount of their whole business.

This establishment, however, deals extensively in everything appertaining to the grocery trade, including rice, tobacco, coffees, spices, canned fruits and vegetables, dried fruits, various preparations of cereals, and all varieties of staple and fancy articles of household consumption.

ITS FIELD OF TRADE

is quite extensive. It includes the pineries and manufacturing regions of northern and western Wisconsin and of western Michigan, as well as the farming regions of southern Wisconsin, of northern Iowa and Minnesota, of northern Illinois, and is of late noticeably reaching southwards, having already crossed the Missouri line from Iowa. This house has very large dealings with the great lumber interests of the northwest, and having stood by this class of its customers through the winter of their discontent, it has established a claim upon this trade which will doubtless redound to its advantage in the coming period of lumbermen's prosperity. All parts of this large field are regularly

visited by a member of the firm, as Messrs. Goodrich, Terry & Co. are disposed to resist as much as possible the "drummer" system which has to such a ruinous extent supplanted the regular system of reaching the trade by advertising and personal acquaintance.

The firm of Goodrich, Terry & Co., is, in short, both old and enterprising, solid, conservative and go-ahead. It requires no introduction to its many old friends in the northwest. To others who are unacquainted with the practical merits of Milwaukee as a grocery market, we introduce with confidence the leading house of Goodrich, Terry & Co.—*Milwaukee Journal of Commerce.*

NORTHWESTERN MUTUAL LIFE INSURANCE CO.

Malice certainly loves a shining mark. A recent change in the administration of the Northwestern Mutual Life Insurance Co., has proved distasteful to a very few persons and in consequence a number of journals abound with all sorts of insinuations against this prominent institution. It is called on, not only to meet the assaults of professional commercial agitators in the legislature, but to repel the puny blows of sore-headed individuals in the press. Any groundless attack upon a trust institution of this character is to be deplored, however little it may be feared. The Northwestern Mutual Life Ins. Co., is in some notable respects the leading institution of its kind in the country. While its magnificent building is an ornament to Milwaukee, its location at this point is a material benefit to Wisconsin and to the whole northwest. Commercially it is to be estimated as an admirable machine for the collection of funds from all the older portions of the country for investment in the legitimate enterprises of this young and expanding state. Not even that class of critics who esteem interest a crime can consistently oppose a financial institution of this description; for it devolves on them to say how much lower interest would be and how much easier money would be in Wisconsin, if the Northwestern Mutual Life were not here for the purpose of investing its vast revenues where they are needed the most and where the

security is the best. For the interests of Wisconsin, it is to be hoped that the press will at least require some tangible information and some trusted authority before doing anything to break down the credit or to impair the usefulness of so creditable and so valuable a western institution.

The names of the active officers and the executive committee of the company are without exception of a character to assure its patrons that its affairs will be managed with the utmost fidelity and discretion.

We present in this issue for the observation of business men the regular annual statement of the company. We have before us a statistical pamphlet just issued by the company showing, among other things, the rate of its growth since its organization. The comparison of its assets to the amount of its risks is extremely interesting. At the end of 1869, the tenth year of its existence, this company had insured on 27,887 lives, \$50,039,744.97, while its assets were \$4,755,418.57. January 1st, 1873 its risks, on 35,207 lives, were \$64,182,874.00, while its assets were \$12,434,527.11. January 1st, 1874, its risks on 35,226 lives, were \$64,692,003.00, and its assets \$14,093,579.16. During the past year it has added over \$2,000,000 to its assets and less than half a million to its risks.

A comparison of the relation of interest receipts to death losses for a series of years is equally interesting. For each of the past three years the interest receipts have actually exceeded the losses, an event which had not occurred in any previous year.

We quote from this table as follows:

	Death losses	Interest receipts.
Jan'y 1, 1872.....	606,020.94	609,045.85
" 1873.....	581,956.79	755,467.42
" 1874.....	701,108.15	953,787.77

So large has been the increase in the ratio of interest receipts to losses within the past three years that the total receipts from this source for the whole period of this company's existence now exceeds the total amount of its losses. Its total losses for fifteen years on 1,828 lives have been \$3,571,972.18; its total interest receipts have been \$3,575,593.21. Here then is a company that is so well located and has been so well managed that its death losses have been more than paid by its receipts from interest alone! We believe this instance is absolutely without a parallel in the history of life insurance.

EAGLE RAPIDS BOOM.**Near Completion of This Great Enterprise***From the Eau Claire Free Press.*

On Saturday morning last, we took a seat with Mr. Donald Kennedy, and together with Messrs. Bullen and Ingram, started to view the Eagle Rapids Booming Company's work.

Reaching Chippewa Falls, the two last named gentlemen left us to attend a meeting of the directors of the company, while Mr. Kennedy and ourselves, proceeded on to the works, arriving just before twelve o'clock. Prior to our examination of these works, it was thought best to refresh ourselves with dinner, at the company's boarding house. At this house there are one hundred men fed and lodged. When summoned to dinner we were particularly struck with the orderly and quiet manner in which all departed themselves. At no hotel in our cities would you see less confusion or more order. The dinner was of the most substantial kind, and prepared by Peter Rowe, with five assistants, in a manner which would do credit to a professional—which he really is in the art of cooking.

The first course was soup (beef)—not a tasteless affair, but gotten up in a manner to suit the taste of the strictest epicure. Then came meats, vegetables, baked beans, bread, butter, coffee, tea, sugar, syrup—and the whole finished by a desert of dried-apple pie.

After, came an hour's rest for the men, which they occupied in smoking, chatting, &c., when, at the toll of the bell, all started for their work.

These works consist of a dam, a stock boom, assorting boom, and stop boom; were commenced at the close of 1872, and at the close of March, 1873, were finished, and thought to be of a substantial character, \$100,000 having been expended on them at that time. The dam was seventeen hundred feet long, and we think, seventeen feet in height. It

went out on the first raise of water, (the west end of it) and when there were about forty-five millions of logs in the boom, thus rendering it useless for the season, and largely damaging the industries of the valley. An attempt was made to restore it during the summer, but so soon as filled with water, it undermined, and again was swept away.

A meeting of the stock-holders was called. About one hundred and ten thousand dollars had been expended, more than the original stock subscribed, and the question to be considered, was whether the works should be abandoned altogether, or whether the stock should be increased, and another effort made to make the works substantial. After much discussion, it was decided to increase the stock, and go on with the work. A new election of officers was had, Mr. Graham, the old president, having been elected to the senate, declined a re-election to the presidency, and O. H. Ingraam was chosen to the place—an excellent selection it was too, he having had large experience, and being of a most energetic and thorough-going character. Mr. Cushing of Chippewa Falls, was made business superintendent, and a Mr. Lough, from the Ottawa pineries, who had much experience in dam building, was put in charge of restoring that portion of the dam swept away.

The dam before, was builded directly across the river, east and west, and while the foundation for the east end was rock, the west end was dirt, not a very substantial foundation for dam building, to say the least. The direction was changed, so as to make a sort of a right angle. A coffer dam was built, to give a dry foundation to start. Then commenced a cobble work, heavy framed timber, each course filled with broken granite rock; this was carried up to the top of water mark, and was seventy-five feet wide; then in front of it comes

a line of piling, sunk as deep as a twenty-two hundred driver, lifted by steam was able; still in front of this, is a heavy course of brush, covered with gravel. Top of the cobble work comes a more substantial frame work. The waste gates, which last year gave only a space of seventy-two feet, for drawing down the water, this year has been enlarged to one hundred and forty-four feet, having twelve compartments, each with twelve feet course or space.

The old dam across the main bed of the river, is being raised four feet, which will make the dam twenty-one feet in height. The main water course, where logs and lumber are to run, the bed of the river is rock; the second place, where water is allowed to run, has been thickly riff-raffed in the rear, and so at the gates. This, it is expected, will prevent any undermining from the rear of the dam.

On the booms, there have been from twenty-five to thirty men employed during the winter, under the charge of Capt. Lea. Fortunately, last spring the piers were very little damaged, and the work this winter has been principally replacing old boom timbers, getting new ones, and in arranging the assorting works somewhat differently. This work was pretty much completed on Saturday, and all but two or three of the men discharged.

The stock boom has a capacity for a hundred millions. The assorting boom is arranged to work a hundred men, and it would seem that there should be no difficulty in passing logs on down the river, as fast as they run.

The stop boom has a line of heavy stone piers, capable of standing an indefinite amount of pressure, but there ought to be little pressure here, for there will be at least three feet of back water at this point. Should everything work well, it is intended next year to enlarge the capacity of the stock boom to double its present capacity, which will be done by canal-

ing across a point, for a channel to pass down river logs, giving the whole river for storage capacity.

The works, taken as a whole, are of tremendous importance to the country, and we have the fullest confidence that they will stand the pressure; that they are of so substantial a character, that a flood will not disturb them. The amount of money expended on them, up to this time, is about \$150,000, and should they not prove what is expected of them, it will be a calamity to the country, as well as to the enterprising men who have so largely expended their money.

IMPROVEMENT BILLS THAT PASSED THE WISCONSIN LEGISLATURE.

The following are the bills passed by the Wisconsin legislature, which adjourned last month, authorizing improvements of some of the tributaries of the Chippewa:

"A bill authorizing Daniel Shaw to erect and maintain flooding dams on Thorn Apple Creek, and to collect tolls on logs."

"A bill authorizing the building of dams on Fisher river."

"A bill authorizing the construction of dams on Nail creek."

The last two are general bills, like the Yellow river one, which gives to any party or parties the right to collect toll on logs, if \$5,000 is expended in improving the same, and providing that if said works prove to be of no advantage, tolls cannot be collected.

The influence of forests in drawing moisture from the heavens may be judged from the experience of San Diego, California. Previous to 1866 there was yearly a rainy season, which made the soil nourishing and productive. In 1863 a destructive fire swept over the greater part of the county, cutting down the luxuriant chapparel, and blackening the hills. Since then there has been no rainy season at San Diego.

MICHIGAN MILL OWNERS' MEETING.

Meeting of Mill Owners and Shippers on the Jackson, Lansing & Saginaw Railroad at Bay City.

The meeting which was called to consider the question of the dealings of the Jackson, Lansing, & Saginaw railroad with the shippers on the line of that road, met at the office of D. Culver, Esq., Bay City, March 12th. There were present representatives of mills at Pinconning, Deep River, Culver, Rowena, Greenwood, and Ogemaw, while messages from others in sympathy with object of the meeting were presented.

An informal discussion ensued for about an hour in which some not complimentary allusions were made to the management. An organization was effected by the calling of W. H. Edwards, Esq., to the chair, and the appointment of G. W. Hotchkiss as secretary.

On motion of G. H. Van Etten it was

Resolved, That the conclusions arrived at by the writer of an article, recently published in the *Saginaw Courier*, signed, "An Officer of the Road," are not such as we approve or endorse, but are contrary to the conclusions arrived at in our personal experience and dealing with the road, both in its general and local management, and our complaints are not met in the spirit of fairness asserted by the writer of the article in question. We deem their rates exorbitant in comparison with those of other roads, both as through and local tariffs some of the latter being at the rate of two dollars per mile per car, while their system of weights and excess charges are unjust and illegal, their depots and stations insufficient, and many other facilities incomplete, whereby our business is crippled and our interests compromised. Therefore we deem it necessary to organize an association for mutual protection against what we

deem the injustice of the road in its dealings with shippers and mill men. Therefore

Resolved, That a committee of three, consisting of Messrs. Stevens, Hotchkiss and Nauman, be appointed to draft a constitution and by-laws for the formation and management of a protection association among the operators on the northern extension of the Jackson, Lansing & Saginaw railroad to report to an adjourned meeting to be held at 7 p. m.

Resolved, That all persons interested in shipments on the Jackson, Lansing & Saginaw railroad north of Bay City, be invited and requested to join the association.

EVENING SESSION.

At the adjourned meeting in the evening the committee reported a constitution and by-laws, the former of which was adopted, while the consideration of the latter was postponed to a future meeting.

CONSTITUTION.

Art. 1. The association shall be known as the Lumbermen's Association of the Jackson, Lansing & Saginaw railroad northern extension.

Art. 2. All persons doing business on the line of the Jackson, Lansing & Saginaw railroad north of Wenona, shall be eligible to membership on the signing of the articles of the association, and the agreement to share *pro rata* in any expenses which may from time to time be incurred by the association in the prosecution of its objects; in addition to the payment of a membership fee of ten dollars for each mill or firm.

Art. 3. The object of the association shall be the securing of the mutual advantages of the members in the grading and sale of lumber including the matter of transportation, and all other matters and things which will inure to the advantage and benefit of mill owners and shippers on the Jackson, Lansing & Saginaw railroad.

Art. 4. The officers of the associa-

tion shall consist of a president, vice president and secretary (who shall also be treasurer) and an executive committee of five which the president vice president and secretary shall be members by virtue of their office.

Art. 5. The officers of the association shall be elective and continue in office for the term of one year from the date of their election, or until their successors are elected and qualified.

Art. 6. The annual meeting of the society shall be held on the 1st Thursday in March in each year, and special meetings shall be held upon the call of the executive committee or a majority of them.

Art. 7. Every member of the association shall, on becoming a member, be entitled to all the privileges of the association on assenting to the following agreement. To-wit:

In placing any name on the list of membership of the Lumberman's Association of the northern extension of the Jackson, Lansing & Saginaw railroad, I do hereby agree to be bound by all the rules and by-laws regularly adopted by the association, and I do agree to and with the association that I will promptly pay all assessments due and demands assessed against me as my proportion of any expenses incurred by the executive committee of the association in securing the rights, either of myself or any member of the association, whether in the employment of counsel and the prosecution of claims, or in the necessary expenses to be incurred by the executive committee in forwarding the ends of the association, and I do hereby acknowledge myself both legally and morally, bound to pay such sums as may from time to time be assessed to me as my proper share of such expenses so long as I remain a member of the association, and to be governed by the by-laws and regulations of the association until I formally, and by consent of the members of the associa-

tion or executive committee, withdraw from its membership, hereby declaring and confessing the privileges to be attained to be ample and sufficient compensation for liabilities incurred under this agreement.

Art. 8. This constitution may be altered or amended by a vote of any meeting of members, when such amendment may be voted by a majority consisting of not less than half the membership. Adopted.

Resolved, That when this meeting adjourn it be to meet at the office of Westover & Culver, Bay City, on Thursday, March 12th, at 3 P. M., and that the special committee be requested to interview and solicit all persons on the line of the railroad to join the association. Adopted.

On motion adjourned.

LEAKING OF FLUES IN STEAM BOILERS.

For the benefit of many using tubular or locomotive boilers, we would correct an impression that many have that when flues commence leaking it is caused from the fact that they are small flues, and they cannot be made tight and remain so. Such is not the fact. Tubular boilers if properly managed, are as tight and will continue as tight as any other class of boilers, and from the fact that they will generate steam more rapidly, are preferable in nearly all cases where boilers are required.

The case of flues leaking is not the fault of the maker of the boiler (of course we take the ground that the flues are properly set in the head sheets where the boiler is built) but arises from one of two reasons; for when flues are properly set so that they will not leak with a cold water pressure applied, they will always remain so as long as they are kept covered with water and free from sediment, and we claim that (when properly set) if flues leak, the water has been low in the boiler, and the fire passed through them and expanded them and thus they became loose, or

that sediment has been allowed to collect around them (even when covered with water) thus allowing them to heat and become loose. If parties having charge of boilers, will never allow the water in their boilers to become low, and also keep the boilers clean, there will be no trouble of flues leaking.

We, of course, refer to boilers built by first-class builders. We regret to say that many builders of boilers do not understand thoroughly their business, and have not the proper tools to set flues or build boilers, and are compelled to put foreign substances in boilers such as bran, &c., to make them tight. This should never be done, and every first-class builder will make his boilers tight by bringing iron to iron, and not permit the introduction of any such foreign matter.—*Utica Steam Engine.*

SALES OF LOGS ON THE CHIPPEWA.

On the Chippewa river, the stock is full and complete, and is of a better quality than last year. The price of logs, judging from the sales recently made will average about as follows: On the Thorn Apple and Fisher, from \$5 to \$5.50; Flambeau, \$5.25; Yellow, \$5.50 to \$6; Jump, \$5.50 to \$5.75; main river, \$5 to \$5.25. Leroy Martin sold, last week, 5,000,000 feet to Ingraham & Kennedy, for \$5.25. These logs are on the Jump, and main river. Malcolm Josie and David Caldwell have disposed of their stock on the Jump, to the Mississippi Logging Company, for \$5.75. Colleche Allen sold 8,000,000 feet, put in on the Jump, Flambeau, and main river, to the same company, for \$5.25. The Union Lumbering Company have purchased 11,000,000 feet of Halbert, Smith & Co., cut on the Le Cotterville Reservation (main river,) at \$5.25. We hear of several other sales, but these will give an idea of the average price paid. The Mississippi Logging Company have secured already 56,-

000,000 feet—as much as they want. The Union Lumbering Company have about 44,000,000 feet. Ingraham & Kennedy must have between 30,000,000 to 35,000,000 feet. The French Lumbering Company have 12,000,000 feet. Daniel Shaw & Co., put in themselves some 20,000,000 feet this winter, and intend purchasing 8,000,000 more. John Robson, John Farron, and the other mill owners, have a full stock.

THE LOG CUT OF MICHIGAN.

The Log Cut of the Past Season—Indications for the Season's Trade.

From the Saginaw Courier, March 12th.

Indications multiply that the new cut of logs are to add much less to the lumber product of 1874 than had been expected earlier in the season. The early break up of the season which now seems to be a finale to operations in the woods, has come at least a month sooner than was hoped for. Very little hauling was accomplished until after the middle of January, and at that time there was so little frost in the ground that good roads were almost out of the question. With scarce a month of indifferent hauling the roads have for the past two weeks been failing to such extent that many camps were abandoned before the recent thaw, which has broken up the camps, and in a majority of cases, fully destroyed the roads, leaving vast quantities of logs on the skids in the woods. We hear of one instance, where, out of 4,000,000 feet, skidded but 1,000,000 has been banked, of another where barely one hundred thousand has been put in out of a million on the skids. These cases may be set down as samples of a rule which has numerous confirmations.

The prospects for running are scarcely more favorable. The snow has gone off so gradually as to have but comparatively little effect on the streams, and unless copious rains

shall improve matters, a large proportion of the timber banked might as well be on the skids, so far as running is concerned. The recent action of the Boom Company in resolving to throw no booms across the streams above Midland, will have the effect to prevent the logs in the tributaries from reaching the main river, until the high water having passed will have left them on the bottom. The old stock which reached the main rivers last year will largely come down, but this will prove utterly inadequate to supply the mills. Meantime holders of stock which is "sure" are jubilant at stiffening rates indicative of advancing prices.

BLESSED BE THE TREE PLANTER.

"The bright trim yards, with flowers decked,
And s dewalks, sun and shadow flecked."

The song of the shade tree seller is heard in the land. He wants to ornament our streets, and line his pockets. He is not so particular as he might be about the future welfare of the trees; because experience has taught him, in some rare instances, that if they live he will not be able to sell others to fill their places next year. This statement does not apply to all dealers, for some take an interest in the success of their trees, but we wish to put on record a hint to dealers, not to butcher trees in wrenching them from the ground, and we ask them, as a matter of justice to confiding purchasers, not to let the trees perish from exposure after they are dug.

The people who have been so often disappointed, in trying to make trees live, will not continue to pay out money for worthless stumps. They want as many roots attached to each pole as we usually find on the dry grubs sold for wood in the market. Furthermore, they do not desire trees that have had their roots exposed to sun and wind until they are worthless. A tree out of the ground, like a fish out of water, soon perishes.

It is very easy to wrap old carpets or coffee sacks, or blankets, over the roots, to keep off sun and wind. But a better way is to sell the trees before they are dug, and then speedily transplant with little exposure.

A large number of cities and villages in Wisconsin have good forest trees growing near them, which might be easily transplanted to their streets by enterprising men. A reputation for skill and promptness in this line would bring men an increasing business each spring. It is work worthy of the best men, for it must be well done to succeed. Most citizens are willing to pay for it; or would be when they saw how their neighbor's trees looked. Thrifty trees add to the value of property. The New Haven elms are more famous than New Haven architecture is.

Planting trees is the cheapest way to improve adjoining property, and though it may seem to practical men like a matter of small importance, they should remember that it will be considered of great importance to the next generation. The remark of an unsentimental bachelor, that "the next generation has done nothing for us," is true; but those of the past generation who said the same thing of us, we are not proud of or thankful to. We may say, also, that the next generation will do something for us, in the way of paying a large national debt, inherited from this generation. We ought, as an act of humanity, to provide shade trees for them on that account.

Finally, let us put out good trees; rock maple, white elm, and white ash. They should have plenty of roots; the tops should be smoothly cut off, and the fresh wounds covered with something to protect them. The roots should be nicely spread, in large holes, with plenty of fine soil sprinkled about for the rootlets to feed on, and then the trees should be mulched and watered until they are well started.—*Madison State Journal.*

A SUNDAY SERVICE.

I was the congregation; all around
 Lay the soft, solemn shadows, long and dim,
 As bowing o'er the sweet, spring-scented ground
 The rustling trees gave out the evening hymn.

The wild flowers preached the sermon, dew-drop wet,
 Close to the needles of the fragrant pine;
 Bellwort and buttercup and violet,
 Blushing azalia, scarlet columbine;

They preached God's goodness and His love to men;
 They preached His wondrous works, His world so
 fair;

And when their gentle voices hushed again,
 All things united in a silent prayer.

Last came the benediction, bowing head
 Of tree and flowers silent reverence yields,
 "God's love and mercy in our souls be shed—"
 "Amen!" rang through the listening woods and
 fields.

Oh, never worshipper in crowded fane
 Offered to heaven a service more divine
 Than rose this day upon the blooming plain
 Before the altars of the oak and pine.

AN OLD TREE.

Mr. Micajah Mott, of Alburgh, Vt., in 1864 cut on his farm a hemlock tree which has been the subject of considerable interest to antiquarians and lovers of the marvelous. The tree stood in a hemlock grove about three-fourths of a mile from the lake, and from which he cut a stick of timber forty feet in length, squaring eight by ten inches. After falling the tree he discovered near the butt a bulge, and thinking it might prove unsound, cut off five or six feet, but found it perfectly sound. The butt cut off he drew home for wood, and upon splitting it, found that when the tree was about eight inches in diameter, it had been hewed on four sides with an axe or some other sharp tool, about eighteen inches in length and perfectly smooth, leaving the tree nearly square, except upon one corner where the bark had been left in a strip about three inches wide. The tree had grown, and completely covered the scarf or hewing, having no external indication except the slight bulge spoken of. Mr. Mott, counted two hundred and forty grains which had grown over the scarf, which had been cut. By whom, and for what purpose, was this tree thus marked? It must have been done somewhere about the year 1824. Champlain, who discovered and gave his name to Lake Champlain, in the year 1609, was frequently about the lake from that time down to the year he died, in 1635. The Pilgrims landed in the year 1620, and this tree was thus marked but four years later. In the year 1623 the

English had begun settlements at Ports mouth and Dover; and in the year 1633 had penetrated the wilderness to Windsor, Ct. It was these advancing settlements that aroused the jealousy of the Indians, and led to the conspiracy formed by the Narragansetts and other tribes for the total extermination of the English. This tree may have been marked by some of those Indian war parties which made this section the theatre of wars, and a scene of havoc and cruelty of the most appalling character, or by Champlain himself on some of his expeditions while camping in this thicket of hemlocks.

PRICES FOR THE COMING SEASON.

We have recorded recently several large purchases of logs by mill owners. For instance, Albert Miller, of Portsmouth, or South Bay City, not long ago purchased some 10,000,000 feet, and yesterday Messrs. Hitchcock & Ingraham, of the same place, purchased enough to run their mill there during the season, or 4,500,000 feet. These purchases indicate that prominent manufacturers do not anticipate any lower prices for logs later in the season, or they would not be in a hurry to purchase their season's supply. Their view seems to us correct, as all the indications point to a steadily advancing lumber market, especially for the upper grades. There can hardly fail to be a considerable scarcity of logs as compared with last season, because, in the first place, owing to the panic and consequent tightness of the money market, the cut has been smaller, as well in the Wisconsin and Minnesota lumber regions as here. And in the second place, it is scarcely possible that the usual proportion of last winter's cut, in the Saginaw District at least, will come out next spring. Most of the logs have been put in on the small streams, and there is not enough snow and ice on the ground to fill these streams, nor does it appear probable now that there will be enough. Another thing, the winter has been so mild that the ground is only slightly frozen; it will be apt to thaw out early, and thus permit the melting snow to soak away into the earth instead of flowing off to swell the streams. In short, unless we get liberal spring and early summer freshets, it seems certain that a large percentage of the logs will

be "hung up"—and such freshets are a contingency too uncertain to be relied upon.

It not only looks as if there would be a considerable scarcity of logs the coming season, but the demand for lumber is likely to experience a large increase. A prominent builder in Richland, Ohio, speaks of one curious effect which the financial panic has had on the farmers of that region. The farmers are generally in good circumstances, and had money in bank. Losing confidence in the banks, they generally drew their money out, and have since slept on it regularly every night. This money will largely be put into new houses and barns, as the farmers are distrustful of the usual modes of investment. The same causes are operating the country over, and will most naturally make an increased demand for lumber. Advices from the east indicate quite a general scarcity, more especially of upper grades, and this deficiency Michigan will be called upon to fill, more largely than any other lumbering state. On the whole, the prospect for a busy season, strong demand and stiff prices all around, is very flattering.—*Bay City Tribune.*

LUMBER TRADE OF WILLIAMSPORT.—

On reference to the report of lumber shipments from this city, for the week ending on the 14th inst., it will be seen that the Catawissa railroad has, since the first of January, forwarded 2,368 car loads of lumber, which foot up the enormous total of 22,605,560 feet. The shipments over the Philadelphia and Erie Railroad, for the same period, amounted to 1,782 cars, containing 16,989,040 feet. The grand total for the year now reaches 39,549,600 feet, an increase of 13,240,940 feet over the same period last year.—*Gazette.*

The indications from all parts of the country are that lumber will bring a fair price the coming season. As a general thing, on the Michigan streams, not much over a three-quarters stock was put in. This is also true in regard to the Oconto, Saumico, Pensaukee, Peshtigo, and Menomonie rivers, which empty into Green Bay.

THE MILLS OF MANISTEE.

A Michigan Lumber Town With A Manufacturing Capacity of Two Hundred Million Feet—List of Its Mills and Firms—Schedule of the Past Winter's Logging Operations.

From the Manistee Times.

There are now twenty saw mills, and four first class shingle mills in Manistee city, and five steam saw mills in other parts of the county.

The shingle mill of G. M. Wing & Co., will cut nearly 100,000 daily, that of Messrs. Chapin & Co., is now turning out over 60,000 daily, and that of George W. Robinson, has a capacity of about the same amount.

The saw mills are as follows :

John Canfield's mill capacity	100,000
Tyson & Sweet's new mill capacity	150,000
Tyson & Sweet's old " "	1 0,000
Cushman & Caulkins " "	100,000
Green & Milmo " "	1 0,000
Magill & Canfield " "	90,000
Shrigley & Canfield " "	50,000
Louis Sands " "	100,000
Dennett & Dunham's " "	60,000
Pagott & Thorou's mill, Pag'ville.....	100,000
Filer & Sons at Filer City "	100,000
Magnau's mill at Stronach "	80,000
Tabar't mill at Filer City "	80,000
Leitch's " "	65,000
Reitz Bros. large " "	100,000
" small " "	70,000
R. G. Peter's " "	100,000
Englemann & Sallings " "	100,000
Ruddock & Gifford's " "	150,000
George Davis, water " "	25,000

These mills will probably manufacture this season as follows :

The mills of Mr. Canfield & Co	25,000,000
Englemann & Salling.....	8,000,000
Reitz Bros	25,000,000
Gifford & Ruddock.....	20,000,000
Tyson Sweet & Co.....	32,000,000
Cushman, Caulkins & Co.....	16,000,000
Pagott & Thorson	8,000,000
Tabar's	6,000,000
Filer & Sons.....	8,000,000
Leitch's.....	8,000,000
Dennett & Dunham.....	3,000,000
George Davis, water	4,000,000
R. G. Peters.	15,000,000
In addition to this, the Portage mill. .	4,500,000
And the other mills of the county including the Gunderson mill of Portage; the Bear lake, and Chief Creek and Arcada, and other mills probably	8,000,000

Making a grand total of 190,500,000

This estimate in some instances may be, and probably is high, in others probably too low. But they have been gathered from the mill owners and lumbermen, and are not far from correct.

A very large stock of logs were

wintered, and quite a full supply have been put in during the winter.

We learn from Benjamin Sweet of the enterprising firm of Tyson & Sweet, who are among the heaviest lumbermen here that 95,500,000 feet of logs were put in during the past winter, as follows. This does not include all of the loggers, nor any of the logs put in for the country mills, and is in addition to all logs wintered over :

A. Rogers.....	1,600,000
Mr. Wodderman.....	1,500,000
John Mc.....	2,400,000
E. J. Copley.....	500,000
E. Veney.....	3,000,000
Dennett & Dunham.....	3,000,000
Ed. Rogers.....	1,500,000
Louis Sands.....	2,000,000
Peter Rosmanson.....	2,400,000
Woodruff & Tice.....	1,500,000
Logs in south branch.....	25,000,000
Camp 2.....	2,000,000
Camp 3.....	2,000,000
Mr. Caff.....	1,800,000
Copley & Northrop.....	3,000,000
Mr. Baley.....	1,500,000
Samuel Potter.....	1,500,000
Charles O'Brien.....	1,200,000
Gifford & Ruddock.....	3,500,000
L. Sands at Pine Creek.....	1,000,000
Logs in the Little river.....	20,000,000
In Bear Creek.....	4,000,000
Hopkins Bros.....	6,000,000
Hawley & Noud.....	2,000,000
Gard Smith.....	3,000,000
Others.....	2,000,000

On the whole the prospect is good for an unusually prosperous season, with full an average cut, and more than average prices for lumber.

GLASGOW TIMBER TRADE.

From the Glasgow Mail.

The first annual conversazione and ball in connection with the above trade was given in Glasgow recently. The president, Alexander Mitchell, of the firm of Edmiston & Mitchell, occupied the chair, and amongst those on the platform were—Messrs. D. R. McLauchlan, Dunn, Walter Baynham, Stewart, Swan, Archabald, J. Edmiston, and Kerr. In the course of his introductory address, Mr. Mitchell said: "At this, the first annual meeting of our trade, it may not be out of place to refer in a sentence to its enormous growth within our own time. Unfortunately no statistics exist of an earlier period than 1844, during which the tonnage employed in conveying timber into the Clyde from British North America only amounted to about 43,000 tons, and ten years later—

viz., in 1854 it increased to 120,000 tons. Ten years later still it amounted to nearly the same figures, and singular to relate, the year 1872 showed a similar result. It is not surprising however to find that the imports have not increased in the ratio referred to in the earlier years of our statistics, but the wonder rather is that they should have been maintained, because the government in May 1860 swept away the protective duties upon foreign imports, thereby throwing open our ports to the whole world, and ever since the United States, but more especially Norway, Sweden, Russia and Prussia have poured in abundant supplies upon our coasts, and it is estimated that the imports which thirty years ago, were a mere trifle from these countries into the Clyde, Grangemouth, and South Alloa, to supply our city, and neighborhood, now require about 200,000 tons from the north of Europe alone for that purpose. A source of valuable employment to our trade is the rapid growth of shipbuilding upon the Clyde. In 1863, 124,000 tons of shipping were launched; while ten years later it had increased to 230,000 tons, valued at about seven millions sterling; and during the past ten years it is estimated that nearly forty millions sterling of shipping property has been launched into our river."

TIMBER IN TENNESSEE.

A correspondent of the *Boston Lumber Trade* says :

The lumber trade here for the past six months has been extremely dull and prices have declined at least twenty per cent. and no sales at the decline. During the early part of 1873, large quantities of Georgia pine car timber was shipped to Louisville, Cleveland, Indianapolis, and other points north. The panic entirely suspended this trade, also the demand for flooring strips, which were shipped in large quantities to northern markets. Stock of lumber in yards is limited, dealers are only buying to fill out orders. As a consequence mills are nearly all idle or only filling small orders. Our market is sensitive, and any orders of magnitude would send prices to last year's figures. There is tributary to

this market a large amount of valuable timber not taken into the account by Messrs. Wait & Little. It must be remembered that lumbering here is in its infancy, there being no good mills in the interior of the south prior to the war, and as the lands were held in extensive bodies a proportion was in primitive forests suitable for lumbering purposes. The timber of the south is not so heavy or dense as in Pennsylvania, or the northwest, but is uniform in quality and will average from three to four thousand feet per acre. Some idea can be formed of the amount of timber in northern Alabama and east Tennessee by stating that the Alabama & Chattanooga railroad have a grant of near two million of acres, most of which is well timbered. The Selma, Rome & Dalton railroad owns large timber tracts along the line of the road. The Coosa river passes through one of the best belts of pine in the interior south, amounting to at least one hundred and fifty thousand acres of high average, for long leaf pine. Lookout mountain, a ridge eighty miles long, is surrounded by a belt of timber from one to three miles wide made up of poplar, pine, white oak and hickory, of good quality. The Tennessee river, with its tributaries, drains fifteen thousand square miles much of which is heavily timbered with poplar, white oak, pine, hickory and black walnut. It is safe to say there is no point in the United States at which so large an amount of poplar suitable for any purpose could be secured as at this place. White oak for ship building can be got out here and delivered at Charleston or Savannah at much less price than it cost, delivered at tide water from Toledo or Saginaw, and the same can be said of pipe staves for European markets. The white oak is chiefly confined to the bottoms and is large and free from the imperfections so often met with in Pennsylvania, Ohio and Indiana, we have the

timber, and all we want is capital and northern enterprise to develop a country rich in timber and possessing excellent facilities for transportation to market. The Cincinnati Southern railroad is now an established fact and on its completion Chattanooga will be brought into close communication with Cincinnati, Louisville and other northern markets, and will be enabled to deliver all classes of building and car timber at prices that will defy competition. Dealers in poplar and white oak would find this a fine field for operation.

Yours truly,

S. M. WINCHESTER.

NEW PLANING MILL.—One of the new enterprises of Winneconne is the planing mill of Tucker & Annis, now in the course of construction. The location of the mill is just north of the freight depot, between that building and the saw-mill of Ingersoll & Rising. The main building will be 28x40 feet in size, and two stories in height. The wing, which is destined for the engines and boilers will be 16x30 feet in size. In addition to the usual machinery of a planing mill they will put in a complete outfit for the manufacture of sash, doors and blinds. The location is one of the very best in town, being so situated that they will be able to load lumber direct from the mill into cars on two different tracks, besides loading on to steamboats and barges. The machinery which is already ordered, will be of the very best kind and the latest patterns. A force of hands are now hard at work on the building, which will probably be completed in the course of six weeks or two months. The young men comprising this firm are too well known in this place to require any words from us; Mr. Tucker is well known as a good business man and a practical lumberman, while Mr. Annis is an engineer second to none in this section.

TENONING MACHINERY.

As a class, tenon-cutting machines are quite simple when compared with those for mortising, or indeed with almost any others that, like them, represent a distinct class. No change of importance has been made, in the tenon machine since its first application, that is to say, no change in the functions nor in the manner of operating. The mechanical construction has of course, with other machines, been since the first, greatly improved.

Tenon machines for rectangular tenons are of two kinds, operating on different plans, both of which are illustrated among this general class in the engravings.

One class of machines have the axis of their cutter spindles parallel to the line of the timber and tenon; the other have the cutter axis transverse to the line of the timber and tenon.

Machines of the first class consist essentially of two or more cutter spindles, nearly parallel, with mechanism for adjusting them laterally, and a traveling carriage on which the timber is moved; with the exception of the cutter-heads, there is nothing connected with their construction or operation admitting of much notice.

The cutter-heads are as a rule made with cutters having a helical edge, originally obtained by curving the cutter; but now, by simply arranging its bed at a slight angle with the axis, and then grinding the edge to such a curve as will bring its extreme periphery or edge on parallel lines to the axis, there is nothing in the nature of the operation so far as cutting is concerned that requires this helical edge; yet it is quite important from other considerations. Tenons require to be smooth, and as the cutting is transverse to the grain, this arrangement of the cutters contributes somewhat to the object. The feeding of the wood is usually by hand, and as the action of the helical edge is continuous and not abrupt, the wood can be fed more steadily.

The speed, besides, of tenoning spindles runs slower than those of most other wood-cutting machines, and the jar of cutting is thereby increased. These considerations, with the very inefficient clamping devices used, no doubt led to this arrangement of the cutters in the early machines, which has since without much change been carried out by the different makers.

The cutter-heads of tenon machines

must, from the nature of the work, overhang the spindle bearings; as the cutting is often heavy and always irregular, the spindles must be stiff and well supported. The rule before given as to overhanging spindles is applicable. The adjustment of the spindles should be both combined or independent, so as to alter either the shoulders or thickness of tenon, without the one interfering with the other.

Tenon machines with the axis of the cutters transverse to the timber, to make triple or compound tenons, are very fully illustrated among the engravings. Their especial adaptation to the kind of work indicated is, perhaps, the greatest claim to be made in their favor.

It has been stated that the power needed in wood cutting is mainly expended in cross-cutting the fibre. Granting this, it naturally follows that the cross cutting should be done at as few intervals as possible, leaving the greatest possible share of the work to be done by the splitting process. Now these two types of the tenoning machine may be said to represent opposite extremes in this regard; the first cross-cutting at but one end of a wide cut, while the other cross-cuts the whole width of the cut, and at intervals close enough to form shavings transverse to the fibre. The objection as to the extra amount of power needed is, however, a secondary matter, if considered alone; and for short tenons in heavy timber, and where more than one tenon is to be made, the advantages of the last arrangement are so obvious that they need not be questioned. In some of the largest railway carriage works in America this system of tenoning has for several years been in use with good results.

The inconvenience of adjustment compared with the other kind of machines unfits them for what may be called jobbing uses, and it is only when a large number of duplicate pieces are wanted that there is much gained in their use.

Tenoning was in times past, and is yet to some extent, done with saws instead of cutter-heads; an expedient generally adopted from convenience rather than policy. There is in no case any good reason for grinding or cutting wood into fine dust to remove it, and all operations that have this result must be wrong, both in the use of unnecessary power and in the rapid dulling and wear of the cutting edges.—*Richard's Wood-working Machines.*

THE NEW RAILROAD TARIFF AND THE WISCONSIN CENTRAL.

From the Milwaukee Journal of Commerce.

We have before us the new railroad road tariff law, and propose to consider some of its features as they relate to interests in which Milwaukee is particularly interested. We refer to the Milwaukee & Northern, and the Wisconsin Central railroads. The Wisconsin Central is the lessee of the Milwaukee & Northern, so practically there is but one interest, yet Milwaukee merchants and citizens have a friendly feeling for the first named road, because it was by it, that first the trade of the northern part of the state was opened in a way that enabled them fairly to compete with Chicago. The management of the Milwaukee & Northern was popular, and that of the Wisconsin Central is scarcely less so, the raging *Sentinel* to the contrary notwithstanding. An enforced tariff which cripples the Wisconsin Central, is therefore a serious blow to the interests of Milwaukee.

The new tariff law in some of its parts seems to be specially designed to injure the Wisconsin Central, and to this end we call attention to some of its features.

The reconciliation of the private rights, and the public duties of railroads, is one of the important questions forcing itself upon the consideration of thoughtful men. It has relation to a large share of the business of the country, and so close and intimate is this relation, that the public duties of corporations cannot be neglected, nor their private rights infringed, without serious damage to the entire business community. If the public have cause of complaint against the railroads, the remedy is not to be found in an imposition of injustice upon them, nor in an attack upon their private rights. Still further, a remedy is not to be found by visiting upon one railroad punishment for the offenses of another.

There are certain general rules which should be observed in the management of railroads, and which may well be compelled by legislation. For instance, upon freight moving in the same direction in similar quantities, between the same points, the same rates should be charged to all alike. The rates should be reasonable, but what is reasonable for 100 miles on freight moving in one direction, may not be so when it is moving in the reverse direction, or when on some other

100 miles of the same road, or when on another railroad.

As an illustration, take the rates on lumber. On the Wisconsin Central railroad, lumber is a specialty, and is the principal commodity transported. It is moved eastward in the direction of the heaviest trade, whereas on the Milwaukee & St. Paul railroad, lumber is not a specialty, and is moved in the direction of the lightest trade. In the law before us the rates allowed to be charged on lumber shipped in car-loads

Is for 50 miles	2 60	per ton per mile
do 100 do	1 70	do do
do 150 do	1 40	do do
do 200 do	1 25	do do
do 250 do	1 16	do do

The Milwaukee & St. Paul railroad may perhaps accept such a tariff on lumber, for in the direction on which they transport most, if not all the lumber they have to carry, they otherwise would haul empty cars.

The movement of grain on the Milwaukee & St. Paul is eastward, the reverse direction taken by lumber, and in immense quantities. In that the new law gives for

50 miles.....	4 00	per ton per mile
100 do	2 80	do do
150 do	2 40	do do
200 do	2 20	do do
250 do	2 08	do do

The injustice of this discrimination must be apparent even to the biased judgment of the *Sentinel* newspaper.

But the figures do not represent the full injustice, as a visit upon the line of the Wisconsin Central would make apparent. Above Stevens Point from whence the heaviest shipments of lumber are to come, it is a dense wilderness, and the supplies required by the lumbermen furnish but very slight return freight for the cars loaded eastward.

Again, if we consider the vast number of freight trains moving between such cities as Milwaukee and Chicago, and a comparison be made with the amount of business between Milwaukee and Green Bay, or Menasha, or Stevens Point, it is open to the commonest observation that rates which may be reasonable between Chicago and Milwaukee, would be ruinous to the Wisconsin Central for the next five years.

In this connection we find the tariff on lumber and on grain now in force on the Wisconsin Central, and we ask a careful comparison with the lumber rates imposed by this new law upon this new undeveloped

enterprise, and upon grain rates allowed the Milwaukee & St. Paul railroad.

On lumber the charge is for

50 miles.....	2.80	per ton per mile.
100 ".....	2.00	" " " "
150 ".....	1.66	" " " "
200 ".....	1.50	" " " "
250 ".....	1.40	" " " "

And on grain to Milwaukee

50 miles.....	8.20	per ton per mile.
100 ".....	2.50	" " " "
150 ".....	2.50	" " " "
200 ".....	2.50	" " " "
250 ".....	2.40	" " " "

Thus it will be seen that the present wheat tariff is for the first 100 miles less than, and for 150 miles practically the same as, the new law. We submit that if the tariff on wheat made by the new law be a reasonable one, then the present lumber tariff in force on the Wisconsin Central cannot be said to be unreasonably high.

We do not believe the farmers and lumbermen of Wisconsin, nor the merchants of Milwaukee desire that the Wisconsin Central shall be compelled to carry lumber for a rate that will not pay something above cost. The politicians have overdone the business. The *Sentinel*, in the eagerness of its defense of party and its desire to put Gov. Taylor in the wrong, has urged on this tariff reform movement with criminal ignorance, for it is scarcely less than criminal to impose a tariff upon a public carrier which pays no profit.

An English commission appointed by parliament to examine the question of rates charged by railroads for transportation of passengers and freight, was composed of the first men in the kingdom. With a modesty that must be regarded as singular by the average modern railway reformer, these gentlemen remarked substantially, "that although in their experience they had been obliged to make themselves acquainted with the details of many branches of industry, including commerce and manufactures, they had not been called upon to make themselves acquainted with the business of transportation, and therefore were not competent to say what were reasonable rates of charges."

The people are entitled to reasonable rates of freight and to rates and rules that shall apply to all alike. We do not believe that an examination of the freight tariffs and freight management of the Milwaukee & Northern and Wisconsin Central railroads will warrant the imposition of a lumber tariff which apparently has been made as a punishment for some fancied offense, and we confidently expect

that an examination of the case by the commissioners will induce them to recommend important modifications to the next legislature.

AMONG THE SAW LOGS.

A correspondent of the *Altoona Tribune*, writing from Philipsburg, Center county, Pa., in reference to important works in that locality, speaks of the following firms engaged in the lumber business :

JONES, ALLPORT & CO.

The large planing of this firm is located at Philipsburg, on the line of the Tyrone and Clearfield railroad, and their saw mill about two and a half miles out of town, on the Moshannon creek, in a real wild cat region. In company with Jno. A. Mull, one of the firm, I visited the saw mill of this company, which is reached by a plank road put down by the company. A drive through the tall pines is surely a sight to one who has never witnessed an almost impenetrable and uninhabited country, in which are hidden immense fortunes in lumber and coal. The giant pines, from which millions of feet of lumber are yearly manufactured, stand so thick upon the ground that very few spots of earth are ever kissed by sunlight. In appearance and reality it is a country, of deer, bear, wild cats and lumbermen.

The saw mill referred to is known by the name of "Lock Lomond." Between 90,000 and 100,000 feet of lumber is cut each week, and over 2,000,000 feet of pine, oak and hemlock is now stacked, ready for market. Bill stuff, shingles, lath, etc., to fill any order received, are cut at this mill. Immediately around the mill the company has erected a number of houses for the accommodation of employes.

The planing mill is a large frame structure, supplied with the very best machinery, and well equipped. The company owns about sixteen hundred acres of timberland in Clearfield and Centre counties, three hundred acres

of which are underlaid with coal. Messrs. J. C. and Hobart Allport are also connected with the Morrisdale coal company.

HOOVER, HARRIS & CO.

A ride of two miles, in company with three jolly fellows, Ellsworth, of the *Journal*, being one of the party, landed us at mill No. 1 of this company. Tried to count the number of logs on hand, but gave it up in despair, and in lieu of obtaining this information, took a ride over the patent log slide—bully sliding place. Again in our vehicles, we started for the company office, half a mile distant, but ere we made half the distance a huge pine root invited us to stop by unceremoniously upsetting our buggy and spilling us out among the logs. Fortunately "nobody hurt." At mill No. 2, everything in the lumber line is manufactured, from the largest to the smallest sizes—ship timber to plastering lath—and shipments made to all parts of the country. The company claim to have 3,500,000 feet of dry lumber on stack, 2,000,000 shingles and 1,500,000 plastering lath. The annual product of the mill is 8,000,000 feet of lumber, 8,000,000 shingles and 5,000,000 plastering lath. The capacity of their mills is 40,000 to 50,000 feet per day, shingle mill 36,000 to 40,000 per day, and lath mill 25,000 per day. From these figures, some idea may be obtained of the dispatch with which this company can fill orders, and also of the rapid disappearance of timber in that section.

PORTAGE LUMBER COMPANY,

The Portage Lumber Company is the name of a new corporation just organized in this city under the laws of the state of Wisconsin, Judge G. W. Washburn, John R. Washburn, L. H. Dodge and Edward C. Owens, are the stock-holders, and the capital stock is fixed at \$10,000. The business of the company is the manufacture of lumber and shingles at

Stevens Point, Wisconsin. The officers of the company are as follows:
President—John R. Washburn.

Secretary and Treasurer—Edward C. Owens.

The company has a mill site at Stevens Point where a mill is now in process of erection under the direction of Messrs. Owens and Dodge.—*Oshkosh Northwestern.*

INCREASE OF LUMBER INTERESTS ON THE CONNECTICUT RIVER,

Previous to 1872 the McIndoes Falls Co.'s mill, which manufactures about eight or nine millions feet of lumber annually at McIndoes Falls, Vt., was the only large saw mill on the Connecticut river. During that year the Holyoke Lumber Co., erected a mill at Holyoke, Mass., and in the spring made a very successful drive of ten million feet of logs from the upper Connecticut.

In 1873 the McIndoes Falls Co., built a mill at Mount Tom Station, near Northampton, Mass. Meantime the smaller mills enlarged and increased their capacity, till the supply of logs, cut this winter to meet the demand of these mills at the main river, will probably reach forty million feet. A large amount of lumber is also manufactured on the tributaries of the Connecticut.

The resources of the immense virgin forests of pine and spruce in New Hampshire, Vermont, and Canada, at the source of the river, are being developed, and about 50,000 acres of these timber lands in the northern part of New Hampshire alone have changed hands within a year or two. These mills of course will be built to help consume this harvest of logs. Hartford, lower down the Connecticut, being a large market for this lumber, and where logs can be easily driven and the waste utilized will doubtless witness the extension of further lumber operations as soon as the attention of capitalists is attracted.

PATENTS AND IMPROVEMENTS IN THE LUMBER TRADE.

For the week ending February 10:

For saw, to Charles D. Lothrop, New York, N. Y. The claim is for the form of the bottom of the clearing-notches, bevelled acutely to the saw plate.

For boring machine, to George W. McCreedy, Petiscodiac, Canada. A series of boring tools operated together by cams and connecting bars.

For water wheel, to John L. Beers, Cocolamus, Pa. The wheel is composed of a hub, a series of buckets, and a rim. The hub is in the form of an inverted cone, to the sides of which the buckets are attached. The water passage gradually diminishes in width from the entrance to its extreme end, and is gradually ascending to said end. It is partially covered by a plate with gradually increasing apertures, and a gate is hinged within the passage under the plate.

For sawing machine, to George S. Grier, Milford, Del. The carriage upon which the timber is placed is so constructed as to oscillate to any desired angle with the vertically reciprocating saw.

For sawing machine, to George S. Grier, Milford, Del. The oscillating carriage is provided with rolls extending upon either side so as to give space for the ends of crooked logs; it is also provided with an indicator which enables the operator to adjust work to the desired angle.

For feed roller for planers, to Lucius P. Hoyt, Aurora, Ill. The upper roller boxes are sustained by arms from a hollow rock shaft having a torsion spring within it, regulated by a ratchet and pawl on one end of it.

For saw gummer, to George Mitchell, Holland City, Mich. A gumming wheel fixed upon a shaft, upon which is also fixed a pulley for the reception of a round elastic belt from a line shaft. Upon the ends of

the shaft are loosely journaled two handles to be held in the hands of the operator while manipulating the tool.

For the week ending Feb. 17:

For saw filing device, to Azel P. Durant, Woodyards, Ohio. The file-guide is provided with an angular tenoned head, so that the file may be presented at different inclinations.

For log turner for saw mills, to Edward H. Stearns, Erie, Pa. A toothed chain, having a reciprocating movement, acts in conjunction with a vertically moving and vibrating bar to roll the log upon the carriage.

For steam or water gate, to Sumner Van Horn, Chicopee, Mass. Within a cylindrical shell is fitted an oblong plug, having removable plates fitted in each side, and pressed against the interior of said shell by springs and by the force of the steam or water admitted thereto through a recess provided for this purpose in the shell above the plug.

For saw, to William Clemson, Middletown, N. Y. The claim is for—
1st. Graduated saw teeth, having the angles of their points graduated form an acute angle, at the middle to an obtuse angle, at each end. 2d. A cross cut saw combining the features of graduated teeth with graduated angles of their points, and tapering graduated sawdust-spaces between the teeth.

For expansive gear for feed rolls of wood-planers, &c., to Rufus N. Meriam, Worcester, Mass. A vibrating stud is employed in place of straps in the upper intermediate gear-wheel, which secures a more solid movement and prevents wear. One gear-wheel is made double, and the wheel of the lower roll is on a different plane from the wheel of the upper roll, so that they may pass each other, while both operate at the same time by connecting intermediate gear.

For tenoning machine, to William H. Elliott, New York. Tenons are cut by a pattern fastened to a table

arranged counter to the work-table.

For saw-jointer, to Edwin Gowdy, Pettisville, Ohio. The file holder is adapted to carry a file for jointing the ends of saw-teeth, and also files arranged to dress the sides of the teeth.

For dovetailing machine, to Alexander Thomson, Ames, Iowa. The pin 3 is made to follow the pattern, and the bit forms correspondingly the dovetail on the work below.

For the week ending Feb. 24:

For Sawset to Robert D. Lascaller, Logansport, Ia. This sawset consists of a slotted base or anvil, beveled face, pivoted spring hammer-headed arm, set or tension screw, adjustable gage plate, and adjustable set screw rests.

For Miter box to John L. Gause, Cleveland, Ohio. Miters are cut on a bevel, the angler being indicated on graduated plates.

For Machine for making Pickets, to Anson H. Bigelow, Chicago, Ill. Two sets of cutters to form the moldings are arranged to cut successively the two sides of the picket, which is clamped in a feed-table, moving between the cutters.

For Saw Gummer to William G. Blackledge, Metamora, Ind. This is an improvement in a previous patent, dated July 8th, 1873, by providing a divided nut, in which the feed-screw works, and in the adjustable bearing to regulate the angle of the cutter.

For Miter Box to Peter Suydam, New Brunswick, N. J. Adjustable stops are arranged on a curved plate to adjust the saw-guides to any particular angle.

For Scroll Saw to William H. Dobson, of Cincinnati, Ohio. A differential pulley moves freely upon ways, its larger diameter being provided with a strap, one end of which is attached to the upper end of the saw, while upon the smaller portions of the pulley wind two straps, which are connected with a spring.

For Planing-machine to William

C. Horton, of Salem, Mass. Scrapers are attached to the feed and pressure rollers to remove dirt, gum, &c.

For Pitman connection to Andrew J. Vanatta, of Newark, Ohio. Concentric V shaped projections, formed on the bar, fit in corresponding recesses in the pitman. The parts are connected by bolt and nut, to compensate for the wear.

For Pitman and Crank motion to Quincy A. Thomas, Oxford, Mich. To the treadle two pitmen are pivoted, the upper ends of which are pivoted to the outer ends of two levers which turn upon the axle of the wheel. To each of these levers, and near the axle, is pivoted a lever, the outer end of which engages with the rim of the wheel, and also forms with the other lever a toggle joint.

UNDINE.

Our lumbermen friends visiting Milwaukee from April 13th to the 18th inclusive, should not fail to see the great spectacular drama, "Undine," as it will be performed at the Grand Opera House in this city. Of the play the *St. Louis Globe* says:

The rain and mud last night did not prevent another full house at the Olympic. "Undine" will draw, rain or shine. The piece was put on even better last night than during last week. Everything seemed fresh, the costumes looked new and the armor of the Amazons was burnished to a dazzling brightness. The dancers danced with more than ordinary *elan*; the machinery worked better, and the ubiquitous demon who stands for the harlequin shot out of the floor with more commendable precision than formerly, then shot back to his catfish and mud-turtle home beneath the Rhine with a smoother thud than was his wont last week. In a word the whole thing worked better and the beautiful extravaganza gave unexceptional satisfaction.

"MICHIGAN PINE."

The *Saginawian*, which is, by the way, one of the best and most ably conducted newspapers in Michigan, has recently been looking upon the pine timber question, as regards the supply of the staple now supposed to exist in the forest of that state. In its issue of February 14th, the amount of standing pine in Michigan is given at 33,000,000,000 feet, "leaving out the upper peninsula." In every reproduction of, or extract from the article we have thus far seen, the impression is conveyed that the amount so given means all the available standing pine in the state, and that between the statement or estimate by the editor of the *Saginawian* and figures heretofore given by the *Lumberman* there exists a difference of 17,000,000,000 feet, while in reality such is not the case at all; as in an article in a subsequent issue of the *Saginawian* its editor gives to that portion of the state 16,000,000,000, making his total estimate now 49,000,000,000, which leaves but a slight difference, our estimates being, as will doubtless be remembered, 50,000,000,000 feet.

The *Saginawian* gives, in its estimate of the lower peninsula, the following schedule of the different sections producing the total:

Eastern shore from Sebawaing to Algonac, Flint, Lapeer and Cass river.....	1,500,000,000
Pine river on the shore, Au Gres, Tawas and Rifle river.....	2,500,000,000
Au Sable.....	3,000,000,000
Thunder bay and shore.....	3,000,000,000
Sheboygan.....	1,000,000,000
Mani-tac and Boardman rivers.....	6,000,000,000
From Mani-tac to White river, including Pere Marquette river.....	4,000,000,000
Muskegon.....	3,000,000,000
Grand river.....	1,000,000,000
Saginaw and tributaries, excepting the Cass and Flint rivers.....	6,000,000,000
Smaller districts not included.....	2,000,000,000
Total.....	33,000,000,000

The remarks preceding and following the above table are more forcible than elegant, but undoubtedly the writer thought that the subject treated needs something beside the wholesale system of flattery and "puffery" with which local newspapers have been wont to express themselves toward

the lumberman in times past. He says:

"Like every other great manufacturing specialty, lumbering is intrinsically selfish, egotistical and 'hide bound'—for which slang phrase we beg pardon, but it fits the subject—and it is only through the earnest efforts of those collaterally interested in its development, and through other business or industries identified therewith that bring it more closely in contact with general trade and commerce that it may be made permanently beneficial to a state or a locality. It is unquestionably in a great measure nomadic and transient, though less so than in many quarters in a district where, as in the Saginaw valley, it is backed by agricultural, mineral, and other resources of vast extent and recognized value and importance.

"It matters little whether the estimate of Mr. Little, Mr. Wait, or ourselves be the nearest correct, all must agree upon one point, that the present mode and manner of devastating our pine forests, without sense, sentiment or system, and regardless of the demands of the markets, is slaughter in the eastern part of Michigan; worse still on the western shore, it is wanton butchery; another fact is also apparent, that whatever the general advantages of Michigan pineries, they are so invested and environed by railways, roads and water courses, that there is scarce a reasonable limit to the operations that may be undertaken and carried through if an excessive demand and a proportionate 'raise' in price should excite the energies and stimulate the efforts of all those who are now directly or indirectly interested in the business of wiping out this timber."

The manner in which the upper peninsula supply is estimated is as follows:

For that portion in which the pine timbered lands are generally located or purchased from the state or United States, if we multiply the number of

acres located by the probable average per acre, and add a certain percentage to cover the timber still unpurchased, we would have the total of timber.

For the portion not generally located, which includes the territory lying west of Marquette, tributary to Lake Superior, and also a large tract of timber land on the headwaters of the upper tributaries of the Menominee river, we arrive at a result, by considering the total area, the proportion timbered and the probable average per acre.

That any result should be absolutely correct, requires a special and exact knowledge of the resources of each township. To this we do not pretend. We simply claim a general knowledge of the pine timber resources, derived from a careful examination of large tracts of land in various parts of the peninsula, the review of field notes, of surveys, and the reports of explorers. Proceeding on this basis, and taking the canal in the St. Marys river as a starting point, we estimate the pine timber to come into Lake Huron between there and the Straits of Mackinac, which includes the timber on the St. Marys, Munnusco, Pine and Carp, in feet.

At.....	600,000,000
To come into Lake Michigan between the straits and the Milacocia and the Monistique, inclusive.....	400,000,000
Between the Milacocia and the Monistique, inclusive.....	2,000,000,000
Between the Monistique and the Escanaba, inclusive.....	2,500,000,000
This includes the product of the Fish Dam, Sturgeon, White Fish rivers.	
Between the Escanaba and Menominee inclusive, which includes the product of the Ford and Big Cedar rivers....	4,500,000,000
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Total coming into Lake Michigan.....	9,400,000,000

Commencing again at the Sault canal we estimate the pine timber to come into Lake Superior, between that and the Two Hearted river, which includes the product of the Waishka, Shelldrake and Tonquamenon rivers.

At.....	2,000,000,000
Between the Two Hearted river and Marquette.....	400,000,000
Between Marquette and state line, which includes the product of the Ontonagon, Iron, Presque Isle and Black rivers.....	3,600,000,000
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Total to come into Lake Superior.....	6,000,000,000

Or to sum up

To come into Lake Huron.....	600,000,000
To come into Lake Michigan.....	9,400,000,000
To come into Lake Superior.....	6,000,000,000
<hr/>	
Making a total of.....	16,000,000,000

Or sixteen billion feet, being about one-half the estimated amount of pine timber on the lower peninsula.

To determine where this timber will finally be marketed, we have to consider its natural location, the present ownership and the future demands of the great lumber markets.

It seems probable that the timber which will come into Lake Superior east of Keweenaw point, will find a market in the eastern states, while that lying west of there, will find a market west.

Most of the timber to come into Lake Huron will go east.

Of that to come into Lake Michigan a fair proportion of that east of Green Bay will go east, being owned by eastern men and designed for eastern markets.

The timber to come into Green Bay is owned almost entirely by western men and intended for the western market.

Our idea of the probable distribution of the upper peninsula timber is as follows :

To go east from Lake Superior.....	3,400,000,000
To go east from Lake Huron.....	600,000,000
To go east from Lake Michigan.....	2,000,000,000
<hr/>	
Total going east.....	6,000,000,000
To go west from Lake Superior.....	2,600,000,000
To go west from Lake Michigan.....	7,400,000,000
<hr/>	
Total going west.....	10,000,000,000

—Northwestern Lumberman.

UNDINE.

The superb fairy spectacle of Undine, presented by a company said to be the largest and most expensive ever got together in this country, will open at the Grand Opera House on Monday, April 13th. Among the attractions are the Kirkafy troupe, the Persian twin sisters, the Ulm sisters, the London Madrigal boys and an immense ballet corp. The managers will arrange to run special trains to accommodate visitors from out of town.

LUMBER MARKETS.**Milwaukee, Wisconsin.**

MILWAUKEE, April 4, 1874.

The trade of Milwaukee yards still continues active and is reaching out to the various accessible points on the Mississippi. Prices remain unchanged but firm, and there is no cutting quotations. Navigation is not as yet sufficiently commenced to establish freight rates or prices on cargo lumber, although one or two mixed cargoes have been received. The recent infamous legislation of political demagogues at Madison, whereby a law designed to regulate railroad freight tariff was enacted, will, if carried into effect prove detrimental to the lumber interests of Milwaukee, and may measurably curtail the usual sales to the interior of the state within a radius of fifty miles. The law may effectually prevent shipments to Milwaukee from the line of the Wisconsin Central on account of establishing rates which that company cannot accept, while it will enable the Milwaukee & St. Paul railroad to obtain larger rates than they now ask on distances within the circle of the immediate retail trade of this city. The new railroad tariff law was enacted by politicians who evidently desired popularity regardless of justice and who have given evidence of being just about as capable of regulating railroad tariffs as a jackass would be of editing Potter's Washara newspaper.

We quote yard prices as follows :

Common boards.....	13	00	@
Joist and Scantling, 12 by 16 ft.....	18	00	@
do do 18 ft.....	14	00	@
do do 20 ft.....	15	00	@
do do 22 to 24 ft.....	17	00	@
Fencing.....	13	00	@
1st and 2d clear dressed siding.....	25	00	@
1st com. do do.....	20	00	@
2d com. do do.....	16	00	@

1st com. flooring.....	35	00	@
2d do do.....	28	00	@ 30 00
3d do do.....	25	00	@
1st and 2d clear boards.....	45	00	@
3d do do.....	35	00	@
Narrow select finishing boards.....	28	00	@ 30 00
Wide select com.....	20	00	@
1st and 2d clear 1½, 1½ and 2 inch.....	45	00	@
3d clear do.....	35	00	@
Wagon Box Boards.....	80	00	@ 35 00
A stock do.....	85	00	@
B do do.....	25	00	@
C do do.....			@ 18 00
Square pickets.....	14	00	@
Flat pickets.....			@ 13 00
Lath # M pieces.....	2	75	@ 3 00
A shingles, # M.....	3	50	@
No. 1 do do.....	1	50	@ 2 25
Timber, 18 to 22 ft.....	15	00	@ 18 00
Timber, 24 ft and over.....	18	00	@ 35 00

Chicago, Illinois.

CHICAGO, April 4th.

Prices still rule firm at Chicago yards, sustained by fairly active trade. The opening of navigation is yet too recent to authorize opinion as to the immediate effect on the market. The *Inter Ocean* gives freight rates and reports a few cargo sales as follows :

FREIGHTS—The market was dull, there being no special demand for vessels. The offerings were moderately large, and the general tendency of rates was to a lower range. The following were the rates :

Manistee, mouth.....	\$2	00
Manistee, river.....	2	25
Ludington.....	2	00
Muskegon.....	1	75
Pentwater.....	2	00
White Lake.....	2	00
Saugatuck.....	2	00

LUMBER—There were several cargoes on sale to-day, and some transactions were reported. The demand is still entirely from the city trade. The offerings not being sufficient to attract any attention from the country interest. The market is rather unsettled and buyers are backward in taking hold. That there will be a good demand for lumber during the coming season, we have no doubt, and this opinion is generally shared by merchants who are well posted. Buyers are willing and anxious to buy, and would readily pay the current prices, but they do not want to pay \$10.50 or \$11 to-day and have the market decline within a few days. The fact of the matter is that the season is not fairly opened, and the sales and offerings are not sufficient to really establish a market. As soon as the market is fairly opened we may look for an active demand and a steady range of prices, while an advance is not improbable, as nearly all our city dealers are in need of lumber, and the same is also true of the country trade. To-day there were three or four city buyers present, and some five sales were reported at \$10.50 for good Manistee joist and scantling. Coarse joist and scantling sold at \$10.37½. Strips and boards were entirely nominal. A cargo of shingles sold on private terms. The market closed quiet, with three or four cargoes unsold. The following were among the cargo sales :

Cargo schr. Falcon, from Muskegon, 120 m coarse piece stuff at \$10.37½.

Cargo schr. Itheca, from Pentwater, 100 m piece

stuff at 10.50; less tow bill—sold by Wm. Meglade & Co.

Cargo schr. A. Rust, from Manistee, 200 m piece at 10.50—sold by J. M. Loomis & Co.

Cargo schr. Hera'd, from Manistee, 130 m joist and scantling at 10.50—sold by J. M. Loomis & Co.

Cargo schr. Dolphin, from Manistee, 130 m joist and scantling at 10.50—sold by J. M. Loomis & Co.

YARD PRICES.

First and second clear.....	\$50 00@55 00
Second clear, 1 to 2 in.....	47 00@50 00
Third clear, 1 1/4 to 2 in.....	45 00@46 00
Third clear, 1 in.....	38 00@49 00
Select, 1 in.....	25 00@35 00
Wagon-box boards, 13 in. and upward, select.....	35 00@40 00
Stock boards, A.....	36 00@38 00
Stock boards, B.....	27 00@30 00
Stock boards, C.....	15 00@17 00
Common boards, joist and scantling, 12 to 16 ft.....	13 00@13 50
Fencing.....	13 00
Joist and scantling, 18 to 20 ft.....	14 00@16 00
Joist, 22 and 24 ft.....	16 00@18 00
Flooring, first and second clear.....	43 00
Flooring, first common, rough.....	33 00
Flooring, first common, dressed.....	35 00
Flooring, second common, dressed.....	26 00@30 00
Siding, first and second clear, dressed.....	23 00
Siding, common, dressed.....	18 00@20 00
TIMBER—Sawed, 12 to 16 ft.....	13 00@13 50
Square pickets.....	13 00@15 00
Flat pickets.....	12 00@13 00
SHINGLES—Sawed A & M.....	3 75
LATH.....	2 75

Hardwood lumber is quoted at the annexed prices:

Black walnut, counter tops.....	\$100 00@150 00
do clear.....	75 00@ 85 00
do common.....	40 00@ 55 00
do cull.....	25 00@ 35 00
do flooring.....	60 00@ 70 00
Ash, clear.....	28 00@ 40 00
do common.....	15 00@ 25 00
do cull.....	8 00@ 15 00
Oak, clear.....	28 00@ 40 00
do common.....	15 00@ 25 00
do cull.....	8 00@ 15 00
Hickory, clear.....	30 00@ 50 00
do common.....	25 00@ 35 00
do cull.....	8 00@ 15 00
Maple, clear.....	25 00@ 35 00
do common.....	12 00@ 20 00
do cull.....	8 00@ 15 00
Butternut, clear.....	40 00@ 60 00
do common.....	25 00@ 35 00
Cherry, clear.....	40 00@ 60 00
do common.....	20 00@ 30 00
do cull.....	10 00@ 20 00
Whitewood, clear.....	28 00@ 40 00
do common.....	15 00@ 25 00
do cull.....	8 00@ 15 00

WAGON STOCK—

Hickory axles, per set.....	1 00@ 1 50
Wagon poles, each.....	45@ 60
Box boards.....	30 00@ 40 00

ON TRACK—Shingles on cars were held at unchanged prices. We quote:

A or Star.....	\$3 25@3 37 1/2
No. 1 sawed.....	1 25@1 50

Three dollars per car to be added when transferred, which charge follows the shingles.

Thickness—Five shingles to be two inches in thickness.

Length—Sixteen inches.

been far more active than was anticipated by even the most hopeful dealers, and although prices are not materially advanced yet a very firm feeling characterizes the market in view of anticipated advance from present rates. We quote as follows:

Common dimension (per M feet)§.....	12.00
Second common.....	9.00@10.00
Fencing.....	14.00
Stock-boards.....	14.00@20.00
Siding.....	18.00, 22.00@25.00
Flooring.....	22.00, 27.00@35.00
Clear.....	25.00, 40.00@50.00
Two-star shingles.....	4.00
A star shingles.....	3.50
Star shingles.....	3.00
No. 1 shingles.....	1.25
No. 2 shingles.....	2.00@2.25
Lath.....	12.00@14.90
Pickets.....	

Mississippi River.

MISSISSIPPI RIVER, April 4.

The yard rates at the different points on the Mississippi, between St. Louis and Minneapolis, do not vary materially. Without exception, the trade since January first has been more active than was usual and the stock of common and dimension lumber and fencing at the yards at Dubuque, Clinton, Davenport, Burlington, Keokuk, Hannibal and other markets is run low. At the markets mentioned prices range about as follows:

1st Clear.....	per M feet	50.00
2d Clear.....	" "	45.00
Finishing lumber.....	" " 30 to	40.00
No. 1 dressed flooring.....	" "	33.00
No. 2 dressed flooring.....	" "	27.00
No. 1 clear dressed siding.....	" "	95.00
No. 1 dressed siding.....	" "	20.00
No. 1 fencing.....	" "	15.00
No. 2 fencing.....	" "	12.00
Sheathing.....	" "	11.00
Common stock boards.....	" "	14.00
"B" stock boards.....	" "	18.00
Joists and timbers 18 feet and under.....	" "	14.00
Above 18 feet, to...feet, for each additional foot, per M.....	" "	50
2x4 studding.....	" "	14.00
"A" star shingles.....	" "	4.00
A No. 1 shingles.....	" "	2.50
"B" shingles.....	" "	1.05
Lath.....	" "	2.50
Flat pickets.....	" "	15.00
Square pickets.....	" "	15.00
Dressed pickets, with scroll heads.....	" "	20 to 25.00

St. Louis, Missouri.

ST. LOUIS, MO., April 4.

Reports from St. Louis indicate that the yards are doing a very fair business for this time of year, and that

Minneapolis, Minnesota.

MINNEAPOLIS, MINN., April 4.

The spring trade at Minneapolis has

favorable indications that the season of activity is near at hand. Methudy & Meyer furnish the following report:

We have no change to note. Receipts of depot and levee lumber were only moderate, and the demand has been fully equal to the supply for all kinds of good lumber—inferior and common is more difficult to place, but is salable at low figures. At the yards there is a better business doing, at unchanged rates. Shingles in demand and held firm at \$4 on east track and the lath at \$3.10

We quote the range for depot and levee lots: Yellow pine flooring—3d rate at \$14@16; green 2d and clear do \$24@25; dry do \$26.50@27; yellow pine mill-run dimensions at \$14@15; poplar at \$17 @19 for mill-run boards and strips—2d and clear do do at \$22.00@23, 3d rate \$13@15; black walnut \$20 @25 for inferior, \$30@37 for common to fair, \$40@42.50 for good, and \$44@47.50 for choice; oaks at \$20@26; ash at \$20@27; hickory at \$20 to \$30@35; sawed cedar timer at \$32.50@35—hewn at \$26@28; cedar posts at \$30; walnut table legs sell at 16@20c per set. Special orders filled at higher rates.

Sales reported at the depot and on the levee: 26,000feet yellow pine flooring at \$15, 1 car do at \$22 and \$16, 9 do at \$24 and \$14, 2 do at \$26.50 and \$15, 10,000 ft. dry do at \$27 and \$16, 40,000 ft. 2d and clear da in pile at \$27, 40,000 ft. common poplar boards at \$14, 18,000 ft. and 1 car 3d rate do at \$15, 51,000 ft. 2d clear poplar boards at \$23 del@23, 6 cars poplar chair-plank on p. t., 1 bed slats at \$20 del, 3,800 ft. beach boards at \$35, 8,000 ft. 3d rate cyprus strips at \$10, 14,000 ft. 2d rate do at \$25, 5,400 ft. ash at \$22.50, 5 cars do at \$25, 1 oak boards at \$20, 21,000 ft. dry do at \$29.50, 1 car sawed cedar at \$35.

From an exhaustive lumber report recently compiled at Milwaukee, it appears that the latest returns from the lumber camps on the different streams in Wisconsin show that a much larger crop of logs will be brought out than was expected when operations began last fall. Still, the crop will be much short of what it was a year ago.

Albany, New York.

From the Albany Argus.

Trade for another season has now fairly commenced, which is full three weeks earlier than a start was made last year. There has been quite a large amount of lumber shipped already; still there is not so much doing as was expected, in consequence of the early close last fall. There is a good assortment to be found in market; the upper grades of pine are scarce and prices are firm. Spruce and hemlock are in very active demand at the advance on last fall's prices, which we quote: the call for spruce and hemlock has been greater than has been known for many years. Michigan and Canadian manufacturers keep their prices high, and so far we do not hear of many contracts being made for this market. Canada freights are likely to open reasonable.

River and eastern freights are quoted as follows:

To New York per M.....	\$1 25@1 50
To Bridgeport.....	2 00
To New Haven.....	2 00
To Providence.....	2 50
To Pawtucket.....	3 00
To Norwalk.....	1 75
To Hartford.....	2 75
To Middletown.....	2 25
To New London.....	2 50
To Philadelphia.....	2 75
To Baltimore.....	4 00
To Richmond, Va.....	5 00

The current quotations of the yards are:

Pine, clear, $\frac{3}{4}$ M.....	\$58 00@60 00
Pine, fourths, $\frac{3}{4}$ M.....	53 00@55 00
Pine, selects, $\frac{3}{4}$ M.....	43 00@50 00
Pine, good box, $\frac{3}{4}$ M.....	23 00@27 00
Pine, common box, $\frac{3}{4}$ M.....	17 00@20 00
Pine, clap-board, strips, $\frac{3}{4}$ M.....	50 00
Pine, 10 inch plank, each.....	42@ 46
Pine, 10 inch culls, each.....	25@ 26
Pine, 10 inch boards, each.....	28@ 31
Pine, 10 inch boards, culls, each.....	18@ 20
Pine, 10 inch boards, 16 feet, $\frac{3}{4}$ M.....	26 00@30 00
Pine, 12 inch boards, 16 feet, $\frac{3}{4}$ M.....	23 00@32 00
Pine, 12 inch boards, 13 feet, $\frac{3}{4}$ M.....	26 00@29 00
Pine, 1 $\frac{1}{2}$ inch siding, select $\frac{3}{4}$ M.....	43 00@45 00
Pine, 1 $\frac{1}{2}$ inch siding, common, $\frac{3}{4}$ M.....	19 00@21 00
Pine, 1 inch siding, selected, $\frac{3}{4}$ M.....	40 00@43 00
Pine, 1 inch siding, common, $\frac{3}{4}$ M.....	18 00@20 00
Spruce, boards, each.....	@ 17
Spruce, plank 1 $\frac{1}{2}$ inch each.....	@ 21
Spruce, plank, 2 inch, each.....	@ 32
Spruce, wall strips, each.....	13@ 14
Hemlock, boards, each.....	@ 17
Hemlock, joists, 4x4 each.....	34@ 38
Hemlock, joists, 2 $\frac{1}{2}$ x4, each.....	15@ 16
Hemlock wall strips, 2x4 each.....	12@ 13
Hemlock, plank, 2 inch, each.....	32@ 34
Black Walnut, good, $\frac{3}{4}$ M.....	75 00@85 00
Black Walnut, $\frac{1}{2}$ inch $\frac{3}{4}$ M.....	75 00@78 00
Black Walnut, $\frac{3}{4}$ inch, $\frac{3}{4}$ M.....	75 00@80 00
Sycamore, 1 inch, $\frac{3}{4}$ M.....	33 00@35 00
Sycamore $\frac{1}{2}$ inch, $\frac{3}{4}$ M.....	30 00@32 00
White Wood, chair plank, @ M.....	65 00@68 00
White Wood, 1 inch, and thick, $\frac{3}{4}$ M.....	83 00@45 00
White Wood, $\frac{1}{2}$ inch, $\frac{3}{4}$ M.....	30 00@32 00
Ash, good, $\frac{3}{4}$ M.....	38 00@43 00
Ash, second quality, $\frac{3}{4}$ M.....	25 00@30 00
Oak, good, $\frac{3}{4}$ M.....	35 00@45 00
Oak, second quality, $\frac{3}{4}$ M.....	25 00@30 00
Cherry, good, $\frac{3}{4}$ M.....	60 00@70 00
Cherry, Common, $\frac{3}{4}$ M.....	25 00@35 00
Birch, $\frac{3}{4}$ M.....	25 00@30 00
Beech, $\frac{3}{4}$ M.....	20 00@25 00
Basswood, $\frac{3}{4}$ M.....	22 00@30 00
Hickory, $\frac{3}{4}$ M.....	40 00@45 00
Maple, $\frac{3}{4}$ M.....	22 00@40 00
Chestnut, $\frac{3}{4}$ M.....	40 00@45 00
Shingles, shaved, pine, $\frac{3}{4}$ M.....	8 00@ 8 25
Shingles, do 2d quality $\frac{3}{4}$ M.....	6 00@ 7 00
Shingles, extra, sawed, pine, $\frac{3}{4}$ M.....	6 00@ 6 25
Shingles, clear, sawed, pine, $\frac{3}{4}$ M.....	4 50@ 4 75
Shingles, cedar, $\frac{3}{4}$ M.....	3 00@ 5 50
Shingles, hemlock, $\frac{3}{4}$ M.....	3 00@ 3 75
Lath, hemlock, $\frac{3}{4}$ M.....	2 35@ 2 35
Lath, spruce and pine, $\frac{3}{4}$ M.....	@ 2 50

Saginaw, Michigan.

SAGINAW, April 2d.

ROUGH LUMBER, CAR LOTS.

Three upper qualities.....	\$38 00
Select boards.....	25 00
Common stock, 10 and 12 inch.....	12 00
Fencing strips.....	12 00
Flooring strips No. 1.....	25 00
do do 2.....	20 00

The Wisconsin Lumberman.

Common boards.....	10 00
Coarse common.....	7 00
Scantling, joint and timber, 12 to 20 feet.....	10 00
do do do 20 feet.....	12 00
do do do 22 to 24 feet.....	15 00
Lath.....	1 60
DRESSED LUMBER.	
Siding No. 1 clear.....	21 00
" No. 2.....	18 00
" No. 3.....	14 00
Flooring No. 1, 6 in.....	26 00
" No. 2, select 6 inch.....	20 00
Ceiling No. 1, clear.....	40 00
" No. 2.....	30 00
" No. 3.....	20 00
Clear boards, s 1 side, 7 to 20 in.....	40 00
No. 2.....	30 00
No. 3 boards, select 7 to 20 in, s one side.....	25 00
Common boards, ".....	17 00

Oshkosh, Wisconsin.

Common Boards.....	\$10 00
Dimension Boards.....	12 00
Flooring, Clear, rough.....	32 00
Flooring, 2d clear, rough.....	25 00
Flooring, clear dressed.....	35 00
Flooring, 2d clear, dressed.....	23 00
Plank, clear, 1st and 2d.....	35 00@40 00
Siding, clear, dressed.....	20 00
Siding, 2d, clear, dressed.....	15 00
Scantling, 12 to 16 feet.....	10 00@11 00
Joists, 12 to 16 feet.....	11 00@12 00
Scantling and joists, 18 ft. and upwards.....	12 00@14 00
Shingles, A.....	3 00
Shingles, No. 1.....	1 50

THE PINE LAND OWNERS' CONVENTION.

There are several Michigan newspapers that cannot be classed as ready sympathizers with the action of the recent pine land owners convention held at Lansing. In fact, they charge that the pine land owners are actually endeavoring to stop the customary practice of township governments which compels non-resident pine land owners to pay the lion's share of the taxes which support the public expenditures of the town or county. It is a well-known fact that unimproved lands are made to pay the taxes, as a usual thing, justly due from improved lands. The swindling processes of township taxation are familiar to every person who has ever had an opportunity of witnessing frontier life. But our object at present is to show, merely, the feeling of a few Michigan papers.

The *Saginawian* says:

The men who own and control the pine timber of Michigan, are mainly well 'fixed' millionaires, not a few of them, many with an abundant abundance, and all 'old' yet they do not all take the world gracefully, joyful at the prosperous situation into which they have worked, figured, or it may be married—many of these timber kings bear their blessings

—'As the ass' bears gold,
To groan and sweat under the business.'

And rather than exercise their brains to devise means for making the vulgar fraction of God's acres yield them in a way that shall yield the greatest benefit to the localities where their timber is located, they worry about the evils to which they are subjected, and in their recent gathering, upon mature deliberation for ever so many hours, bring out this one puny proposition, merely: that the only bond of sympathy between owners of timber in Michigan, is the necessity for protection against 'barbarous' taxation. It is nothing that by aiding in developing collateral interests, this the sponsor for the leading manufacturing interest, may do the state much good; it is nothing that in this, as in agricultural, commercial, and manufacturing matters, it is the part of prudence to obtain correct statistics that wise calculations may be made thereon for the future; it is nothing that by the interchange of facts and opinions, a thorough business investigation of this most beneficent endowment, waste and destruction may be prevented, its value materially enhanced, and the time of its continuance largely protracted; nothing that is a part and parcel of the resources of the commonwealth of Michigan, and ought, in justice, to be managed, when it can be done so without detriment to the owner's interests, in such a manner as best to promote the interests of the whole people; nothing to nobody; but a big fifty dollar baby that will have some sort of soothing syrup or fight. * * *

The Bay City Leader says :

The ostensible object of this meeting was to protect timber, guard against its destruction, and compile statistics; but the real object aimed at seems to be to devise ways and means to protect pine land owners from paying taxes on their lands according to their value. It was complained, that in certain sparsely settled counties, whose inhabitants are generally poor, these rich non-resident land owners are compelled to bear the chief burdens of taxation for making roads, building school houses, and all other improvements that mark advancing civilization. We suggest to these gentlemen grumblers, that paying of taxes is incidental to the ownership of property everywhere, and if they deem it a misfortune to own pine lands in new counties in Michigan, they can easily sell them to those who will be willing to pay their legal proportion of taxes for making public improvements. The truth is, that hundreds of thousands of acres of pine land in this state are held by non-residents, who regard the pine on it as constituting its chief value, but who are unwilling that it should be taxed at a valuation greater than what the land itself is worth, and design, as soon as the pine is off, to return the land itself to the state. If the millions of dollars which these pine forests are worth, are ever to be taxed for public improvements, in the towns and counties where they stand, it must be before they are removed in the form of logs and lumber, and while constituting a large part of the property of these localities. If settlers would just keep out of these counties, and thus render expenditures for public improvements unnecessary till this is all but off, doubtless these dissatisfied gentlemen would feel more amiable; but grumble as they may, we opine the tide of emigration will still roll on, and the blessings of civilized society extend, and the rich treasures of our pine forests will contribute thereto.

We would call the attention of lumbermen to the fact, that there is connected with this office, the most complete job printing establishment in the northwest. Send for figures. All orders by mail promptly attended to.

JOHN B. BOTTINEAU,

REAL ESTATE,

Insurance and Loan Agent.

OFFICE, Ground Floor, East Entrance, CITY HALL,
MINNEAPOLIS, MINNESOTA.

Special attention given to paying taxes, procuring and perfecting titles to lands entered by HALF-BREED SCRIP. Soldiers' 80-Acre Claim and Warrants bought and so'd. Personal application, under Chippewa Treaty, Feb. 22, 1855, to enter Land always on hand, by which I can enter Pine Lands in Minnesota at \$2.50 per acre.

Persons having numbers, or expecting such, will do well to give us a call or correspond. Letters will receive prompt attention.

Also owners of Pine or other Land, who wish to dispose of the same, will find I am in a position to make speedy sales.

Choice Timber Land.

In Townships 158 to 160 inclusive, Range 50, situated between the St. Vincent Extension of the St. Paul and Pacific Railroad and the Red River of the North, on which latter there is constant traffic, and where the surrounding country is somewhat deficient in timber, I have 10,000 acres of land, first-class black loam and alluvial soil, surpassing any tract in the State for the production of wheat and farm produce. Specimens of the produce of this locality at the last State Fair took the first prizes. The above tract is heavily timbered with White and Burr Oak, averaging at least 4,000 feet select timber to the acre on which the government in adjoining tracts collects stumpage at \$3.00 per thousand feet. The lumber is not only in demand for local consumption, but finds a ready market in Pembina and the Province of Manitoba, where also timber is scarce, and to which there is water carriage.

Extra inducements to capitalists will be offered in the above lands for joint operations.

I have also for sale 1,120 acres in township 130, range 34 and 35. First quality Farming Lands, well timbered and prairie and well watered; near railroad. \$5.00 per acre.

Choice Pine Lands.

6,331 acres, on which stand 27,710,000 feet of choice lumber, all within four miles of landing, in tracts as follows:

180 acres in sec. 24.....	T. 132, R. 30	240 acres in sec. 10, 14, 21.....	T. 132, R. 31
400 acres in sec. 21, 22, 30.....	T. 137, R. 33	360 acres in sec. 14, 18, 24.....	T. 132, R. 31
440 acres in sec. 1, 12.....	T. 137, R. 34	240 acres in sec. 30.....	T. 40, R. 25
160 acres in sec. 10, 22, 24, 34.....	T. 137, R. 38	380 acres in sec. 3, 22, 24, 26.....	T. 40, R. 29
577 acres in sec. 6, 11, 18, 14, 24, 25, 33, 34.....	T. 138, R. 25	320 acres in sec. 6, 10, 23, 34.....	T. 51, R. 27
160 acres in sec. 8.....	T. 137, R. 33	360 acres in sec. 10, 14, 26, 34.....	T. 51, R. 26
240 acres in sec. 4, 18.....	T. 131, R. 30	320 acres in sec. 14, 22, 26, 30, 34.....	T. 53, R. 26
480 acres in sec. 10, 14, 24.....	T. 131, R. 81	160 acres in Wisconsin, sec. 30, T. 44, R. 2 W., near crossing of Wisconsin C. R. R.	
200 acres in sec. 18.....	T. 132, R. 30		

Prices range from \$4.50 to \$12.50 per acre.

1,000 acres estimated to cut 5,000,000 feet of White Pine, in townships 129 and 130, range 32. Will be sold cheap to close a partnership.

Have also several hundred acres that have been partly cut, some years ago, which at the prices asked would be a good paying investment.

And several thousand acres of choice Pine Lands tributary to Duluth markets.

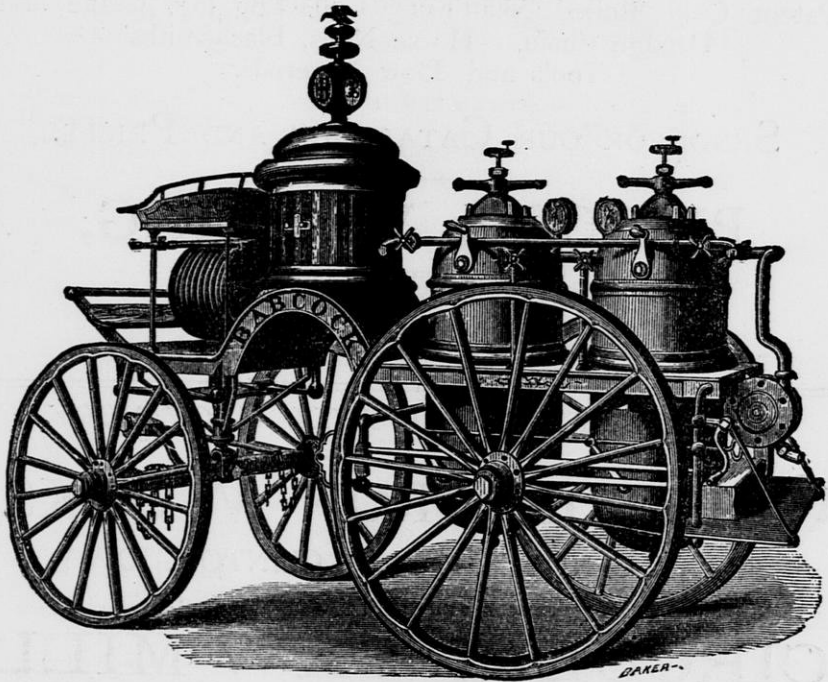
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|---|--|
| Hon. Alexander Ramsay, U. S. Senator, Minnesota. | Hon. E. M. Wilson, ex-member of Congress, Minneapolis, Minn. |
| Ex-Gov. W. R. Marshall, President of Marine Bank, St. Paul, Minn. | Hon. R. J. Baldwin, Cashier of State National Bank, Minneapolis, Minn. |
| Ex-Gov. Henry H. Sibley, St. Paul, Minn. | Hon. T. C. Buxton, Cashier City Bank, Minneapolis. |
| Hon. C. E. Vanderburg, Judge 4th Judicial District, Minnesota. | Hon. H. T. Welles, Minneapolis. |
| Sparks, McPherson & Co., Bankers, Minneapolis. | Hon. R. F. Crowell, St. Paul, Minn. |

ABSOLUTELY THE BEST PROTECTION AGAINST FIRE.

BABCOCK FIRE APPARATUS

SEND FOR RECORD.



Self-Acting Fire Engines,
EXTINGUISHERS, STATIONARY TANKS,
WARE-HOUSE ENGINES, for Lumber Yards, Docks, Etc., Etc.,
HOOK AND LADDER TRUCKS,
All Kinds of Fire Department Supplies.

THE BABCOCK MANUFACTURING CO.,

407 BROADWAY, NEW YORK.

83 WASHINGTON STREET, CHICAGO.

PEIRCE & WHALING,
 WHOLESALE
Iron, Nails, Steel,
 AND
HEAVY HARDWARE,

Patent Cold Rolled Shafting. Coil, Logging, Crane and
 Dredge Chain, Horse Nails, Blacksmiths'
 Tools and Plow Materials.

SEND FOR OUR CATALOGUE AND PRICES.

PEIRCE & WHALING,
 WEST WATER STREET,
 MILWAUKEE, WIS.

A SPECIALTY OF SAW MILL MACHINERY.

CLINTON IRON WORKS,

FRANK C. NOYES, PROP.. CLINTON, IOWA.

MANUFACTURER OF THE NOYES DOUBLE AND SINGLE

CIRCULAR SAW MILL

With Head Blocks having Steel Rack and Pinions and Double Ratchet Wheels,
 which set to $\frac{1}{8}$ of an inch.

**THE NICHOLS FOUR ROLLER GANG EDGER,
 GANG SAW MILLS**

With STEEL SASH and POWER BINDERS.

Engines and General Mill Machinery,

SHAFTING, PULLEYS, &c.

Catalogues, Cuts and Price List will be gladly sent by mail on application. Working plans for
 Setting up are sent with each Machine.

1874 FOURTEENTH ANNUAL STATEMENT 1874

OF THE

WASHINGTON LIFE INSURANCE CO.,

December 31, 1873.

NET ASSETS, January 1, 1873..... \$3,120,221 65

RECEIPTS.

Premiums.....	\$1,042,926 75	
Interest.....	214,083 28	1,257,010 03
		<u>\$4,377,231 68</u>

DISBURSEMENTS.

Claims by Death.....	\$ 308,912 76	
Surrendered Policies and Dividends to Policy Holders.....	218,994 47	
Matured Endowments.....	16,065 97	
TOTAL PAID POLICY HOLDERS.....	\$ 543,973 20	
Interest to Stockholders.....	10,146 72	
Taxes.....	9,377 12	
Commissions and Brokerage.....	71,901 07	
Expenses, including Advertising, Printing, Stationery, Medical Examinations, etc...	137,577 19	772,975 30
		<u>\$3,604,256 38</u>

NET ASSETS, December 31, 1873.....

Invested as follows:

Loans on Bonds and Mortgages.....	\$1,863,977 87
United States Securities, at cost.....	326,982 50
New York State, County and City Stocks, at cost.....	1,168,324 13
Real Estate.....	12,151 56
Loans on Policies.....	4,682 00
Cash in Bank and Trust Co.....	195,833 11
Cash in course of transmission.....	32,305 51

ACTUAL INVESTMENTS..... \$3,604,256 38

Interest accrued.....	33,939 00
Market value of stocks in excess of cost.....	40,293 37
Premiums due and unpaid.....	63,786 65
Deferred Premiums.....	168,040 09
Other Assets.....	15,502 76

GROSS ASSETS, December 31, 1873..... \$3,925,818 25

Cash reserved for Policies, etc., as per N. Y. State valuation.....	\$3,311,851 00
Liabilities for Claims, etc.....	74,420 02
	<u>3,386,271 02</u>

SURPLUS..... \$ 541,547 23

Dr. S. L. FULLER & CO., General Agents,

117 Wisconsin St., Milwaukee, Wis.

CHICAGO,
MILWAUKEE & ST. PAUL
RAILWAY.

THE ONLY THROUGH LINE
BETWEEN

MINNEAPOLIS,
ST. PAUL,
MILWAUKEE,
And CHICAGO.

AND THE ONLY RAILWAY LINE

Traversing the Valley of the Upper
Mississippi River,

AND

ALONG the SHORE of LAKE PEPIN.

This Route passes through more Summer
Resorts and Business Centers than
any other Northwestern line.

THROUGH PALACE COACHES
AND
SLEEPING CARS

On all Through Trains, without change.

Connecting in Minneapolis and St. Paul with
the several lines centering at those points.

St. Paul Depot, corner of Jackson and Levee. City
Office, corner Third and Jackson Streets.

Connecting in Chicago with all routes for the
East, South and Southwest.

Chicago Depot, corner Canal and West Madison
Streets. City Office, 61 and 63 Clark Street.

Connecting in Milwaukee with Western Union
and Wisconsin Central and other Divisions. Also
other Divisions of this Road.

A. V. H. CARPENTER,

Gen'l Pass. and Ticket Agent.

1874 Season Arrangement. 1874

\$3.00 IN FARE
SAVED

BY TAKING THE

DETROIT & MILWAUKEE

RAILROAD LINE.

The Cheapest and 100 Miles the Shortest Route to
Grand Rapid, Saginaw,
Detroit, Cleveland,
Suspension Bridge, Buffalo.

NEWYORK, BOSTON

And All Points in the East.

On and after Monday, April 6th, 1874, the Steamers
of this line will leave MILWAUKEE from their dock,
63 West Water Street, daily at 9 P. M. (Saturday ex-
cepted) making direct connections at GRAND HAVEN
the following morning with Trains for

DETROIT AND ALL POINTS EAST.

PULLMAN'S PALACE SLEEPING CAR ON NIGHT TRAINS
PARLOR CARS ON DAY TRAINS.

Fare \$3.00 Less than any other Route.

Through Tickets for sale at all principal Ticket offi-
ces in the Northwest. Also at Company's Office 335
Broadway, Milwaukee, and on board steamers.

HARRY BRADFORD,
Ticket Agent, Milwaukee.

W. W. WILSON,
Western Pass- Agent, Milwaukee.

S. LINDLEY,
GREEN BAY, WIS.

SAW REPAIRER AND FURNISHER.

All kinds of Saws Gummed and Straightened, and
made as good as new. When sending Circulars, it is
necessary to mark the log side of the saw, or send
instructions in regard to it. All orders promptly
attended to. Agent for Henry Disston & Co.'s cele-
brated Saws. A full stock of Saws constantly on
hand.

HOWARD FOUNDRY AND MACHINE WORKS
TAYLOR & DUNCAN,

Manufacturers of Steam Engines,
Blowing Engines, Mill and Blast Furnace Machinery,
Iron and Brass Castings, &c.

FORT HOWARD, WISCONSIN.

Chicago & Northwestern Railway **WISCONSIN CENTRAL**
 Passengers for **RAILROAD.**

CHICAGO,

DETROIT,	MONTREAL,	DAYTON,
TOLEDO,	QUEBEC,	INDIANAPOLIS,
CLEVELAND,	PORTLAND,	TERRE HAUTE,
BUFFALO,	BOSTON,	CHAMPAIGN, Ill
NIAGARA F'S,	NEW YORK,	BLOOMINGTON,
PITTSBURG,	PHILADELPHIA,	SPRINGFIELD,
CINCINNATI,	BALTIMORE,	JACKSONVILLE
ROCHESTER,	WASHINGTON,	QUINCY,
ALBANY,	WHEELING,	ST. LOUIS,
TORONTO,	COLUMBUS,	CAIRO,
SAN FRANCISCO,	SACRAMENTO,	
OGDEN,	SALT LAKE CITY,	
CHEYENNE,	COUNCIL BLUFFS,	
SIoux CITY,	YANKTON,	

—ALSO FOR—

FOND DU LAC,

Ripon, Green Lake,
 PRINCETON, BERLIN,
 WINNECONNE,
 Stevens Point, Wausau,

Oshkosh

Appleton, Menasha, Escanaba, Green
 Bay, Negaunee, Ishpeming,
 L'Anse, MARQUETTE, and
 the Shores of

Lake Superior.

And ALL POINTS SOUTH and EAST, Should
 Buy their Tickets via

Chicago

AND THE

CHICAGO & NORTHWESTERN RAILWAY.

Close Connections made with all Railroads running
 EAST or SOUTH from Chicago.

Among the Inducements offered by this Route, are all

THE MODERN IMPROVEMENTS.

Rock and Gravel Ballasted Track; Steel Rail, Rock
 and, Iron Bridges, Pullman Parlor Cars and
 Coaches; Parlor and Drawing room Day Coaches;
 Smoking and Lounging Cars; Westinghouse Safety
 Air Brakes; Miller's Patent Safety Coupling and
 Platforms; Close Connections at Junction Points
 Less Transfers than any other Route; Union Depots,
 No Car Ferry Transfers; Speed, Safety, and absolute
 comfort.

From 2 to 10 Fast Express Trains run each way
 Daily over the various lines of this road, thus secur-
 ing to the Traveler selecting this route sure and cer-
 tain connections in any direction he may wish to go.

See that your Tickets READ VIA THIS ROUTE,
 and TAKE NONE OTHER

Milwaukee Offices, 102 Wisconsin Street, and at
 the Depot foot of Wisconsin St' east.

MARVIN HUGHITT, W. H. STENNETT,
 General Superintendent, Gen'l Passenger Agent.
 S. SANBORN, General Agent.

New Short Through Line

BETWEEN

Chicago, Milwaukee,

DE PERE, GREEN BAY,

AND

ALL POINTS in the GREAT NORTHWEST.

THE ONLY CONTINUOUS LINE BETWEEN

MILWAUKEE, MENASHA,
WEYAUWEGA, WAUPACA,
AMHERST and STEVENS POINT.

AND THE

Only Route to the
IMMENSE LUMBER DISTRICT

Of Northern and Central Wisconsin.

Between Stevens Point and end of track a train
 runs each way daily, (Sunday excepted.)

NO CHANGE OF CARS

BETWEEN

Milwaukee and Green Bay

AND

Milwaukee and Stevens Pt.

SLEEPING CARS

ATTACHED TO ALL NIGHT TRAINS.

Passengers for FOND DU LAC, SHEBOYGAN and
 all points on Sheboygan and Fond du Lac Railroad,
 will find this the QUICKEST and MOST COMFORT-
 ABLE ROUTE.

CONNECTIONS:

At Plymouth, with Sheboygan and Fond du Lac
 Railroad.

At Green Bay, (Fort Howard), with Chicago and
 Northwestern, and Green Bay and Minnesota Rail-
 ways.

At Amherst Junction, with Green Bay and
 Minnesota Railway.

Ask for Tickets via Wisconsin Central Rail-
 road, the best equipped and most popular Road in
 the Northwest.

C. HARRIS, H. PRATT,
 Gen'l Sup't, Milwaukee. Gen'l T. A., Milwaukee.
 H. M. SCHOLLAR, Traveling Agent.

Green Bay & Minnesota Railway

Passenger Time Table.

GOING WEST.	STATIONS.	GOING EAST.
7:30 A. M. Dep.	Green Bay	8:45 P. M. Arr'ed
7:47	Duck Creek*	8:27
8:04	Oneida*	8:10
8:34	Seymour	7:40
8:57	Black Creek	7:17
9:20	Shiocton	6:54
9:50	New London	6:24
10:10	Royalton	6:04
10:23	Manawa	5:51
10:40	Ogdensburg	5:34
11:00	Scandinavia	5:14
11:30 } † Arrive.	Amherst	4:44 } † Depart.
11:50 } Depart.	Plover	2:24 } Arrive.
12:30 P. M.	Grand Rapids	8:44
1:17	Dexterville	2:57
2:07	Scranton	2:07
2:34	City Point*	1:40
2:45	Hatfield*	1:29
3:10	Black River	1:04
3:58	Merrillan	12:17
4:25 } † Arrive.	Alma Center	11:47 } † Depart.
4:45 } Depart.	Hixton	11:27 } Arrive.
5:00	Taylor	11:14
5:19	Blair	10:54
5:41	Whitehall	10:31
6:00	Arcadia	10:11
6:22	Dodge*	9:45
7:05	Marshland	9:00
8:11	Bluff Siding*	8:00
8:39	Winona	7:35
8:45		7:20
9:05		7:00

* Trains stop only on signal. † Trains will stop for meals. Trains do not run on Sundays. Black figures denote the stations for meeting and passing trains.

CONNECTIONS.

At Green Bay, with C. & N. W. Railway and Wisconsin Central Railway for Chicago, Milwaukee, Fond du Lac, Oshkosh, Neenah, Menasha, Appleton, and all points in Lake Superior; and in the season of Navigation, with Union Steamboats Co's Line First-class Propellers between Green Bay, Buffalo, Detroit and Cleveland, with Connections at Buffalo for New York, Boston, and all Eastern points.

At Amherst, with Wisconsin Central Railway for Stevens Point, Waupaca, Menasha and intermediate points.

At Grand Rapids, with Wisconsin Valley Railroad. At Merrillan, with West Wisconsin Railway for Hudson, Stillwater, St. Paul, Minneapolis, Duluth and intermediate points.

At Marshland Junction, with La Crosse, Trempealeau & Prescott Railway for La Crosse.

At Winona, with Winona & St. Peter Railway for all points in Western and South-Western Minnesota, and with M. & St. Paul, Minneapolis, La Crosse and intermediate points.

S. B. KENRICK,
Assistant Superintendent.

METHUDY & MEYER,
COMMISSION LUMBER DEALERS,
22 South Main Street,
ST. LOUIS, MISSOURI.

Scale in Steam Boilers.

I will remove and prevent Scale in any Steam Boiler, and make no charge until the work is found satisfactory.

GEO. W. LORD,
232 Arch St., Philadelphia, Pa.

H. M. NORTHROP,

MANUFACTURER OF

FRENCH YOKE SHIRTS,

AND DEALER IN

Men's Furnishing Goods,

Jan'y 4-ly

86 Wisconsin St.

MILWAUKEE FINE ART GALLERY,

No. 416 Broadway.

OPEN DAILY FROM 8 O'CLOCK A. M. TO DUSK.

Season Family Tickets \$10. Single admission 25 cts.

Jan'y 4-ly

B. FRODSHAM, Manager.

O. F. LINDMAN & CO.,

MERCHANT TAILORS,

90 Wisconsin St.

Gentlemen visiting Milwaukee should call at our establishment and leave their measure, that they may, at their convenience or necessity, order by sample or otherwise, complete or partial suits. Your measure once on our books, we can guarantee perfect fits and the very latest styles, at any season of the year you may wish to order.

Jan'y 4-ly

Wanted—Agents

To sell a Novelty just patented. Mill-men and Head sawyers buy it at sight. Commission liberal. Address,

FITZGERRELL & PRESSER,

Jan'y 7-3t

East Saginaw, Mich.

500,000 ACRES OF PINE AND FARMING LANDS

FOR SALE!

The lands of the Jackson, Lansing & Saginaw Railroad Company are now in market.

They are situated along its railroad, and contain tracts of the best Pine on the Tittabawassee, Rifle, Muskegon, Manistee, Au Sable, and Cheboygan Rivers. The grant having been made before any considerable quantity of pine land had been located in the northern part of the state, it now includes some of the finest and choicest

WHITE PINE TIMBER,

AND BEST

NORWAY PINE.

The FARMING LANDS include many thousand acres of first-rate

BEECH AND MAPLE LANDS.

No better can be found, and they are well watered, and located where they will have the best railroad facilities. No section of the country offers greater inducements to the settler than the above lands.

Terms For Sale.

One-fourth down, and the remainder in three equal annual installments, with interest annually at 7 per cent. Farming lands will be sold on longer time if desired. For list of lands, further information, or purchase, apply to the undersigned at LANSING MICH.

O. M. BARNES,
Land Commissioner.

RETAIL DRY GOODS HOUSE

L. A. WHEELER,

133 and 135 Wisconsin Street, Milwaukee,

Now opening a varied of goods adapted to

SPRING TRADE

And will be in daily receipt of all the Novelties of the season.

SPECIAL ATTENTION GIVEN TO

Black Goods,

OF ALL KINDS.

**Black Silks, Black Cashmeres, Brilliantines,
Tamise Cloths, Bombazines,**

And many other choice goods in that department

Real Thread, Guipure, Yak, Valenciennes and Point Laces,

In great variety. A complete line of

LADIES' WHITE COTTON UNDERWEAR,

Of good material and well made. Corsets, Kid Gloves and Fancy Goods of all kinds.
All Brown and Bleached Sheetings and Shirtings sold at New York wholesale prices.
Prices of all goods as low as anywhere in the United States.

THE DRESS-MAKING DEPARTMENT

Has wide reputation through the Northwest, and the work done is unexcelled in

Beauty of Finish, in Style or in Perfect Fit,

By any establishment at the East. Ladies wishing first class work done are guaranteed perfect satisfaction.

Particular attention given to BRIDAL OUTFITS.

CRANE BROTHERS MANUFACTURING COMPANY,ESTABLISHED
1855.

[LATE THE NORTHWESTERN,]

INCORPORATED
1865.

OFFICES, 10 North Jefferson Street, CHICAGO.

MANUFACTURERS OF

Wrought Iron Pipe,

Steam Pumps,

Steam Engines,

Machinery and Castings,

Babbitt Metal,

Pipe and Material for Dry Kilns

Rubber Hose,

FURNISHED AND FITTED COMPLETE,

Leather Belting, &c.

SIMONDS & BROOKE,

382 East Water Street,

MILWAUKEE, WISCONSIN,

MANUFACTURERS AND JOBBERS OF

CLOTHING.

— DEALERS IN —

Woolen Goods, Tailors' Trimmings and Men's Furnishing Goods.

A FULL LINE OF GOODS ESPECIALLY ADAPTED TO THE WANTS OF

LUMBERMEN,

SUCH AS

Duck and Denim Overalls,

Over Shirts, in great variety,

Knit Shirts, in great variety,

Country-Knit Socks and Mittens,

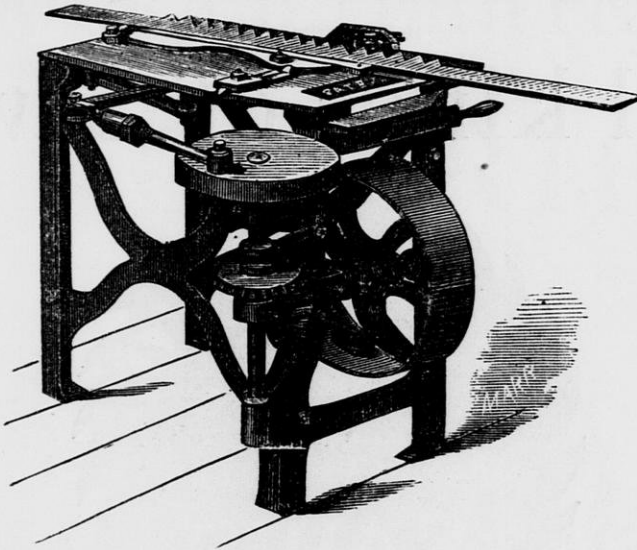
Rubber and Oil Cloth Clothing,

White Shirts, Paper Collars, Satchels, etc.

Agents for the sale of the Berlin, Wis., and Waukesha, Wis.,

Hard Twist Cassimeres and Tweeds.

HINKLEY'S POWER SWAGING MACHINE.



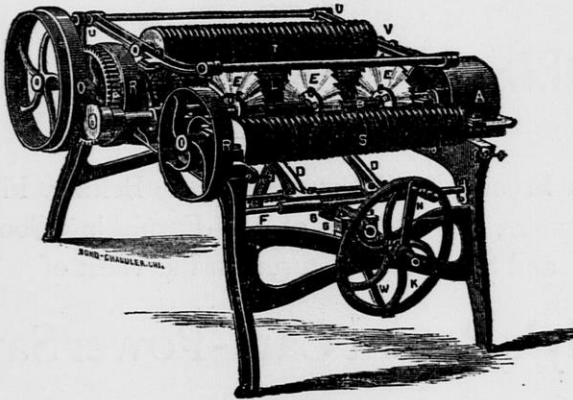
Address G. M. HINKLEY, care E. P. Allis & Co., Milwaukee.

O. L. PACKARD, Milwaukee, Wis.

SAW MILLS,

Gang Lath Mills,

SHINGLE and HEADING MACHINERY,



Belling, Lacing, Rabbit Metal, etc., etc.

Surface Planers, and Matchers,
EMERY SAW GUMMERS,
STONE'S BURR GUMMERS,

CALDWELL'S PATENT PARALLEL GANG LUMBER EDGER,

2, 3, 4 or 5 Saws. Do not fail to send for Circulars of this Machine.

Ames' Stationery Engines, Portable Engines and Boilers,

IRON AND WOOD WORKING MACHINERY, OF ALL KINDS,

PORTABLE FORGES ETC.

CURTIS & CO.,

MANUFACTURERS OF

All kinds of Saws.

Circular, Gang, Mulay, Mill, Pit,



Cross Cut and Seroll Saws, Billet Webs.

ALSO,

MANDRELS AND EMERY WHEEL MACHINES

Dealers in French Band Saws, Rubber Belting, Files, Saw-Gummers, and all kinds of Mill-Furnishing Goods,
and Sole Manufacturers in the West of

Grandy's Patent Cam-Power Saw-Set

THE BEST SAW SET EVER MADE.

Send for Price Lists.

117 VINE STREET, ST. LOUIS, MO.

GOODRICH, TERRY & CO.

Have a Large and Well Assorted Stock of

GROCERIES

Suited to the Lumbering Trade,

Consisting of, in part,

500 KEGS OF SYRUP,
5 and 10 Gallons, convenient for the Woods.

Full Assortment of Canned Goods,

COMPRISING

PEACHES, TOMATOES, BERRIES AND FRUITS OF VARIOUS KINDS,
VEGETABLES AND OYSTERS.

KENTUCKY AND VIRGINIA

Plug and Fine Cut Tobacco

GREEN, OOLONG AND JAPAN TEAS

Packed in quantities to suit the demand of the camp.

DRIED FRUITS: Apples, Peaches, Cherries,
Blackberries, Turkish Prunes, Zante
Currants, Etc., Etc.,

SUGARS, COFFEES AND SPICES,

Goodrich, Terry & Co.,

314 AND 316 EAST WATER STREET, MILWAUKEE, WIS.

F. J. BOSWORTH.

B. B. HOPKINS.

E. C. HOPKINS.

BOSWORTH & SONS,

JOBBER IN

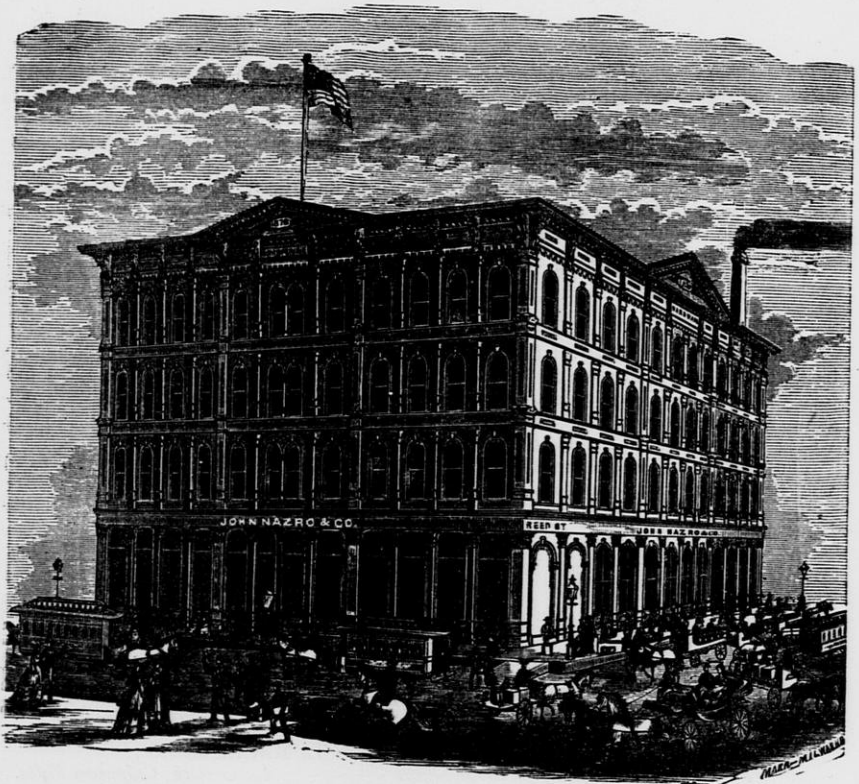
DRUGS, CHEMICALS, PAINTS, OILS AND FINE LIQUORS,**MILWAUKEE,**

OFFER TO THE WHOLESALE TRADE,

- 5,000 Boxes Window Glass,
 500 Brls Raw and Boiled Linseed Oil,
 300 Brls Tar Pitch,
 200 Brls Rosin,
 1,000 Brls Extra Carbon and Headlight Oil,
 200 Tons White Lead,
 200 Carboys Muriatic, Nitric and Sulphuric
 Acids,
 500 Cases Niagara Star Bitters,
 1,000 Boxes Sun Chimneys,
 200 Brls Extra Lubricating and W. V. Oils
 500 Pks Ginger, Mustard, Nutmegs, Spices,
 1,000 Pks Whiskey, Brandy, Wine, Gin, Rum
 A Large Stock of **BRUSHES** of all Descriptions
 " " **DRUGGISTS SUNDRIES** and **FANCY GOODS**

☛ We Make a Specialty of the Lumber Trade. ☛

JOHN NAZRO & CO. WHOLESALE HARDWARE



NOW OCCUPY THEIR

Mammoth New Store,

Corner of South Water and Reed Streets, near the Milwaukee & St. Paul Passenger Depot, on the South Side, MILWAUKEE.

Seasonable Goods

INCLUDING

CROSS-CUT SAWS, WOOD SAWS,

Augurs and Augur Bits, Rafting Augurs, and Stock Replete with everything in the line of Hardware, Metals and Tinner's Goods.

IMPORTANT TO MILL OWNERS AND MACHINISTS.

Vulcanized Friction Board.

We desire to call attention to our celebrated VULCANIZED FRICTION BOARD, as a substitute for Leather and Rubber, in Packing, and for Friction Pulleys. It is only a comparatively short time since this article was introduced, but its use is already rapidly superseding that of Leather and Rubber, on account of both its greater cheapness and greater durability, costing less than one-third the price of Leather and one-sixth that of Rubber, and wearing more than double the time. It is absolutely the ONLY article to make a good friction against iron, as it will not slip like leather or wood. It is put up in 50 lb. bundles, in the following SPECIAL sizes:

33x44 inches, 5, 6, 8 and 10 sheets to bundle.
 19x29 " 20, 25, 30 and 35 sheets to bundle.
 22x26 " 15, 20, 25, 30 and 35 sheets to bundle.

Nos. 5 and 6 are about $\frac{1}{4}$ of an inch thick, and are those most used, and will usually be found the most available for all purposes. For mill men and machinists, for pulleys and packing, and to founders for raising patterns, this article is almost indispensable, and in all our experience we have never found parties, who having used it, would return again to the use of wood, rubber or leather.

The following parties have used it largely, and will doubtless recommend it to all who may inquire regarding it:

FILER, STOWELL & CO.,
Founders and Machinists, Milwaukee.

W. H. HINER & CO.,
Founders and Machinists, Fond du Lac.

C. J. L. MEYERS,
Manufacturer of Lumber, Sash, Doors, etc., Fond du Lac.

C. C. PAIGE,
Eagle Iron Works, Oshkosh.

UNION LUMBERING CO.,
Lumbermen, Chippewa Falls.

EAU CLAIRE LUMBER CO.,
Lumbermen, Eau Claire.

HAMILTON, MERRYMAN & CO.,
Lumbermen, Marinette.

This is the only Board manufactured expressly for this purpose, and will be found the only one that will give perfect satisfaction.

FOR SALE BY

TYTUS, HAMILTON & CO.,

382 and 384 Broadway, Milwaukee.

National
Business College
MILWAUKEE, WISCONSIN.

This Institution offers superior facilities for preparing young and middle aged men and women for the counting-room, and business pursuits. For circulars or information, address Robert H. Spencer.

MILWAUKEE JOURNAL OF COMMERCE

Job Printing Rooms

No. 62 Oneida St., Grand Opera House,

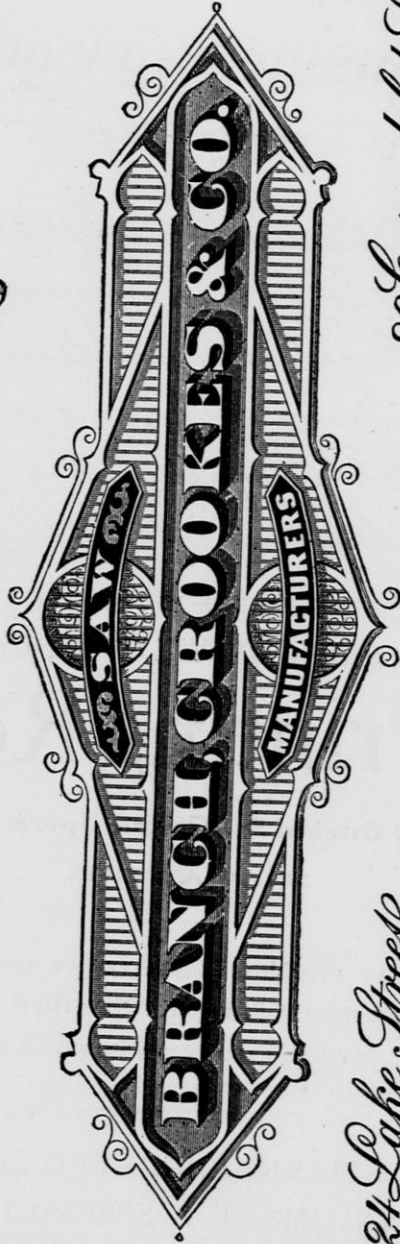
MILWAUKEE.

THE LARGEST NEWEST AND MOST COMPLETE JOB OFFICE IN THE STATE.
EVERY VARIETY OF JOB, BOOK AND SHOW PRINTING
NEATLY EXECUTED AT THE LOWEST RATES.

LUMBERMEN'S MARKS ENGRAVED, ELECTROTYPED
AND MADE A SPECIALTY.

SEND FOR SAMPLES AND FIGURES.

ST. LOUIS SAW WORKS
Established in 1849.



224 Lake Street
CHICAGO.

114 & 116 Vine Street
ST. LOUIS.

80 Carondelet St.
NEW ORLEANS.

LUMBERMEN'S REGISTER.

The following list is intended to represent every firm in the pineries of the Northwest who are engaged in the manufacture or the buying and selling of lumber, shingles, &c. The list will be published from month to month and names added just as rapidly as we can, through the medium canvassers, obtain them. We propose making this Register perfect in all its details, but of course several months must necessarily elapse before we can hope to obtain anything like a full and complete list.

The Register will prove of much benefit to lumbermen generally. Names will be classified as nearly as possible in accordance with post-office address. We desire the assistance of lumbermen in correcting and making complete this department. Send us names of all reliable firms in your locality.

WISCONSIN.

Upham Chas M & Bro.....	Angelica	Price W T.....	Black River Falls
Laird & Co.....		Shepherd A.....	
McCartney D.....		Spaulding D J.....	
Foster N C.....		Mark Bump.....	
Smith & Rlekkett.....		Burchard Harrison.....	
Oleson & Co.....		Porter W B.....	
Clinton McLaren & Co.....		Sawyer A E.....	
Hall A & Co.....	Ahnapee	Smith John B.....	
Young D.....		John and James Dickson.....	Bloomington
Jewett Lawrence & Co.....	Algoma	Barron John.....	Blue Mills
Sawyer P.....		Briggs & Barnes.....	Boaz
Reynolds & Tibbetts.....	Appleton	Bucker A.....	Buffalo
Jerard J F.....		Rouch & Erding.....	
Ross Huntress.....		McCarty J.....	Bloomer
Rose & Heath.....		Smith, Brooks & Macauley.....	
Dorr & Steele.....		Nelson H & Co.....	Boscobel
Phillips Dr.....	Arena	Weston, Miner & Co.....	
Yorker S. J.....		Pierce & Sly.....	Branch
Goodrich J & Co.....	Angusta	Yerty J & Kripd.....	Brandon
Randall S.....		Bowen E.....	Brodhead
Bennett & Hurd.....		Lamson C & Co.....	
Parr G.....	Avoca	Usher & Hassinger.....	
Bowen E.....	Albany	Blake Francis W.....	Burlington
Morrison Creek Lumber Co.....	Albion, Jackson Co	Wodford & Davis.....	Barton
Smith J B.....		Betcher & Alley.....	Bay City
Ashland Lumber Co.....	Ashland	Carney & Fairbanks.....	
E Inglalls & Co.....		Phillips L D.....	
Daniels E W.....	Auroraville	Haines H.....	Bell Center
Holbrook M S & Co.....	Arkansaw	Delveux A & C.....	Bellevue
Humphrey D & Bros.....		Randall Johnson.....	Binghamton
Miles & Knight.....		Herman Henry.....	Black Creek Station
Flower J H.....	Bangor	C B Fay & Co.....	Casco
St. Louis & Wisconsin River Co.....	Barnum	Horn F W.....	Cedarburg
Hodgman S & N, Spring c Mackie.....	Beaver Dam	Wehausen Henry.....	
Townsend. Jones & Co, Spring c Second		Deniston J C.....	Cadiz
Gratiot E H.....	Belmont	Deniston C R.....	
Goodhue W T.....	Beloit	Martin & Deniston.....	
Peet & Keeler.....		Staines J M.....	
Gray James.....		Bock.....	Calumet
Weed J H & Co.....		Edwards J & Co.....	Centralia
Peck S W.....		Garrison & Blinckley.....	
Talbot H G.....	Berlin	Jackson H W.....	
Treadway S N.....		Lefevre H.....	
Cohn L S.....		Lyon R C.....	
Harmon S C.....	Berlin	Clark & Scott.....	
Troan E.....	Black Earth	Wrahern W C.....	
Ward J S & Bro.....	Black River Falls	Graves James.....	Charlestown
Edmonds J.....		Montgomery Geo H.....	
Elliott A.....		Union Lumbering Co.....	Chippewa Falls
Given P G.....		Allen C.....	
Ice J.....		Marriet, La Beulif & Co.....	
		Phillips Jackson.....	

Robson John.....	Chippewa Falls	Coe & Lyman.....	Fairchild's
Vincent, Mandlett & Co		Pedrick & Co	
Woodruff & Taft.....		Cook & Foster.....	Fort Howard
Lyon & Co.....	Clark's Mills	Howard Mill Co.....	
Crosby P.....	Clinton	Lamb, Watson & Co.....	
Lampheer H P.....		C Schwartz & Co, ..	
Wilcox Bros & Co.....		J. P. Laird & Co.....	
Bond A D.....	Columbus	Oscar Gray.....	
Long & Henderson.....		Taylor A.....	
F. F. Farnham.....		Clapp & Mead.....	Fountain City
Aldrich V M.....	Cooperstown	Matthais F & C.....	
Wright P.....	Coral City	Bohan & Grant.....	
Stricher M.....	Cross Plains	Bowman W.....	Frankfort
Bates, Hoag & Co.....	Darien	Arpkee J.....	Franklin
James T & Co.....	Darlington	Cooley & Race.....	Fredonia
Pratt & Carpenter.....		Bergtresser L.....	Fremont
Woodward T.....		Schroeder & Co.....	
Clark H.....	Deansville	Kinsman C C.....	
Gormley P & Co.....	Delevan	Townsend E.....	
Watson J J & Co.....		Edwards J & Co.....	Frenchtown
Blake Samuel.....	DePere	Freeman A W.....	Genoa
B. F. Smith.....		Wightman E D.....	Germantown
A. Reid.....		Natchway H.....	Gibson
John McLelland.....		Clark & Thorp.....	Glenbeulah
Kingsley W O.....		Rafans & Co.....	Glen Haven
Marsh G S.....		Olds J S.....	Glenmont
Ritchie James.....		Coulson T.....	Grafton
Monroe John.....		Berrey Bros.....	Glenmore
Stetson Q S.....		Bowen E & Co.....	
Struthers Thomas.....		Hubbard S.....	
Hiles G.....	Dexterville	Smith Charles.....	
Nason S L.....		O. & W. Freeman.....	Genoa Junction
Remington H W.....		Arpen A.....	Grand Rapids
C M & A R Worth.....	De Soto	Arpen J.....	
Kinney Francis.....	Durand	Byron F.....	
Plummer & Morse.....		Clark & Scott.....	
Hoard & Earl.....	Doylestown	Langworthy, Mehan & Co.....	
Peck M N.....		Meehan P & J.....	
Knapp, Stout & Co.....	Dunnville	Neeves Geo & Son.....	
Rosenberg & Co.....	Dykesville	Rablin John.....	
Stockman W H.....	Eagle	Roe & Butterfield.....	
Smith W F.....	Elkhorn	Sampson H.....	
Larson & Olsen.....	El Paso	Scott Thos B.....	
Magee Bros & Anderson.....		Miller John.....	
Eau Claire Lumber Co.....	Eau Claire	Whipple E E.....	
Northwestern Lumber Co.....		Hickerson N H.....	Grantsburg
Bangs & Fish.....		Graves J A.....	Gravesville
Boyd A.....		Modlin Henry.....	
Burdock, Preston & Co.....		Earle & Case, Washington.....	Green Bay
Chubb H C.....		Lamb, Watson & Co.....	
Estabrook W B.....		McCartney D.....	
Graves D P.....		Sanford & Co.....	
Ingraham & Kennedy.....		Schwartz C. & Co.....	
Graham, White & Co.....		Shirland & Co.....	
Kiley Hiram.....		Whitney & Foster.....	
W Maxter & Bro.....		Woodruff J W & Co.....	
Ira Mead.....		Benjamin S A.....	
Pinkham J.....		Holmes & Thompson.....	
Daniel Shaw & Co.....		Anton Burkhardt.....	
Smith & Buffington.....		Kellogg C W.....	
H D Stockman & Co.....		K aus Anton.....	
Tarrant E.....		Lefehre Charles.....	
Wilcox & Co.....	Eau Galle	Lucas J & T.....	
Carson & Rand.....	Eau Pleine	Marshall L M.....	
Week John.....		Herling Theo.....	Green Bush
Hutchinson & Bro.....		Bailey D. R.....	Hammond
Webster & Palmer.....	Embarrass	Schmidt Adam.....	Harrisville
Fiffeld E.....	Evansville	Cook J.....	Hartford
Parker A.....		Mills J D.....	Hartland
Mack H & Bro.....	Evanswood	Olmstead Shelton P.....	
Shaw J.....	Fall River	King P.....	Helena
Griffith J Q & Son.....	Fond du Lac	McCutcheon A.....	
Meyer Charles J L.....		Roands W P.....	High Cliff
Merayman & Co.....		Tripp N D.....	Hillsborough
McDonald Alexander.....		Fisher J. Lake.....	Horicon
Sexmith G W.....	Fond du Lac	Baily D R.....	Hudson
Moore, Galloway & Baker.....		Palmer M P & Co.....	
Parker N & Co.....		Andrews F M & Co.....	Jenny
Mihills N D & Co.....		Matthews Thos.....	Jenny
Hamilton & Finley.....		White C F.....	
Bryant & Brown.....		Jewett A & Sons.....	Jewett's Mills
Hunter, Stewart & Co.....		Sutherland Sol.....	Juda
Dale J L.....	Forrestville	Blair & Wagner, Jackson.....	Janesville
Curtis & Cornish.....	Fort Atkinson	Piffeld, D. R. River.....	
Wilcox, Southwell & Co.....		Lovejoy & Blount, W Milwaukee.....	

Rexford J D, Academy.....	Janesville	Hubbard H F.....	Manitowoc
Rockwood & Sons, High.....		Cooper & Jones.....	
Schutt U, River.....		Smith Ira B.....	
Clapp J R.....	Juneau	Smith, Fliegler & Co.....	
Taber J B & Co.....	Kenosauville	Wallach A & Co.....	
Backus N G.....	Kenosha	Wallch T H A.....	
Grant & Son, Market.....		Zander & Co.....	
Truesdell Gideon, 3 Main.....		Klingholz Charles.....	Manitowoc Rapids
Hitchcock & Mashek.....	Kewaunee	Pierce Plinn.....	
Murray, Slauson & Co.....		Reune Chas.....	Maple Works
Slauson, Grimmer & Co.....		Brayton, L J.....	Marquette
Stranky W.....		Green J S.....	
Dikeman & Latimer.....		Hamilton, Merriman & Co.....	Marinette
Clapp N S.....	Kinnickinnic	Hilbeck '4 & Co.....	
Brauman B.....	Knowlton	Menomonee Mig Co.....	
Brook V.....		Spaulding, Houghtaling & Johnson.....	
Wallace & Redford.....		McCartney Wm.....	
Starte & Bros.....		N Ludington Co.....	
Hurlburt H H.....	Kilbourn City	Witbeck H & Co.....	
Cloespeck M.....	Kossuth	Bartlett L H.....	Marshall
Kellnor M.....		Bronson D W, Broadhead.....	Mazo Manie
Black River Improvement Co.....	LaCrosse	Rein Daniel.....	Medina
Hogan & Chamberlain.....		Hewitt Henry, Jr.....	Menasha
McDonald Bros.....		Poppe, Ross & Co.....	
Salzer G. J.....		Spaulding, Houghtaling & Johnson.....	Menekaune
Crosby W. W.....		Stephenson T & Co.....	
Coleman C L.....		Kuapp, Stout & Co.....	Menomonee
Gile & Holway.....		Bainbridge W.....	Mifflin
Mooer R M.....		Harker & Bainbridge.....	Mifflin
Bright & Withee.....		Greene N S & Co.....	Milford
Russell W C, Main c Second.....		Brown & Evans.....	Mills Centre
Gile Abner, Third.....		Dunham L.....	
Hankinson & Son.....		Lucas & Bro.....	
Hewett & Woods, Main c Second.....		Greenman R J.....	Milton
Hixon & Withee, Main c Second.....		Hutchinson James.....	Mineral Point
McMillan Alexander, Main c Third.....		Pierce J H.....	
McMillan Duncan D, Main c Third.....		White S.....	
Nevis S L, Main c Second.....		Weyhausen A.....	Mishicot
Paul John, Front.....		Williams J W.....	Monroe
Polleys W H, Main c Second.....		Dessert J R.....	Mosinee
Root W C, c Second.....		Goldsbury W.....	
Servis John.....		Brancau J.....	
Sill Wm R, Main c Third, c.....		Kronenwetter S.....	
Vincent & Edwards, Front.....		Roberts & Sicard.....	
Washburne C C, Main c Second.....		Sterling W A.....	Mukwa
Weston RS Main c Second.....		Garland J.....	Muscoda
Abbey Edwin.....		Parr & Co.....	
Abbey Hiram.....		Bull & Bowers.....	Muskego Centre
Emery T B.....		Houghton Geo G & Co.....	Milwaukee
Farnum Geo.....		Schroeder & Steinman, dealers.....	
Goddard H.....		Ernst Herzer, planing mill.....	
Hankerson A H.....		Wm. Willer, planing mill.....	
La Crosse Lumber Co.....		H. Jalass & Co., planing mill.....	
Mitchell.....		Brockhaus & Bradley, planing mill.....	
Ross Robert.....		W. C. Conway, planing mill.....	
J. H. Ross & Co.....		Nic. Schuh & Son, dealers.....	
Barron John.....	Lafayette	Engelmann, Babcock & Salling, Manufacturer and dealer.....	
Hodgens & Robson.....		Weston Bros, manufacturer and dealer.....	
Holbert Thos & Co.....		Mayhew Bros.....	
Mitchell & Clement.....		Durr & Rugee.....	
Barney S P.....	Lavalle	Schmidt & Reichel.....	
Sanford J F & Son.....		Judd T H & Co.....	
Hull Elijah.....	Luha	Comstock L & Co.....	
Leigh J.....	Little River Mills	Chandler Walter S.....	
Bailey & Vincent.....	Little Sturgeon	Seyfried Martin.....	
Gardner, Davis & Co.....	Little Suamico	Brembach Fred.....	
Chase & Dickey.....		Mabbett & Foster.....	
Conn A C & Co.....		Simpson E. B & Co.....	
Lamont A.....		Pierce R. W. & Co.....	
Peters C & Co.....		Merrill Bros.....	Merrillan
Mikeljohn James.....	Little Wolf	Ketchum L & Co.....	
Furtze W.....	Logansville	Warren J M.....	
Hankovitz F.....	Lomira	Hayden A S.....	
Zeider L.....		Clark S & Son.....	
Vaesch & Runkle.....	Lowell	Merrill L G.....	
Amy P.....	Lyndon	Kellogg A S.....	Neshoto
McMillan A.....		Cooper, Myers & Co.....	
Bunker & Vroman, Mifflin c Carrol.....	Madison	Cooper & Jones.....	
Sorenson & Frederickson.....		Raymond & Jones.....	
Stein C R, Washington av.....		Lamb W.....	New Franklin
Walsing & Bailey.....	Maiden Rock	Latham & Smith.....	New Franklin
Maiden & Jones, Quay.....	Manitowoc	Smart J & E (manufacturers) Bridge.....	New Lisbon
Emerson L.....		Bradford & Co.....	Necedah
Guyles & Pankratz, Quay.....		Burch G B & Co.....	
Horn W H, Commercial.....			

Dawes W F & Co.....	Necedah	Williamson G M & Co.....	Oshkosh
Shorey P & Co.....		Wetherby David.....	
Weston T & Co.....		McAllyster J P.....	
Sherry Henry.....	Neenah	Hanson W E.....	
Hewitt & Woods.....	Nellsville	Crowell & Son.....	
King G W.....		Webb, Albert & Co.....	
Blakely C.....	Nellsville	Myers & Van Every.....	
Clark A W.....		James & Stille.....	
Green A.....		Nash, Lines, Libbey & Co.....	
Lindsley F D.....		Morgan Bros.....	
Ross Robert.....		Fraker J S.....	
Putnam L G.....	Neosho	Spalding & Peck.....	
Cooper & Jones.....		Campbell Wm & Sons.....	
Hale & Springsted.....	New London	Libby D L & Co.....	
Bell Marcus.....	New Richmond	Regan, Cheney & Pratt.....	
Crozier & Jacobs.....		Doe & Miller.....	
Moore & Bro.....	Northport	Ripley & Mead.....	
Wisconsin mnfg Co.....		E. C. Kellogg.....	
Streeter J & A C & Co.....	Oconomowoc	John A. Paige.....	
Vilas G, opp depot.....		Dorby & Curran.....	
Woodruff Bros, n depot.....		McMillan R. & Co.....	
Brunquest W.....	Oconto	Sawyer J P & Son.....	
Orr, Newell & Co.....		Raine C N & Co.....	
Jacob Spies.....		Reed L B.....	
Anson Eldred.....		Sheldon L P & Son.....	
Leigh John.....		Laabs J & Co.....	
Oconto Lumber Co.....		Buckstaff Bros & Chase.....	
Comstock & Simpson.....		Foster & Jones.....	
Hart L W.....		Henderson & Wilson.....	Palmyra
Holt, Balceem & King.....		Wentworth, McGregor & Co.....	Portage City
Pierce L M.....		Gillon N.....	Pine Grove
Winslow & England.....		Glawe C.....	
Brownsigg John.....	Ozekee	Bruce, Fuller & Co.....	Rock Falls
Monizeneux E.....		Garland & Nichols.....	
Vanderpool & Clark.....		Bates & Hong, Second n Main.....	Racine
Woodley Samuel.....		Hall & Scott.....	
Johnson H & Co.....	Omro	Hood S & Co, Main c Second.....	
Curtis & Burlshesser.....		Murray, Slanson & Co, Second.....	
Gerard N.....		Peck S B & Son.....	
Morton, Arnold & Morton.....		Tremble & Doud, State.....	
Webster & Foster.....		French D C.....	Randolph Station
Wilson A.....		Cushman A G.....	Readstown
Foster N C.....	Cswego	Smith Timothy.....	Reedsburgh
Aiken F & D.....	Onalaska	Rudolph C J.....	Richland Centre
Hali Chas.....		Richardson Mrs. W.....	Richland City
Hayden L D.....		Learnmouth J.....	Rio
Jenks C L.....		Barlow J B & Co.....	Ripon
Moore R M.....		Pedrick M.....	
Nichols Chas H & Co.....		Bowman Na.....	Roundhill
Bradley C G.....	Oscola	Moore J P & Co.....	Royalton
Dresser & Wilso.....		Judd, Walker & Co.....	Saint Croix
Talboys & Hauscome.....		Roberts George.....	Sandy Bay
Knapp L E.....	Oshkosh	Halasz Chas.....	Sauk City
Jenkins J & Co.....		Obrecht U.....	
Harris M.....		Cowles H H.....	Scott
Osborn & Christenson.....		Carrol S.....	Seneca
Conlee Bro & Co.....		Campbell Y.....	Sharon
Lane C & W.....		Treat J A.....	
Gill & Son.....		M. McCord.....	Shawano
Copeland Alex.....		C. D. Westcott.....	
Freeborn John.....		Asa Hicks.....	
Turner Bros.....		C. Crowley.....	
Sturtevant & Son.....		Hockner A.....	Sheboygan
Stevenson Chas.....		Schrage Joseph.....	
Bray Jefferson.....		Weeks A L.....	
Danforth Joseiuh.....		Haseltine C P.....	Sherman
Danforth E M.....		Kelly W P & Co.....	
Edwards Henry.....		Stafford & Gray.....	
Elwell Joseph.....		J. H. Parks.....	Shiocton
Farrow T H.....		Mason, Barnes & Co.....	
Reynolds Paul.....	Oshkosh	W. D. Sordon.....	
Jewell, Lawrence & Co.....		Nutwig Ole.....	Siegel
McNair Jas.....		Harriman Samuel.....	Somerset
Barnes W W.....		Irwin O L, Maple.....	Sparta
Doughty & Bro.....		Johnson S E.....	Springfield
Streeter Geo.....		Stafford L R.....	Staffordsville
Rockwell & McCord.....		Balley D C.....	Stevens' Point
Bray & Chote.....		Blake & Mitchell.....	
Lynch John.....		Benson P & Bro.....	
Wall & Fitzgerald.....		Burns, Thompson & Co.....	
Bumery & Kellogg.....		Boynton N.....	
Hutchinson Thos.....		Brown E D.....	
Miller L J.....		Burr, Emmons & Co.....	
Fuinely & McDonald.....		Bean T G & Son.....	
Eighme R P.....		Campbell P.....	

Homestead Seth.....	Stevens Point	Peylon H M & Co.....	Superior
Gilchrist A B.....		Mann J H & Co.....	Sun Prairie
Goodhue Geo J, Jr.....		Anson Eldred.....	Stiles
Gamble Ross.....		Huct John.....	Trim Bell
Hungerford Seely.....		Barrett J M.....	Trempealeau
Hutchinson & Bro.....		Healy Benj B.....	
Hubbard.....		Reed Joseph.....	Tyrone
Karner S H.....		McCaul & Son.....	Tomah
Kelly Bros.....		Hinton T.....	Trap River
Knox Bros.....		Mann Joseph & Co.....	Two Rivers
Meehan Bros.....		Goyt C.....	Ualo
McCulloch H D.....		Foster N C.....	Upper Duck Creek
McDill T & Bro.....		Lucas J & Bro.....	
McMillan & Sons.....		Taylor A.....	
Moe Louis I.....		Arntz P.....	Waucesa
Lester and Plummer.....		Smith & Foster.....	Wauzeka
Park G L.....		Lewellen & Lunn.....	Waterloo
Pike E L.....		Squires & Sheldon.....	
Perry I & J.....		Coe O K.....	Watertown
Quinn Jas.....		Hamlin & Sleeper.....	
Rennie John.....		Streeter J & A C & Co W Water.....	
Robeson J M.....		George V. Brill.....	Wrightstown
Reading & Van Order.....		Hammond Alfred.....	Waukechon
Richardson Chas.....		Semple A.....	
Clifford Wm J.....		Semple F.....	
Rousseau M. A.....		Kimball R N, Madison.....	Waukeshu
Sherman S A.....		Richardson Silas.....	
Scott Bros.....		Morse O A.....	Waupun
Sheckels Wm.....		Yewdike A H.....	
Wadleigh & Walker.....		Andrews & Parcher.....	Wausau
Woods.....		Ancutt & Callon.....	
Whitney Ebenezer.....		Allen Henry.....	
Wade Geo & Co.....		Bernhard & Simpson.....	
Warner.....		Brown John.....	
Welch Adam.....		Clarke J C.....	
O C Wheelock.....		Clark T W.....	
Callahan Chas.....		Cohn & Curran.....	
Redfield John.....		Daniels H.....	
Isherwood J & H.....		Fitzer Al.....	
Blow Louis.....		Gray Robt.....	
Johnson J O.....		Hermann & Miller.....	
Martin John R.....		Kickbush & Bro.....	
Clark Owen.....		Leahy Capt J.....	
Cooper B F.....		Lawrence & Peters.....	
Cronkite, Plummer & Co.....		Manson Rufus.....	
Clements D R.....		McLain Henry.....	
Cook Cornelius.....		McGinnis Daniel.....	
Curran H & J D.....		McCrossen Jas.....	
Lawson & Co.....	Stoughton	McGinnis John.....	
Severson S H.....		Nichols Ed.....	
Turner O M.....		Plummer B G.....	
Ives W A.....	Sturgeon Bay	Single Ben.....	
Anderson Geo.....	Seymour	Single Jas.....	
McIntosh, Ross & Perry.....		Stafford M.....	
Pope Gr M.....		Wenhime & Kickbush.....	
Procke & Blair.....	Sheboygan	Zastrow Ed.....	
Freye g E.....		Shaw Daniel & Co.....	West Eau Claire
Thompson & Schrader.....		Wheaton Lumber and mfg Co.....	
Winter M.....		Shell Bros.....	West Salem
Graham W.....	Sheldon	Allen N H & Co, Railroad.....	Whitewater
Wait S.....		Esterly Geo W & Co.....	
Wilson George.....		Littlejohn A M.....	
Callon Wm.....	Sherman	Nutt M E & Killips.....	Winneconne
Gray J.....		Jones, Wellington & Co.....	
Davidson D.....	Saumico	Knapp Bros.....	
Klaus & Wright.....		McArthur & Co.....	
Trumble M E & Co.....		Starks, Stickles & Co.....	
Gray O.....		Schultz C.....	Woodland
Lamb, Watson & Co.....		Converse H.....	Wyoceua
Marshall & Co.....		Wells & Craig.....	
Weed A & Co.....	Saumico	Kling P & Sons.....	Wyoming
Coburn R G.....	Superior	McCutchen H.....	
Howard John D.....		Baker & Blair.....	Yankeetown

ILLINOIS.

Ludington, Welles & Van Shaick, 224 south water street.....	Chicago	Wilce, Stephens & Co., planing mill, 22d Chicago and Throop st.....	
Palmer, Fuller & Co., planing mill, cor. w. 22d and Union streets.....		Kelley, Wood & Co., cor. w 22d st and Center Ave.....	
Adams & Lord, 338 Lumber street.....		Soper, Brainard & Co., 69 Beach st.....	
Park & Soper, 775 Canal street, cor. of Lumber.....		R S Whitcomb, 714 w. Washington st.....	
Batcheller & Slight, Throop st, s of 22nd.....		Gilbert, Hubbard & Co, 226 to 220 s water st.	
South Branch Lumber Co., cor. 22d and Loomis st.....		Benedict Franz.....	East St. Louis
		Livingston John B.....	

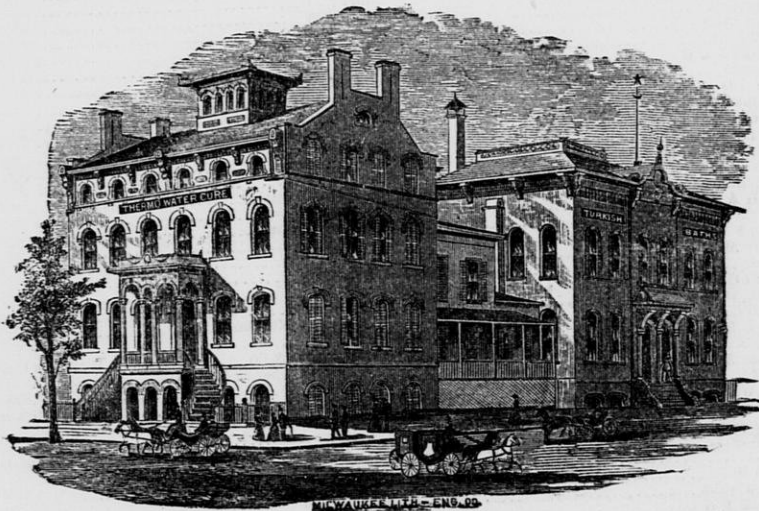
MINNESOTA.

Chute S H.....	Minneapolis	Judd W S.....	Minneapolis
Smith E K.....		Brood E.....	East

MISSOURI.

Lobsinger, Meegan & Co.....	Carondelet	Theo. Bloess, Carondelet Avu. cor. Barton..	St. Louis
McAlister & Bowling	Columbia	August Leisse, 609 Chouteau Ave. bet. 6th	
Cruikshank, J J Jr.....	Hannibal	and 7th sts	
Northwestern Lumber Co.....		Boeckenkamp & Surkamp, cor. 9th and	
Phillip Gruier, Jr., s. e. cor. of 9th st. and		Monroe sts.	
Case Ave	St. Louis	Lobsinger, Meegan & Co., Carondelet.....	
Woerheide & Luchrmann, planing mill, 813		Clear Water Lumber Co.....	
Case st.....		Floitz & Ganahl, 1320 Jackson st.....	
Schulenburg & Boeckeler.....		Methudy & Meyer, commission, 22 s.	
Lesley, Garnett & Co., planing mill, 124		Main st.....	
Olive st.....		Berthold & Jennings, commission, 28 s.	
Parker, Spencer & Co., 3,922 Broadway....		Main st.....	
Knapp, Stout & Co., Bremen Ave.....		Williams & Alford, commission, 100 s.	
Patrick Bros. Lumber Co., Bremen Ave....		Main st.....	
Schuelle & Queri, n. Main st.....			
Phillibert & Johanning, planing mill, 1502			
to 1518 Market st.			

Milwaukee Thermo Therapea.



Comprising all the appliances of a first-class Water Cure, with the Electro-Thermal and Turkish Bath wedish Movements, Health Lift, &c. The only Turkish and Electro-Thermal Bath in the City.

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S. P. HANSON, M. D. } PROPRIETORS.
 GEORGE J. UGER. }

end for Pamphlet.

This institution has, within the last six years, treated with wonderful success, over five thousand patients representing nearly all classes of diseases, Chronic and Acute. A large portion of them of long standing, in which other means had failed, such as Rheumatism, Gout, Dyspepsia, Scrofula, Local and General Dropsy, t. Vitus' Dance, Asthma, Bronchitis, Chlorosis, and all Female Weakness, Contracted Limbs, Constitutional phyllis, Bright's Disease of the Kidneys, and Diabetes Diseases of the Lungs and Air Passages, the Liver, the Womb, the Heart, the Head and also the Skin.

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From CHICAGO to

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AND

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RUN THROUGH WITHOUT CHANGE

To **KANSAS CITY and ST. LOUIS.**

 No extra charge for seats in PALACE RECLINING SEAT CARS, which are run through between Chicago and St. Louis WITHOUT CHANGE.

NO CHANGE OF CARS from Chicago to Kansas City, Springfield, St. Louis and Jacksonville.


The ONLY LINE RUNNING


A SATURDAY NIGHT TRAIN

To **SPRINGFIELD and ST. LOUIS,**

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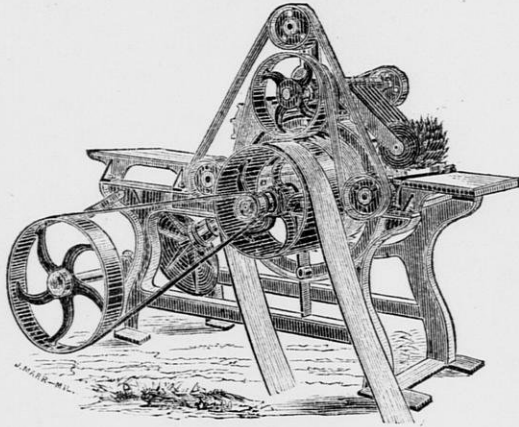
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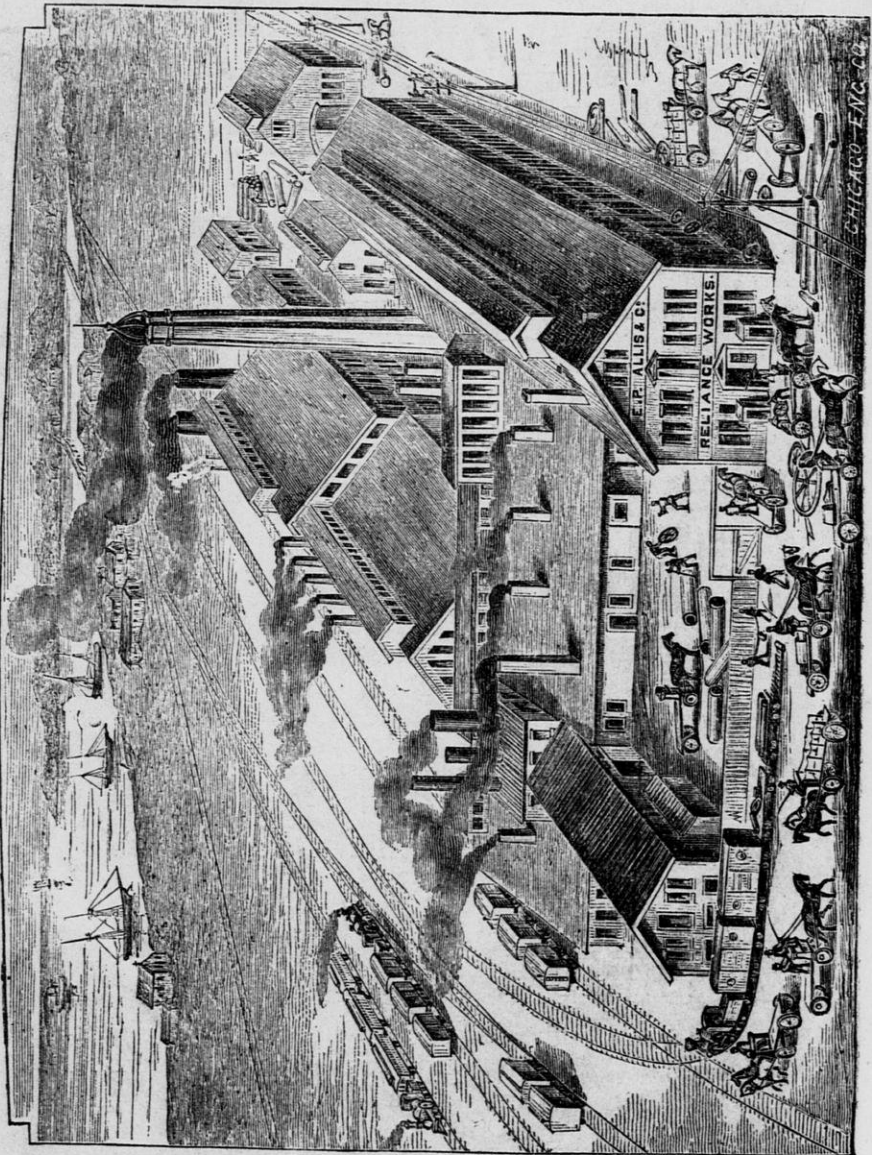
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