



# LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

## **The Wisconsin lumberman, devoted to the lumbering interests of the northwest. Volume I. Number 4 January, 1874**

Milwaukee, Wisconsin: The Wisconsin Lumberman Publishing Co.,  
January, 1874

<https://digital.library.wisc.edu/1711.dl/XOFRBADRSJKFB84>

Based on date of publication, this material is presumed to be in the public domain.

For information on re-use, see

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

THE  
**Wisconsin Lumberman,**

DEVOTED TO THE

LUMBERING INTERESTS OF THE NORTHWEST.

JANUARY, 1874.

PRINCIPAL CONTENTS:

- |   |  |
|---|--|
| 1. Prospects of Lumbermen for 1874.             | 17. Happy New Year to the Wisconsin Central. |
| 2. The Green Bay and Minnesota Railway.         | 18. Opinions of Wisconsin Lumbermen.         |
| 3. Marathon County.                             | 19. Good Joke on Mayor Ludington.            |
| 4. The Chippewa Valley.                         | 20. Northern Michigan.                       |
| 5. Valuable Estimates.                          | 21. New Timber Land Bill.                    |
| 6. Lumbering in the Lake Michigan District.     | 22. Recent Growth of De Pere.                |
| 7. Why the Lumber Trade is Depressed.           | 23. Forest Culture in California.            |
| 8. The St. Louis Market Overstocked.            | 24. Resins.                                  |
| 9. The Winter's Production.                     | 25. Timber and Health.                       |
| 10. Preserving Timber.                          | 26. Handling Material.                       |
| 11. The Turkish Bath.                           | 27. Editorial Notes.                         |
| 12. Education and Commerce.                     | 28. Late Notes.                              |
| 13. The State Grange on the River Improvements. | 29. Lumber Tariff.                           |
| 14. A Lumbermen's Association.                  | 30. The Lumber Markets.                      |
| 15. Wisconsin Items.                            | 31. "The Wisconsin Lumberman."               |
| 16. Value of Wisconsin Pine Lands.              | 32. Berthold & Jennings' "Annual."           |

EDITORS: E. B. NORTHROP and H. A. CHITTENDEN, JR.

MILWAUKEE:  
THE WISCONSIN LUMBERMAN PUBLISHING CO.,  
GRAND OPERA HOUSE, 62 ONEIDA STREET.

Yearly Subscriptions, \$2.00; Single Copies, 20 Cents.

# MUNSON & CO.,

## TANNERS,

AND

# BELTING MANUFACTURERS,

JOBBER IN { Rubber Belting,  
Rubber Hose,  
Lace, Hooks, Studs, &c.

**ENDLESS BELTS A SPECIALTY.**

*14 and 16 West Randolph Street, Chicago.*

### TO ADVERTISERS.

IT is conceded by business men that advertising in class publications ensures greater returns for money invested than advertisements placed before the public in any other way or through other mediums. THE LUMBERMAN is the only journal in the State devoted exclusively to Lumbering interests, and is, even with the first number, widely circulated. It will find its way to the hands of every Lumberman and Manufacturer in the State, and will become one of the best Advertising Mediums in the West.

Examine our rates, and send any desired form of advertisement. Especial care and taste exhibited in display.

### RATES.

SPACE.	1 MONTH.	3 MONTHS.	6 MONTHS.	1 YEAR.
1 Inch, - -	\$3.00	\$7.00	\$12.00	\$18.00
2 Inches, -	5.00	12.00	20.00	30.00
½ Column, - -	8.00	20.00	30.00	50.00
1 Column, -	12.00	30.00	50.00	80.00
1 Page, - -	20.00	45.00	70.00	120.00

## WISCONSIN LUMBERMAN.

VOL. I.—JANUARY, 1874.—No. 4.

## PROSPECTS OF LUMBERMEN FOR 1874.

The year that has just past has been valuable, at least, in experience. It has opened the eyes of the business men of the country to certain facts that will be of value to them in planning for the future. The credit system of the country has created too much business; more than is necessary to live and let live; more than the actual currency in circulation would carry; more than could be created by law of natural supply and demand; a very large proportion above the real necessities of the people and nation. Extravagance has been the rule, and perfect recklessness the average conception of business life during the past few years. Now the result is manifest, and economy has suddenly become a virtue of necessity. Undoubtedly the lesson is well appreciated by our business men. It remains to be seen whether it will be remembered or not. Lumbermen are proverbially a generous class, and have paid too little attention to the matter of thorough organization and system in securing labor and the results therefrom. They, more than any other class of manufacturers, have shared with their men the lion's portion of the natural profits

of business. They have paid unskilled labor the price even awarded the best mechanical knowledge and training. The product of their industry has cost one-third more than a fair compensation. And yet the burden of extravagance only became apparent when the market was glutted with their commodity of manufacture. The present situation then is due to the fact that there was more lumber manufactured in 1872 and 1873 than was necessary for immediate consumption, and that this lumber cost its producers more money than could be paid for it by dealers who desired to carry stock largely in excess of the prospective trade. It is evident that there can be no increase in value of lumber until there is a greater proportionate demand to the supply on hand than now exists. For the present year that state of affairs can only be brought about by curtailing the amount of lumber manufactured. It is absolutely certain that there will not be as many logs to saw next season as there has been sawed during the past year. The question then, in referring to the prospective prices for the present year, is whether the amount of logs which will be cut this winter and manufactured during the season will, with the amount of last

year's stock in the market, be more than sufficient to meet the demand of consumption, equal to that demand, or less than will be required. Lumbermen are aware that the market is at least well stocked. That there is more than the usual amount in pile throughout the pineries. That one result of the panic will be shown during the year by great reduction in the amount of building throughout the country as well as the cessation of corporation works which have contributed largely to the demand for lumber. There is then little prospect of an increased demand during the present year. The whole question reverts to the amount done and to be accomplished this winter. If, as we have claimed heretofore, there should be added to the amount on hand not to exceed fifty per cent. of the cut of 1872-3, it is safe to assert that there cannot be an overstock in the country for the present year, as it is evident that the present surplus is not 50 per cent. of last year's product. One advantage to result to manufacturers is the fact that the cost of producing this season is to be materially lessened, and a living profit may accrue from prices which have, the past year, been ruinous. The spring trade will soon commence, and will undoubtedly indicate a dull season. If, during the remaining winter, it be proven that but little logging has in reality been done, prices will advance somewhat, and the fact will also tend to materially enliven the trade for the time being because of anxiety of purchasers to buy at the bottom prices. The great encouragement, however, to manufacturers

who own their own pine lands lies in the fact that their standing timber is increasing greatly in value, and is in reality paying an enormous interest on the capital invested in those lands. The depletion of the pine forests is progressing with such rapidity that the coming generation will be unable to realize the fact that pine boards were ever sold at their present prices. Pine land owners are at least as certain to increase their wealth by allowing their timber to stand untouched as they would be from active operations even if the lumber market was very much better than it is. If profit cannot be made by manufacturing at present prices, it will at least pay well to remain inactive and watch the increase of value of every pine tree in the land. All in all, the lumbermen of the country have no reason to despond. Their chief commodity is a staple article, and will never be worth less money than it is to-day. A little rest, not quite so much energy in destroying the never-to-be replaced forests, will bring around that desired condition of the lumber market, when every board will sell readily for its real value in cash. A very few months longer will decide the question as to the profitability of manufacturing during the present year, and we believe and trust that it will be decided favorably to the readers of *THE WISCONSIN LUMBERMAN*.

---

About the usual number of logs will be got out at Cavoit's mill, Oconto. Nick is good natured as usual, and takes the panic times easy.

VALUABLE ESTIMATES.

In order to arrive at anywhere near correct estimates of the amount of logs that will be ready for the mills next spring, it is of course necessary to first learn the amount of old logs now on hand. Careful statistics have been prepared, by prominent lumbermen, of the amount of old logs left over in Michigan and in northeastern Wisconsin. We are enabled to place the figures before our readers and may say that they represent the amount as compiled by those who ought to know :

Lake Michigan.	Logs left over, Feet.
<b>EAST SHORE..</b>	
Saugatuck.....	10,000,000
South Haven.....	5,000,000
Grand Haven.....	75,000,000
Muskegon.....	158,000,000
White Lake.....	17,000,000
Stony Point.....	3,000,000
Pentwater.....	3,000,000
Ludington.....	20,000,000
Lincoln.....	4,000,000
Hamilin.....	2,000,000
Free soil.....	500,000
Manistee.....	110,000,000
Portage Lake.....	1,000,000
Frankfort.....	2,000,000
Traverse City.....	6,000,000
East Bay.....	500,000
Elk Rapids.....	1,500,000
Cheboygan.....	10,000,000
Monistigue.....	3,000,000
Two Rivers.....	10,000,000
Kewaunee.....	8,000,000
<b>Total.....</b>	<b>441,500,000</b>

GREEN BAY DISTRICT.	Logs left over, Feet.
Ford River.....	2,000,000
White Fish Bay.....	3,000,000
Cedar River.....	5,000,000
Menomonee.....	10,000,000
Peshigo.....	20,000,000
Oconto.....	50,000,000
Pensaukee.....	20,000,000
Little Suamico.....	5,000,000
Big Suamico.....	2,000,000
Duck Creek.....	1,000,000
Green Bay.....	5,000,000
Red River.....	3,000,000
Little Sturgeon.....	5,000,000
Big Sturgeon.....	1,000,000
<b>Total.....</b>	<b>132,000,000</b>

The total amount in feet, then, of the old logs left over in the district principally tributary to Chicago is \$573,500,000.

It is calculated that at least 220,000,

000 feet will be put in this winter throughout the Green Bay district ; that amount added to the old stock on hand gives us 793,500,000 feet. The lumber received in Chicago during 1873, from the localities we have mentioned, measured about 1,100,000,000 feet. It will therefore be observed that but 306,500,000 feet of new logs are necessary from the east shore of the Lake Michigan district to make an amount of logs on hand equal to the board measure of the lumber received in Chicago during the past year. Indeed, it is claimed that if a stock should be cut this winter equal in amount to the old logs left over there would be sufficient stock on hand to exceed the Chicago receipts of last year by at least 130,000,000 feet. It is well known, of course, that there is probability of the usual percentage of logs remaining unsawed next fall, and that per cent should be deducted from estimates made as to the amount of lumber to be tributary to the Chicago market next season.

It is also certain that a vast amount of lumber remains in pile throughout the Lake Michigan and Green Bay districts, ready for shipment if spring prices shall pay the cost of manufacture and transportation. The estimates in relation to the district of eastern Michigan place the amount of old logs left over at the enormous figure of 803,000,000 feet ; apportioned as follows :

	feet.
Saginaw.....	613,000,000
Alpena and shore.....	90,000,000
On line of Grand Rapids	
Railroad.....	100,000,000

**THE GREEN BAY AND MINNESOTA RAILWAY.**

The Green Bay & Minnesota Railway is at last completed to an intersection with the La Crosse & Trempealeau road, and tracks its way across the state from Green Bay to within four miles of Winona, Minn. By contract with the Winona & St. Peters Railway Co., the Green Bay & Minnesota Company are to use their railroad bridge across the Mississippi for a term of years; therefore the Green Bay and Minnesota railroad virtually runs to the city of Winona and possesses a continuous line of 214 miles in length. The cost of the entire line is said to be upwards of \$5,000,000, every cent of which was obtained in this country; there is, therefore, no foreign indebtedness on the road. It is expected by the owners of the Green Bay & Minnesota that their line will eventually become one of the great wheat freighting roads of the west and also a favorite passenger route for that western emigration which travels from Buffalo on the great lakes to the western shore of lake Michigan. It is our intention in this article, however, to speak of the Green Bay and Minnesota railway in reference to its character as a lumber freighting road of Wisconsin. Commencing at the city of Green Bay where, by virtue of connection with the Chicago & Northwestern the immense lumbering interests of the west shore of Green Bay are made tributary, the Green Bay & Minnesota traverses the very foot of an extensive pinery until Grand Rapids on the Wisconsin River is reached. Here is found a great lum-

ber manufacturing point on the very line of the road, and by connection with the Wisconsin Valley road, and thereby with the Wisconsin Central, the very heart of the most valuable pinery in the west becomes tributary. From Grand Rapids the Green Bay & Minnesota traverses an extended pinery until the West Wisconsin railroad is reached, when it may be said that again an important connection is made with an almost inexhaustible pinery. The fact that the Green Bay & Minnesota railroad has connection with its own line, and by means of intersection, with the vast prairies of Minnesota, Iowa, Nebraska and Dakota, assures the prediction that it will soon rank among the foremost lumber freighting lines of the west. It behooves the management of the corporation to deal fairly, even liberally, with the lumbermen of the localities along its line and adopt rates of transportation which shall enable manufacturers to ship their pine boards directly to consumers or to the retail dealers in the states west of the Mississippi. Indeed, if favorable rates should be established, it is probable that lumber even from the eastern shore of Lake Michigan might be landed at Green Bay and transported to the west by means of the facilities afforded by the Green Bay & Minnesota and its connections. It was thought, by the projectors of the Green Bay & Minnesota that the business of their road would be that, almost exclusively, of a through line; but we are pleased to congratulate the company on the fact that a very large and lucrative way business is already created and that the enterprise of

Messrs. Ketchum and Kelley is finally recognized as one of the great railroad labors of the age.

### MARATHON COUNTY.

#### *Regular Correspondence of the Wisconsin Lumberman*

Notwithstanding the fact that the panic has proved an effectual quietus to many railroad enterprises, the Wisconsin Valley line now run regular trains to Central Junction and labor continues, and will continue without cessation, until the road is completed to the present point of destination, Wausau. First class stages will run from Wausau and Mosinee to Central Junction and the freight for Marathon County will be shipped to that point.

Logging is good and all are doing as well in the wood as they expected. There is no increase of camps over those first contemplated, and the amount put in this winter will not exceed 33 per cent of last seasons operations. The portable mills which run only during the winter, are all at work and will probably produce about one half as much lumber this winter, as last.

A good work is being accomplished by the Wisconsin River Improvement Company in their efforts to construct a substantial dam at Little Bull Falls. The dam is being built for the purpose of backing the water, thus destroying the famous eddy which has been so fatal to life and destruction to lumber, and rendered the "Jaws of Little Bull" the veritable "jaws of death." It is hoped and expected that the efforts of the Improvement Company will be successful.

There is no improvement, as yet, in the prospects for lumbermen. Sales are slow and dull, and very few, if any, contracts have been made for the coming season.

The Wausau Boom Company at their recent annual meeting elected the following gentlemen as officers for the ensuing year :

President—J. C. Clarke.

Sec. and Treas.—J. A. Farnham.

Directors.—Alex. Stewart, R. E. Parcher, J. E. Leahy, J. C. Clarke, Walter Alexander.

The report of the company for the past year was received, and a dividend of 20 per cent, on the stock, was declared; evidence, surely, of unusual prosperity. The boom and piers have been constructed at great expense and in most satisfactory manner, and there is ample room in the boom for storage of all logs to be out above Wausau this season. The capacity of the mills at Wausau is entirely sufficient to saw all logs got out above that point, and for safety and ease in handling the boom has no superior.

The Jenny Bull Mills have lately put in a run of stone to grind feed, accommodating the people of the vicinity who have heretofore been obliged to haul grain a long distance to mill. The Jenny Bull Mills are owned by Senator Scott of Grand Rapids, and F. M. Andrews of Jenny, who has personal supervision of the mills. They now have in pile 4,000,000 feet of an extra grade of lumber which will be run to market in the spring. The firm is doing but little logging this winter, but will have a portion of last seasons stock left over.



## TRIALS OF THE TEMPERANCE LAW.

**His Honor, Mayor Ludington, Milwaukee's Lumberman Mayor, Assailed in his Office by a Desperate Irishwoman.**

Harrison Ludington, the present mayor of Milwaukee, is one of the large lumber manufacturers of the east shore of Lake Michigan, one of the pioneer settlers of Wisconsin, a pillar in the Protestant Episcopal church, and a man of bluff, hearty manners that make him exceedingly popular with "the boys." This class of his admirers will appreciate the following little story about the worthy lumberman mayor that is now going from mouth to mouth. The enforcement of the Graham temperance law is especially difficult in orderly Milwaukee, where nearly every man and a large proportion of the women quietly indulge in beer, and where something like 600 saloons come under its restrictions. Since the constitutionality of the law was affirmed by a competent tribunal, the mayor has rigidly enforced the provision requiring the execution of a bond on the part of the vender, making himself liable for any damage inflicted on the community by his customers. Sometimes though "Honest Old Harry" has had hard work to resist the plaintive appeals that this severe exaction has provoked. An honest Irishwoman, who runs a small saloon in the Third Ward, offered bail that savored strongly of "straw." The mayor promptly refused it. She obtained new signatures to her bond. His Honor declined to accept them.

She came up to the mayor's office

to see about it. Mayor Ludington kindly but firmly explained that her bondsmen were not good for anything and could not qualify.

She expostulated. He was firm.

The interview closed in this manner, and the story proved too good to keep :

*She* :—"Och, now, yer Honor. It's too much yer askin' of a poor woman like me, at all at all. Jist give me the license now, if ye please—bless yer old bones—and I'll do anything ye ask me to."

*He* :—"Oh, but you'd go and tell your husband."

*She* :—"Dade, an' I would not. I niver tell's me husband about me bizness arrangements."

*He* :—"Well, then you'd tell your priest."

*She* :—"Me? Bless yer old bones! An' how could I tell me praist, when I'm not a Catholic at all? *Sure, an' it's a good Episkepailyun, I am!*"

THE following are the receipts and shipments by lake from the Port of Toledo, for the season to December 6th, and a corresponding period during 1872 :

RECEIPTS.		
	Since Opening.	Same time 1872.
Lumber, ft. ....	107,125,500	84,445,762
Lath.....	16,686,550	20,465,000
Shingles.....		15,202,000
Staves.....		24,000
Salt, bbls.....	24,921	58,593
SHIPMENTS.		
	Since open	
Lumber, ft.....	15,044,700	
Staves, No.....	6,262,000	
Lath, No.....	12,000	
Timber, cu. ft.....	1,478,780	

The following table exhibits the shipments at Toledo by the Lake Shore Railway during the week ending Dec. 6, the total since Jan. 1, 1873, and for the corresponding period in 1872 :

	Past Week.	Since Jan. 1, '73.	Same time 1872.
Lumber, ft.....	268,000	26,295,000	25,844,000
Staves.....	131,000	16,245,500	13,508,000
Shingles.....	300,000	27,785,000	23,318,000

## MUNSON &amp; CO.

14 and 16 West Randolph Street, Chicago.

We call the attention of mill men to the advertisement, in this issue, of MUNSON & Co., manufacturers of standard belting and jobbers in lace leather, belt studs, hooks, rivets, etc. We recently enjoyed a visit to their factory in Chicago, Nos, 14 and 16 West Randolph street, and were impressed with the idea that the firm possess unusual facilities for the manufacture of first class articles in the line they represent. The firm run a large tannery at Brookdale, Pa., and therefore are enabled to supply the Chicago factory with leather prepared with especial care for their particular use and trade. Indeed, it is a specialty with MUNSON & Co. to sustain their already enviable reputation by the use of material which at least has no superior. Their machinery for manufacture is of the latest and best patents and the workmen employed are selected with special care for their capabilities. We cordially recommend this firm to the manufacturers of the northwest and may add that time occupied in calling at 14 and 16 West Randolph street is well passed if for no other object than to form the acquaintance of so genial a gentleman as Mr. C. MUNSON.

The Green Bay *Advocate* furnishes the following information as regards lumbering affairs at Peshtigo: "Work in the woods on a limited scale, as compared with last year's operations, is in progress by the company's men, no jobbers being employed."

## THE LUMBERMEN'S ASSOCIATION.

The Clark County *Republican* refers to the efforts of the WISCONSIN LUMBERMAN to awaken interest in the organization of a lumbermen's association, and says:

The WISCONSIN LUMBERMAN advocates the necessity of forming a State lumbermen's association, and suggests that a meeting of the lumbermen be called at Madison during the session of the Legislature to take the initiatory steps.

An organization which unites all men engaged in one common business, would seem of course to promote each individual interest, and be conducive to the greatest prosperity of the whole. There is no industry in the State that would reap larger benefits from a protective association than the lumber business. It is the thing most necessary to prevent our hardy lumbermen from becoming too often the victims of a combination against them.

The lumbering business is conducted principally on several important streams, and each apparently is entirely separate and distinct from the other, but the product of all reaches in its destination, one and the same influence which arbitrarily controls and governs prices. Under this state of things it is quite obvious that the common welfare of the lumbermen throughout the State—particularly the northern part—should dictate the wise policy of an organization which will enable them to join hands and engage in a free and profitable interchange of ideas and opinions.

The lumbermen on the Oconto contemplate doing a limited business this winter, and consequently business will be unusually dull. The demand for lumber the past season has been light, and there is now considerable stock on hand.

## WISCONSIN ITEMS.

Persons desirous of purchasing valuable cranberry lands will do well to address Wisconsin Lumberman Publishing Co., Milwaukee, Wis., who are authorized agents for the sale of some of the most valuable cranberry lands in the State.

John Reed leaves logging alone this winter.

The "new departure," among the lumbermen, now signifies departing out of the woods instead of into them.

There is said to be more money in circulation at Oconto than any other place on the Bay Shore. If so, God help them!

The remarkably mild weather of some time past will probably impair the lumbering prospects of the Wisconsin pineries this season.

One of the largest, neatest, best regulated establishments in Milwaukee, is the planing mill and box factory of Brockhaus & Bradley.

It is reported that but nine camps are now logging in the woods north of Jenny, where last winter there were forty-five or fifty.

The amount of logs to be got in this winter on the Menominee is stated at 102,000,000 feet, and there are 15,000,000 feet left over from this year.

A Weed & Co.'s mill at Suamico is being placed in perfect repair for the spring work. The firm will probably put in this winter 3,000,000 feet of logs. Last winter their cut amounted to 6,500,000 feet.

The Clark County *Republican* furnishes us ten items of interest, as follows:

Harry Mead says he's going to "slap in" two million on a two mile road this winter. He is logging in "twenty-eight" on Popple and Black rivers.

David Mason is "foremanizing" one of Boardman & Palmer's camps, and he knows how to do it, too.

Elias Weaver has two camps on Rock creek and will cut about three million. He has been hauling about two weeks and has already got in 400 logs.

Chet. Oleson is again running a camp for Hewett & Woods. He has made himself indispensable to his employers.

Ans Green calculates on about two million in one of the forks of Popple river. Twenty-two men in camp are rushing things for him.

W. S. Covill has not started into the woods yet, but has everything ready for it.

From all quarters come reports of good sleighing. Logging roads are as smooth as glass and sleds can take on thousands for a load.

Myron Withee was in town yesterday, and from him we learn that the logging firm of Hixon & Withee will come down from a usual business of twelve or fifteen million to about one or two this winter, which will be put in on the north fork of the Popple river.

Robert Ross, who was also in town does a very small business, compared with former operations. His figures are only one or two million.

Capt. Thomas La Flesh has gone down on the line of the Green Bay and Minnesota railroad to cut about six million this winter.

The Oconto *Lumberman*] says the Peshtigo company are making the necessary survey for constructing a

canal from the ship-yard to the bay shore, some three and a half miles distant. By this arrangement the company can control the river below the yard, for booming their logs.

The Marinette and Peshtigo *Eagle* says: Logging is quieter up river this winter than for many seasons past. Lumbermen complain of the soft weather. They say that the swamps and low places are not sufficiently frozen to bear teams, and that logging is much delayed in consequence.

W. H. Polleys, of Melrose, has one camp on Rock creek, and two on Black river—one near Arch Day's, and the other a little northwest of this village. The aggregate amount of logs to be cut by these crews will reach about six or seven million.

William Armstrong, Gile & Holway's foreman, says this firm will cut only about three million feet of logs this winter—on Rock creek. Twenty million was their amount last season.

The Clark County *Republican* says: Mr. J. S. Keator, of Moline, Ill., was in town this week, and from him we learn that he carries on a comparatively light business in the woods this winter. He will not put in more than six or seven million. Two years ago he did three times as much.

The Door County *Advocate* says: It is almost impossible to get men enough to do the projected winter's work, and it looks as though the scale of prices adopted for work this winter, will have to be raised here, a

fact that will not be distasteful to working men. Good wood choppers can find plenty of work if they come soon.

Geo. M. Bowman, of Black River Falls, has killed seventeen deer the present season, within a limit of six miles about the city. J. B. Ellison, of the same place, came across a drove of six, and succeeded in killing five of the number with a repeating rifle.

East Madison is soon to have another addition to its business interests. A German carpenter has erected a building on the lake shore, opposite Beerbaum's hardware store, for use as a sash and blind factory. It will be run by steam, and no doubt have a good share of patronage.

The Green Bay *Advocate* says:—Logging has commenced to a moderate extent. All the lumbermen are doing *something*, though in a less degree as compared with former years. The ground not being frozen hauling is difficult. Money is getting easier, and but for the depressing in the lumber and shingle trade, this region would be as prosperous as ever.

The lumbermen of the Upper Wisconsin river have a hard time, surely. The warm weather of December has necessitated the withdrawing of many teams from the woods, as the logging roads became utterly unfit for long hauling. There is no scarcity of snow, but the bottom is decidedly "out," owing to the fact of the snow having come before the ground was sufficiently frozen to afford a solid foundation.

One of the most extensive manufacturing firms in the Wisconsin Valley is the "Wisconsin River Lumber Co.," Stevens Point. We speak of combined energy and business capacity when we mention the officers of that company: President, A. H. Cronkhite; Vice President, John A. Walker; Treasurer, B. G. Plumer; Secretary, Maj. E. R. Herron.

The Ahnapee *Record* furnishes two items as follows:

"Dikeman's shingle mill, in Kewaunee, recently commenced operations for the winter, and now toots to the tune of 80,000 a day."

"The lumbermen are all busy notwithstanding the poor sleighing. We understand that Messrs. Slauson, Grimmer & Co., of Kewaunee, will get out about the usual amount of logs."

The Polk County *Press* says: "Friday evening of last week Frank Knight of Taylor Falls, a cook in a logging camp on Yellow river, visited a neighboring camp, four miles distant. He returned in the night, but it is supposed that he was insensible from the effects of the cold, as he passed his own camp and was found on the landing the next morning, frozen to death. He was very thinly clad."

The Wausau *Wisconsin* says the Wisconsin Valley railroad is pushing forward and the track is now laid to within two miles of the crossing of the Wisconsin Central. On account of the unsettled state of the weather comparatively little work has been accomplished at the logging camps. About \$300,000 are due the lumbermen of Wausau from the Mississippi

markets. If paid, there would be easier times in the pinery.

A Pine river correspondent of the Waushara *Argus* says: "Everything is quiet on the placid Pine. Nothing startling to excite us. We are all rejoicing over the shaving of Bill Tweed's head. Teams are coming in with wood, pork, grain, etc. Runners are coming and going. Lumbermen are making for the pines." Merchants, millers, doctors, shoemakers, hotel keepers, preachers and all are reported as busy, prosperous and flourishing.

The vicinity of Shawano is rendered lively by the following logging camps:

Names of firms.	Location	Sec.	T.	R.
H. H. Rich.....	Upper Wolf.....	10	34	11
John H. Parks....	do.....	6	31	15
Bray & Choate...	do.....	11	31	14
N. G. Sturtevant & Son	do.....	17	32	14
Jewell, Lawrence & Co	do.....	85	33	18
J. Palmer & Armstrong	do.....	16	33	12
Con Crowley.....	do.....	12	31	15
Thad & Sam Lawrence	do.....	2	31	14
Bray & Choate...	do.....	10	31	14
Henry Sherry....	do.....	82	32	14
Doe & Griffin....	do.....	2	31	14
Trask, McArthur & Co	do.....	15	31	14
D. Wetherby (Sec No 2)	do.....	10	31	15
Mr. Finley (Win)...	do.....	—	33	11
T. Wheeler & Bro	West Branch.....	11	28	14
Wm. Johns.....	do.....	1	23	14
Martin & Pendleton	do.....	9	23	14
T. H. Dodge.....	do.....	9	23	14
M. H. McCoid.....	Red River.....	5	23	14
H. H. Martin.....	do.....	7	23	14
J. Laabs & Co.....	do.....	2	23	13
Asa Hicks.....	do.....	12	23	13
H. E. Howe.....	do.....	80	27	15
S. McConeley.....	do.....	29	27	15
Kellogg & Rumsey..	Wolf River.....	4	26	15
James Miller.....	do.....	31	26	15
Webster & Foster.	do.....	28	27	15
John Freeburn....	do.....	37	27	15
Chan M. Curdy	South B. Embarrass.....	—	26	12
Richard Evans	North do.....	3	27	13
Mr Curtiss (Omro)	do do.....	9	27	12
Mr Harshorn	White Clay Lake.....	—	28	17
Sturtevant & Gummer	Upper Wolf.....	17	31	14
Doughty & Brother	Shloc.....	25	26	17

The logging operations for the coming winter—says the *Oconto Lumberman*—will sink into insignificance in comparison to that of former winters. Every lumberman who contemplates logging this winter,

will make more careful estimates than usual, will decrease every possible expenditure and see to it that every dollar is invested as economically as possible; the result will be that logs will be cut and handled at less expense than usual, and worth more money proportionately in the spring. We can not but think then that those lumbermen who will be enabled to do business on their own capital will find the spring of 1874 opening under very favorable auspices, logs secured at less than usual expense, and prospects of great increase in demand.

**MICHIGAN ITEMS.**

Ballou & Co., of Kawkawlin, Mich., will put in 10,000,000 feet of logs this winter against 30,000,000 last season.

The Grand Rapids, Mich., Boom Company handled, during the past season, about 63,000,000 in logs for Grand Rapids and Grand Haven manufacturers.

During the past season Terry, Seeley & Spencer's mill at Terry Station, Mich., has cut 4,500,000 feet of lumber.

It is estimated that 2,500,000,000 ft. of lumber was cut in Michigan during 1873. The amount remaining in pile at the mills, or in logs yet unsawed, is variously estimated from five to eight hundred million feet.

Fifty-five million feet of logs is the amount handled this season by the Rogue River (Mich.) Running Company.

The Oconto Lumber Company's mills have cut during the season of

1873, 33,000,000 feet of lumber. They have shipped 30,000,000 feet of lumber, 18,000,000 shingles, and 8,000,000 ps. lath, and have now on hand, stacked up in their mill yard for sale, 14,500,000 feet of lumber. They have on hand left over for another year's sawing, about 10,000,000 feet of logs, and propose to put in this winter about 7,000,000 feet more, which will give a stock for next season's operations of but 16,000,000 feet. This looks as if they do not count on very heavy operations next year.

The *Bay City Tribune* gives the following statement of logs rafted out by the Kawkawlin Boom Company during the season of 1873 :

Name.	No. Feet.
Carrier & Co.....	7,000,000
Hill Bros.....	5,787,975
F A Kaiser.....	675,900
Foss.....	688,100
B Whipple & Co.....	2,727,380
J F Hotchkiss.....	1,226,860
J Shearer & Co.....	137,168
Watrous & Son.....	249,900
Watrous Bros.....	40,000
M Brennen.....	91,000
<b>Total.....</b>	<b>18,573,354</b>

The Ludington (Mich.) *Appeal* furnishes the following statement of amount of lumber cut at Ludington during the past season and the stock of logs left over :

AMOUNT OF LUMBER CUT THIS YEAR.

Name.	No. Feet.
Pere Marquette Co.....	12,000,000
Foster & Stanchfield.....	6,500,000
Sweet & Taylor.....	8,000,000
Roby.....	6,000,000
Danaher & Melendy.....	17,000,000
E B Ward's North Mill.....	17,014,469
E B Ward's South Mill.....	15,055,722
<b>Total.....</b>	<b>83,009,381</b>

AMOUNT OF LOGS LEFT OVER.

Name.	No. Feet.
Pere Marquette Co.....	7,000,000
Foster & Stanchfield.....	6,000,000
Roby.....	2,000,000
Danaher & Melendy.....	2,500,000
E B Ward's two mills.....	10,000,000
<b>Total.....</b>	<b>27,500,000</b>

Mr. E. T. Carrington, superintendent of the Rifle River Boom, furnishes the Bay City (Mich.) *Tribune* with the following statement of the amount of logs stored in that boom during 1873 :

Names.	Pieces.	No. Feet.
G P & B Chapman.....	17,847	4,623,500
Folsom & Arnold.....	17,274	4,072,615
H W Sage & Co.....	13,784	2,692,118
Westover, Culver & Co.....	1,854	470,430
Gates & Fay.....	10,761	2,912,762
Oakes & Wardwell.....	9,939	1,841,950
Northwest'n Gas & Water Pipe Co	1,438	175,500
R G Horr.....	24,472	3,920,050
Ives, Grevt & Co.....	4,256	1,787,434
Cleveland Sawmill & Lumber Co	42,226	8,185,036
Bonsfield & Poole.....	2,216	599,973
E Y Williams.....	141	31,430
A McRoberts & Co.....	590	117,840
Pitts & Crangae.....	13,667	5,272,776
Savage & McRoberts.....	3,610	1,654,370
Weidemann & Wright.....	3,504	2,646,170
John Gramble.....	3,868	1,865,617
M Watrous & Sons.....	624	124,650
I N Smith.....	1,805	918,315
I L Lyon.....	8,482	5,019,390
J P Phillips & Son.....	16,521	2,907,487
J C Cameron & Co.....	5,745	1,008,452
Dunham & Whipple.....	12,588	2,383,780
P A O'Donnell.....	16,942	2,461,890
A Rust & Co.....	41,928	6,874,680
Sears & Holland.....	278	61,750
L L Culver & Co.....	2,973	1,202,056
A Bailey & Co.....	13,814	3,154,484
S W Thompson & Co.....	4,806	773,900
Widner & Sovereign.....	2,636	1,059,477
Keystone Co.....	18,955	4,420,640
Charles L Ortmann.....	39,155	5,590,830
Tawas Mill Co.....	1,636	354,480
Robert Boyd.....	8,726	1,737,450
Total.....	369,456	80,872,607

Amount left in Rifle Boom.....13,000,000

The Au Gres, Mich., boom handled during the year 1873, 63,281,236 feet in logs and timber. The following tabular statement shows the amount stored during the season by the different firms :

Names.	Pieces.	No. Feet.
W F & V Whitney.....	14,778	2,861,300
Keystone Co.....	65,440	11,725,860
Gates & Fay.....	12,895	3,368,576
H W Sage & Co.....	32,354	6,045,581
Geo C Smith.....	10,564	7,646,120
Adams, Jolly & Co.....	12,941	2,952,842
Folsom & Arnold.....	11,035	2,654,080
Noyes & Reed.....	22,284	4,117,626
S & C D Hale.....	15,243	3,776,440
D Wright & Co.....	13,797	2,623,041
E Y Williams.....	6,584	1,817,770
Wm Peter.....	78,633	13,607,990
Howell & Johnson.....	13,503	2,682,500
R McDonald.....	1,889	2,200,462
G F Nagle.....	1,094	655,654
Bonsfield & Poole.....	5,507	1,715,445
Total.....	318,172	63,281,236

Amount left in Au Gres Boom.....6,000,000

The *Globe* furnishes a carefully compiled statement of the cut of the Flint (Mich.) mills last season, and also an estimate of the amount of logs now on hand and to be got in this winter. It will be observed that about 7,600,000 feet less than last season, is the estimate for 1874 :

AMOUNT OF LUMBER CUT IN 1873.

Names.	No. Feet.
W W Crapo.....	20,000,000
A McFarlan.....	6,500,000
Begole, Fox & Co.....	8,000,000
J B Atwood & Co.....	10,000,000
Wm Hamilton.....	6,000,000
C C Eddy & Co.....	5,000,000
H C Hascall.....	2,600,000
Busenbark & Stone.....	3,000,000
Total.....	61,100,000

AMOUNT OF LOGS LEFT OVER.

Names.	No. Feet.
W W Crapo.....	5,000,000
A McFarlan.....	2,000,000
Begole, Fox & Co.....	12,000,000
J B Atwood & Co.....	6,000,000
Wm Hamilton.....	2,000,000
C C Eddy & Co.....	2,000,000
H C Hascall.....	1,000,000
Busenbark & Stone.....	1,500,000
Total.....	31,500,000

WILL CUT THIS WINTER.

Names	No. Feet.
W W Crapo.....	10,000,000
A McFarlan.....	4,000,000
Begole, Fox & Co.....	2,000,000
Wm Hamilton.....	2,000,000
C C Eddy & Co.....	3,000,000
Busenbark & Stone.....	1,000,000
Total.....	22,000,000

The quantity of lumber cut at Grand Rapids, Mich., the past season, is shown in the following statement :

Names.	No. Feet.
Michigan Barrel Company.....	6,000,000
A B Long & Sons.....	6,000,000
Wonderly & Co.....	18,131,387
I L Quimby.....	3,000,000
L H Withey & Co.....	12,000,000
Robinson, Solomon & Co.....	5,500,000
C C Comstock.....	11,000,000
W T Powers.....	3,000,000
J L Wilkins.....	1,000,000
Total.....	66,931,387

LATH.

C C Comstock.....	Pieces....	1,700,000
Robinson, Solomon & Co.....	Pieces....	2,339,000
L H Withey & Co.....	Pieces....	4,500,000
Wonderly & Co.....	Pieces....	7,549,000
A B Long & Sons.....	Pieces....	2,420,000
W T Powers.....	Bundles..	17,530

SHINGLES.

L. H. Withey cut 15,000,000 ; C.

C. Comstock, 175,000, and Wonderly & Co. about the same quantity as last mentioned.

LOGS IN BOOM.

At the present time there are 10,000,000 feet of logs in boom at this point, and but few, if any, of this number will be cut this winter. Five millions belong to parties at Grand Haven, and the balance to mill men in this city.

The Huron Boom Company, Mich., have handled and delivered, during the year just past, 100,458,140 feet in logs. In 1872 the same boom company delivered 478,221 logs, or in board measure 100,187,798 feet. The following statement indicates the amount stored by each firm in 1873 :

Names.	Logs.	No. Feet.
John McGraw & Co.....	12,202	1,934,070
A Stevens & Co.....	2,025	328,140
Pitts & Cranage.....	17,690	3,148,480
G F Williams & Bro.....	22,346	5,471,590
W R Burt & Co.....	15,636	2,732,830
Avery & Murphy.....	30,982	7,475,060
C & E Ten Eyck.....	954	159,390
Sear- & Allison.....	2,857	602,700
Mitchell & Rowland.....	13,863	2,142,260
H A Ballentine & Co.....	2,191	386,100
H W Sage & Co.....	6,496	1,243,700
E C Litchfield.....	13,561	3,388,720
B & S O Fisher.....	3,773	910,720
Bundy & Martindale.....	12,539	2,430,220
Lockwood, Swift & Co.....	11,561	2,117,190
Mark & Fleitz.....	1,653	376,000
T & J E North.....	922	147,000
J L Woods.....	17,698	3,830,180
H M Bradley & Co.....	6,891	1,599,310
Ketcham & Co.....	28,806	5,208,370
Tolfree & Simpson.....	2,476	525,620
J S Stevens.....	2,034	284,140
D G Slafter.....	3,384	429,390
A Rust & Co.....	984	167,040
Absalom Backus, Jr.....	998	127,260
N W Gas & Water Pipe Co.....	2,184	180,010
J Wilkinson.....	206	24,040
A W Thompson & Co.....	18,491	4,256,440
Dennis Bow.....	81	33,690
W A Heartt.....	1,114	163,790
Shaw & Williams.....	4,864	1,058,330
Gates & Fay.....	3,438	749,200
N Holand.....	29,129	5,795,600
Geo S Weaver.....	29	4,600
Watrous Bros. & Co.....	338	94,150
Cockburn & Murray.....	400	210,756
Bundy & Youman.....	37,589	6,523,290
John Burgoyne.....	84	10,200
Baldwin & Pinkerton.....	145	12,310
O J Sawyer.....	22	2,790
Avery, Murphy & Son.....	41,144	10,585,460
Hendrickson & Bro.....	9	1,840
Sears & Holand.....	13,471	2,620,270
J G Lublger.....	15,750	2,120,740

Eddy, Avery & Co.....	40,616	8,634,160
John Stillson.....	94	8,410
James Tolbert.....	48,711	8,294,000
Fred Wells.....	205	30,560
Cloud & Wykes.....	1	160
R W Andrus, Sheriff.....	211	20,820
C K Eddy.....	3	200
J P Phillips.....	8,133	1,502,620
M Watrous & Son.....	21	900,810
Folsom & Arnold.....	21	3,830
J Russell & Son.....	9	2,830
Total, 1873.....	504,675	100,458,140
Total, 1872.....	478,221	100,187,798

The *Herald* estimates the cut of logs for the Menominee river this season at one hundred million feet, which it says will be got out at a reduction of 25 per cent. on the cost heretofore incurred.

The *Herald* furnishes the following estimate of the winter's cut of logs in that district. And, by the way, we notice the *Herald* is paying a good deal of attention to lumbering rews, and has already published valuable statistics:

Kirby-Carpenter company.....	25,000,000
H. Stephenson & company.....	20,000,000
Menominee River Lumber company.....	17,000,000
N. Ludington company.....	14,000,000
Hamilton & Merryman company.....	8,000,000
F. Carney & company.....	11,000,000
Wm. McCartney.....	3,000,000
Total.....	98,000,000

In addition to this, there will probably be four million feet put in by jobbers, increasing the total to 102,000,000, which, with the 15,000,000 feet now on hand, will increase the amount for next season to 117,000,000 feet—a very comfortable summer's work.

**SWEDISH TIMBER.**—The value of the timber exported from Sweden in 1871. was £3,204,560, of which £1,696,493, or about 53 per cent., went to England. The kinds most in demand are spars, pit props, lathwood, sleepers, and split wood. After Great Britain, Denmark, Prussia, and France receive the largest amount.



**VALUE OF WISCONSIN PINE LANDS.**

**What Philetus Sawyer knows about it—His  
Testimony before the Cornell Land  
Grant Investigation Committee—  
How Wisconsin Pine is  
Usually Sold.**

Hon. Philetus Sawyer gave the following interesting testimony before the committee of investigation in the case of Ezra Cornell's land grants, in Washington, on the 15th ult.:

Mr. Sawyer testified that he had lived in Wisconsin since 1847, and that he owns 30,000 to 40,000 acres of pine timbered lands in that State.

Q. What do you consider was the wholesale value of pine lands in Wisconsin in 1871, say in lots of 100,000 acres? A. That depends on the amount of timber on the land. I bought about 10,000 acres in the spring of 1870 or 1871 at \$3 an acre, averaging about 6,000 feet to the acre. In the spring of 1872 I made another purchase of over 12,000 acres, to be taken out of the same tract from which the first 10,000 acres had been selected, and was allowed to select single eighty-acre lots, the price being \$1.62½ cash. Both purchases were for cash. This last purchase, we estimated from examination, would average from 3,000 to 4,000 feet of timber to the acre.

Q. Were these purchases in the immediate vicinity of Mr. Cornell's lands or the lands located for the Cornell University? A. No. Mr. Cornell's lands are on water courses that are tributary to the Mississippi river, and the others are on waters that enter Lake Michigan. I consider the pine lands on water entering the lake more valuable, for the reason that the country is opened up more and is more accessible. The streams are safer, and there is less risk of losing logs.

Q. Is there any difference in the quantity of the timber in the two regions? A. That on the waters entering the lake is generally better than that on the Chippewa.

Q. Do you know the general character of Mr. Cornell's lands as timbered lands? A. I do not personally; but I have had agents examining my own and those lands, and they report that they find some of them very well pined indeed, and others have no pine on them. I do not feel qualified to state what proportion of Mr. Cornell's whole tract of 500,000 acres is timbered. I have examined Mr. Cornell's maps, and know where his lands are.

Q. For what do you suppose it would have been possible to have made a sale of 100,000 acres in one block out of that region in 1870, of average quality, without selection, except that the purchaser might take any 100,000 acres in one block that he chose, on either the north, south, east or west side, but take them

clean as far as he went? A. I should say in reply to that, from \$2 to \$2.50 an acre—not to exceed that.

Q. At what price at that time would you have bought 100,000 acres in the way spoken of? A. I would not have paid more than \$2 an acre for any of Mr. Cornell's lands taken in that way; and I will say that I have had experts over a portion of them. In 1871 I owned about 8,000 acres in that same region, and in ascertaining about my own lands obtained something of a knowledge of these; and my agents have been over perhaps twelve or fifteen townships where Mr. Cornell's lands are located. From the reports of these agents I think Mr. Cornell's lands would average from 4,000 to 5,000 feet of pine timber to the acre.

Q. Do you still own the 8,000 acres spoken of above? A. No, sir. I sold them in October of this year at \$10 an acre.

Q. On long terms? A. Seven years, annual payments, interest payable annually. That lot would average from 8,000 to 9,000 feet of timber to the acre, I think. I bought a portion of it in 1868, and from that up to 1871; some of the government and some at private sale. I paid for the most I bought second-handed \$5 an acre. It was very handy to the river. For one-quarter section I paid \$10 an acre. That lot averaged 12,500 feet of timber to the acre. I consider that I had great advantages in purchasing that 8,000 acres, as I bought it in small parcels. I don't remember of a single forty-acre lot that didn't exceed 4,000 feet of timber to the acre.

Q. Did you know of Mr. Cornell's contracts with Sage, McGraw, and others? A. I only knew of them by report.

Q. Would you have been willing to take an interest in those contracts at that time? A. I don't think I should. Blocks of 100,000 acres, selected as under those contracts, might have been worth twice my estimate above given for blocks of that size. Lands in Wisconsin are usually sold on long time, with a small payment down and annual payments running six, eight, and ten years, with interest. It is usual to give permission to cut timber in proportion to the cash payments made, as they are made from time to time, or something near it, so that, however, the last payment shall be equal as well and generally better secured than the others.

For the season of 1873 close estimates place the total amount of lumber cut in Michigan at about 500,000,000 feet. The aggregate of logs cut during the winter of 1872-3 was unprecedentedly large, and it is estimated that of that aggregate 800,000,000 will lay over until the spring of 1874.

## OPINIONS OF LEADING WISCONSIN LUMBERMEN.

## What is Thought of the Prospects for the Coming Season—Estimates as to the Quantity and Grade of Logs and the Condition of the Markets.

*From the Chippewa Herald.*

The prospect for lumber next season does not appear very bright to the general eye, and operatives differ considerably in their opinions. On the Chippewa, wages for men in the woods has not yet touched ante-war prices; they are higher here than on the St. Croix, Black, or Wisconsin rivers. And yet this fact does not seem to discourage loggers, for appearances would indicate that the usual amount, if not more, will be put in this winter.

We have taken the pains to interview three gentlemen who are perfectly familiar with the lumber markets of the Mississippi—the first, Gov. Pound, President of the Union Lumbering Company, Chippewa Falls, who spends most of his time in the markets below; the second, ex-President Schricker, of the Mississippi (Beef Slough) Logging Company; and the third, Ald. S. B. Stannard, of St. Louis, Secretary of Patrick Brothers Manufacturing Company.

## GOV. POUND.

*Editor*—How does the prospect of lumber look to you for the next year?

*Gov. P.*—I think the ordinary lumber operations for the next year will not be remunerative to manufacturers. The increased product of lower grades and growing scarcity of better qualities of pine lumber will likely cause a wider difference in prices—the poorer tending downward and the better grades upward. This will insure to operators who have good timber, and manufacture their stock to suit the demand, a good and reasonably profitable business, while the less fortunate who have only ordinary grades of timber, and manufacture indifferently, will continue to lose, and ruinously.

*Editor*—Do you think the general demand for lumber will be good?

*Gov. P.*—If the present healthy condition of produce and cereal markets continue, the demand will be generally good—but the crippled condition of railroad building which has hitherto furnished new fields for supply, will be seriously felt.

*Editor*—Do you think there will be the usual quantity of logs put in this winter?

*Gov. P.*—Should the winter continue favorable, there will be more logs banked on the Chippewa during this logging season, than ever before. There are, however, very few old logs on hand, save such as have been driven past the mills—most of which are in Beef Slough. Of the quality, it is difficult to judge as yet. On other streams the amount to be put in will likely exceed the general estimate.

*Editor*—Then you think that the mills on the Chippewa will have a full supply?

*Gov. P.*—Should the Eagle Rapids improvement be successfully completed this winter, there is no doubt that every mill will have a full amount of stock such as it is.

## MR. L. SCHRICKER.

*Editor*—What is your opinion about lumber prospects next season?

*Mr. S.*—The prospects are fair for good grades of lumber. Financial matters are improving; grain, pork, etc., are advancing, and money is a good deal easier all over the country.

*Editor*—You think, then, that common lumber will not be much sought after?

*Mr. S.*—Yes. Last winter, the class of logs put in was poor, and hence, there was a wider difference between lower and upper grades of lumber on the Mississippi than ever before. As soon as the panic commenced last fall, all lumber sales practically ended, and as a consequence, there is a very large amount frozen up in nearly all the safe harbors on the river, and it will run common. Besides, most of the mills on the Mississippi have enough of last season's logs to keep them going until July; there are 50,000,000 yet in Beef Slough; and a large quantity in the booms on the St. Croix and Black rivers; and these are mostly ordinary logs.

*Editor*—Then you think the prospects only very bright for those having good grades of logs?

*Mr. S.*—That is the way it looks to me. The common lumber market will be glutted, but a good demand will exist for upper grades. Last season, while a large quantity of common was sold below cost, the best grades did not suffer much diminution in price. The call for com-

mon stock on the lower river decreases every year.

MR. S. B. STANNARD.

We next conversed with Ald. S. B. Stannard, Secretary of the Patrick Bros. Lumbering Company, St. Louis, Mo., with the following result:

*Editor*—What is the prospect for lumber next year?

*Mr. Stannard*—Should say it was poor. In the first place, the market will undoubtedly be overstocked. At the commencement of last season, there was but very little money in Iowa, and most of the stock from the Chippewa, St. Croix, and Black rivers goes into that state. The farmers were short of ready means. Later in the season, this condition of things somewhat improved, but still the yard men bought in small quantities—smaller than they have done in former years. When the panic came, of course everything stopped—there was no sales at any price. And as a consequence to-day nearly every safe harbor on the Mississippi river contains quite a quantity of lumber which will be thrown on the market in the spring. Most of this stock, however, is common run, and the lumber markets of Mississippi, and Chicago, have plenty of this on hand. There was a good many fires in the pineries within the past two years, and a large amount of poor timber was put into the rivers. What the lower river needs is better grades of lumber. It is a fact, that most of the common stock has been sold below cost the past season.

#### AN INSTITUTION OF THE PINERIES.

"The land-looker," says the *Bay City Chronicle*, "is a man who is found only in the great lumber districts. He has a business unlike any with which the public is familiar, and not unfrequently he is as peculiar as his calling. His designation itself is a misnomer, for he looks not so much for or at the land as for the pine which may be on it. Hunting up pine tracts in his business, and, as may be imagined, it takes him constantly beyond the bounds of civilization. His outfit is simple, but his knowledge of the woods is profound and not soon to be acquired. In the employ of some capitalist he starts off into the wilderness, and though he may wander for days through trackless solitudes, he always knows the very section of land he is upon. By long experience he can always tell, walking across a sec-

tion from side to side or from corner to corner, as may be necessary from the lay of the land to determine the point he is after, about how much pine it will cut and the per cent. of the upper qualities of lumber to be counted on from its product. The various conditions of lumbering on a given section, nearness to rafting streams, &c., and many other points enter into his observations. From his reports the capitalist buys the land with as much confidence in its value for lumbering as he would have in the worth of a horse whose paces he could try before investing in him. The land-looker's notes are thus frequently exceedingly valuable, worth thousands of dollars to the man who has the means to take advantage of the information they contain."

#### LEGALITY OF VERBAL CONTRACTS.

Chapman & Chaney, lumber manufacturers of Oshkosh, sued Spafford & Scofield, of Rockford, Ill., to recover for \$200,000 feet of lumber sold them, which was burned Oct. 4, 1872. The verdict was for defendants.

"Plaintiff proved the sale of the lumber to the defendant before the fire, but under the statute of frauds the jury found for the defendant on the grounds that the bargain was not in writing, and no part payment was made. The lumber was cut by the plaintiffs, piled in the yards and afterward destroyed by fire before any payment was made. The case involved the legality of verbal contracts, and attracted considerable attention."

SEASONED WOOD MOST PROFITABLE.—Economy may be practiced in a thousand ways, and one way is in our fuel. Wood that has been sunned a few days after cutting and splitting it, and then housed four months or more, is worth, for the family purposes of warming, cooking, and washing, almost twice as much as when green. But few farmers realize the value of dry wood, especially during the winter season, and hence but little wood is stored during the Summer. Be sure to furnish plenty of oven-wood. This should be piled in a part of the woodhouse by itself. It will promote kindly feeling in the family—will save much time otherwise lost in kindling fires with green wood. Then let us prepare a good supply of dry wood for winter, full six months before wanted for use.

## THE CHIPPEWA VALLEY.

GORER & LUDLOW have recently published a business directory of the Chippewa Valley from which we are enabled to compile interesting information regarding the localities of Eau Claire, Chippewa Falls, Menomonie, Augusta, Durand, Bloomer and Eau Galle. Eau Claire is now a city of ten thousand inhabitants and includes the area which was originally platted as Eau Claire and Eau Claire City. The principal business which has developed the largest commercial center of Northern Wisconsin is lumbering; the product of that locality for 1872 being over one hundred and thirty million feet. The natural facilities for lumber manufacturing at Eau Claire are as yet but partially developed and will be vastly enhanced if the plans for the improvement of the Dells, are carried out. We find in the "business directory" many personal mentions of interest. We quote:

## THE EAU CLAIRE LUMBER COMPANY.

This enterprise was commenced in 1856, by Chapmann & Thorpe, of St. Louis, and various other places along the Mississippi and its tributaries. It was organized as the Eau Claire Lumber Company, Aug. 1st, 1866, with J. G. Thorpe, President, N. C. Chapman, Treasurer; Alex. Kempt, Secretary. They own four mills, whose united capacity is 356,000 feet of lumber, 120,000 lath, and 100,000 shingles per day. They own three steamboats, and employ 625 men on the Eau Claire and Chippewa rivers. They have a flouring mill with capacity of 75 barrels per day; its lumber yards at St. Louis and Louisiana, Mo., have their own cooper, blacksmith, hardware, store, tinware and butcher shops, and do all their own work in every branch of business. Their paid up stock amounts to \$200,000. Last year they cut 450,000,000 feet of lumber, 12,000,000 shingles, 16,000,000 lath. Their

lumber is always of superior quality, according to its grade. They have one of the largest and most popular stores in the city. J. G. Calahan, who has been with the company 21 years, conducts it. Frank McDonough has charge of the mills. H. D. Ainsworth is cashier. J. Sinclair, and S. Van Wayne, are book-keepers. The Company will saw this year 45 million feet of lumber, 12 million of shingles, and 16 millions of lath.

DANIEL SHAW.

D. Shaw & Co., successors to Shaw Butler, one of the old pioneer lumbering firms of this valley, built their mill in 1857. In August, 1867, it was destroyed by fire, and rebuilt with great improvements, in January, 1868. The existing mill measures 130x50 feet; is three stories high; cuts 180,000 feet of lumber, 25,000 shingles, and a large amount of lath daily; has two circular saws and one double stock gang of 38 saws. It employs two hundred men. Shaw & Co., own 25,000 acres of pine land, where much of their logging is done. Their principal yard is at Sabula, Iowa, where they sold two and a half million feet of lumber last year. They have several others along the Mississippi. They own two hundred and fifty acres of land adjoining the mill, on which is built their office, blacksmith shop, grist mill, barns, boarding-houses, store, &c. The store is 20x80 on the ground floor, and two stories high.

## CHIPPEWA LUMBER CO.

This mill is owned by R. C. Wilson, and rented to J. Tarrant; is 36x116 feet; giving employment to seventy men. Its capacity is 50,000 feet of lumber, 20,000 lath and 2,000 pickets, per day. Circular and gang saws are used in the mill.

## NORTHWESTERN LUMBER CO.

The firm of Porter, Moon & Co., will hereafter be known as the Northwestern Lumber Company. The following gentlemen as officers: G. E. Porter, President; D. R. Moon, Vice President; S. T. McKnight, Treasurer; M. E. O'Connell, Secretary; with a paid up capital of \$400,000.

The size of the present lumber mill is 54x136 feet, two stories high, with engine and boiler rooms 23x36 feet, using four boilers and three engines, manufactured by Graham, White & Co; 100,000 feet of lumber 30,000 feet of laths and 50,000 shingles are cut daily. During the running season of 6½ months, 15,000,000

feet of lumber are cut; two circular and one gang of saws doing all the work, giving employment to 120 men. There are 500 acres of fine land adjoining the mill site which gives an abundance of room for all purposes. They own 20,000 acres of pine lands in this and adjoining counties. A blacksmith shop is kept in full force doing all the necessary repairs to machinery and other work pertaining to that branch of the business. A store with general merchandise adjoins the office. This fall it is the intention of the company to enlarge it. They hold one half interest in G. B. Chapman & Co's large dry goods house. The shingle mill is three stories high and is the most unique and convenient mill in the Chippewa valley. The bolts are sawed down stairs and by means of an elevator are raised to the third story where they are cut into shingles, then sent down a chute to the second floor where they are trimmed; from there they are sent to the first floor to be sorted and packed.

Mr. G. E. Porter started his old mill in 1864, which he run by himself until the fall of 1866 when he had the misfortune to be burnt out.

Gilbert E. Porter came to Eau Claire in 1856. Mr. Porter's first position was with Chapman & Thorpe (now the Eau Claire Lumber Co) with whom he remained for a little over one year, retiring from them he was induced to take the management of the Eau Claire Free Press; which he made over to the Stocking Bros.

D. R. Moon went into the firm in the spring of 1867, which was run until 1870 under the name of Porter & Moon, in which year S. T. McKnight took a third interest. The firm was then called Porter, Moon & Co., by which name it has been known until recently, when for many and sufficient reasons they organized as the Northwestern Lumber Co.

Mr. S. T. McKnight the resident partner at Hannibal, Missouri, was formerly a Wisconsin river lumberman; he has the selling of all lumber that is sent to Hannibal, Mo.

#### SMITH & BUFFINGTON.

Geo. A. Buffington came to Eau Claire in the fall of 1856, and started in the lumber business in 1859. That saw mill that he is now running is of the following dimensions, 80 by 50 feet, two stories high, cutting each year six million feet of lumber, three and one-half millions of shingles, ninety-two and one-half mil-

lions lath; two rotary saws are used. The new mill will be of the following dimensions; 150 feet long, 67 feet wide, with a capacity for cutting twelve million feet of lumber annually—two rotary and one double stock gang saws will do the work, 100 men will be employed. The engine house will be of stone 37 by 90 feet. They own twenty acres of land adjoining the mill site on which is built office, barn 30 by 60 feet, two stories high, dining hall 18 by 20 feet, for the use of the employes. The barn is one of the finest structures of the kind in this city. It was built during the present year upon the site of a number of little houses attached to the property. The appearance of the whole site has been greatly improved by the rectification of the road which now lies in the same straight line with Menomonie street. This was done during the present summer. The work done in this mill has been prodigious in proportion to the facilities. It runs day and night, gives employment to a large force of men, of whom a large proportion have always been Scandinavians, and owes its efficiency largely to the constant supervision of an unusual number of intelligent overseers.

#### H. CLAY WILLIAMS.

In the year 1861, he was appointed receiver of the United States Land Office and Disbursing Agent for the entire west. During Mr. Williams tenure of office he overpaid \$2,600 which was refunded to him by special acts of Congress. In 1860 in partnership with John Barron, they built what is now known as the Blue mill, at an expense of \$50,000. They also purchased the mill property at Big Bend. At the same time they bought the property of MuGill & Mc Nab, known as the Warren mills, and pine lands on Duncan Creek. They run the saw mill for three years manufacturing about twelve million feet of lumber per year. During this period Mr. Williams continued his practice as attorney at law.

#### BLUE MILLS, JOHN BARRON & CO., PROPRIETORS.

John Barron & Co., have run the above named mills for eight years. Mr. Barron came to Eau Claire in 1857, and established a grist mill. He afterwards built a small saw mill run by water-power, with a capacity for cutting twelve thousand feet of lumber per day. This

was run for two years, when he built his present mill, which is of the following dimensions: 140 feet long by 32 feet wide, cutting 50,000 feet of lumber, twenty-five thousand shingles, and eighteen thousand lath per day. One gang of twenty-four saws, and one rotary saw doing all the work. Seventy-five men are employed in and about the mill. The proprietors of this mill have the best facilities for handling their logs. Behind the mill is a large pond. By means of a flume the logs are taken out of the river on a car, carried through the flume and placed into the pond, where they remain until required for use. The pond will hold about thirty million feet of lumber by this arrangement. The proprietors handle their logs much easier than the majority of other mill men. In connection with the lumber mill is a tub and pail factory, the only one in the valley. The result of this enterprise has more than met the expectations of the proprietors, for they cannot commence to supply the demand for their goods. It is Messrs. Barron & Co.'s intention to enlarge their factory this fall. They own between seven and eight thousand acres of pine land, and six hundred acres adjoining the mill.

#### GRAHAM, WHITE & CO.

This firm is so widely known that anything we may say in regard to them, perhaps will be considered unnecessary. As they are among the leading manufacturers of the valley, we think that we should fail to meet the expectations of our patrons, if a slight synopsis of this firm was not given:

Graham, the senior member of the firm, came to Eau Claire in 1856, and settled here in February, 1857. Mr. Graham entered into the employ of Chapman & Thorpe, (now the Eau Claire Lumber Company) as superintendent of their buildings; he afterwards had charge of the mill. He remained with Chapman & Thorpe for four years, when in connection with Mr. Tolles, started a small planing mill, and sash, blind and door factory. It 1865, they formed a co-partnership with Mr. Tarrant, and opened a foundry and machine shop. At the end of a year, Mr. Tarrant, sold out, since which time the firm has been known as Graham, White & Co. In 1868 they built a saw mill and joined interests in the same with Prescott, Burdick & Co. In 1869 Graham,

White & Co., built a grist mill on the Menomonie river, and in 1871 another was erected by this firm on Duncan Creek. Messrs. Graham, White & Co., do a large contracting and building business. This year they elected the Gallo-way House. They also are held a large interest in Barron & Co's Tannery. In the planing mill and foundry about fifty men are employed. Mr. Graham was elected first Mayor of the city by a large majority, and has just been elected State Senator.

#### BUNDLE & FREE'S PLANING MILL.

This is the largest planing mill in the Chippewa Valley. The building is 50x 80 feet, two stories high, and 40 men are employed throughout the year. The sale of this firm last year amounted to \$60,000. All of their goods are manufactured from the best seasoned lumber. Besides doing a large home trade they ship goods all through the valley. Messrs. Rundle & Free, also carry on an extensive building and contracting business. They have the contract for building the new Court House. They have erected a number of private residence during the past year for parties residing in Eau Claire.

#### W. B. ESTABROOK, LUMBER MERCHANT.

Mr. Estabrook came to Eau Claire sixteen years ago, and started in the lumber business in a small mill. Last winter he built his present mill at a cost of \$36,000, it is 32 by 120 feet, two stories high with a stone basement. Five million feet of lumber, three million feet of lath was cut last year, all of which was sold to St. Louis parties. There are twenty acres of land adjoining the mill site. Mr. Estabrook also owns 160 acres on Mount Washington where he has built a beautiful residence at a cost of \$8,000.

#### Chippewa Falls.

Now a city of four thousand inhabitants was platted by H. S. Allen as a village in 1855 and was granted municipal privileges in 1869. It is the county seat of Chippewa county, said to be the richest in pine lands of any similar area in the west. Like Eau Claire, Chippewa Falls is a great lumbering manufacturing point and the one mill of the Union Lum-

bering Company has a capacity of 50,000,000 feet per season. There are 1,580,480 acres of pine land in Chippewa county annually producing a log crop of 2,000,000. The principal lumbering firms are :

STANLEY BROS. — LUMBER DEALERS AND MERCHANTS.

This is one of the oldest firms in Chippewa county. The Messrs. Stanley Bros. have been engaged in business from the earliest settlement of the village. They own a large saw mill at Eagle Rapids, which is 100x80 feet, cutting about five million feet of lumber, five million of lath, and the same of shingles, per year. Fifty men are employed in the mill. They also own a grist mill, 40x60 feet, three stories high, with three run of stone; capacity 75 barrels of flour per day. Messrs. Stanley Bros. have just erected a large brick store which they will soon occupy with a large stock of general merchandise. They are also agents for a number of the leading insurance companies. A large real estate business is conducted by this firm. Any business entrusted to their care will receive prompt attention.

THE UNION LUMBERING COMPANY.

Nowhere in the west can we find a better specimen of enterprise, perseverance and indomitable pluck than of the officers of the Union Lumbering Company of our city. We find three young men, fourteen years ago taking hold of a vast mill, and making it one of the most successful lumbering companies in the United States. With the rise of the mill, so rose the town; from a small village it has grown into a city of five thousand inhabitants, with a moral and refined people, good schools, numbers of churches, noble looking business blocks, and a palatial private residences. To the officers of the Union Lumbering Company the thanks of the citizens of the entire county are due for their unceasing efforts in making Chippewa Falls what it is to-day. A description of the mammoth store and mill of the company may be of interest to our readers, with a slight history of the rise and progress of the same.

In 1860, the Union Lumbering Company's mill was purchased from the United States Marshal by Messrs. Pound,

Halbert & Co. These gentlemen were not possessed of a vast amount of capital, but had what is in many instances far better, a large amount of business tact and perseverance. They went to work with a strong determination to succeed; how well they have done this, it is useless for us to state, for the Union Lumbering Company is known all over as one of the largest and most successful mills in the country.

When a person enters the company's mill for the first time, he is struck with the magnitude of the business that is being carried on. Here you see three hundred men working, each man at his post, everything in connection with the vast machinery, running with clock work precision. The size of the mill is 180x200 feet, including the rafting shed. The 1st floor is devoted to the water works; the 2d floor is used as a rafting and machinery floor. The 3d is used for the cutting of lumber. On the 3d floor the active work is done. Here you find the different kinds of saws in full operation. There are 2 "Live gangs," 1 "Flat gang," and 1 "Yankee gang," 1 "Muly," 3 rotaries, 6 edgers, 12 butters, 3 lath saws, 1 picket saw, and 1 shingle mill. In the different gangs there are 90 saws in constant motion.

In twenty-five days in the month of June, 1873, the average amount of lumber cut daily was 325,000; lath, shingles and pickets in proportion, making for the month 8,125,000 feet of lumber, which is the greatest amount of lumber cut in one single month by any one mill in the Chippewa valley, under one roof. The firm has cut 42 million feet of lumber this year, about 15 million shingles, and 12 million of lath. On the ground adjoining the mill, is a large blacksmith and machine shop, and wood and turning shop. In three different shops all the repairs are made to the machinery, when necessity requires it. The company own eighty thousand acres of pine lands, seventy-five thousand of which is uncut pine. The capital stock is fifteen hundred thousand dollars. From 1860 to 1868, the firm was Pound, Halbert & Co., at which time they organized as the Union Lumbering Company, with the following officers: Thaddeus C. Pound, President; D. M. Peck, Vice-President; Albert E. Pound, Secretary, by which name it has continued up to the present time. The company have recently purchased a yard at Muscatine, Ia., where

they intend making their depot for lumber, besides doing business along the river cities. On the pay rolls of this company, there are over 500 men. The cutting, sawing and rafting is all let by contract. The mill is in charge of A. K. Shaw, who has had the contract for three years for sawing the lumber.

The store, which is one of the finest in the state, and the finest and best arranged in this part of the country, was built in 1869, is three stories high, 100 feet deep, by 60 feet wide, heated by furnaces and lighted with gas, and is devoted to the sales of general merchandise. Last year the sales amounted to four hundred thousand dollars. Each class of goods has a separate department. Thirty-two men are employed in and about the store. One is inclined to think that they are in one of the mammoth dry goods houses of the metropolis, when they enter the store of the Union Lumbering Company. The basement is used for the storage of heavy groceries. The east side of the main building is the dry goods department, where the ladies make their tours to inspect the large and costly stock of goods that are constantly arriving. Mr. M. M. DeLano, the gentleman who has the entire charge of the buying of the goods, is fully alive to the exigencies of the times, and is always on the alert to keep the shelves of the store filled with the latest novelties. On the counters are handsome and costly show cases, which contains toilet articles, fancy goods, jewelry and perfumery. The west end of the store is devoted to the sale of groceries and hardware; a full line of ladies and gentlemen's boots and shoes are kept in stock. Ascending a handsome stairway you turn to the left where a well selected stock of ready made clothing is kept. The merchant tailoring is a large feature of this institution. The cutting is under the charge of one of the most experienced tailors in the state. On the left end of the stairway you find a large stock of carpets, oil cloths, and matting. On this floor there are suits of rooms intended for private offices, etc. A large elevator carries all the goods up to the third floor, where they are unpacked, marked and sent to the different departments below. The rest of the third floor is used as a store room, which is completely filled from floor to ceiling with goods.

This is a slight synopsis of the history of this company and shows how

young men, who are determined by an honorable business career to succeed, can do so when they put their shoulders manfully to the wheel.

#### WITBROW & M'CRÆ—PLANING MILL.

The size of the planing mill is 80x30 feet, two and one-half stories high, employing 15 men. All the latest and most improved kind of machinery is used. Sash, doors, blinds and windows are manufactured from the best seasoned lumber which is kilndried. The sales last year amounted to \$36,000. Over 1,000 doors were manufactured—blinds and sash in proportion. It is the intention of the proprietors of the mill to build a large addition this fall, for they cannot supply the numerous orders they are receiving from all parts of this and adjoining counties.

#### Menomonie.

Menomonie, the county seat of Dunn County, contains 2,000 inhabitants and is one of the marvels of the Chippewa Valley. The town was platted as late as 1857 by Messrs. Knapp, Tainter and Milsen. It is said that improvements costing \$125,000 have been made at Menomonie during the past year. The most important business firm is that of,

#### KNAPP, STOUT & CO.

The largest and most extensive lumbering company in the United States is that of Knapp, Stout & Co. Here we find another instance of enterprise, backed by perseverance and industry. In 1846 Wm. Wilson in company with J. H. Knapp located in what is now Menomonie. All that was here in the shape of civilization, were two or three log huts and a very small saw mill. These gentlemen were convinced that there was a good opening for them in the lumber business. They set to work and built a mill which, for the time, answered their purpose. In the fall of 1850 Andrew Tainter an experienced lumberman joined the firm, which was then called Knapp, Tainter & Co. In 1853 A. L. Stout took an interest in the firm, since that time the name of the company has been Knapp, Stout & Co.

It is a somewhat difficult task to de-



scribe the vast business of this firm; the greatest wonder is often expressed how the firm in the space of 25 years from its foundation has risen to its present eminence. When it is taken into consideration that the gentlemen who are at the head of this firm are all men of experience and are well acquainted with every branch of their business, and who pay the closest attention to it in all its details; and by a spirit of fairness and liberality, making friends of all who had business transactions with them. Some idea of the magnitude of the firm may be gathered from the following particulars: The size of the steam saw mill in Menomonie is 165x32 ft, two stories high with boiler and engine room 60x24 ft. In the mill there are two rotary saws, one single edger, one four edger, three butting saws, and a lath mill. In the water power mill, near the steam mill, there are six gangs containing over 100 saws, one rotary, one muley, five four-saw edgers, nine butting saws, six lath mills, and one grub pin machine. The shingle and planing mill, which is a model of neatness and utility is 60x50 feet, two stories high. The grist mill is 40x60 feet, three stories high: attached to this mill is a grain warehouse which holds 40,000 bushels of grain. Near the mills is the company's store and offices. The size of the store is 65 feet long, two stories high, with two wings of the same size. The store is devoted to the sales of general merchandise, giving employment to thirty-two clerks. One side of the lower floor is devoted to the sale of drugs, groceries, and hardware. Passing to the adjoining store through a hallway, you come to the ladies' dry goods department. In this side of the store ladies' shoes are kept. On the counter there are large show cases containing all kinds of jewelry. An experienced watchmaker has charge of this department. Ascending to the second floor, there is the merchant-tailoring department, where four men are employed. A large and well selected stock of ready made clothing, boots and shoes, and gent's furnishing goods are also kept on this floor. To the right is the house furnishing goods department, where carpets, oil cloths-queens and hardware is kept in large quantities. The warehouse is 100 feet long, two stories high, with a wing the same length. The heavy goods, such as stoves, heavy hardware, agricultural implements, and furniture, are kept in the

warehouse. The whole of the mercantile department is under the charge of Mr. Egbert Marks. Opposite the mill is the foundry and machine shops, butcher and blacksmith shops, boarding houses, and sleeping rooms for the use of the employes. Besides these immense buildings, the company own a large mill and store at Downsville, a store and saw mill and a large hotel at Dupnville. The same at Rice Lake, in Barron county; a large store and mill at Prairie Farm, and a store at Wanbeek, and a large store, warehouse and lumber yard at Read's Landing, Minn. The total amount of sales for general merchandise from all the stores amounted last year to \$700,000. They own six large farms, in Dunn and Barron counties, on which there is between 6,000 and 7,000 acres of improved lands. The largest amount of land under cultivation on one farm is 1,400 acres; 1,200 men are on the pay rolls of the company. They own 115,000 acres of pine lands on the Menomonie and Chippewa rivers. Sixty millions feet of lumber, 20,000,000 shingles, 20,000,000 of lath and pickets were manufactured by the company last year. They own a steamboat which runs on the Chippewa river. Messrs. Knapp, Tainter, T. Wilson, and T. B. Wilson, reside at Menomonie. H. L. Stout has charge of the lumber yard at Dubuque, Iowa. J. H. Douglass is the resident partner at St. Louis, Mo., where a large amount of lumber is sold. Mr. Stout, jr., is at Reeds Landing. A. J. Messenger has been with the company fourteen years, as real estate agent and legal adviser. Mr. C. H. Barwise has charge of the books. Messrs. Knapp, Stout & Co., have large quantities of good agricultural lands for sale, which can be purchased on easy terms.

In this sketch we have endeavored to give a description of the immense resources of the company. We are sorry that space will not permit us to devote more to them. These men have made Menomonie and part of Dunn county, what it is to-day, thriving and prosperous, for it has been to their interest to have the country around them opened up. They are noted for their enterprise and liberality, as specimens of which mention may be made that Wm. Wilson, Esq., at a cost of \$15,000 erected and furnished the Baptist church. The other members of the firm are actuated by the same spirit of unostentatious generosity.

A realization of the wealth and importance of the Chippewa valley creates a feeling of pride in the minds of those who claim citizenship in Wisconsin. Yet the natural resource, of that portion of our state are but just commencing a partial development. Ten years hence and the Chippewa valley will be a marvel to the manufacturing world.

#### WHY THE LUMBER TRADE IS DEPRESSED.

A lumberman residing in Canada furnishes the *Ottawa Citizen* the following argument expressive of his views as to the causes which have depressed the lumber trade. We append the article entire, because it is the opinion of a practical manufacturer:

"The general tone of the lumber reports from Albany and other lumber markets, during this season, must certainly have a bad effect on the welfare of the lumber trade. The Albany reports generally went to show that receipts were light and shipments large. Now those not acquainted with the state of the lumber business are led to believe that there is a good business being done, and that there cannot be a very great over stock of lumber when the Albany market reports go to show that receipts are light and shipments large. Those not acquainted with the grounds for such reports are led to believe that the lumbermen have no cause to complain, and men engaged in getting out logs, &c., cannot be led to believe that wages have reached a far higher rate than the business can sustain, which is certainly the case. Allow me to point out the cause of the Albany market showing shipments in excess of its receipts, and also showing lighter receipts than those of a corresponding period last year. In the month of

September, 1871, a sudden rise took place in the value of lumber; there appeared a shortness in the supply, prices ran high and the lumbermen generally thought that there now could be no such thing as over-stocking the market. Till the close of the season lumber sold briskly, and at higher prices. This so encouraged the manufacturers that, during the winter of 1871 and 1872, far too great a stock of logs was taken out; yet the effects of this over stock was not felt at once. The Albany lumber dealers and dealers in other sections of the United States, encouraged by the fine trade they had done in the fall of 1871 and the spring of 1872, came on and bought freely during the summer of 1872, all the lumber they could get. This lumber they bought at high prices—freights advanced accordingly, and this lumber, laid down at their several yards, cost them a high price. In the months of June, July and August, the trade is generally rather dull in the United States. Large operators in New York and other points are generally away from home during these months, either at the seashore, traveling in Europe, or some other quarter. There are two seasons of the year at which the bulk of the wholesale lumber trade is done. The term, over which these seasons extend, is called by the dealers the fall and spring trade. The spring trade generally begins from the 15th March to 1st April, and lasts till about the 1st of June; the fall trade generally begins from the 15th August till September 1st, and continues till the close of navigation on the Hudson river. Now, during the months of June, July and August, 1872, the Albany and other lumbermen in the United States, inflated by the very great streak of success they had in the fall of 1871 and spring of 1872, were busily engaged buying up the stock of lumber for their fall and spring trade, having it forwarded to their yards and making preparations for a

very large business. But the month of September, 1872, brought a very great change. The high rates to which the wages of laborers and mechanics of all kinds had attained, and the many strikes throughout the country, demanding still higher wages and shorter hours, put a very great damper on building. Then came the change in the money market; it for some time had been easy, which had excited speculation, building, &c., but in this matter there was a sudden and serious change. To make matters still worse, the horse disease made its appearance, the effect of which on trade are well known, and the result was this: The fall trade instead of being very large and successful, was very small and unsuccessful, and the wholesale merchants had left on their hands, to carry through winter, very large stocks of lumber bought at high prices and high rates of freight; this was a serious matter for dealers. Lumber is generally bought at 60 to 90 days, and as a rule, drafts are made on the buyers, at these rates, from day of shipment, and the bulk of these drafts come due in December, January and February. This gave the wholesale dealers an immense amount to finance for, which, with a very stringent money market, was not a pleasant or easy task, but they braved it through the winter, with the hope that spring was to bring a better state of affairs. Spring brought no change for the better; it found the wholesale dealers where it left them in the fall, with unusually heavy stocks of lumber, and to add to this an accumulation of interest immensely large. The consequence was that last spring found very few of the wholesale dealers in Canada looking for lumber. Their trade did not require it; they were required at home to lose no opportunity in trying to reduce their heavy stocks without lose if possible. Dealers, who had purchased and owned the lumber themselves, and the better class of commission men, held on firmly. One heavy failure took place early in the spring, and the weaker class of commission men, in order to realize and meet drafts, made on them by the parties who had entrusted them with lumber to sell, a large firm controlling a very large quantity of lumber could no longer stand the pressure of the times and was obliged to yield. The lumber was thrown on the market and sold for what it would bring. Then the weaker class of commission men, in order to realize to meet drafts made on them by their consignors, were obliged to sell and take what they could get for the lumber entrusted to them to sell, the consequence was prices looked down, and men, able to hold, and the better class of commission men have done very little throughout the present season. These were required to buy no lumber, the trouble has been that they have had too much of it. The result to manufacturers on the Ottawa would have been much worse than it has been, were it not for the fact that the trade with foreign markets has been very good this season. A large quantity of lumber that formerly was shipped to the United States, found an outlet through Montreal and Quebec, for shipment to the West Indies and to South America at fair prices, and a larger quantity of 3-inch deals than usual has been cut this year for the English market. Consequently the Ottawa River men have not been the greatest sufferers in the present depression in the lumber trade, although they feel it very much—they would have felt it very much more were it not for the export trade above named. The greatest sufferers in Canada and that part of the United States with which Canada is more directly interested, are the manufacturers in Western Canada and the wholesale dealers in Burlington, Whitehall, Troy and Albany. The situation of the last named dealers has already been given. The manufacturers of Canada West, like

the manufacturers on the Ottawa, encouraged by the success of their operations during the season of 1871-72, put into the woods in the fall of 1872, a larger number of men at advanced wages, high rates of hay and grain. The only articles used in their operations for which a reasonable price was paid were pork and flour; these two articles, although paid for at a pretty good price, could not be called very high, but everything else was high—very much in excess of the previous year. The consequence was that the lumber manufacturing season of 1873 cost very much more than that of 1872. The western men were not in the same position as the Ottawa men with regard to the export trade, and it could not compete with them as the freighting of lumber from Muskoka and Georgian Bay district would cost too much, consequently the only outlet left for them is the trade of the United States. Like some of the commission men and dealers of Albany and other markets, many of the manufacturers are not able to hold. They could not sell to good dealers at Albany, or place their lumber with responsible and strong commission men to be held and sold by them at remunerative prices, as all these men were stocked up with lumber, bought in the season of 1873, or taken on commission. The consumers in New York and other quarters, naturally took advantage of this state of affairs, and bought from those that were obliged to sell; the consequence has been that weak holders and manufacturers have sold their lumber for what they could get for it, and in many instances large quantities of lumber have been sold, delivered in New York at prices that do not net the manufacturer the cost of the logs. Now this is the reason why Albany reports show lighter receipts this year, than those of a corresponding period of last year, and also 1871. The reports of the Albany *Argus* throughout the summer would lead

those in Canada, unacquainted with the trade, to believe that the trade there was in a good condition. In many cases such remarks as the following were made: "The principal feature in the lumber business, the past week, have been light receipts and large shipments." The fact was that the large sales and heavy shipments were made by parties not able to hold at very low prices, and a very large quantity of lumber instead of going to Albany for distribution, went direct to New York. It has been a very hard season for the Albany and Troy dealers; they are going through a trying time, and the result of the last year's operations will make them very careful. Even when trade does revive again, they will take hold of lumber far more cautiously than they have done heretofore. It does not follow, however, that because a large quantity of lumber has gone by the Albany market this year, that that is the way in which the business is to be conducted hereafter; it went just then for the reason before mentioned.

A great deal has been said in Canada about dealing direct with the consumers. No doubt this may be done to a limited extent, but we must have the middle men; the manufacturers in Canada have sufficient to attend to at home. They cannot go into details and keep track of the standing of the numerous consumers and retail dealers. The distribution to those men is a separate trade and must remain so, and only in such instances as those of the present season will lumber go in such large quantities through to the consumers. It is not so safe a way of dealing, but was the only resort the present season for those who could not hold; and it is quite plain to those who understand it, why the good dealers in Albany have had a very dull season. It is quite plain to any one acquainted with affairs in the United States that they have been going too fast; railroads have been built and other

improvements have been going on faster than the resources of the country would warrant. Real estate and all kinds of property advanced to a fictitious value; all went on swimmingly for a time, but the time has come when they have to stop and settle up, and many are surprised to find, that, instead of being immensely wealthy, they are worth nothing. This state of affairs has its bad effects on trade of all kinds; the price of labor has to come down, and other things in proportion. We too, in Canada, have been going too fast, more particularly the lumbermen than those engaged in any other branch of trade. For the past few years they have entertained the idea that neither the square timber nor the sawn lumber market could be overstricken. They have gone on, from year to year increasing their manufacture, yearly advancing the rate of wages, and yearly becoming more extravagant, in the way of conducting their business, and they have at last reached the climax. There is a very large overstock of both square timber and sawn lumber on hand, and the only branch of the trade now existing out of which the bottom has not fallen is the deal trade; and it would be well for those interested in this trade, that it does not go next. One would almost be lead to believe that it will be a natural result, as it is now the only healthy branch of the business left. No doubt many who have not cut deals heretofore will give their attention to it now; and, as this business can be overdone as well, as any other, it is more than likely that it will be.

Now, there is no necessity for such a state of affairs as this to exist. It is in the hands of the lumbermen to bring round a healthy state of the lumber trade in a very short time. It is in their hands, and it is with them to say whether they will do a reasonable amount of business, take out yearly as much lumber as the market will guarantee them ready and re-

munerative sale for, or go on as they have been doing for the past few years taking out far too much lumber, keeping the market in an unhealthy state, making far less money than if they were doing only half the business, working night and day in order to carry on a large business to their loss, destroying their limits and throwing away what is the greatest resources of Canada. Would it not be much better to do a smaller business, manage it more economically, do less work, make more money, and save the timber, which is yearly growing, and becoming yearly more valuable.

There is one point in which those interested in the manufacture of sawn lumber make a great mistake, and that is in running their mills at night. The facilities for manufacturing sawn lumber have now become so great that quite sufficient lumber for all demands can be manufactured in day time. As a rule lumber sawed at night is not so well manufactured; it costs fully one-third more to manufacture at night than it does in day time. The risks of fire are increased very much by running at night. A mill sawing night and day will not saw as much in day time as if they were running in day time only, and to add to this more money would be made by running in day time only. The limits would stand longer, and the proprietors or manager would have a good deal toil and trouble for more money. This is a matter of very great importance to the limit holder and the manufacturers of square timber and sawn lumber and to the country. If it were possible to organize some arrangements by which the quantity of lumber taken out yearly would be governed, it would be a very great benefit to those interested in the trade. It is very true that if less is done in Canada, it will stimulate the manufacturers in Michigan and the Western states to increase their manufacture, but this ultimately would be a benefit to the

Canadians, as, in a very short time, the Michigan men will get through with all they have to cut, and the trade will be left in the hands of the Canadians alone. On the same principle, if the Canadians will not be willing all to come under an arrangement, and regulate the quantities taken out as the demand requires it, would it not be well for all rational men to come under such an arrangement, and let those who are disposed to go on, ruin their limits and work hard for nothing, do so. Those who go on moderately would be the winning men in the end. This is a matter of serious importance, and should have the careful consideration of all those interested in the trade. Notwithstanding the present new stock, a very large number of men are in the woods again this season. No doubt that there are far too many.

Yours, &c.,

LUMBERMAN.

---

**PRESERVING THE TIMBER SUPPLY.**— We shall soon learn the lesson of national as well as personal economy, and there is no single source of wealth so cruelly wasted as the western forests, our main supply of timber. It is being destroyed in every wanton way, and thus far no remedy has been even suggested, beyond an act of congress recommending and rewarding the planting of trees. The English government had the same question to meet in India, where, just as in this country, the appearance of endless wealth from this source brought with it all kinds of mischievous destruction. A school of foresters was at once set on foot; old officers were sent to France to learn the science, to Germany to study the practice of preserving their timber, and young men were engaged for a regular course of instruction, at the expense of the government, to be employed afterward in its service in India. In a recent report of one of the former class, an account is given of the way wood is cared for in Hanover, where there are 900,000 acres of wood under state management. In Prussia nearly a fourth of its whole area is in forest, although a half of it is in the hands of private persons, who are just as

jealous in taking care of it. Now in Hanover, as an example, there is an organized corps appointed over its forests, consisting of one manager, with twenty division officers, 112 districts foresters, 403 assistants, 303 under foresters, besides occasional laborers; there is a cash keeper in each district, and the net result is that, with an expenditure of \$650,000, there is an income of a million and a half, besides saving, for present use, much that would else be lost, keeping alive one of the most important elements of national wealth and welfare, and training up a body of men who are of the greatest use in gathering, spreading, and utilizing an immense amount of valuable knowledge and experience. It is certainly time that we should take a lesson along with England, from the German system, and apply it to our own equally great and growing needs.

---

**ANCIENT TIMBER.**—The timber found in the ancient temples of Egypt is described by *Van Nostrand's Electric Magazine* as probably the oldest in the world which has been subjected to the use of man. It is found in connection with stone work which is known to be at least 4,000 years old. This wood, which is the only wood used in the construction of the temple, is in the form of ties, holding the end of one stone to another in its upper surface. When two blocks were put in place, it appears that an excavation about an inch deep was made in each block, into which an hour-glass shaped tie was driven. It is, therefore, very difficult to force these stones from their positions. The timber appears to be tamerisk, or shittim wood, of which the ark was constructed. In ancient Egypt this tree was sacred, and is now very rarely found in the valley of the Nile. These ties are just as sound now as on the day of their insertion. Although fuel is very scarce in that country, the labor of extracting them is too difficult to tempt the Arabs. Had they been of bronze, half the old temples would have been destroyed ages ago, so precious would they have been for various purposes.

**FOREST CULTURE IN CALIFORNIA.***From the Sacramento Record.*

We can scarcely realize the fact, still it is nevertheless true, that this is one of the most important subjects that can engage the attention of public spirited citizens, of land owners, of farmers, and especially of legislators, in the state of California. Our state is peculiarly situated in respect to natural forests. We have nothing that can be properly called forests, except in the mountainous districts of the Sierra Nevada and coast range mountains. It is true that the foothills leading to these mountain ranges were originally covered very sparsely with a sort of scrubby white oak, of no value for timber, and making only an inferior quality of wood; but the forests producing any considerable supply of valuable timber do not make their appearance on the western slope of the Sierra Nevada until we have reached about an altitude of 3,000 feet above the level of the sea, beginning in the neighborhood of Colfax, which is 2,421 feet elevation, and becoming pretty general and heavy at Blue canyon, at an elevation of 4,678 feet. From the altitude of Blue canyon, past the Summit, and until we descend to about the range of Truckee, on the other side of the Nevadas, there is a pretty continuous belt of good timber land, covered mostly with pines of different varieties, dotted here and there with patches of spruce and hemlock. Expressed in figures this belt of timber of the Sierras is about sixty miles wide on an average, and runs from the southern to the northern boundaries of the state, a distance of about one thousand miles. It is quite narrow at the southern extremity and widens as we travel northward, until at the northern line it is considerably above the average. This belt embraces from fifty to sixty thousand square miles, but probably fifty thousand would be a high estimate of good timber forests. The Coast Range supplies from ten to fifteen thousand square miles, making an area in round numbers of say sixty thousand square miles. This area embraces all the timber of value for timber purposes within the states of California and Nevada. The whole number of square miles in this state is in round numbers one hundred and fifty thousand and the area of Nevada is a little less, but three hundred thousand square miles will ex-

press the whole surface very nearly. Here, then, we have an area of three hundred thousand square miles, only sixty thousand, or one-fifth of the whole of which was originally covered with timber forests. We commenced the use of this timber about twenty years ago and it is estimated that already one-third of the valuable timber embraced within this area has already been cut and used. This would leave at the present time only an equivalent of forty thousand square miles of timber now standing within the two states. This is less than one-seventh the whole surface. Nevada is drawing on this small area of timber for use in her mines and mills and other improvements at this time more rapidly than at any previous date. California is also using more timber, in the construction and repair of railroads, in the timbering of mines of various kinds, in the construction of water supply and irrigation canals and in general improvements, than at any period heretofore. Laying aside all considerations of climatic influence which it is well known forests do exert on a country, laying aside all known facts in regard to the decrease of the productive qualities of the soil, when the proportion of timbered to cultivated land is reduced below a certain per cent., laying aside the fact remarked by the most casual observers that the volume of water passing through the creeks and rivers of this state is annually decreasing in all portions of the state; and looking at this question only as a matter of supplying the necessary demands of timber and lumber for the various purposes of life, not in the distant but near future, still the subject of forest culture is one of the most important questions with which we, as a people, have to deal, and which should engage the legislature soon to convene. Coal may supply the place of wood, but nothing, no other material, can be made to do as a substitute for timber and lumber. Timber is almost as necessary to a civilized community for a thousand purposes as the food they eat or clothes to wear. It becomes, in fact, clearly the interest, if not the duty, of the state, as a separate community, as a separate government, looking after the welfare of its citizens and the prosperity of all those who take up their homes within her borders, to see that the supply of timber and lumber material is kept up. Everybody is constantly cut-

ting down trees, and, in one way or another, consuming the lumber or wood they make. We are decreasing the available timber of the state at a rate which, if continued for fifty years, we will scarcely have any forests of any kind left, and our climate is such that nature can do comparatively nothing towards the renewal, by the growth of young trees, of the forests which we are so rapidly cutting down. It might be an interesting question to determine what will be the amount of water running through the creeks and rivers of this state fifty years hence, when the Sierras and the Coast Range mountains have been completely denuded. It might be an interesting question for science to determine what will be the climatic condition of California when the whole surface of her territory shall be exposed to the uninterrupted rays of a summer's sun, and when no pine trees, with their dense evergreen foliage, shall retard the melting of the snows that fall on her mountain ranges each winter. It might be a profitable problem to engage the skill and forethought of political economists in an attempt to solve the problem as to what will be the comparative average product of wheat and other crops per acre in California when, in consequence of the exposed condition of her mountains, all the moisture in the shape of snow now precipitated upon them during the winter season shall melt and descend to the sea almost as rapidly as it falls, leaving none to come down in the spring and early summer to supply the roots and foliage of vegetation with life-giving and growth-sustaining moisture, and when no trees shall be found to interrupt the currents of hot and poisonous air that occasionally even now come down from the sand plains of Nevada, lapping up every drop of moisture and blasting with the certainty of an Arabian Simoom every tender plant, and sometimes, in the course of a single day, damaging the wheat crop of the state to an extent of millions of bushels. But we propose for the present to leave out of consideration all these great and important questions and call attention to the one question alone of supply of timber and lumber for the necessary uses of man. Wisconsin is one of the best timbered states in the Union, and is located between Michigan and Minnesota, the two other best timbered states, and the whole country of the Southern, Middle and Eastern

states was, but a few generations back, one vast dense forest, embracing most all the varieties of valuable timber known to man, and yet so valuable is timbered land in Wisconsin that right in the midst of her densest forests, on Wolf river, Oconto county, six hundred and forty acres of timbered land was lately sold by the Honorable Philetus Sawyer to John Lynch and associates, of Oshkosh, for the sum of \$50,000, or very nearly eighty dollars an acre. Good agricultural land in the vicinity of this sale, but devoid of timber, is estimated to be worth only about from \$10 to \$15 per acre.

---

### HANDLING MATERIAL.

*From the Operator's Hand Book.*

What proportion of the labor of a wood-working establishment is directed to moving and handling material, cannot be stated, but that it is a fair share of the whole anyone must admit. Handling material is one of those things which cannot be done to any extent by power; and in machine operations, the greater part of the labor is usually handling the stuff. There can be little information given about handling long lumber, but the following suggestions in regard to short stuff or work in process will enable the operator to get along without so much handling, and carrying the stuff from place to place.

In arranging machines always set them so as to leave truck room between and around them; no matter how crowded the room this should be done; the floor-room that will be saved by piling stuff on trucks will more than make up for room lost in the passages.

In furniture and chair shops, carriage shops, turning shops, door, sash and blind shops, and in nearly all of our wood-working factories, the material can be kept on trucks instead of on the floor, with two important advantages gained; it may at any time be moved from place to place and can readily be reached without stooping to the floor.

We may also mention the system, order, saving from bruises, and the facility for counting pieces, as objects gained by the truck system, which is suggested.

The trucks for machine rooms should be made of uniform size for each story; there is no use in depending upon a particular truck being kept for a special use; the rule is, to take the first one at hand,



and there is but little use in having different sizes. The trucks can be built of the following dimensions for anything except heavy loads of lumber, which require a truck that is lower in height and much stronger. The main frame should be of hard wood, about 4x4 inches, and cross rails set in 3½ inches from the end, with tenons to keep them in place. Two throughbolts, ½ in. in diameter along the inside of the cross rails hold the frame firmly together, and yet allow it to spring in passing over blocks or uneven floors.

The common mistake in making trucks is in having them too rigid; they will not last long or work well, unless made to yield at the corners. The planking the top can be nailed to the side rails; it should be 1½ or 1¾ in. thick, of white wood—sycamore, or some other tough wood, that will stand bruising, and will not split; even pine better than ash or oak. The standards should be arranged to go either at the ends or on the sides.

With from six to twelve of these trucks on a floor, or at least one for each machine, so that the pieces can be taken from one and placed on another as they are worked.

When material is to be moved from story to story, the trucks can be run upon the platform of the hoist, and with their loads raised or lowered to where they are wanted. A boy with one of these trucks will move a thousand pounds the length or width of the shop, and up or down through several stories, at the same cost that a single load can be carried by a porter, to say nothing of the damage by having the stuff thrown down upon the floor, and the loss of time required to gather it up again. This system of roller trucks is to some extent in use, but it is exceptional, and rarely ever carried out so to realize the greatest advantage from it.

A system half carried out is no system at all. One or two trucks in a large shop are only an annoyance; the men lose more time, than a dozen additional new ones would cost.

In connection with the arrangement of a mill, a tramway through the center of the building was mentioned. This plan is a good one, and the best and cheapest in a large mill or car shop; but in furniture factories, chair factories, door and sash shops, and jobbing mills, caster trucks, such as those just described for machine rooms, only stronger, are even more convenient than the tramway.

The general means of moving material may be said to consist in tramways for horizontal movement in straight lines, hoists for vertical movement, and caster trucks for distributing in irregular lines; however, in any but the largest mills, and but long and heavy lumber, the horizontal movement and the distributing can be combined, and the fixed tramway dispensed with. In such cases the trucks to be used in connection with cutting out saws, planing machines, and for first floor purposes generally, should be framed of stuff about 5x5 inches, and be correspondingly heavy in all their parts; they should be from six to eight feet long, with three wheels instead of four, the two forward wheels on a fixed axis, and the rear one swiveled. Such trucks should be strong enough to carry at least two tons and a half, and their wheels six to eight inches in diameter, with from two and a half to three and a half inches face. There is nothing peculiar about their construction that calls for diagrams to explain.

By laying a cheap plank floor from the mill room to, or through, the board yard, such trucks can be run out and loaded at any distance from the shop, and men will prefer to push in a thousand feet of stuff in this way to carrying two boards that will not weigh 50 lbs. each.

This simple matter of trucks is dwelt upon because it is perhaps the most neglected of all things about wood shops. We exhaust our ingenuity in devising machines to work stuff to or from the machines; and with the exception of the large lumber mills along the northwestern lake coast, and the very largest mills in cities, it is unusual to find any means of handling material that at all compares with the completeness in other details.

Of tramways little need be said; all know what they are for, and how they are made. The difference from trucks is that they can be used in one line only, and that the cars require less power to move them than trucks with casters. In many cases it may be expedient to have both a tramway and trucks, but whether both, or even additional means of handling, are required, be sure and provide whatever will save carrying stuff or throwing it upon the floors.

Some of the most valuable hardwood lands in the west are located along the line of the Wisconsin Central railway in Northern Wisconsin.

## TIMBER AND HEALTH.

The decay and increasing barrenness of portions of our country is a subject that national pride might lead us to overlook; but as the degeneracy of a country is closely related to, and largely responsible for, the physical degeneracy of its people, it is apparent that scientific minds should grapple with this question, and, if possible suggest a remedy, so as to enable us to escape the fate of other once flourishing but now barren and depopulated countries.

The effect of this drying up of the face of the country upon the health and longevity of the people which inhabit it has not received sufficient attention. We are apt to look for a solution of the causes in many ways foreign to this view of the subject. The physical degeneracy of our unprolific American people is also attributed to many and diverse causes. From a careful study of this subject, in all of its bearings, I am convinced that this important factor has been entirely overlooked. For a few moments I desire to direct your attention to the increasing physical degeneracy of our continent, and the consequent physical (not mental nor moral) degeneracy of our people, and, if possible, to suggest a feasible and available remedy.

It is perhaps unnecessary before this body of scientists to dwell long upon the fact of the drying up of the whole face of the country, the disappearance of springs and brooks, the low state of the wells, and the shrinking of streams, rivers, and lakes. Nor is it perhaps necessary to recall the fact that other settled portions of the American continent grow more dry and barren, and consequently less productive, year by year. The effect of all this change is, in the nature of the case, to give a less general and a greater local humidity over streams, lakes, and low-lying portions of the country. As a result there must also be a less general precipitation, and the storms are more severe. There may be the same amount of rainfall, but is not retained by the surface soil, it runs away, is absorbed by the dry strata below, and is more readily and rapidly evaporated into the dry atmosphere. The vicissitudes of the season are, and must become, more marked. The lands are less productive, for the necessary surface moisture is not present, and there is not much carbonic acid generated and retained within the reach of vegetation. The pro-

ducts are also markedly affected by this change. As a rule, the grains are less plump than formerly, and the fruits are less succulent, except during a very wet season, when they are sodden and go easy to decay.

The effect of this great and growing change of the fall of the country, and its climatic and meteorological condition upon our people, industries, etc., is worthy the attention and study of men of science. The humidity of the atmosphere has a marked influence upon the vigor and fruitfulness of both animals and plants. Either extreme changes the whole flora and fauna of a country. For permanency we all recognize a golden mean. The effect of too much moisture upon health and vitality has been ably pointed out by Dr. Nathan Allen, of Lowell, Mass., as tending to increase the amount of consumption. The other extreme is equally deleterious and more wide-spread.

The great infant mortality in this country leads us to inquire into its causes, and chief among these I would suggest this one of the growing dryness of our country. Here I think is ready explanation of the steady decrease of the per cent of children from each decade in the older states, as demonstrated by Dr. Tove, of Washington, for the census reports. The greatest mortality among the children is where they are taken from milk and put to the table and given the dry food of our adult people. If it survives it grows rapidly, tall and thin, and matures early and prematurely. Is it any wonder, therefore, that families in America diminish in size and finally die out? We place the chief cause of all this upon the climatic surroundings of our people, and thus secure a stigma that some writers have attempted to fasten upon our people.

The American disease, dyspepsia, is, I am convinced, not so much due to our manner of eating as to our climate and dietry. The body does not receive nor absorb the necessary fluidity to supply a sufficiency of gastric and intestinal juices, and indigestion, constipation, and emaciation are the results. The great prevalence of biliousness in the west finds, I think, its most ready explanation in this drying up of the body. This constant and great abstraction of moisture from the body produces a nervous restlessness of mind and body that is markedly an American trait of character. The farther west we go and the dryer the climate, the more marked this becomes.

The absence of a proper humidity in the air must and does affect the respiratory organs, giving rise to irritation, cough, and finally, disease. Miliary tubercle is the form of lung disease produced, and is the opposite form of consumption arising from local dampness.

The remedy for this growing dryness of our country is evidently to increase the average humidity of the atmosphere over the whole country. This might be accomplished in a degree, as is being done in France and Switzerland, by planting trees and shrubbery upon the dry exposed highlands. The cultivation of grain and the regular seeding down of more land by our agriculturists would give the same result. Instead of the ground being left dry and exposed after the wheat and other grains are harvested, there might be a protecting cover, as of clover, etc. The government should encourage the growth of timber, and also prevent the clearing off of whole belts of timber where the face of the country would be materially effected thereby. The importance of sinking artesian wells to irrigate the driest regions, and the formation of lakes, ponds, and reservoirs to increase the humidity, deserves the study of scientists and the action of the government. The rainfall may still be sufficient if this moisture was only retained. That these means would have the effect to maintain a greater average humidity, and thus influence the productiveness of the whole country, and also the better health of the people is self-evident. The more equable in all regards the atmosphere can be maintained, the better the health of plants and animals.—*I. C. Duncan, M. D.*

---

#### RESINS.

---

The resins best known to commerce and used extensively in medicine and several of the mechanical arts, are nine in number, and are known as copal, lac, amber, common resin, elemi, sandarac, mastic, and caramba wax. All these resins can be reduced to powder, and all can be dissolved by a union either with acids, oils or alcoholic preparations. Gum copal is the concrete juice of a tree growing in certain sections of South America and the East Indies. The substance when pure is hard, shining, transparent, citron-colored and inodorous. It is not soluble in water or spirits, but may be dissolved in linseed oil, when submitted

to a heat a little less than sufficient to boil or decompose the oil. When the solution is diluted with spirits of turpentine it forms a beautiful transparent varnish. Shellac, or more properly lac, is a resinous substance obtained mainly from the *Ficus Indica*, or banyon tree, on which it is deposited by an insect. It is composed of five different but very similar kinds, each of which is united with a small quantity of several other foreign substances, particularly a red-colored matter. Stick lac is the compound in its natural state, incrusting small twigs. When broken off and boiled in water it loses its red color, and is called seed lac. When melted, strained, and spread into thin plates, it is called shell lac. United with ivory black or vermilion it forms red or black sealing-wax; when lac is dissolved in alcohol or other solvents, and submitted to different methods of preparation, it constitutes various kinds of varnishes and lacquers. Lac is readily dissolved by a union with caustic soda. Amber is a yellowish resin, and resembles copal. It is found on the seashore, and frequently on alluvial soils with beds of lignite. It is capable of receiving a fine polish, and is used for ornamental purposes, to adorn pipes, walking sticks, etc. It is also the basis of a fine varnish. By friction it readily becomes electric. Amœr will not dissolve in alcohol, but it yields to the action of concentrated sulphuric acid, which will dissolve all resins except caramba wax. The union with sulphuric acid gives dammar a brilliant red tint, but to other resins a dark brown color. Dammar is obtained from certain trees indigenous to the East Indies; among others the dammara and the dammar pine. It is principally used for making varnish. Dammar dissolves easily in sulphide of carbon, oil of turpentine, linseed oil, and benzol. Common resin is the product of the Southern pine, and is readily soluble in alcohol and the essential oils. Elemi is a concrete substance obtained from several species of trees growing in the tropics, but having much the same appearance, and undoubtedly allied in origin. It is used by the medical profession in ointments and plasters, and by mechanics as a base for the manufacture of varnish. This resin dissolves with difficulty in alcohol and linseed oil, but gives way under the action of turpentine and benzol. Mastic exudes from the mastic tree, which grows in the island of Scio in the Mediterranean Sea. It runs

freely when an incision is made in the body of the tree, but not otherwise. It is of a yellowish white color, is semi-transparent, of faint smell, and is used as an aromatic and as astringent. It is also used by painters as an ingredient in drying varnishes. Sandarac is the product of a tree growing in Barbary. It is obtained in what is known as transparent tears of a white color, and is used principally as incense and the manufacture of varnish, and when pulverized and mixed with other substances in a pounce as a perfume. The following resins will become pasty before melting: amber, lac, elemi, sandarac, and mastic; the others will become liquid at once. Ammonia will slowly dissolve copal, mastic, and sandarac; but on the other principal resins it has very little effect.

#### THE WINTER'S PRODUCTION.

Under a caption "A Bane of the Lumber Trade," the WISCONSIN LUMBERMAN says: "We observe that a number of our exchanges, from a natural and creditable but mistaken spirit of local pride, will have it that a great deal of logging is being done in their vicinity, and that this season's lumber crop will not be far below the usual amount. Such reports are a mistake both in point of fact and in their tendencies. The papers which make these rose-colored reports do not intend to injure the producers of lumber in their own vicinity or to mislead dealers at a distance. Yet they do exactly this." It states further that, having "again examined this field with the greatest care and at considerable expense, with the object of presenting all classes of our readers with the exact truth, we are obliged to say that the present dull condition of the market and the causes that have for several successive years operated against the manufacturers of lumber, together with the unparalleled stringency of all money markets, will materially affect this winter's production."

Our own acquaintance with the condition of affairs in the lumber regions, eastward, northward and at the south, as well as at the west, and recent conversations with large operators satisfy us that the position assumed by our able contemporary of Wisconsin, is correct, and that there will be no such amount of lumber manufactured this winter as will materially affect the prices the ensuing season,

especially in view of the generally conceded probability, amounting almost to an assurance of very active operations in all branches of the trade, the ensuing season. The only thing that will have a tendency in that direction is the reduction of wages, which will so far lessen the cost of manufacture.—*From the Boston Lumber Trade.*

#### CALIFORNIA WOOD-CHOPPERS.

It is in the logging camps that a stranger will be most interested on this coast, for there he will see and feel the bigness of the red-woods. A man in Humboldt county got out of one tree lumber enough to build his house and barn, and to fence in two acres of ground. A schooner was filled with shingles made from a single tree. One tree in Mendocino whose remains were shown me, made a mile of railroad ties. Trees fourteen feet in diameter have been frequently found and cut down; the saw-logs are often split apart with wedges, because the entire mass is too large to float in the small and narrow streams, and I have often seen them blow a log apart with gunpowder. A tree four feet in diameter is called undersized in these woods, and so skillful are the wood choppers that they can make the largest giant of the forest fall just where they want it, or, as they say, "drive a stake with the tree."

The choppers do not stand on the ground, but on stages raised to such a height as to enable the axe to strike in where the tree attains its fair and regular thickness; for the red wood, like the sequoia swells at the base near the ground. The trees prefer steep hillsides, and grow in an extremely rough and broken country, and their great height makes it necessary to fell them carefully, lest they should, falling with such enormous weight, break to pieces. This constantly happens, in spite of every precaution, and there is little doubt that in these forests and at the mills two feet of wood are wasted for every foot of lumber sent to market. To mark the direction line on which the tree is to fall, the chopper usually drives a stake into the ground 100 or 150 feet from the base of the tree, and it is actually common to make the tree fall on this stake, so straight do these red-woods stand, and so accurate is the skill of the cutters. To fell a tree eight feet in diameter, is counted a day's work for a man.—*Harper's Magazine.*

**LUMBERING.**

**The Second Manufacturing Interest of the Country—The Great Lumbering Section of Michigan and Wisconsin—Extent of the Trade—Railroad Lumbering—How the Product of the Pineries is Shipped to Market—Sketches of Some of the New Towns on the East Shore.**

*Special correspondence Chicago Times.*

ALLEYTON, NEWAYGO CO., MICH. }  
Dec. 16, 1873, }

The census report for 1870 developed two interesting facts: First, that lumbering had become the second manufacturing interest in this country—iron alone leading it—and second, that the center of this gigantic business had been transferred from the New England and middle states to the extreme northwest, Michigan taking the lead among states, and Wisconsin coming in second as a lumber producer.

**THE GREAT NORTHWESTERN LUMBERING SECTION,**

which extends over the northern portions of the states of Michigan, Wisconsin and Minnesota, may properly be divided into three districts—the eastern Michigan, having Saginaw for a center, and shipping its lumber to the east and south, both by rail and water—the central, or lake Michigan district, including the western shore of the state of Michigan, together with the Green Bay and Wolf river in Wisconsin, which has Chicago for its principal market, and last, the western district, which takes in the upper Mississippi and its tributary streams, and competes with Chicago for the trade of the river towns from Clinton, Iowa, to St. Louis, and the immense lumber consuming country west of them.

**EXTENT OF THE LUMBER TRADE.**

The most reliable estimates that can be formed place the annual product of lumber for the eastern district at one billion feet; the central at two and a half billions, and the western at one and a half billion, making a grand total for the whole northwest of about five billion feet, worth, in its manufactured state at the mills, not far from \$12 per thousand feet, or the immense sum of \$60,000,000. Corn, wheat, and pork must now take a second place beside lumber among the leading interests of the northwest. Some idea of the value of this trade to Chicago may be formed

when it is known that during every season of navigation upward of ten thousand vessels laden with lumber arrive and discharge their cargoes upon her docks, the receiving and reshipping of which forms one of the leading branches of industry in the city.

**RAILROAD LUMBERING.**

Until within a few years no pine was considered valuable unless it stood upon the banks of some stream in which the logs could be floated to a first-class vessel port. Five years ago certain railroad men of Fort Wayne, Ind., had a charter for the Grand Rapids & Indiana railroad, extending north from Fort Wayne through the state of Michigan to Grand Traverse bay and Mackinaw. Congress had voted a liberal grant of the pine lands which laid along the line of the proposed road, but it was not until the charter obtained by the company was on the eve of expiring that capitalists were induced to embark in what was then deemed the hazardous venture of building a railroad through an almost unbroken pine forest. But when the road was completed it was found that the land grant had been disposed of at an average of over \$14 per acre—the highest price ever obtained for the grant lands of any railroad in this country—while the business of carrying lumber from the saw mills erected along the line was far in excess of the capacity of the rolling stock the company had deemed it prudent to furnish. Since the first section of the road was opened, there has been a constant and pressing call for more cars to accommodate the lumber traffic, and this, too, in face of the fact that the company, and many private, shops have all the time been working at their utmost capacity to meet the Oliver-Twist-like demands of the mill men for more rolling stock.

**THE SUCCESS**

which attended the opening of this road insured the rapid completion of other similar lines which had been projected through the lumber regions of Michigan and Wisconsin, and fairly inaugurated the new and already gigantic business of railroad lumbering. Saw mills were rapidly erected along the new lines of road, while at the same time an immense number of cars were employed in bringing logs to mills many miles distant from where they were cut. The pine timber tributary to these roads advanced in value with a rapidity that completely surpassed any previous speculations in river

timber. The fact that Congressman Sawyer, of Oshkosh, Wis., recently sold a section (640 acres) of pine timber land on the Wolf river, for \$50,000, has attracted considerable attention, but I can mention several instances where equally large tracts of pine, on the line of the Grand Rapids & Indiana road, have sold for \$100 per acre within the past two years.

#### A NEW FEEDER FOR CHICAGO.

Among the most important of the lumbering railroads directly tributary to Chicago which has been opened during the past year, is the Muskegon & Big Rapids branch of the Chicago & Michigan Lake Shore railroad. This road runs 55 miles from Muskegon, Mich., through the finest tracts of pine timber lands on the Muskegon and White rivers, and already several flourishing towns have sprung up along the line. Having a day to spare, your correspondent boarded the train of Conductor Tom Murphy for a trip over the above road to note what was going on where one year ago was an almost unbroken forest.

Between stations the scenery is far from inviting. Along the line of the road for several rods on each side of the track, are the unsightly stumps and withering tops of trees which were removed to make way for the tracklayers, while in many places the lumbermen have extended the same scene of destruction and desolation as far as the eye can reach in every direction to meet the demand of some neighboring saw-mill for logs.

#### "WOODMAN SPARE THAT TREE"

has very little effect upon the apparently unpoetic souls of the Michigan lumbermen—statistics showing that they annually strip 300,000 acres, or 468 square miles, of pine lumber land to supply the numerous saw-mills of the state.

#### THE FIRST VILLAGE OF IMPORTANCE

on the road is Holton, the headquarters of the extensive lumbering firm of Blodgett & Burns, who started the town several months ago by the erection of extensive saw-mills, stores, &c., &c. In addition to huge piles of manufactured lumber, lath, and shingles, there were stacked up about the station, awaiting shipment to Chicago, immense quantities of railroad ties, shingle bolts, piles, posts, telegraph poles, and every other conceivable product of the forest. The farmers in the vicinity till the soil for recreation and cut the above

commodities for a living, if we are to believe current reports.

Twenty-six miles beyond Muskegon is

#### FREMONT LAKE,

a clear, sparkling sheet of water, two miles long by three-quarters wide, surrounded by bold, beautifully shaded banks, upon which a company of Chicago and Muskegon capitalists purpose erecting a first-class summer resort hotel at an early day. A few miles beyond the lake is the already flourishing village of Fremont Centre, one of the smartest towns on the road. Seven miles after leaving Fremont Centre the train strikes into an extensive tract of pine land owned by Messrs. J. Alley & Co., and after a ride of three miles through pine owned entirely by the firm your special was landed in the neat and commodious railroad station house of

#### THE VILLAGE OF ALLEYTON,

a town only six months old, but already the smartest and most promising place on the road. The original owners of the place were Messrs. Alley & Co., of which firm Geo. Alley, Geo. M. Smith, and Chas. G. Alley are at present the resident partners. It seemed like the Arabian Nights' tale of Aladdin's Palace as we walked about the streets of Alleyton and noticed the numerous and stately hotels, stores, public halls, manufacturing establishments, and private residences already completed. The busy notes of the carpenter's saw and hammer were to be heard in every direction, and standing on one street corner we counted no less than 35 first-class buildings in process of erection. The Messrs. Alley & Co. have here a splendid saw mill, lath and picket mill, as well as a first-class shingle mill, from which they are prepared to fill orders for anything in the lumber line from a four foot lath or six inch flooring strip to the longest and largest dimension of timber. They design following in the footsteps of the older railroad mills and ship on orders by car load, or more, directly to the Chicago or the country yards of Indiana or Illinois, or even further south and west, but, up to the present time, the rapid growth of the town has absorbed the entire cut of their mills. The same firm also has extensive flour mills at the mouth of White river and is among the heaviest shippers of lumber to Chicago. Among the other manufacturing establishments of Alleyton and vicinity mention should be made of the very capacious and complete steam saw-mill of Messrs.

Wilcox & Morgan, which, together with their extensive store, is located on the opposite side of the river, in what may be paoperly termed a suburb of Alleyton.

#### CHARACTER OF THE NEW TOWNS.

The stir, activity, and rapid growth which prevail in these new lumbering towns finds a parallel only in the auriferous mining regions of the far west. Everything goes with a rush, and a mental or physical drone will not be tolerated. Nor is this remarkable energy the only peculiar feature of the new villages. In most of them the inhabitants have not yet had time to remove the pine stumps from the principal streets, and in many cases even the piles of brush are still allowed to remain, as it was not considered safe to burn them down during the dry weather, with so much inflammable material about.

We predict for the towns on the Big Rapids branch a brilliant future. Their splendid water power, almost inexhaustable supply of all varieties of either hard or soft timber, fertile soil, and the ample means, energy and public spirit of their founders, combine to insure their rapid growth and ultimate success.

#### LUMBER FOR 1874.

Regarding the probable supply of lumber from the east shore for the next season, a very few words will describe the whole situation. There was on hand when the mills shut down last fall, about 15 per cent of a year's stock of logs. Arrangements were made for putting in about 50 per cent of a usual stock during the coming winter, but up to this time there has been no sleighing, and contractors who are feeding idle teams and men and have large logging contracts to fill, are beginning to elongate their countenances to an alarming extent, although the owners of the pine do not seem to be very anxious to have their contracts filled, as they believe there will be plenty of lumber, if not more than 25 per cent of last year's stock is put in, and in that case their profits will be much greater. Taking everything into account, we predict that the lumber product from the east shore for 1874 will not exceed 60 per cent of the product of 1873.

In Minnesota the effect of the "depression" is noticeable in one locality where 913 men are employed in the woods this season, against 1,675 men worked last winter by the same employers.

#### PRESERVING TIMBER.

Numerous experiments have been made to treating wood so as to preserve it from decay, and a variety of patented process are now in use. The treatment known as "Kyanizing" was one of the earliest methods used in this country, and often with good effect. It consisted of an infusion of corrosive sublimate, and imparted such durability to chestnut railroad ties, in one instance on record, that, after lying eleven years on a lime soil, they were in even better condition than when put down, while other ties of the same wood, not kyanized, gave out in seven years. The process, however, was extremely unhealthy in its effects upon the workmen who applied it, and was ultimately abandoned.

A method largely and very successfully adopted for rendering timber imperishable is known with various modifications, by the general term of creosotizing. Its most effectual application appears to be in the form of oil from gas-tar, by the use of which railway sleepers of fir, oak, beech and other woods have been made practically rot-proof. The lasting utility of the process depends upon the thoroughness with which the wood is impregnated with the creosote. This should be carried to the point of complete saturation, except in the case of oak, where it is only necessary that the sap-wood should be saturated. The wood also requires to be exposed to the air for eight or ten months before undergoing treatment, and the heart wood, where exposed, should be perforated so as to allow the preparation thorough access to every part.

Sulphate of copper, sulphate of iron, petroleum, whale-oil, and lime-water have been used with good results in the treatment of timber. In the treatment called Burnettizing, which has been extensively applied in this country, the preservative element is chloride of zinc. Wood is rendered nearly incombustible and prevented from decaying under ground by placing it with the surface unplanned, in a bath of 1 part concentrated silicate of potassa and 3 parts pure water, allowing it to remain twenty-four hours, and after several days' drying giving it a second immersion. When dry, it should receive three coats of a paint composed of 1 part cement and 4 parts of the liquid used for the bath, and is then ready for service. In a process, patented a few years since, the treatment consisted in immers-

ing the wood from two to twelve hours, (according to its porosity and thickness,) in a boiling solution of borax in water, contained in a wooden or iron tank. This was followed by a second immersion, but of only half the duration of the first. When dry, the wood was ready for use; or, if desired, its discoloration could be removed by washing in boiling water. The wood could also, after treatment, be further impregnated with tar or coal-oil, applied in the usual manner. To render it perfectly water-proof, resin, gum-shellac, or other suitable substance was added to the liquid used for second immersion of the wood. It was claimed for the borax solution that it dissolved and removed all the perishable substances which caused the decay of the wood, without any injury whatever to the fibre, rendering it, on the contrary, very hard, nearly incombustible, and proof against water, vermin, and the effects of either a moist or dry atmosphere.—*Leffell's Mechanical News.*

---

**CIRCULAR OF THE WISCONSIN STATE GRANGE TO MEMBERS OF CONGRESS.**

The Executive Committee of the Wisconsin State Grange have sent the following letter to the Senators and Representatives from that State :

"In your capacity as member of the National Legislature, we respectfully ask your attention to the following statement and request :

"Adequate means of transportation at moderate cost has grown to be a great national want, and justly demands the attention of Congress. To the producers of the country, a portion of whom are represented by the undersigned, the subject is of vital importance. With due regard for the various plans, theories and schemes which are advocated before the country at large, or which may be presented for the consideration of Congress, we respectfully represent that one means of relief is open for the action of that body, which would seem to demand precedence, no matter what other plan or plans may or may not be subsequently adopted. We refer to the improvements of rivers of a national character. While improvements upon these have heretofore been either altogether ignored, or kept lingering along with comparatively little expenditure of money from time to time, Congress

has made appropriations of such magnitude, in aid of private enterprises, as to at once provide for and secure their rapid completion. We believe that the improvement of national channels should have corresponding action at the hands of Congress without further delay, and have resolved to give what influence we possess toward securing such results. To that end, in behalf of the large number of citizens of the State which you represent in our National Congress, we respectfully ask you to be assured that your efforts and influence will be given during the coming session of Congress to secure by adequate appropriations the following results to-wit : The speedy improvement of the Mississippi river at its mouth, and such other points upon it as work has already been commenced by the General Government ; also the speedy improvement of the Fox and Wisconsin rivers. A reply at your earliest convenience will oblige, yours respectfully,

J. COCHRANE,  
JAS. BRAINERD,  
J. H. OSBURNE,  
O. D. HINCKLEY,  
H. C. SHERWIN,  
A. W. McLAUGHLIN,

Executive Committee of the Wisconsin State Grange Patrons of Husbandry.

---

**LUMBER MATTERS.**

Now that the lumber seasons has ended in all sections, the result of the season's cut can be fairly estimated. From authentic sources, it is ascertained that the manufacturers on the western shore of Michigan, and along Green Bay, have lost from 50 cents to \$1.50 per thousand on their sales. Chicago dealers that were interested in mills in Michigan, for two months before the season closed, could buy cargoes at \$2 less than the cost of stock and sawing. The Mississippi market has fared much better, but we doubt if there is a lumber firm on the St. Croix, Chippewa, Black, or Wisconsin rivers, that feels very much encouraged. Some of the mills on the Chippewa had old contracts which were filled in the early part of the season at fair figures, but the later sales were made at figures on which there was no profit whatever. For the past six weeks, it has been impossible to make sales at any price—the panic crippling this branch of trade worse than any other.



In the face of all these things, loggers do not seem to be discouraged, and are making arrangements to get in nearly the usual amount. It seems strange, with the discouraging prospects in view, that this should be the case, but it is a fact, nevertheless.

Lumbermen everywhere seem determined to slash all the lumber possible. Their veneration for the "goose that lays the golden egg" is very small—its life is doomed. When pine timber commands a fabulous price, with none to be had, they will remember this. — *Chippewa Falls Herald.*

#### NEW TIMBER LAND BILL.

In the senate of the United States, December 1, 1873, Mr. Sargent asked and, by unanimous consent obtained leave to bring in the following bill, which was read twice and ordered to be printed, the full text of which is herein given.

A bill for the sale of timber lands in the states of California and Oregon and Washington territory.

Be it enacted by the senate and house of representatives of the United States of America in congress assembled: That surveyed public lands of the United States within the states of California and Oregon and Washington territory, not included within military, Indian or other reservations of the United States, valuable for timber but unfit for cultivation, may be sold to citizens of the United States, or persons who have declared their intention to become such, in quantities not exceeding six hundred and forty acres to any one person or association of persons, at the minimum of two dollars and fifty cents per acre, and lands valuable chiefly for stone may be sold on the same terms as timber lands; provided, that nothing herein contained shall defeat or impair any bona fide claim under any law of the United States, or authorize the claim of any mining claim, or the improvement of any bona fide settler, or lands containing gold, silver, cinnabar, copper or coal in quantities sufficient to render mining remunerative or lands selected by the said states under any law of the United States donating lands for internal improvements, education or other purposes; and provided further, that none of the rights by the act approved July 26, 1866, entitled "An act granting the right of way to ditch and

canal owners over the public lands, and for other purposes," shall be abrogated by this act, and the same are hereby extended to all public lands affected by this act; and all patents granted shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights, as may have been acquired under or recognized by said act, and such rights shall be expressly reserved in any patent issued under this act.

SEC. 1. That any person desiring to avail himself of the provision of this act shall file with the register of the proper district a written statement in duplicate, one of which is to be transmitted to the general land office, designating by legal subdivisions the particular tract of land he desires to purchase, setting forth that the same is unfit for cultivation, and valuable chiefly for its timber or stone; that it is uninhabited; contains no mining or other improvements, except for ditch or canal purposes, such as were made by or belong to the applicant, nor, as deponent verily believes, any valuable deposit of gold, silver, cinnabar, copper or coal; that deponent has made no other application under this act; that he does not apply to purchase the same on speculation, but in good faith to appropriate it to his own exclusive use and benefit; and that he has not, directly or indirectly, made any agreement or contract, in any way or manner, with any person or persons whatsoever, by which the title which he might acquire from the government of the United States should inure, in whole or in part, to the benefit of any person except himself; which statement must be verified by the oath of the applicant, before the register or the receiver of the land office, within the district where the land is situated; and if any person taking such oath shall swear falsely in the premises, he shall be subject to all the pains and penalties of perjury, and shall forfeit the money which he may have paid for said land, and all right and title to the same; and any grant or conveyance which he may have made, except in the hand of bona fide purchasers, shall be null and void.

SEC. 3. That upon the filing of said statement, as provided in the second section of this act, the register of the land office shall post a notice of such application, embracing a description of the land by legal subdivisions, in his office, for a period of sixty days, and shall furnish the

applicant a copy of the same, for publication in a newspaper published nearest the location of the premises, for a like period of time, and after the expiration of said sixty days, if no adverse claim shall have been filed, the person desiring to purchase shall furnish to the register of the land office satisfactory evidences, first, that said notice of the application prepared by the register as aforesaid was duly published in a newspaper as herein required; secondly, that the land is of the character contemplated in this act, unoccupied and without improvements, other than those excepted, either mining or agricultural, and that it apparently contains no deposits of gold, silver, cinnabar, copper or coal; and upon payment to the proper officer of the purchase money of said land, together with the fees of the register and the receiver, the applicant may be permitted to enter said tract, and on the transmission to the general land office of the papers and testimony in the case, a patent shall issue thereon; provided, that any person having a valid claim to any portion of the land may object, in writing, to the issuance of a patent to lands so held by him, stating the nature of his claim thereto; and evidence shall be taken, and the merits of said objection shall be determined by the officers of the land office, subject to appeal, as in other land cases. Effect shall be given to foregoing provisions of this act by regulations to be prescribed by the commissioner of the general land office.

SEC. 4. That after the passage of this act it shall be unlawful to cut, or cause or procure to be cut, or wantonly destroy, any timber growing on any lands of the United States, or remove, or cause to be removed, any timber from said public lands, with intent to export or dispose of the same; and no owner, master or consignee of any vessel, or owner, director, or agent of any railroad, shall knowingly transport the same, or any lumber manufactured therefrom; and any person violating the provision of this section shall be guilty of a misdemeanor, and on conviction shall be fined for every such offense a sum not less than \$100 nor more than \$1,000; provided, that nothing herein contained shall prevent any miner or agriculturalist from clearing his land in the ordinary working of his mining claim, or preparing his farm for tillage, or for taking the timber necessary to support his improvements, or the taking of timber for the use of the United States; and the

penalties herein provided shall not take effect until one year after the passage of this act.

---

#### NORTHERN MICHIGAN.

---

#### Present Condition and Future Prospects of Business in the Towns on the Line of the Flint & Pere Marquette Railway.

A correspondent of the *Saginaw Free Press* has just visited some of the principal villages on the line of the Flint & Pere Marquette Railroad, as far as Reed City, the present terminus of the road. The rapid growth of most of these villages has been very materially retarded by the present financial times. Reed City, Hersey, Evart, Farwell, and Midland, all being the direct offspring of the railroad and the lumbering interest, and as there is but little lumbering being done this winter, and the usually large traffic of the railroad is thereby cut off, business of all kinds is in a languishing condition. At both Evart and Reed City the rubbish in and about these towns has been cleared off and burned up, and where but a few months ago trees, underbrush and logs were in profusion, all is now cleared away, permitting a fine view of the town. The general disposition of every one seems to be to go slow until the financial difficulty of the present shall cease. Mr. George C. Kimball, Superintendent of Flint & Pere Marquette Railroad, says there is now on the line of the road, west of East Saginaw, over 2,500 car loads of lumber and shingles ready to be shipped as soon as there is a market for them, and in this connection, and while speaking of Mr. Kimball, it may not be committing a breach of trust to say that on the 1st of January, he severs his connection with this road. This is of his own choice. He has been a true and faithful servant for this company, and to his untiring energy, perseverance, and knowledge of railroading, is due, to a large extent, the prosperity and success of this road. In retiring from the arduous duties of the superintendency of the road he will carry the well-wishes, not only of those associated with him as officers of the road, but of the employes and the traveling public at large.

## THE WISCONSIN LUMBERMAN.

## Tokens of Appreciation by the Press.

We are of the opinion that few publications have been so generously "noticed" as the WISCONSIN LUMBERMAN. So many favorable words have been spoken by our brethren of the press, from the Atlantic to the Pacific, from the Gulf to the Great Lake, that it would be impossible to reproduce all. We must therefore content with a few extracts:

The WISCONSIN LUMBERMAN, published in Milwaukee, is a monthly digest of all news pertaining to the advancement of the great timber interests of the West. It is plain and truthful in its statements, forcible in its arguments and logical in its deductions. Published by the "Wisconsin Lumberman" Publication Company. Price, \$2.00 a year.—*Philadelphia Evening Herald*.

The WISCONSIN LUMBERMAN is a new monthly launched with October for freight of public favor by the Wisconsin Lumberman Publishing Company. Its editors are E. B. Northrop, H. A. Chittenden, Jr., and W. H. Bishop. What need be said farther when such experienced and able writers lend their names and pens. We will only add that our lumbermen will find their journal a most able and efficient promulgator of the wants of their industry.—*Milwaukee Monthly*.

We have received the first number of a new Milwaukee publication, entitled the WISCONSIN LUMBERMAN. The new paper or magazine is to be issued on the first of each month, and will be devoted exclusively to the lumber interests of the Northwest. The need of a special journal for this great branch of business has long been felt among lumbermen, and from the mere cursory examination we have given this new aspirant for public favor, we should say that it is the very article so long sought. The editor of the LUMBERMAN is E. B. Northrop, formerly of the *Steven's Point Journal*, a ready writer, and pleasant gentleman.—*Oshkosh Times*.

We have received the initial number of The WISCONSIN LUMBERMAN, a monthly

magazine "devoted to the lumbering interests of the northwest." It is published at the *Milwaukee Journal of Commerce* office, and is edited by the Journal men assisted by E. B. Northrop, formerly of the *Steven's Point Journal*. The LUMBERMAN contains much useful information and statistics, and will be a valuable aid to the lumbering interests of the northwest. Subscription \$2.00.—*Waupaca Republican*.

Number one, volume one, of the WISCONSIN LUMBERMAN, published at Milwaukee, is on our table. It is a fifty page monthly, and is, or at least this specimen number is, the best thing of the kind we have seen. It is neatly printed and the matter contained in its pages is eminently sound and practical. Subscription price, \$2.00 a year in advance. Address "THE WISCONSIN LUMBERMAN PUBLISHING COMPANY," Grand Opera House, 62 Oneida Street, Milwaukee, Wis.—*Merinette Eagle*.

The WISCONSIN LUMBERMAN, devoted to the lumbering interests of the northwest, published in Milwaukee, by the WISCONSIN LUMBERMAN PUBLISHING Co., is on our table. The publication starts out well. It is a want that has long been felt by the lumbermen of Wisconsin.—*Waukesha Democrat*.

THE WISCONSIN LUMBERMAN.—Volume I, Number 1, of this new enterprise is before us, and claims more than the passing word of praise, which we are only able to give it. It is a publication which will meet an old and constantly growing want, and already excites in lumbering circles a natural astonishment that they had so long allowed the immense interest in question to go so long unrepresented. Conspicuous among the articles of the present number, we notice articles on Central and Northern Wisconsin; the Indian Pine Land Ring,—a criticism on a late article in the *Milwaukee Journal of Commerce*, alleging fraud in the sale of certain Indian pine lands and stumpage, and the Lumber Market. The first named article alone is worth the price of the volume. The Editorial corps of the LUMBERMAN, composed of Messrs. E. B. Northrop, H. A. Chittenden, Jr., and W. H. Bishop, is a strong one, and one which will keep above the high water mark of journalistic ability and success.—*Neenah Gazette*.

## WISCONSIN RIVER LUMBERING.

## St. Louis Market Overstocked.

*Correspondence Milwaukee Sentinel.*

A gentleman operating at Jenny, on the Wisconsin River, said that he had been in the trade for twenty years, and that in all that time the country consuming their lumber had never been so completely overstocked. He had just returned from St. Louis, and his estimate is that in that city there are fully 150,000,000 feet more than ever before at this season of the year. Further than this, he says, St. Louis dealers expect that, as a result of general business stagnation their winter's sales will fall 100,000,000 behind what they might have reasonably expected under more favorable circumstances, which is equivalent to saying that the principal market for the lumber of the middle and northwestern parts of Wisconsin will find on its hands, when spring opens, about 250,000,000 more than it ever had before at the same season. Added to this is an immense amount of lumber in transit, frozen in, or housed on account of the discouraging prospects for running it and finding a market. Old soldiers in the business have told me that if the ice should go out of the Mississippi by a freshet, there must inevitable be a great deal of loss from rafts now lying in insecure positions, caught unexpectedly, and still more from others that remain in the water because the owners deferred incurring the expense of drawing them out and piling them.

## WHAT THE LUMBERMEN ARE DOING.

Of course, operations in the woods for the present are controlled by two strong considerations: first, by the condition of the operator's finances; and secondly, by the prospect for a remunerative market, when his winter's work can be brought into marketable form and run off. To be brief in stating the condition of both these weighty considerations, they may be called quite discouraging. It might be judged at once that financial matters are close with lumbermen, for they are close with men in other occupations; but from what I have always said in regard to the effects of the season upon the general run of sales, it will at once be seen that lumbermen are more than ordinarily embarrassed. They are not slow to acknowledge their embarrassment, and even urge that it is more severe in their case

than even in that of the iron manufacturers.

## IF MONEY WERE PLENTY,

the prospects of sales is such that operations in the woods would probably be much reduced from what they were a year ago. Add to this a present financial stagnation, and it compels lumbering to be carried forward on a limited scale. From the best information that could be gathered, one may estimate operations on the Wisconsin river at about one third of their expected proportions. The capitalists of Grand Rapids, Stevens Point, Wausau and Jenny are all going in with light forces, where they are going in at all. The woods to the north of Jenny are the usual field of their winter's work, and in this region they have only about nine small camps where there were forty-five to fifty a year ago. On the smaller streams there is a little work being done, but nothing that could be called lumbering on the scale of former years. Besides these, a few men are at work on private account, to give employment to themselves and their teams, and this about sums up the stir for this winter in a business that has been remarkably active and remunerative on the Wisconsin river for several years past.

Careful compilations show that there will be 7,500,000 feet of white pine taken out of the Ottawa lumbering district this season, against 12,500,000 last year. There will be at least 5,225,000 feet of red pine. Wages are reduced \$5 to \$7 per month lower than last year, and provisions are cheaper.

A letter of recent date from D. H. Pulcifer, one of the genial landlords of the Wescott House at Shawano, says that sleighing is excellent in that locality and that logs are being banked in fair quantities; the only drawback to lumbering being the condition of the swamps which are not frozen hard enough to make good roads. There are 38 camps in the vicinity of Shawano.

### PATENTS AND IMPROVEMENTS IN THE LUMBER TRADE.

Patents issued Nov. 25th, included the following:

For Head-Block for Saw-Mills, to Gustavus A. Prescott and Joseph Barsaloux, Sandy Hill, N. Y. Two pawls are attached to a lever upon opposite sides of the fulcrum, and produce a continuous movement of the sliding head to which they are attached when the lever is oscillated. By turning the lever down upon the ratchet-rack the head is locked in position.

For Saw-Set, to William J. Boynton, Battle Creek, Mich. The claim is for a saw-set, combining in its construction two jaws, having a throat to receive the extreme end of the saw-tooth to relieve it of pressure, two inclined faces for bending the tooth and two flat surfaces for grasping and holding the saw-blades, arranged to operate substantially as herein shown and described for the purpose specified.

For Saw-Mill Dog, to Edward H. Stearns, Erie, Pa. A series of self-adjusting dogs are arranged within the setting-knee of the head-block, and are attached to a lever, from which they receive their vertical movement.

For Saw-Mill Dog, to John Torrent, Muskegon, Mich. A series of self-adjusting dogs are arranged upon a vertically moving bar.

For Metallic Plane, to Joseph F. Baldwin, Boston. A metallic carriage, supporting the plane iron and raising or depressing it at any desirable angle, is operated by a screw nut moving in either direction.

For Machine for Cutting Veneers, to William H. Williams, Green Point, Brooklyn, N. Y. The knife carriage is adjusted on inclines and is moved automatically by screws so that the pitch of the knife is maintained as the log is reduced in its diameter by successive cuts.

For Compound for Filling Wood, to Cyrus E. Bradley, Wilmington, Del. The claim is for a compound for filling the pores of wood-work prior to the application of varnish, consisting of a solution of para or india-rubber, shellac, litharge, and sugar of lead compounded in the manner and about in the proportions substantially as set forth.

For Planing Machine, to John Rankin, Binghamton, N. Y. The planing cylinder is driven by a system of gearing that im-

parts power equally upon opposite sides of the cylinder-shaft.

An extension was granted for the patent on improved Journal Box for Saw-Mill Carriages, granted to William M. Ferry, Jr., November 19, 1859. The claim is for a single casting, molded with an intermediate space and with offsetting boxes on each side of said space, substantially as and for the purposes set forth.

### LUMBERING IN THE LAKE MICHIGAN DISTRICT.

Amount of Lumber and Logs Left Over from the Crop of 1873, in the District Tributary to Chicago—A Lumberman's Association Required to Remedy the Evil of Over Production—Our Correspondent Expects More Than a Full Stock in this Market for 1874.

CHICAGO, Ill., Dec. 24, 1873.

EDITORS WISCONSIN LUMBERMAN:—  
In the last number of the WISCONSIN LUMBERMAN I read your remarks on an article recently published in the *Chicago Tribune* in relation to the amount of lumber and logs remaining at the manufacturing points at the close of navigation of the present season, also in relation to the amount of logs being provided for the trade of 1874.

As the estimates of the *Tribune* are considered substantially correct by those in the market, who have made inquiry, I beg to call your attention to such facts, as have been obtained by correspondence and otherwise, as I believe the information will be of value to many of your readers, and to the trade generally.

The fact that less logging will be done in the western portion of Wisconsin, as stated in your last number, even if correct, would but slightly effect the lake markets, that are wholly supplied from lake ports—

and it is to the lake district only that this letter refers.

Reliable statements have been received since the close of navigation, that fix the amount of lumber and logs of 1873, remaining at the mills west of Mackinac and tributary to Chicago by water, at 450,000,000 feet. More than half this amount is held at Muskegon, Manistee and Ludington, and the total is fully one half the requirements of this port for next seasons supply, if sold at paying prices. Estimates of the amount remaining at Lake Huron ports added to the above, somewhat exceed the quantity as stated in the article above referred to.

Had this information been published before logging plans were perfected for the coming year, together with a correct estimate of lumber held at the principal markets, much good must have resulted from it, but very soon after the financial troubles of September, reports were circulated that a great number of manufacturers must retire from business until better prices could be obtained for lumber, and mills generally would be but half stocked. This has been generally published in western journals, and many manufacturers have from this cause, added to their winter's business, when prudence would have caused them to curtail operations. The true remedy for this evil is an association of manufacturers, to hold semi-annual meetings, and to furnish its members all information of importance to them relating to the trade.

Other manufacturing interests employing much less capital have

adopted this plan with success:—I do not advocate any combination looking to advancing prices beyond a fair paying rate, as that must surely result in additional machinery, and ultimately in an overstock of lumber.

To this date, the present winter has been unfavorable for logging, yet more than a full stock will be provided for 1874. Of course the market price will entirely depend on the necessities of manufacturers. The experience of October and November last does not lead us to believe that low prices will prevent large receipts. Lumbermen as a class saw too much lumber, even in prosperous seasons—and ten years of prosperity have resulted in too many mills and very great improvements in mill machinery.

A similar state of trade existed in 1858. Then the manufacturing capacity was almost double the requirements of the market, and few mills were built until the growth of the country made such property again desirable.

The large amount of capital now employed in manufacturing lumber, may prevent a decline in price equal to that of 1858, but so long as the market continues overstocked, no profit can be expected, in comparison to the amount invested or the risks incident to the business. \*\*\*

---

The cut on the Plover river—tributary of the Wisconsin—this winter will not exceed three million feet. The usual amount on that stream has heretofore ranged from ten to fifteen millions.

## EDITORIAL NOTES.

We wish the lumbermen of the northwest a Happy New Year, and will arrange with Father Time to extend our congratulations to August 1st that our well-wishes may be returned with assurances of prosperity, by the toilers among the pines.

The Wisconsin Valley R. R. is completed to the junction with the Wisconsin Central and regular trains are now run. Wausau will be reached early next summer, by the Wisconsin Valley, and thus one more important lumbering locality will have transportation facilities to the south and west.

As an indication that intelligent dealers in Chicago are not always of the same opinion, we may say that we recently witnessed a small wager laid in relation to the amount of lumber now in pile in the Queen City. One party claimed that there was now a greater quantity in pile than at this time last year; the other gentleman holding there was not even an equal amount. The inspector's report for January was to decide the matter.

THE WISCONSIN LUMBERMAN is fairly launched on the journalistic sea, and is making its regular trips, on time, (but not on "tick") to the many subscribers who are profiting by the valuable cargo of information delivered monthly. We want every lumberman to interest himself particularly in this publication, and send us items of information. We want news and opinions from the lumbering localities, and really insist that our friends fur-

nish us with at least occasional contributions.

The line of the Wisconsin Central railroad, on its way to the Great Lake, traverses hundreds of thousands of acres of hardwood lands which embrace the choicest Maple, Oak, Ash, Butternut and other varieties of timber. There is probably no locality in the west which offers equal inducements to manufacturers of hardwood lumber. Timber is cheap, of superior quality, and now the transportation facilities are unsurpassed. Ere long the hardwood lands of northern Wisconsin will equal the present value of pine.

Wisconsin lumbermen or their wives and families visiting Milwaukee, should not miss the opportunity afforded of viewing the finest Art Gallery in the west. We refer to the Gallery No. 416 Broadway, under the management of B. Frodsham. Some of the finest paintings are representations of scenes on the Wisconsin and Black rivers and would be immediately recognized by lumbermen of those rivers, as familiar places. The great painting "Consolation" is a feature of the Gallery and is alone of merit sufficient to induce a visit from every lover of true Art.

The tide of emigration which has heretofore streamed across the state of Wisconsin to the fertile fields of Minnesota, Iowa, and Nebraska, is being somewhat diverted by the attractions of the northern portion of our own state, and is commencing to appreciate the fact that a locality

raising 36 bushels of winter wheat to the acre isn't so bad an agricultural region after all. In point of fact, there is no region in the west more perfectly adapted to the growing of winter wheat, rye or the grasses, than Wisconsin north of latitude 44°. The average of the winter wheat crop of Marathon county this year was thirty-six bushels to the acre and of a quality unsurpassed. The protection afforded by the dense forest is even favorable to the growth of nearly every variety of northern fruit trees and the season is of sufficient length to ripen early varieties. The day will surely come when central and northern Wisconsin will be considered of equal importance in point of agricultural development, with the best portion of the prairie country of the west.

---

#### SOMETHING USEFUL.

---

A monthly magazine which serves a practical purpose is something of a novelty, owing to the inveterate propensity of mankind to take their amusement out of a patent pail and their business out of a thimble. Such a novelty however is the WISCONSIN LUMBERMAN, a periodical whose type and binding resemble very much those of a congressional pamphlet, and whose sixty pages of reading matter contain pointed and timely discussions of almost every subject connected with the lumber trade. The November number of this magazine is now before us. It is the second only which ever has been published, and owing to the unfortunate tendency above mentioned we apprehend that an increase of patronage would not be by any means superfluous. Yet if the circulation of the LUMBERMAN be at all commensurate with its value, it ought to have as good support as any magazine in the state, for every one interested in lumbering ought to read it. Among the articles for the present number we notice a full account of Pond's gang saw jointer, manufactured and first used in this city,

essays on the future demand for lumber, the growth of pine timber, lumbermen's association, the panic, and statistics of the trade in Milwaukee, Oshkosh, on Black River, etc. It contains also abundant and judiciously selected extracts from the newspapers of the lumber regions to which, as might be supposed, the *Free Press* contributes largely.—*Eau Claire Free Press*.

---

SHADE TREES.—John J. Smith, Esq., ex editor of the *Horticulturist* and editor of *North American Sylvia*, has recently expressed his views in relation to the proper species of trees for shading our streets, with hints for their management. He protests against the usual method of mutilating this class of trees after they have attained full size, and calls attention to the fruit tree grower, who begins to prune as soon as the trees are set out and while the limbs are necessarily small. Attention is called to the fact that we cannot judiciously plant fruit or nut-bearing trees along our side-walks, nor even handsome flowering trees. Then again, we are restricted to those which will flourish in smoky towns, thus debarring the ever-green family. In many instances streets are quite narrow, often only thirty feet wide, so as to afford insufficient space for the larger trees. "As well admire a sick monkey or a dying cat as a plant struggling for life between a curbstone on one side, sand, brick, and rubbish on the other, and the air and rain excluded from all." The silver maple recommended above all others for a popular street tree, provided it receives proper care when young; but "it wants attention every week during the growing season, if we expect good results." Trim when young, is our writer's advice, and never allow it to form large limbs to be cut away in after years. He recommends the sugar maple highly, and among smaller-sized trees suggests the red bud or judas tree. Attention is called to the claims of the magnolias and the yellow wood or virgilia. The deciduous cypress, the weeping cypress (*glyptostrobus Sinensis*), and the lindens are all worthy of a place in our list. Some of the oaks, Kentucky coffee tree, varieties of ash, native beech, copper beech, fern-leaved beech, and the salisbury are all fine. At the east and especially in portions of the middle states the elm is infested with worms and must be rejected, but the species known as the slippery elm appears to be an exception. He says the



Norway maple casts too dense a shade for the street. The sycamore maple is a more rapid grower than the silver, and among oaks the overcup or macrocarpa is the fastest grower of all. In broad avenues of 80 or 100 feet in width, oaks, hickories, tulip poplars, and many others may be used. Always select trees that have been twice transplanted if possible.

#### NEW GROWTH OF TIMBER.

Whenever an oak tree, growing along the large rivers of this State, is cut down, from the stump there immediately starts up a number of sprouts, the larger of which if allowed to grow undisturbed will in about ten years attain to a height of thirty feet and six inches in diameter. If all of these sprouts, but about two of the stronger, be broken off when they are from one to two feet long, the two left growing will grow much more rapidly and make better shaped trees. Land so situated and covered with oak timber, and managed as above indicated, can be made to pay the interest on from two to three hundred dollars an acre per annum for wood alone. It is a fact, though not generally known, that this young growth of oak is equal if not superior to the best of eastern oak for all purposes to which oak timber is put. A knowledge of this fact renders such land more than 300 per cent. more valuable than it would be if such timber was only fit for wood. In this connection we notice a statement of the *Santa Cruz Sentinel* that "where one redwood tree is cut or burned down a colony starts up from its roots. They are of very rapid growth. Redwood trees planted in Santa Cruz fifteen years ago have attained some eighty feet in height and nearly three feet in diameter at base. So that if protected we should soon have a dense forest from the stumps." This fact should be taken advantage of in cutting our redwood forests and care taken to secure their renewal in the manner above described. By this management the land containing our redwood forests can be rendered the most valuable land in the State.

**TIME TO CUT TIMBER.**—Dr. Hartig, who has made numerous experiments to determine the point, states that March and April are the best months in which to cut timber for building purposes, as it then

contains its lowest per cent. of moisture, which he states to be 47 per cent. During the three previous months it has 51 per cent., and in the three following ones 48. He further states that properly seasoned timber should not contain more than 20 to 25 per cent. of moisture, and never less than 10 per cent. If the moisture is removed to a still greater extent the wood loses its strength and becomes brittle. An English authority states that if trees are felled as soon as they are in full leaf, and allowed to remain undisturbed until the leaves dry up and fall off, the timber will be found well seasoned, the leaves having exhausted all the moisture in the wood.

#### LUMBERING.

Receipts at the Chicago Yards the Past Season—Depression of the Trade—The Rafting on the Lake—The Wholesale and Retail Trade.

*From the Chicago Tribune.*

The receipts of lumber at Chicago for the past season, from the points named, were, in millions of feet, approximately, as follows: Saugatuck, 20; Grand River, 85; Muskegon 300; White Lake, 60; Pentwater, 16; Ludington, 75; Lincoln, Hamlin, and Duck Lake, 14; Manistee, 150; Portage Lake and Frankfort, 12; Traverse Bay, 12; Cheboygan, 8; Saginaw, 10; Monastique,  $\frac{1}{2}$ ; Cedar River, 10; Menominee, 125; Peshtigo, 40; Oconto, 45; Pensaukee, 12; Suamico, 12; Green Bay and De Pere, 5; Ford River, 18 $\frac{1}{2}$ ; Sturgeon Bay, 15; Escanaba, 4. The balance, miscellaneous.

The lumber trade has been greatly depressed this season, owing principally to an over-production of the commodity, and more recently to the financial troubles. The season's business has been unprofitable to most of those manufacturers who have placed their lumber on forced sale; while with others, especially those who have retailed from their yards, the prices realized have been in a measure satisfactory. The Chicago market annually absorbs a little over 1,000,000,000 feet of lumber, and an immense quantity of lath and shingles. The season of 1872 being the great rebuilding year, the receipts amounted to nearly 1,200,000,000 feet. The local trade of the current year was, of course, less, but above the average of previous seasons, while the shipments of lumber to the interior exceed those of

1872 by about 150,000,000 feet. The receipts and shipments of shingles are becoming less each year, they being shipped to a greater extent direct from the mills by rail to the interior on orders. The receipts this season were greatly shortened, and the fall trade interrupted, by the panic, which almost paralyzed an active and advancing wholesale market, compelling manufacturers to shut down their mills and immediately curtail their shipments. Less lumber has been received from Oconto this year than usual, the opening of new railroads making it more of a distributing point for its product than formerly. There is also considerable lumber shipped direct from the Michigan west shore ports, now that they have railroad communication with the interior.

The rafting business was inaugurated on Lake Michigan this year. About 2,000,000 feet of lumber in the log was successfully rafted to this port from Ludington. This business will probably receive more attention next season.

The wholesale market, though active at times has generally lacked animation. The greatest decline has been in the common grades; choice lumber and shingles have brought proportionately better prices. The receipts for the first three months were very heavy, especially in May and June, when the capacity of the lumber fleet was largely increased by grain vessels entering the trade, the freights being more satisfactory than those at that time obtainable for grain. Common lumber opened at \$12@13.50 and declined to \$9@10.00 about the 1st of June, continuing at about this range until early in the fall, when an advance was obtained. The fall trade promised to be active and the market was very firm. The receipts at that time were lessened by all the lumber vessels capable of carrying grain entering the latter trade, being attracted by the high freights. Joists and scantling were then selling at \$9.50@10.75; but the panic interrupted the trade, and prices fell to \$8.00 for piece some selling at \$7.75, and \$8@9.50 for common boards. Choice boards and strips have sold at \$12.00@18.00; average price about \$15.00, and of piece stuff \$9.50. Lath opened at \$3.25, declined to \$1.75, advanced to \$2.00, and closed at \$1.75@1.87½, afloat. Shingles have sold at from \$2.87½@3.37½ afloat, and \$3.00@3.50 on track. Shingles were scarce in early fall, and, with an active demand,

had advanced to \$3.25@3.37½ afloat, and \$3.37½@3.50 on track, when the panic came and stopped the trade, and they soon declined. Selects and clears sold before September at \$18.00@45.00.

The yard trade has been active, and in a measure satisfactory. The interior demand has increased, and the city trade exceeds that of previous years, last season excepted. Yard prices have been lower this season than last, the greatest reduction being made in the common grades, which have declined \$3 per m, selling on the average at \$12@13, though common lumber has sold lower than this. The upper grades have ruled comparatively steady throughout, prices being not very much lower than last year. Shingles and lath have fluctuated some, but were tolerably steady, and scarce and firm during the early fall.

Lumber was very active, and advancing in September; but the panic checked the upward tendency of the market, and although the retail trade continued uninterruptedly active for several weeks after, prices for common soon receded to \$12, and concessions have since been made for cash.

Following is a statement of the stocks of lumber, shingles, and lath at the yards on Jan. 1 of the years named:

	1871.	1872.	1873.
Sawed lumber			
and timber ft.....	295,124,252	233,871,527	321,943,232
Shingles.....	22,633,000	70,920,000	40,301,000
Lath, pkgs.....	33,982,550	17,55,350	27,751,529

The annual inventory of the stocks at the yards has not yet been taken. The stocks are probably less than a year ago. The stocks of lumber is thought to be not far from 300,000,000 feet.

Reports from the various lumber districts indicate that logging operations are to be conducted on a much less extensive scale this winter than last. The experience of this season and scarcity of money will, it is thought, cause lumbering to be reduced at least one-half. Besides, the winter so far has been unfavorable for active operations in the woods. Owing to this general disposition to curtail operations, there is some talk of a short supply of lumber next year, though our dealers generally anticipate that the supply will be at least ample. The possibility of a short supply will doubtless stimulate many to renewed exertions, besides men are plenty and labor cheaper than last year. In addition to these facts, however, there has been a large amount of lumber and logs left over. The estimate

given makes the total amount in logs and lumber left over on the shores of lake Michigan at 581,000,000 feet. Another authority makes the amount for the state of Michigan at 1,650,000,000 ft. The estimated quantity of logs, including some lumber left over last year at Saginaw, Muskegon, Manistee, and Mason, Ottawa and Oceana counties was 582,000,000 feet. At Ottawa only 750,000,000 ft. will be got out this season, against 1,250,000,000 last year.

The estimated amount of lumber and logs left over on the east and west shores of Lake Michigan is 581,000,000 feet, distributed as follows: Saugatuck, 10; South Haven, 5; Grand Haven, 75; Muskegon, 150; White Lake, 17; Stony Point, 3; Pentwater, 3; Ludington, 27½; Lincoln, 4; Hamlin, 2; Free Soil, ½; Manistee, 110; Portage Lake, 1; Frankfort, 2; Traverse City, 6; East Bay, ½; Elk Rapids, 1½; Cheboygan, 10; Monastique, 3; Two Rivers, 2; White Fish Bay and Masonville, 3; Cedar River, 5; Menomonee, 10; Peshtigo, 20; Oconto, 50; Pensauckee, 20; Little Suamico, 5; Big Suamico, 2; Duck Creek, 1; Green Bay, 5; Red River, 3; Little Sturgeon, 5; Big Sturgeon, 1; Two Rivers, 10; Kewaunee 8, million feet. The estimated amount of logs left over in the Saginaw district is 437,250,000 feet. The stock of lumber on hand on the Saginaw river is estimated at 175,000,000.

#### RECENT GROWTH OF DEPERE.

De Pere and West De Pere are thriving villages, five miles from Green Bay, on the Fox River which separates them. These rival places have each a village charter, but all sensible people admit that the two should be united as one corporation, viz. the city of De Pere. We learn that an effort will be made to procure a city charter this winter. De Pere contains about 2,500 inhabitants, West De Pere, 1,800. During the past season both villages have grown remarkably fast, new blocks and private residences appear on all sides. The Bank of De Pere building, just finished by R. M. Hunt, is a model for style of construction and beauty of finish; the entire front is iron and glass, the other walls are of Menasha brick. Geo. S. Marsh has a

very fine building nearly completed, also destined for a bank, with a spacious basement and room for offices on second floor. These and other substantial buildings have been raised on Main street this season. The largest vessels sail up to the docks on both sides without difficulty. A line of propellers ran regularly from De Pere to Chicago the past season and was liberally patronized by passengers and freight. The National Iron Co., have two furnaces on the east side for reducing iron ore to pig iron; the furnaces are located near the river and have a large and convenient dock where the ore is landed from vessels and propellers that bring it from Escanaba. The manufactured iron is shipped from this dock during navigation. The Milwaukee & Northern railroad have a side track running to the furnace for convenience in handling iron, coal, ore, &c. The Fox River Iron Co. have also two furnaces in West De Pere; docks for receiving and shipping iron; and connection with the Chicago & Northwestern railroad by a side track. These furnaces are idle at present but the company expect to commence operations soon using one furnace only until the advent of better times.

A dam across the river furnishes an inexhaustible water power, on which we find grist mills, saw mills, planing mills, pump, pail and numerous other factories, on both side of the river, and on the dam in the river; furnishing employment to a great number of persons and consuming vast quantities of timber and other material. The De Pere car factory, of West De Pere, employed 175 men last summer and had orders for all the cars they could make. At present only 50 men are employed. In fact De Pere, like all other parts of the country, and particularly the manufacturing towns, feels the effect of the panic. Every establishment has discharged more or less workmen. Some have closed for the winter and those that continue operations find it difficult to pay their employees. But our people are hopeful and confident that the growth and prosperity of De Pere will not be seriously affected, that next year will add new manufactories on our water power, that a rolling mill will be established between here and Green Bay, that property will increase in value and our population in numbers, and that in a few years the city of De Pere will be the leading manufacturing city on the Fox river.

H. M.

## EDUCATION AND COMMERCE.

**ADDRESS OF THE PRESIDENT, ROBERT C. SPENCER, PRINCIPAL OF THE SPENCERIAN BUSINESS COLLEGE, MILWAUKEE, WIS., BEFORE THE INTERNATIONAL BUSINESS COLLEGE ASSOCIATION.**

**Relation of Various Human Industries to the System of the Business Education—Scope of Business College—Its Bearing upon Commerce, Agriculture, Mining, Manufacture, Building, Politics, the Professions and Religion—Business Education of Women.**

From the proceedings of the fifth meeting of the International Business College Association, held last June in Cincinnati, Ohio, which have just been printed in an elaborate pamphlet, we take the following report of the opening address by Mr Robert C. Spencer, of the Spencerian Business College, Milwaukee.

You are convened to promote the cause of business education, and to carry out the objects of this organization.

As declared in the preamble to its constitution, this association was formed "*For the purpose of developing, diffusing and perpetuating a sound and comprehensive system of business education commensurate with the growing wants of business life, and for the purpose of placing this department of education in co-operative relations with the system of general education.*"

These objects concern all the interests of modern progress, and their claims are strong and permanent as civilization.

The development of such a system of education as this association contemplates must be a work of time—possibly of centuries—in which we are but pioneers breaking the way.

In meeting the growing wants of business life, every interest needs to be considered and duly provided for, so as to fit people properly for their various pursuits.

First in order and importance among human industries must be placed

### AGRICULTURE.

Appropriate recognition should be given to this business in our system of education, so that we may extend to it every possible aid and encouragement.

I recommend such measures as will identify and connect us, as directly and actively as may be practicable, with the various organizations for the encouragement and improvement of the different branches of agriculture; also, that pains be taken to suitably interest our students in these noble occupations by

means of such lectures, study and drill as may be suited to the object.

The value of a business education such as we can now impart is generally estimated by farmers according to its availability in enabling them to leave the farm and go into some other line of business. The farmer should be as thoroughly a business man as the merchant or dealer, and the education which we are prepared to give him can be used on the farm to great advantage in swelling its profits, and in making agriculture more attractive. A business education is quite as necessary to make the farm pay as it is to make the mine, the shop, the manufactory, or other business profitable and pleasant, and farmers ought more generally to understand this fact.

The lack of business knowledge among the agricultural classes is the prolific cause of financial evils that often embarrass and seriously injure all other kinds of business. Among these might be mentioned the abuse of the credit system, and a general ignorance of the laws and customs of trade. The financial disorders arising from these sources are often aggravated by the excessive competition of dealers, and the failure of customers and merchants to check and regulate themselves and one another by thorough systems of accounts and by frequent settlements. The diffusion of such knowledge and training as the colleges of this association offer, will greatly diminish these evils, and promote systematic and healthy progress and relations in all branches of business.

The published transactions of societies devoted to agriculture in general, to horticulture, pomology, breeding of domestic animals, and kindred matters, are invaluable as means of keeping pace with the general advance and improvements with these lines of business, and all such publications should be placed within reach of our students, and their attention called to them.

I recommend, therefore, that immediate steps be taken to lay our wants before the bureau of agriculture at Washington, and the various state and other societies whose publications we need. I would also suggest in this connection the propriety of signifying our wants to the proper authorities in the Canadian provinces and in England, and other countries, soliciting their favors.

I feel it to be my duty to call attention specially to the subject of forests and forest tree culture, and to urge that in all of our colleges pains be taken to inform our students regarding it, as a matter of business interest, public economy, health and safety.

The better qualities of citizenship and character are so strengthened by ownership in the soil that we ought, seems to me, to encourage all of our students early to acquire such property, and to incorporate with it the interest of their minds and the labor of their hands.

In furtherance of our objects as they stand related to agriculture, I suggest for considera-

tion the expediency of issuing, under the auspices of this association, a hand book for agriculturalists, containing in condensed and simple form a treatise on business and book-keeping suited to their wants.

I submit to your thoughtful consideration and most liberal regard this vast business, knowing that whatever it may be in your power to do for it will be done heartily and well, as for the common good of society dependent upon it for the supply of wants that are vital, incessant and universal.

#### MINING.

The treasures stored beneath the surface of the earth are becoming better known, and more generally utilized and highly valued.

The capital and labor employed in the development of this wealth, statistics show to be very large in amount.

The products of mining, like those of agriculture, enter into and concern, directly and indirectly, every economy, and constitute the material basis of civilization.

Coal, iron, copper, stone, lead, tin, zinc, silver, gold, platinum, and the many other substances employed in the arts for which new and greater uses are constantly being found, are powerful elements in the social problem, as shown by the engine, the railway, the telegraph, and the vast manufacturing industries, also by trade and commerce, and the conveniences of domestic life.

The organization, financial management, and prosecution of mining operations, require superior business qualifications, which render necessary the instruction training of the business college, as well as the school of mining. To meet the growing wants of business life, this association will find it necessary to be particularly mindful of the increasing importance and demands of mining, and make such special provisions for it as may be required in the progress of its work.

Our colleges should be supplied with suitable books of reference on the various branches of this subject, and the inquiries and studies of our students in this department intelligently directed by lectures and other means at our command. The applications of book-keeping to mining are generally provided for in our schools; also instruction in the organization of mining companies, etc. etc.

It is desirable to have in our colleges the published report of state, national, and other geological surveys, accompanied by suitable maps; also, such specimens of minerals as are of economic and commercial importance.

I therefore recommend that measures be taken to make our wants in this respect known to the proper authorities; also, our desire to do what we can to foster those interests upon which national wealth and public prosperity so greatly depend.

#### MANUFACTURES.

Every community that has made any con-

siderable advance in the industrial arts, and learned the utility of the division of labor, is more or less conscious of the value of manufactures.

The great movements and general activity that mark the most advanced and wealthy nations and communities in the development of manufactures are particularly striking at this present time.

Facts are constantly coming to notice which go to show not only how enormous has become these industries, and how interwoven with all the concerns of life, but that their future growth will probably exceed our most extravagant anticipations.

The developments of mining, agriculture, trade and commerce are affecting material changes as regards the great centers of manufactures, as shown by the condition of things in England and elsewhere at this moment.

What this association and its colleges will be able to do in the future to meet the growing wants of manufactures, time must determine.

The thorough business qualifications and accountantship which are so indispensable to the intelligent and successful prosecution of all manufacturing enterprises, our colleges are now imparting.

In addition to this, community has a deep interest in providing, as far as possible, such instruction as is necessary to the highest degree of skill and efficiency in the execution of mechanical work of every description, the general superiority of its artisans, and the intelligence and thrift of its operatives. At present in America this education is limited almost entirely to apprenticeship, unaided by any systematic instruction or training in arts and sciences that do so much in the development of manufactures.

The centres of manufacturing industries and population are cities and large towns where our colleges are generally found, and here should suitable education for these workers be provided.

If it be wise policy (as we hope it may prove) to provide for the special education of farmers at the public expense by founding and endowing agricultural colleges by funds arising from the sale of public lands and other revenues from public sources, would it not be equally so to furnish suitable education for the mechanical pursuits upon a similar basis? If I mistake not, the act of congress for establishing so-called agricultural colleges also contemplated that those institutions would provide instruction in mechanics. To what extent they have attempted for succeeded in doing so I am unable to say. It is to be feared, however, that this object is neglected in consequence of the scholastic bias of these agricultural colleges. With scarce an exception, they are located in rural and inconvenient places, away from the centers of mechanical and manufacturing interest, and this puts them quite out of the reach of many who

would otherwise gladly improve any useful opportunities they may offer.

In addition to the facilities which we may be able to provide suited to the special needs mechanics wishing to perfect themselves in drawing and other subjects directly pertaining to their business, something can be accomplished in a general way in our colleges for the encouragement of manufactures and mechanical pursuits by means of lectures and familiar talks. In this way we shall be able to make apparent the claims of the subject, and set forth properly its relations.

Those who contemplate engaging in such occupations can be advised as to preparation, and stimulated to master the many details and difficulties of study, observation and experience which are the conditions of real superiority and distinction in this or any other line of work.

I recommend that some suitable expression be made of the spirit of this association regarding manufactures, together with a brief statement of the present relations and claims of our colleges as to such business; also, that we signify a desire to be identified with movements for the promotion of these interests, and solicit manufacturers to place in our colleges such samples, cards, circulars, price lists and other matters as will serve to bring their establishment and goods to public notice, and at the same time prove useful in our system of business education.

#### BUILDING.

Since man began to emerge from that condition in which his highest intelligence was only sufficient to lead him to seek shelter in caves, the hollow trunks of trees, beneath the leafy canopy or under the fair sky, and since his constructive genius began to develop, the art of building has marked his progress and given expression to his idea.

The power that he has gained over nature and the general improvement of the condition of man is due greatly to the exercise and cultivation of his capacity for building habitations, machinery and the means of safe, cheap and rapid transit.

These branches of business, grown to such enormous proportions, and so interwoven with the life of the race, claim the attention of this association in carrying out its objects. The investments, operations and interests which building embraces, are matters of a business and financial nature involving many vital concerns of society which come within the province of business education.

To what extent such a subject can be treated in our colleges depends upon circumstances. More or less attention can be given it in all of them in various ways.

House building is a branch of the subject the more essential features of which can be introduced with little difficulty so far at least, as regards its relations to health, which is of first importance. The building of cities and

towns with due regard to sound sanitary principles in the construction of buildings, sewers and in water supplies and security against fire, is a matter that we can suitably notice in its bearings upon public health, morals and economy. That business men in whose hands these matters are, need to have a business education that includes instruction upon these points is very evident.

The construction and economy of railways is a feature of this subject of building that is becoming deeply interesting to the public and requires to be duly noticed in our colleges in connection with the instruction which is given in the system of railroading business and book-keeping.

Wagon roads, bridges, harbors and other public works, including buildings for public use are, of course, legitimate matters for the business college to treat in their relations to business, taxation and public convenience.

Rural architecture and farm buildings comprise much that is appropriate for the business college to discuss, particularly as regards the investments and capital which they absorb and the intelligence and taste which they represent.

The miracles of human genius and the immense labor power which we have in the shape of machinery of every description, are also of the highest importance to the business world, and hence to the business college, in the education of its students, who should be directed as to the means of getting suitable knowledge of the subject which connects itself with the supplying of every want and is an element of the cost and price of whatever enters into human consumption.

#### TRADE AND COMMERCE.

The various talents and tastes among men and the diversities of soil, climate and natural conditions which give rise to an endless variety of products and necessitate a constant and general exchange have developed those marvelous activities of trade and commerce which distinguish this age.

The account keeping, clerical labor and agency work of trade and commerce create wants which can not be supplied by other means, and hence gave birth to the business college. To meet this important demand is a special object of the present system of instruction and training in the business college. The business community feel and appreciate the necessity and convenience of these schools in supplying its wants and in raising the standard of business qualifications.

The best and more advanced schools of the kind are extending their studies in trade and commerce, and employ ingenious and useful methods of illustration which are very perfect representations of operations in these lines of business.

The student is not only instructed in the principles of trade and commerce, but is trained in their practical application to af-

fairs in which he becomes an active and interested party, feeling the influence of motives, the weight of responsibility and the pressure of obligations as they are felt and understood in real business life.

The claims of our colleges in this respect have become so well established that no thoughtful person considers it wise to engage in any kind of trade or commercial business without first having graduated from a thoroughly conducted business college.

The essential and intimate relations of our schools to trade and commerce will not only grow closer and stronger, but to meet the growing wants of this department of business life, imposes upon this association the duty of keeping itself actively in the line of progress. The work before us in this department is vast, demanding our most intelligent and faithful efforts.

I recommend that steps be taken to inaugurate in our colleges a system of commercial and industrial museums, to be commenced by exchanges between the schools of the association of such agricultural, manufactured, mineral and other products, as will be useful in carrying out such a plan. By such means can much be done to illustrate industrial progress and the development of trade and commerce.

#### TRANSPORTATION.

The subject of transportation is a branch of commercial interest that brings us in our system of business education face to face with growing issues that are surrounded with difficulties and dangers of a grave character.

I recommend that early measures be adopted for perfecting the system of transportation between the colleges of this association on a correct basis, in order to meet our wants in carrying on the business of intercommunication, and to illustrate sound principles of public economy in this branch of business.

#### THE LEARNED PROFESSIONS.

Like all other departments of life, the learned professions depend for their success in a greater or less degree upon proper business qualifications and financial management. Consequently, the relations of our system of education to this class of people is important as a means of promoting their welfare and saving them from serious ills that they too often bring upon themselves in consequence of business incapacity.

The instruction and drill of our colleges are calculated to give broader and more practical views of life and its concerns to the man of letters, and a better understanding of the wants of society.

Teachers are not only greatly dependent upon the material prosperity of community, but are in duty bound to make their instruction as useful and business like as possible. All other things being equal, the teacher, whether male or female, who has had the

benefit of a business education, will be the most servicable and successful.

The clergy are a class of teachers whose various duties and relations demand that they have a knowledge of business affairs. This is essential alike to their own and the interests of church organizations and enterprises, and to the proper exercise of moral influence in community. Business education for the clergy would correct an wrong tendency toward under-estimating the importance of business life, and the beneficent uses which it serves in the development and improvement of the race.

The legal profession are intimately connected with the transaction of business, and in addition to thorough legal study may be assisted in their preparation for their professional duties by the instruction and training of the business college. Every lawyer, like every business man, should be a thorough accountant.

The business college is indebted to these several classes of people for much valuable encouragement and aid, for which it will return a full equivalent in the services it is able and willing to render each and all in completing their qualifications for their various professions.

#### BUSINESS EDUCATION OF WOMEN.

Society has advanced so far in the more civilized nations as to emancipate woman from the lower forms of slavery, and in many respects to accord her equal rights with man.

There still exists, however, much difference of opinion among educators and others as to her education. While there is a general disposition to extend an opportunity for all the education that she desires, there are doubts as to woman's intellectual capacity for profound study. There are also very strong objections offered to admitting her to the same schools to be instructed in the same classes with males. The co-education of the sexes is as yet in the experimental stage. Predictions are various as to the final result, which time alone can fully determine.

The fact that woman has become sufficiently free to earn wages for herself, own property, carry on trade, and transact business as principal as well as agent, has created a necessity for offering her a chance to obtain a business education. This the business college, with rare exceptions, undertakes to do, and as far as I am informed on the subject, in most of them the co-education of the sexes prevails with general good results.

In those kinds of financiering in which the exercise of smaller economies comes into play, woman generally excels. In keeping accounts she is likely to be quite as exact, and as a rule, more nice and methodical than man.

As employees in the counting room, and in other capacities as clerks, there may be objections urged against women which are valid. If women propose to fill such positions, they

must prepare themselves to do the work as well or better than men, and at lower prices. Not only so, but they must neither expect or ask consideration on account of sex. On these grounds only can women successfully compete for employment.

When, however, woman asks that the natural laws of trade which govern labor as well as other things, shall be suspended in her favor, she is unreasonable, and must fail in her demands.

The inability or failure of female agitators of woman's rights to comprehend and practically apply this universal and simple law of trade, shows woman's need of such education as the business college can give her.

That the business college and this association have it in their power to do much for the emancipation of woman from pecuniary dependence and its attendant evils, and to improve her condition, I do not doubt, and I trust that the unjust bias that has grown out of her long subjection will not deter us from extending to her every encouragement to fit herself for independent self-support.

**DOMESTIC SERVICE.**—Since there can be no substantial thrift and material prosperity unless the household economy, of which the kitchen is the basis, is in working harmony with the farm, the shop, the counting room, the study, and all the industries of man's hand and brain, this realm of woman becomes one of very great importance from every point of view.

Could this association, or any other; or any of the political, religious or reformatory organizations, devise some way of converting women into professional and efficient housekeepers, and establish that business among the learned, honored, and well paid professions, we might hope for the millenium.

In considering the needs of woman, I recommend that her want of greater fitness for domestic service have special attention, and that the subject of housekeeping be discussed in our colleges for the benefit, not of women alone, but for the good of society as a whole. Housekeeping should be considered a science and fine art, ignorance of which on the part of a woman should be regarded a disgrace.

#### POLITICS.

Since government affects every interest which it is the object of this association to advance, our system of education cannot ignore politics. Our relation to the subject, however, are not partisan.

The administration of any form of government requires large business and financial capacity and vast clerical labor, which the education of the business college materially assists in qualifying. No efficient system of civil service can be maintained without business education.

We need in our colleges a manual of government, public economy and civil service,

embracing in condensed form, outlines of the various systems of government.

I invite your attention to this subject and recommend that it be given more prominence in our course of instruction.

Many of our graduates and students are called to public life and generally discharge their official duties with credit.

This association has it in its power to do much for the improvement of government and the purification and elevation of politics.

#### RELIGION.

With the subject of religion in any sectarian, theological or ceremonial sense, this association need not concern itself. But there are ways in which our objects are essentially religious.

If we accept the general definition given by Mr. F. E. Abbot, that "religion is the effort of man to perfect himself," or, of that Boston radical, who defines religion as "a recognition of the facts of the universe and a recurrence to them," then our colleges should be religious institutions.

Their religious character however must be of that free and broad sort that includes on a basis of perfect equality, all religions, and incorporates into business the highest moral principles and sentiments which can be gathered from every source.

In short, the business college inculcates honesty and does not meddle with piety. Wherever piety is cultivated at the expense of uprightness, the business college will respectfully protest, because integrity is the grand principle of business life which no religious sanctity must be allowed to tamper with.

In the sense indicated we cannot make our colleges too thoroughly religious or exact too much of ourselves, our students, and society.

#### INTERCOMMUNICATION.

Dealings and correspondence between the students of the colleges comprised in this association are growing rapidly and are marked by stricter attention to the laws and customs of trade. This feature seems susceptible of unlimited development.

I commend it to your special attention at this time and hope that a free interchange of views on this subject will result in measures for giving additional efficiency to this most useful and interesting branch of instruction and training.

**PENNY POSTAL CARDS.**—Recently introduced, are likely to prove a great convenience in carrying on business between our colleges and can be made available in developing this peculiar part of our system of business education.

**CURRENCY.**—Better adapted to our wants should be provided and our system of banking perfected and unified.

#### INTERNATIONAL EXTENSION.

Several European nations have schools of



trade and commerce similar in design to our business colleges.

I recommend that correspondence be opened with such schools and their co-operation enlisted in carrying out the objects of this association.

The bureau of education at Washington, and Doctor J. W. Hoyt, its special representative at the Vienna exposition, may be addressed on this subject and will doubtless lend us their valuable advice and assistance.

#### METRIC SYSTEM.

The adoption of the metric system of weights, measures and currency, by the leading nations of the earth, indicates that it will become universal. I therefore suggest that a system of business be introduced into our colleges based upon the metric system, and that this system be extended to such schools and cities in the old world as will unite with us in the experiment.

#### INTERNATIONAL COINAGE.

The movement for an international coinage will undoubtedly succeed, thus removing another impediment to commercial intercourse and greatly simplifying business education.

In all matters of this kind our association has a deep interest, and should keep its schools up to the most advanced standards of reform and improvement.

#### ADVERTISING.

Our relations toward the public require that we make known the claims and advantages of business education and of our colleges. In doing this, care should be taken to avoid exaggeration and that no expectations be created that cannot be more than satisfied.

The best advertisements that we can send out are well trained students, and any school that does not advertise in this way ought not to exist.

Next to our own circulars, the newspaper is the best medium for reaching the public. The newspaper has rendered invaluable aid in building up the business college, as it has all the great institutions and interests of modern society. The business world cannot too highly value or too judiciously employ newspaper advertising.

Congratulating you upon the grand field of useful and noble labor which you occupy, and and upon the bright and encouraging prospects before us, I commend us all to the guidance of that invisible care that so organizes and environs humanity, that by the necessities, activities and obligations of progressive existence the various elements of wealth are wrought slowly but surely into that highest of values, the ideal, perfected man.

Contribute statistics, estimates, opinions, facts, and \$2.00 a year, to the WISCONSIN LUMBERMAN.

## MILWAUKEE THERMO THERAPEA.

### THE PROCESS AND BENEFITS OF THE TURKISH BATH.

**Three Weeks' Experience at Drs. Hanson & Rogers' Curative Institution—Tribute of a Restored Patient—Testimony of Distinguished Citizens.**

*From the Milwaukee Sentinel.*

That man is poor, though rolling in wealth, who lacks the great boon of health, without which "slumber soothes not, pleasure cannot please," and he is rich, indeed, though he have but the wherewithal to feed and clothe himself, who is well in mind and body. Teach people how to be well and how to keep so, and you have placed them on the high road to honor, happiness and holiness. The papers contain a world of politics, a vast mine of religious and general news, all well, and indispensable to those who would keep up with the times, but too little in regard to the all-important subject of health. Be assured that anything pertaining thereto is eagerly sought for and devoured with avidity.

Among the agencies for the benefit of the sick largely and successfully used is the

#### TURKISH BATH,

and for the benefit of such of your readers as have no practical knowledge thereof, or who entertain erroneous impressions in regard to it, I will try to briefly give an idea of what it is, on general principles, and also a few facts connected with the institution in this city. Perhaps I can do no better than to use the language of another in regard to its *modus operandi*, as it agrees perfectly with my own experience, and is a good description of the average bath.

The bath consists of four rooms, and, gentle reader, let us undress and go through in proper order. In a small, neatly furnished compartment shut off from the cooling room, we prepare for the bath in perfect seclusion. We finally come forth in a state of nature, excepting a crimson cincture. We are ready for the bath. An attendant ushers us into the

#### TEPIDARIUM.

And in a moment we are revelling in a region of intensified summer air. The usual shrinking sensitiveness of the unclothed frame vanishes. The warm, soft air seems to fold us in a delicious embrace. All apprehensions about the Turkish bath disappear in this safe, delightful place. The attendant motions to one of the comfortable reclining seats, over which is spread the drapery of a snowy sheet. We lie down, and the air, the exquisite, caressing, warm air, invades us everywhere, and the luxury of the passing enjoyment increases every minute. We glance at the thermometer; it is 140 degrees, and we wish it was even higher. Pain, weariness, languor, and sick feeling have disappeared, and like the

mystic lotus eaters, we rest in tranquil, drowsy delight. Ten minutes pass as we lay gazing at the sky, through the ceiling window, and the real world is half hidden. The imagination grows active, and it requires but a slight effort to supplement the exquisite touch of the temperature, and we are in the land of eternal summer, with the bliss and beauty of perfected nature around us. Now the skin grows moist and glistens with its exudations. The face, the head, the hands, neck and shoulders perspire first, because in the most normal state from exposure to the air. Soon we are "like Niobe, all tears," but not of pain, and as the perspiration grows more profuse there is no feeling of weakness, because it springs from no physical effort. We feel buoyant, and happy, and disposed to mirth. The attendant examines us critically, and then leads us into the

#### CALIDARIUM.

The difference in temperature is, however, thirty degrees (170.) We enjoy it the more and renew our dreams.

It must be understood that this hot air is perfectly pure, and so tempered as to be rendered perfectly soft. It is absolutely sweet to breathe, and those who only know hot air as it flies off rusty steam-coils, have no idea what it is here. After half or three-quarters of an hour, or more, has been passed in this chamber, we are led into the

#### SHAMPOONING ROOM.

Here a polished marble slab, warm as the air, receives our recumbent frame. Now commences that gentle but wonderful washing, which, until a person has taken a Turkish bath, he can have no idea of. A fragrant lather envelops us, while soft brushes glide over us. The inward man was cleaned in the calidarium, and now the outward man is made as pure as Adam when he first opened his eyes on Paradise.

#### THE SHOWER.

"The free application of water succeeds this by means of the spray, douche and shower bath. At first it is warm, but the temperature is graduated, shading into tepid and cold almost imperceptibly. There is no abrupt transition, no violent change, and extreme cold water is only turned on at the bather's request. Most persons, however, desire it, for the gradual process of the bath has so educated him that he stands the dash of an ice-cold stream without a shudder and with positive pleasure. The exuvia thrown out from the system is removed, the pores are closed and the skin tempered. It must be remembered that during these steps in the bath the bather is completely passive, and hence emerges at the end not only not weakened, but full of

#### EXHILARATION AND VIGOR

He is now dried and enveloped in a sheet, re-enters the cooling-room, takes a siesta on a couch, and reads or sleeps for half of an hour.

Then he is ready to dress and depart into the open air.

#### THE EFFECTS OF THE BATH

are beneficial to a wonderful degree, and many who but for it would sleep the sleep that knows no waking, live to bless the day their attention was directed to it. I mention a few cases coming under my personal observation during my stay of a few weeks at the cure.

Mr. Wm. Schmitz, 282 East Water street, is free to converse of his own case. He had rheumatism and consumption, could not dress himself for two years and a half. "By advice of doctors I went south in October, 1870; returned to Milwaukee in June, 1871, no better; coughed incessantly for several hours in the morning, and raised much pus from my lungs. My first week's treatment here did me more good than all I had done before. My cough and rheumatism left me entirely within the first few weeks, and I have been attending to my business as well as ever since. I am as well as I ever was, and take the baths twice a week to keep so."

I saw Mr. John Dahlman. He is known to all the business men of the northwest. His previous ill condition was well known to his numerous friends in this city. He says he is as well as he could be, and takes the baths to keep so. Mr. D. will be happy to see any one who cares to know anything of his case or the treatment

Master Fred Wahl, fifteen years old, son of the late Christian Wahl, Greenbush street: "When I came to this institution I was paralyzed in both hands and feet; could not move any of my toes, shut my hands or stand steady, not lift my own coat, walked six miles yesterday and lifted three hundred pounds."

Mr. S. B. Phillips, of Palmyra, Mo.: "I have been sick for two years, nervous prostration and partial paralysis of both legs, with frequent attacks of dizziness not able to read or think coherently, no appetite or good sleep: I have been here two weeks and have improved from the first day. I feel assured of perfect recovery."

Mrs. Mitchell, from Duluth, Minn., wife of Hon. R. C. Mitchell, of the *Duluth Tribune*: "I have been an invalid for years from disease of the liver and general debility. I have suffered everything but death from the frequent passage of gall stones. My case was considered hopeless for a long time before I came here. I have improved from the first week, and I shall return home feeling as well as ever I did."

I saw Mr. Harvey Russell, of the Milwaukee chamber of commerce, who told me his wife was brought here in a dying condition from Bright's disease of the kidney; general dropsy, coma, and partial paralysis were alarmingly present. She is now about the city as smart as ever. Mr. Russell will be willing to see any one who is afflicted with

that disease or wishes to inquire about the treatment.

I saw a young man from New London. He had come near dying from frequent attacks of gravel. He has had but one fit since he first took this treatment, and that was slight, and during the first three weeks of his treatment here.

Mr. C. B. Finch, with James Bonnell, 361 East Water street: "The Turkish Bath saved my life. I had been sick for years; did not know what ailed me. It proved to be Bright's disease of the kidneys. My doctor did me no good, nor afforded me hope for the future. I went to Dr. Spearman, he advised me to take the Turkish Baths. I am better than for years before, and free from Bright's disease."

Mr. Wm. S. Kobler, shoe store, 411 Third street: "I had the sugar disease (diabetic) Three years ago I lost 90 pounds in weight; drank all the time, had cramps in my limbs and back; no good sleep. When I had taken baths ten weeks I was well, and had gained 48 pounds in flesh. Now I am as heavy as ever before."

Mr. Joseph Kramer, Elkado, Iowa: "I had disease of the kidneys for some years (Bright's disease). Six months since I bloated very much with dropsy, and could not lie down. The doctor tapped my limbs; that relieved me for a time, but I filled up again, and the cuts on my limbs would not heal up, but grew larger. I thought surely I must die, but I came here five weeks ago, and I feel well. The cuts are healed up; dropsy all gone."

Mr. Wallace, shoe dealer on Wisconsin street, in this city, tells me his wife was sick for seven years, the two last years had consumption. Was carried to Dr. Hanson's institution in a dying condition. In one month she was sent home quite well, and she continued to improve until she was as well as ever.

Such are some of the to me simply wonderful cases successfully treated at the admirably managed institution in this city. If even one poor sufferer shall be by the perusal hereof placed on the broad way to health and happiness I shall be fully repaid. Not the sick alone are benefitted by the treatment. The Turkish Bath "will become an indispensable substitute for exercise to three large classes of people: 1st. To the indolent and luxurious, who take advantage of their privilege, but who find it, alas! anything but a blessing to be exempt from the primal curse. 2d. To the brain-tolling city-pent masses, the keepers at home, the men of literature and science, the drudges of the desk, the prisoners of the counter, or the slaves of the factory. 3d. To valetudinarian multitudes, not ill enough to be loosened from the cares of business—which thousands once claimed to quit no more—but too ill for personal comfort likewise for the comfort of those around them—the hypochondriac, the billious, the dyspeptic, the bloated, the un-

wieldly, the asthmatic, the lame and the lazy." W.M. L. ABBOTT.

#### Some Facts in the History of the Turkish Bath.

Science has never suggested any system of measures for the healing of the sick, so agreeable, safe, and efficient as the bath of two thousand years ago.

The old Roman bath, which the Turks preserved, has stood the test of time and experience. All drug remedies, like men and fashion, have had their rise and decline, and those which the doctor of to-day prescribes, with such an air of confidence, will be discarded by his son, and probably by himself twenty years hence, as useless or injurious; while the bath holds the confidence of mankind all over the world, age after age for thousands of years, among the barbarous as well as the most refined of the nations of the earth.

Witness the rude but complete bath of the American Indians, the Mexicans, the sweating houses of the Hibernians, the Egyptians, the Russians, the Finn, the Hindu, the Greek, and the Turk.

The Romans brought the hot air bath to a state of perfection never before known. It became a model of utility and refinement. At once a social privilege, and a public need. At one time there were eight hundred such baths in Rome and not a doctor in the Empire. The baths of Caracalla were fitted with sixteen hundred marble seats, and that of Diocletian had three thousand. These baths were all dedicated to some imaginary deity, and were destroyed by the christians as a part of the idolatrous system of the nation. The Moslem preserved and incorporated the bath into his religion. Alas! that the Christians were not as wise!

Science kept in swaddling clothes by jealous doctors, never went out to see the bath until very recently, but it was love at first sight. They embraced each other, and to-day there is no means used for the cure of disease, so well backed up by the authority of the leading men of the profession all over the world.

The theory of the bath is rational, but the experience of mankind established it independent of all theory. Science may claim an alliance, but the bath was before science, and she owed it nothing until within the last twelve years. Science may make use of her marvelous curative power, and regulate her modes, but she owes her existence to the natural instincts of mankind, and her hold upon the people to the blessing she has conferred.

The mass of doctors oppose it, because it comes between them and their patients. Dr. Erasmus Wilson says of the doctors "that those whose income is above two thousand pounds a year, are much more likely to em-

brace the bath, than those whose income is less than that amount."

Her course is still onward, and upward. The better she is known, the more highly she is esteemed, and when men come to study the laws of life, with the same earnestness they now do the laws of trade, the Turkish bath, with its appliances, will stand first in the confidence of the people, for the preservation of health, and cure of disease.

The eastern or Turkish bath is silently and steadily making itself appreciated; not only in this city but in some of the smaller towns of the state. And when it comes to be understood by the mass of the people, as it is by many thousand of the most intelligent it will be as extensively patronized as it was by the Greeks, and Romans in the days of their highest civilization.

#### In the Street, Milwaukee.

MERCHANT C. TO MERCHANT D.—Good morning friend John, I have wanted to see you for a long time to warn you against killing yourself with those Turkish Baths. I hear you take them too often, and they will certainly kill you John.

MR. D.—Well, my friend, I have taken more than two hundred during the last year. I take one three times a week when my business will let me, and sometimes I take one every day in the month, and think I feel the better for it. I went to a ball the other night and danced in every set for twenty times, and did not feel the worse for it the next day. I have not seen the time I could do that for fifteen years until I took the baths.

MR. C.—Well, friend, I warn you that they will undermine your constitution at last.

MR. D.—What do you know about it any way?

MR. C.—Oh! I know on general principles such intense heat is very weakening.

MR. D.—But my friend, do you know that in England they train their foot racers, their pugilists and their race horses in the Bath? A Bath has just been completed in New York for training horses.

MR. C.—Is that so? Well, your friend Dr. N. says it will kill you, and Dr. M. of Madison says you will be in the Insane Asylum within six months if you keep on, and they ought to know.

MR. D.—Certainly they ought to know in such matters, and I am very sorry they don't. It would be better for their patients if they did. And as for yourself how many have you taken?

MR. C.—Oh! I have never been there.

MR. D.—Well, my friend, with no disrespect to you I must say that your opinion is just as good in this matter as that of your og. Good morning sir.

#### In the Street, Milwaukee.

DR. BOLUS AND MRS. C.

DOCTOR—Good morning Mrs. C. How is your husband? I hear he is taking those Turkish Baths every day, and I as a friend feel bound to say that they will injure him.

MRS. C.—But Doctor B—, he says he feels better every one he takes.

DOCTOR—Well, well, that may be but they will bring him down at last.

MRS. C.—But doctor how can they injure him?

DOCTOR—Why, they dry up his blood.

MRS. C.—Well doctor, to tell the truth I have felt afraid of that myself, and I wish you would see my husband and warn him against taking any more. He is at home evenings. Will you call to-night?

#### DOCTOR ENTERS.

MR. C.—Good evening Doctor B—. Glad to see you. Take a seat.

DOCTOR—Mr. C. I called to apprise you of the great danger of taking too many of those Turkish Baths.

MR. C.—Well, really doctor, I have taken one every day for six weeks, and feel better for it every time. I am stronger, eat more, sleep more, weigh more, and can attend to my business better than for a long time before. What danger can there be in such a process?

DOCTOR—Why Mr. C. They dry up your blood and make it too thick.

MR. C.—How is that doctor?

DOCTOR—Why, don't you sweat?

MR. C.—Yes, I sweat a quart?

DOCTOR—Well, all that comes from your blood.

MR. C.—Yes, doctor, but I drink a quart of water in the same time. Ain't it about an even thing as to quantity? While I have the advantage in this, I swap off a quart of water or sweat loaded with the effete matter, and poisons taken from the blood, and get into my blood a quart of clean water in exchange. Am I not the better for that?

[EXEUNT DOCTOR.]

#### A General View.

The Turkish Bath is something more and higher than the introduction of an oriental luxury, or a new mode of cleanliness. It is the mighty agency for the prevention and cure of disease. It is a long sought desideratum of practical medicine. It is one of the most potent modifiers of the living organism whether in health, or disease; the more it is tested the more will it vindicate its claim to be placed in the first rank as an orthodox weapon of medical warfare.

There is one prevalent misapprehension in regard to it which constitute the whole arma-

ment of the ignorant against it. It is supposed to be only suitable for strong constitutions. This is a mischievous error. The *weakly* have more need of it, and are more benefitted by it. Powerfully aiding nutrition it promotes growth and strength, for all in whom nutrition is depraved or defective. For the scrofulous, the extremely weak from any cause the Turkish Bath is pre-eminently adapted. But every excellent thing may be abused. The Turkish Bath is too powerful an agent for good not to be equally an agent of evil when misapplied. Its dose must be regulated like any other remedy, and this certainly requires a physician. To be wielded with safety and success in the treatment of disease it must be under scientific management. Barbers and adventurers may make it useful in some cases, but the result is uncertain and such management has done more to bring the institution under suspicion than all the arguments of ignorant, and prejudiced doctors.

The Turkish Bath amounts almost to a discovery. It is at least a new found boon to the Christian world, and it is to become a permanent institution among them. A remedy for many of the evils of modern civilization, as well as a cure for many of the most deadly diseases that afflict mankind. The questions which it raises are those which next to morality and religion effects a nations best interests? The habits it promotes are those which most directly conduce to the health, the happiness, the longevity, the physical culture, the material prosperity, and moral elevation of the people.

The report of the failure of Myron H. McCord, a leading lumberman of Shawano, and member of the state senate from the 29th district, was a baseless error. Mr. McCord immediately upon being informed of his own failure early last month, proceeded to Milwaukee and Chicago and within three days liquidated every claim against him on the basis of a hundred cents on the dollar, paying a large proportion cash down. McCord is one of the strongest operators in the Wisconsin pineries, and may always be counted on to do what he says he'll do to the letter.

Correspond with the WISCONSIN LUMBERMAN,

### LATEST NOTES.

Subscribe for the WISCONSIN LUMBERMAN.

We appreciate the substantial favors we have received from the press in all parts of the country. It is procuring the WISCONSIN LUMBERMAN subscriptions from all points between and including Sacramento and Boston, Montreal and Pensacola.

The *Michigan Lumberman* for December is on our table and indicates prosperity by an enlarged form, increased advertising patronage and abundance of carefully prepared editorial reading. Here's our co-operative quill on the subject of a "Lumbermen's Association," Bro. JUDSON.

Mr. John Barron, a well-known lumberman of Eau Claire, has just formed a stock company to go into lumbering on a large scale. Its capital stock is \$200,000, of which Mr. Barron holds \$100,000, the First National Bank of Eau Claire \$30,000, a resident partner \$10,000, and parties in Hannibal, Mo., \$60,000.

We have added to the usual dimensions of this publication, a description of the popular Turkish Bath of Messrs. Hanson & Rogers in this city, and a report of an interesting address on the subject of business education by Mr. R. C. Spencer, of Milwaukee.

MESSRS. BRADFORD, MCCOY & Co., residents of Quincy, Ill., but doing business at Necedah, Wis., have commenced suit against the Kilbourn Manufacturing Co., and the case will probably be tried before the February term of the U. S. Court at Madi-

son. Judicial proceedings are perhaps the best course to pursue in the determination of the question of the Kilbourn Dam Nuisance. The result of the suit will be anxiously awaited by the lumbermen of the Wisconsin and Yellow rivers.

The careful reader will observe this month extensive additions and corrections in our "Lumbermen's Register." The entire worthlessness of the state directory in this department, (which we took at first for an authority) proves the need to the trade of such a list as we intend to perfect in due time. Names *will be inserted free* in this Register, for the general information of our readers. We solicit therefore corrections and additions from all states in the northwest—the firm name and post office address of both manufacturers and dealers.

The Durand Bros., of Durand & Co., who went into the grocery business in Chicago after making a good deal of money in that line in Milwaukee, having tried the City of the Garden of Eden to their satisfaction have concluded to rub out and begin over again in Milwaukee. Mr. George I. Robinson, lately of J. B. Durand & Co., of this city, goes into the new firm which is to be known as that of Durands, Robinson & Co. They will occupy the old East Water street quarters of J. E. Patton & Co. This new house commands immense capital and great experience, and will immediately take foremost rank in the grocery trade of Milwaukee, which is one of its commercial strongholds.

From Mr. W. W. Thair, a gentleman who represents the extensive boot and shoe trade of Mann, Beals & Co. in the pineries of Wisconsin and is thoroughly posted on lumbering affairs, we obtain the opinion that a pretty fair amount of logging will be done in this state this winter in spite of hard times. The smaller loggers who depend on the larger concerns for advances before they can commence operations will be very generally deterred from doing much of anything. The large loggers will do, or try to do, as much as heretofore. The low price of labor, together with an expectation on the part of many of a short crop and a big advance, operates as a powerful incentive to activity. On the other hand, the extreme mildness of the winter is an obstacle to active logging. There is an abundance of snow, but the swamps are not frozen hard. It is estimated that nearly the usual amount will be done on the Chippewa river, while not much more than one third the usual quantity of logs will be put in on the Black river. As an instance of the drift of things, Mr. Thair mentions the fact that the Mississippi Logging Company is buying 50,000,000 feet (their usual amount) of logs delivered on the banks to float to various points on the Mississippi. Messrs. Mann, Beals & Co. are satisfied that there will be no scarcity of Wisconsin logs next summer.

---

Advertise in the WISCONSIN LUMBERMAN.

## LUMBER MARKET.

## Milwaukee Market.

MILWAUKEE, Jan. 3, 1874,

"The present month constitutes the particularly dull season. The trade usually opens for the season in February and there is a diversity of opinion as to whether the demand will be active or merely nominal. Most dealers expect an active trade because of the low prices of lumber, and the fact that all kinds of produce is moving rapidly at remunerative prices. The present stock of lumber in store in this city is probably upward of 40,000,000 feet, being several millions in excess of the amount in pile at this time last year. Yard prices remain unchanged, although a firmer feeling exists, in anticipation of active demand in February. Lake receipts have entirely ceased and but little lumber is brought by rail from the northern pineries. Occasional carloads only being received from Green Bay, Oshkosh, Fond du Lac or Stevens Point. We quote yard prices as follows:

Common boards	13 00@
Joist and Scantling, 12 by 16 ft.	13 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	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, 1¼ and 2 inch.	47 00@ 50 00
3d clear do	35 00@ 38 00
Wagon Box Boards	30 00@ 35 00
A stock do	35 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 20
Timber, 18 to 22 ft.	15 00@ 18 00
Timber, 24 ft and over.	18 00@ 35 00

## Chicago Market.

A firm feeling characterizes the market and the trade in common grades is fairly

active for the season. The amount in pile is estimated at about 300,000,000 ft.; it being the opinion of many dealers (the official figures are not yet returned) that there is a less amount now in pile than at the same time last year. January 1st, 1873, there was on hand in the Chicago yards 321,943,232 feet of sawed pine lumber and timber, 40,301,000 shingles, and 27,751,520 pieces of lath. The majority of dealers hold prices very firm, expecting a revival of the trade soon. The operations during the last of the present month will probably give an indication of what may be expected from the spring trade. We quote yard rates of January 2nd.

First and second clear	\$50 00@55 00
Second clear 1 inch to 2 inch	47 00 50 00
Third clear, 1½ to 2 inch	45 00 46 00
Third clear 1 inch	38 00 40 00
Select, 1 inch	30 00
Wagon box boards, 14 inches and upward	35 00 40 00
A stock boards	36 00 38 00
B stock boards	27 00 30 00
C stock boards	14 00 16 00
Common boards, joist, and scantling, 12 to 16 feet	12 00 13 00
Fencing	12 00 13 00
Joist and scantling, 18 to 20 feet	14 00 16 00
Joist, 22 and 24 feet	18 00 18 00
Flooring, 1st and 2d clear	43 00
Flooring, first common rough	33 00 36 00
Flooring, first common, dressed	33 00 35 00
Flooring, second common dressed	26 00 30 00
Siding, 1st and 2d clear dressed	23 00
Siding, common, dressed	18 00 20 00
Timber—sawed, 12 to 16 feet	12 50 13 00
Square Pickets	13 00 15 00
Flat Pickets	12 00 13 00
Shingles—sawed A, per 1,000	3 25 3 50
Lath	2 25 2 50

Hardwood lumber is quoted as the annexed prices.

Black Walnut counter tops	\$100 00@150 00
do clear	70 00 85 00
do common	49 00 50 00
do cull	25 00 35 00
do flooring	55 00 70 00
Ash, clear	28 00 40 00
Ash, common	18 00 25 00
Ash, cull	10 00 15 00
Oak, clear	28 00 40 00
Oak, common	18 00 25 00
Oak, cull	10 00 15 00
Hickory, clear	30 00 45 00
do common	25 00 35 00
do cull	12 00 18 00
Maple, clear	25 00 35 00
Maple, common	18 00 25 00
Maple, cull	10 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	12 00 18 00
Whitewood clear	30 00 40 00
do common	20 00 25 00
do cull	10 00 15 00

Wagon Stock—  
 Hickory axles, per set.....\$1 00@ 1 50  
 Wagon poles, each..... 45@ 55  
 Box boards,..... 30 00@40 00  
 On Track—Shingles on cars were held at unchanged prices. We quote:  
 A or Star.....\$ 3 00  
 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.

**St. Louis Market.**

The amount of lumber in pile at St. Louis is claimed to be largely in excess of the number of feet on hand January 1st, 1873. General dullness characterizes the market and there is no material advancement in prices. Considerable lumber is in pile at different points on the Mississippi, owned by manufacturers who have not regularly established yards; but it is probable that they will not attempt to retail unless forced to do so by the inability of dealers to take it off their hands.

Chippewa and Minneapolis white pine will run \$13 to \$15. Wisconsin, \$13 to \$27. Yellow pine flooring, dry, \$27 to \$23 for first and second rates; \$15 to \$13 for third rates. Dimension, mill run, dull at \$14 to \$16. Shingles, A, \$3. 0 to \$4.00.

**Detroit Market.**

Yard rates range as follows:

First clear.....	\$45 00@	
Second clear.....	40 00	
First clear siding.....	25 00	26 00
Common siding.....	17 00	
Second clear siding.....	40 00	
Good common flooring.....	20 00	28 00
Box, 1 and 2 inch.....	35 00	
Box, 1½ and 1¾ inch.....	38 00	
Barn Boards.....	17 00	18 00
Common Boards.....	17 00	
Fencing.....	17 00	
Cull boards.....	12 00	14 00
Long joist.....	20 00	25 00
Short joists and scantling.....	17 00	
Mill stuff.....	15 00	45 09
Deck plank.....	35 00	40 00

**Saginaw Market.**

First class.....	\$38 00	40 00
Fourths.....	35 00	38 00
Box.....	30 00	35 00
Three upper grades, firm.....	35 00	
do do dry.....	35 00	40 00
Common.....	11 00	12 00
do dry.....	12 00	
Shipping culis.....	5 50	6 00
Lath.....	1 75	2 35
Shingles—Sawed A, 1.....	3 75	3 90
do do A, 2.....	2 25	2 75

**New York Market.**

New York, December 20.

There is a better trade; sales three cargoes timber at \$17 to \$19. Ordered schedules quoted at \$18 to \$19, and random cargoes, \$16 to \$17. Shingles quoted at \$6.50 to \$10 per M for pine, extra shaved, and \$17 to \$27 for cypress. Southern pine is quoted within the range of \$36 to \$38. Trade in dressed boards is moderate. Lath in better demand; quoted \$1.75 to 1.90; sales of 1,000,000 at 1.75 to 1.90. We quote:

Southern pine.....	\$ 36 00@ 38 00
White pine box boards.....	25 00@ 30 00
White pine merchantable box boards.....	28 00@ 31 00
Clear pine.....	65 00@ 75 00
Poplar and whitew'd b'ds and planks.....	64 00@ 56 00
Cherry boards and planks.....	78 00@ 80 00
Oak and ash.....	50 00@ 60 00
Maple and birch.....	38 00@ 44 00
Black walnut.....	100 00@130 00
½-inch sycamore.....	44 00@ 53 00
1-inch sycamore.....	42 00@ 52 00
Spruce boards and planks.....	24 00@ 26 00
Hemlock boards and planks.....	18 00@ 20 00
Basswood boards and planks.....	25 00@ 30 00

**Boston Market.**

Boston, December 27.

The market is well supplied and dull, as might be expected at this season of the year, independently of the recent condition of general trade. Prices, however, remain steady, without material change. We quote:

Western Lumber—Michigan pine, Nos. 1 and 2, \$60; No. 3, \$50; No. 4, \$37@38; Black walnut, Nos. 1 and 2, \$80.00@87.50; Black walnut, Culla, \$50; Ash, Nos. 1 and 2, \$40@48; 3rd quality do, 30@40; Cherry, Nos. 1 and 2, \$60@70; 3rd quality do, \$35@40; Whitewood, Nos. 1 and 2, \$40@45; do ½, \$33@35; 3rd quality, \$25@30; Oak, \$45@50; Butternut, Nos. 1 and 2, \$55@65; 3rd quality, \$30@35; Michigan Pine Saps, \$40@45; do Pickings, \$40@42; Michigan shippers, \$25@28; best Michigan 6 inch strips, \$55@58.

Canada Pine—Selects Dressed, \$60; Shelving Dressed, \$50@52; Second Shelving, \$40@42; Sheathing, 1st quality, \$50@52; do 2d do, \$34@38; Ceiling Dressed, \$33@40; Dressed Shippers, \$30@32.

Eastern—Pine Clear, Nos. 1 and 2 \$65; No. 3, \$50; No. 4, \$38@40; No. 5, \$30@35; Common, pine shipping, boards, \$22@25; No. 5, \$22@23; Refuse, 15@16; Spruce, scantling and plank, \$16 00@16.50; Boards, \$15@17, Hemlock boards, \$12@13; Laths, Spruce, \$2.00@2.25; Hemlock, \$1.75; Pine, \$2.75@3.00.

Southern Pine—Our quotations as obtained from different houses are: Flooring, Nos. 1 and 2, \$32@36 and \$33@38; Ship stock, \$34@39 and \$36@40; Dimension Factory, \$30@40, according to size; Hewn timber, \$20@38; Random cargoes, \$4@5 less; Refuse, two-thirds price.

Shingle—Spruce, extra, \$2.00@2.25; No. 1, \$1.50@1.75; Shaved Pine, \$5@8; Sawed, \$2.50@2.90; Shaved Cedar, \$3.00@6.50; Sawed, extra, \$4.50@5.00; Clear, \$3.00@4.00; No. 1, \$2.50@3.00; No. 2, \$1.50@1.75.

Clapboards—Spruce, extra, dressed, 4 feet, \$34@35; Clear, \$24@26; No. 1, \$15@20; Dressed, extra, 6 feet 6 inches, \$42@48; Clear, \$37@40; No. 1, \$30@35; Pine, extra, sap dressed, \$50@60; Clear, \$50@55; No. 1, \$25@35.

**Ottawa Market.**

Ottawa, December 12.

The dullness in the lumber trade and the consequent reduction of operations in the woods will have a depressing effect upon the trade of the valley which is not likely to wholly pass away until spring. Like the recent financial panic in the neighboring country, however, it will prove a wholesome lesson if those who are now suffering.



from its effects are willing to learn and profit by the experience. The depression is the direct result of over production, and a repetition of the same cause will produce a similar effect in the future. The "hard times" may be regarded as a blessing not wholly undisguised if Ottawa lumbermen will learn from it to conduct their operations in accordance with the law of supply and demand.

### San Francisco Market.

SAN FRANCISCO, December 12.

There is quite a large demand for the city trade still, on account of the business in the building trade. There never was more demand for new buildings than now, and builders are hurrying so as to get their work done before the rainy season sets in. Then the demand will slacken off, and things will be dull during the winter. Imports from Pacific Coast ports from September the 22d to November the 29th include 28,108,000 feet of lumber, 5,790,000 shingles and 1,687 bundles of do., 3,720,500 laths, 41,300 posts, 32,350 R. R. ties, 67,800 stakes, 5,045 cords of hoop poles, 2,634 cords of wood, 3,237 cords of stove bolts, 199 ship knees, 150 cedar props, 40 cords of bolts, 64 spars, 10 piles, 45 cedar slats, and 900 wool slats.

Imports by sea from the East for the same period include 2,654 pieces of Ash, 871 do of Hickory, 143 do of Maple, 2,852 do of Oak, 278 do of Ash and Oak, 10,350 do of Pine, 354 do of lumber (unspecified), 1,120 do of Black Walnut, 1 Kauri plank from New Zealand, 1,471 Cedar logs, 12 tons and 14 logs of Redwood, 259 logs of cabinet wood, and 10 tons of Japan wood.

Imports by rail for the same period include 2,284,250 feet of lumber, 355,750 shingles and 125 bundles of do, 112,000 laths, 31,500 pickets and 7 spars.

We quote Puget Sound and Oregon pine, rough \$14@16 per M; retail, \$18@19; for street work, \$16; flooring and stepping, cargo rates, \$25@26; retail, \$30; second quality do, cargo rates, \$5 off the first quality; retail, \$25; laths, \$3.50@4.00 at wholesale; retail, \$4.50; redwood, rough, cargo rates, \$20; retail, \$21; refuse do, cargo rates, \$16; retail, \$18; pickets, rough, cargo rates, \$18; retail, \$18; pointed, cargo rates, \$16; retail, \$20; do fancy, cargo rates, \$25; retail, \$30; T. G. surfaced redwood flooring, cargo rates, \$32.50; retail, \$35.00@37.50; do, refuse, \$10 per M off; retail, \$25@28; do, rustic, cargo rates, \$32.50; retail, \$35; Port Oxford cedar, cargo rates, \$45; retail, \$60; choice lot, \$70; battens, cargo rates, 1/2 c per foot; retail, 3/4 c; shingles, cargo rates, \$2.50 per M; retail, \$3; 1/2-inch surfaced, cargo rates, \$27.50; retail, \$37.50; sugar pine, cargo rates, \$42@45; retail, 6@7 1/2 c per foot.

### Pensacola Market.

PENSACOLA, December 20.

Freights—The present week has shown more activity—a few charters have been closed at full rates—to U. K. 55s@57s 6d are reported. One charter to Jamaica at \$12. Cuba ports are neglected, as well as ports north of Hatteras.

Hewn and Sawn Timber—There seems to be an active demand for the first, and some inquiry for the last; our rivers are still down, and with a large fleet of ships due, these articles will keep firm.

Assorted lumber of all kinds, are dull, and we see little chance of improvement—with our West India business suspended—but this will all change on the settlement of the Cuba question, and give us one of our best markets for our lumber product.

Cuba Lumber—In good demand at.... \$15 00@17 00  
We quote Stowage Deals per M..... 18 50@.....  
We quote prime, per M..... 14 50@14 75  
South America—Rates are still the same for standard deals..... 18 00@20 00  
Texas..... 15 00@16 00  
Texas deals, long length..... 18 00@.....  
Texas deals, 1/2-inch flooring..... 18 00@20 00

Texas deals, 1-inch flooring..... 20 00@.....  
Texas deals, wide boards, No. 1, 1-inch 16 00@.....  
Texas deals, edge boards, No. 1, 1-inch 9 00@10 00  
Texas deals, edge boards, No. 2, 2-inch 7 00@ 8 00

The remarkable mildness of the winter still continues and is a matter of rejoicing to the dealers who have large stocks on hand. If not an immediate benefit to those manufacturers who are attempting the usual logging, it will certainly prove a blessing to the trade at large. Scarcity of snow is reported in Michigan, but in Wisconsin pineries there is an abundance, although the bottom for suitable hauling roads is lacking. If there should be a continuance of present weather the new log crop must be even less than anticipated by those who have considered fifty per cent. cut of last year's work to be a fair estimate of this winter's. If the spring demand should commence at all favorable there is little doubt but that an appreciable advance in prices will be felt in all the different markets. The market is certainly becoming firmer and there is good reason for the hopefulness manifested by manufacturers and dealers.

Wisconsin lumbermen will appreciate the special lumber tariff of the Wisconsin Central Railroad which is to be found in this issue of the WISCONSIN LUMBERMAN.

The "Lumbermen's Register" of the WISCONSIN LUMBERMAN is intended to be worth five times the subscription price of the whole volume to every eastern house that has dealings with lumbermen.

The novelty referred to in the special notice of Fitzgerald & Presser, in this issue of the WISCONSIN LUMBERMAN, is a "cam power saw sett." It is described as a really good thing which will sell at sight, costing from \$2.00 to \$5.00.

"Jist have pashents" is the post-script to a letter which we have seen within a day or two to a Milwaukee business house from a dilatory debtor in the lumber region! We would extend the exhortation to the trade generally. It needs it.

Eighteen Seventy-Three has been a trying year for the Wisconsin Central railroad, but it has stood the ordeal splendidly. We wish this enterprising company—what it deserves—"a happy new year."

Fire is the dreaded foe of every lumber manufacturer. There are comparatively few mills of any age in the country that have not been once or twice burned down. Incessant and liberal insurance is certainly the policy of the worker in wood, as well as the utmost vigilance at all times, strict discipline, and the employment of all the means which science has produced to lessen the chances of conflagration and to stay its ravages. No mill or lumber yard should be without an equipment of the Babcock fire extinguisher, or some contrivance of a similar nature. These remarks derive force in this place, from the fact that three important lumbering towns of Wisconsin have been seriously assailed by fire within the past month—Eau Claire, Chippewa Falls and Stevens Point.

E. Y. Williams, inspector general of lumber for the Saginaw district has just made his third annual report to John J. Bagley, governor of the state of Michigan. The amount of lumber shipped through his office in 1873 is averaged as follows: Ten and three-quarters per cent. of qualities known

as uppers, seventy-six and one-half per cent. of common, and twelve and three-quarters per cent. of culls. The amount of lumber certified to by this office during the season of 1873, is as follows, viz.:

Upper qualities.....	21,157,089 feet.
Common.....	149,796,033 "
Culls.....	24,760,689 "

Total amount by inspection of qualities.....	195,713,811 "
Total amount measured straight.....	17,798,162 "

Total amount inspected and measured.....	213,511,973 "
--	---------------

The receipts and expenses of this office have been as follows, viz.:

RECEIPTS.		
To fees rec. for insp.....	195,713,811 feet.	\$56,757 90
To fees rec. for mark'g.....	5,705,494 "	570 55
To fees rec. for mea'g.....	17,798,162 "	3,381 65

EXPENSES.		
\$60,709 20		
By paid salaries to Inspector General and Deputies.....		\$ 7,5 0 00
By paid inspection for legal fees.....		52,168 72
By paid office rents, clerk hire, stationery, etc.....		1,556 48
		\$61,125 29

He looks to manufacturers of the district to make up the deficit of \$516 in the finances of his office, although none last year went under bonds to do so.

Mr. R. C. Kedzie, professor of chemistry in Lansing, Michigan, suggests to manufacturers of hemlock extract that carbolic acid may save them from loss by "souring." He thinks that half a fluid ounce of the crude acid, or a pint to the barrel, will save them from loss. The carbolic acid, he says, will not injure the extract for tanning leather, and will not injure the workmen using it. The professor wants to be informed by any who may use this suggestion, respecting their experience.

Subscribe for the WISCONSIN LUMBERMAN, the only publication in the northwest, devoted to the interests of lumbermen.

## HAPPY NEW YEAR TO THE WISCONSIN CENTRAL.

The officers of the Wisconsin Central Railroad on New Years' Day, afforded representative business men from Milwaukee and other Wisconsin cities an opportunity of inspecting their admirable work in the northern part of the state. The train comprised several of this company's most elegant cars, and was the most perfectly appointed excursion that ever left Milwaukee. The party dined and slept on board the train for two days, proceeding one hundred and one miles north of Stevens Point through a forest of superb pine mingled with a variety of hard woods and almost unbroken except by the broad, straight swath which the railroad builders have made. The party consisted of business men, liberally seasoned with politicians. The railroad company was represented by Mr. E. B. Phillips, president and general manager; Mr. C. Harris, general superintendent; Mr. J. E. Follett, general freight agent; and Mr. E. Bacon.

Mr. Geo. Reed, the vice president of the Wisconsin Central Railroad, was the presiding genius of the occasion.

Among the prominent business men we noticed Mayor Harrison Ludington, (lumberman,) Mr. John Nazro, Mr. Chauncey Simonds, Mr. F. Vogel, Mr. E. B. Greenleaf and Mr. Daniel Wells, Jr., of this city. Mr. A. K. Hamilton, (lumberman) of Fond du Lac; Mr. Anton Klaus, (lumberman) of Green Bay; Mayor Wadleigh, (lumberman,) Mr. John D. Curran, (lumberman) and Mr. G. L. Parke, (lumberman) of Stevens Point.

Among the politicians, besides Lieutenant-Governor Chas. D. Parker, there were Dr. O. W. Wight, Mr. John Black, Judge H. L. Palmer, Col. E. A. Calkins, Mr. F. H. West, Col. Geo. B. Goodwin and the Hon. Tom Reid, of Menasha.

Appropriate speeches were made from time to time, and the occasion was one of great harmony. All who saw it for the first time were impressed with the excellence of the Wisconsin Central Railroad, with the dimensions of the undertaking and with its vast commercial importance to the state of Wisconsin.

Lumbermen's job printing solicited at WISCONSIN LUMBERMAN office. Send for estimates. Satisfaction guaranteed.

---

**H. M. NORTHROP,**  
MANUFACTURER OF  
**FRENCH YOKE SHIRTS,**  
AND DEALER IN  
Men's Furnishing Goods,  
jan'4-1y 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'4-1y 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'4-1y

## Wanted—Agents

To sell a Novelty just patented. Mill-men and Head sawyers buy it at sight. Commission liberal.  
Address,  
**FITZGERRELL & PRESSER,**  
jan'74-3t East Saginaw, Mich.

## THE LUMBER TRADE OF 1873.

### ANNUAL REVIEW OF MESSRS. BERTHOLD & JENNINGS.

The St. Louis Market—The Northern Pinerias—The Upper Mississippi Valley—Destruction of Forests—Quality of Logs—Channels of Trade—The Log Yield, Receipts, Shipments and Stock on Hand—The Predictions of the "Wisconsin Lumberman" Indorsed by a High Authority.

We have delayed our January number three days beyond the first in order to present our readers with the following masterly review of the lumber trade of the northwest for 1873, by Messrs. Berthold & Jennings, commission lumber dealers, No. 18 South Main St., St. Louis, Mo. This house has earned a wide reputation for the accuracy and wisdom of its reports, which, until the establishment of the WISCONSIN LUMBERMAN, were the only dependence of the Wisconsin pinerias. We are gratified to observe that so high an authority takes substantially the same view which the WISCONSIN LUMBERMAN has for four months been urging upon the attention of dealers—namely, that the production of this winter will be necessarily curtailed by a variety of causes, while the consumptive demand for lumber must increase in a steady ratio. These considerations ought to begin very soon to tell upon the market in the way of a firmer feeling and better prices. We obtain the following review from the *St. Louis Republican*, which has been for several years the exclusive vehicle of the annual and weekly reports of Messrs. Berthold & Jennings:

#### St. Louis Lumber Review.

The year 1873 has developed many remarkable phases in all branches of trade and presented features of a character wholly unexpected, leaving in many instances the well-studied theories of so-called scientists wholly undemonstrated; or more properly, facts have occurred

requiring, as it were, new sets of principles from which to evolve the results as they have transpired. No other branch than the lumber trade, with its exclusive and peculiar systems of conducting manufacture and supply, is so sympathetic or answers quicker to any great favorable variation, or depression in the financial markets and affairs of the country, and in point of fact as well as theory, it has proved itself a veritable barometer in this much, that almost of necessity it has felt the influences and effects, and has quickened and increased, or for the time being suffered.

The extent of the demand for lumber, created by the extension of railroads in the west is now a matter of much importance and will be many times doubled when the eleven thousand miles already projected shall be completed, (making some twenty-four thousand miles in all), and the tide of immigration (the great item) increased in same rates as in the past few years. As the country becomes populous and rich and prosperous, the value of lands will warrant improvements which the people with inherent ideas of progress will not be slow in constructing.

#### DESTRUCTION OF FORESTS.

The extensive destruction and demolition of the forests in the United States and Canada, which is continued in augmented proportions, has become a subject of such moment and consideration as to merit notice at all times. About one hundred and seventy-five thousand acres of pine were cut out the past year in Minnesota and Wisconsin for building purposes alone, and the greater portion destined for the Mississippi river markets. This amount will be increased gradually until the extent will be prodigious, yet it is reasonable to believe from the immense quantities of standing pine in those states that for some time no important direct influence will become palpable. Still in fifteen years it can be prophesied with show of fulfillment that the supply of lumber will be a source of anxiety and calculation to consumers who now give the fact little attention. It is true that there are vast quantities of yellow pine and cypress in the South which cannot be consumed for many years, and this restricts the demand for Northern timber to the Northern, Middle and part of the Western states, and a portion of the Eastern seaboard. We mention this fact as many

Northern authorities fail to notice this large supply of first-class material growing in the Southern states.

#### QUALITY OF LOGS.

The greatest difference exists in the quality and size of white pine logs that were cut twenty and as late as twelve years ago and those manufactured into lumber now. It was usual, say fifteen years ago, for logs sent to river mills to scale from 500 to 1,200 feet board measure for ordinary length, and the largest percentage into the better grades, whilst now they only run from 200 to 275 feet to the log, or about six to three to the thousand feet, and three and a half logs to the thousand are considered a good average. This shows that the best trees have been selected and that the better timber grows close to the banks of streams. Logs are hauled now as far as two to eight miles from the banks.

#### CHANNELS OF TRADE.

It has become a matter of much comment in the white pine regions and the opinion prevails to some extent that transactions with consumers will be transferred from dealers or middlemen to manufacturers, and in connection therewith that the railway is fast usurping the function of the Father of Waters for the transportation of lumber, and also that the river markets will inevitably lose much of their trade and profits. As there are grounds for a difference in belief it may not be improper to present a few points in this connection. Lumber markets or distributing points of any magnitude are invariably situated on large water routes, and one thing which makes itself prominent here is the cheapness of bringing lumber to these points. It is manifest that it can be rafted and floated (and has been sent by vessels to lake ports) at less cost than by loading and shipping on cars by rail. Lumber from its bulky nature requires immense tonnage to handle it, and it will be some time before railroads can furnish sufficient facilities for the large business done in Wisconsin and Minnesota.

Consumers need over two-thirds of their material seasoned, and with the capital now or that may be in use, in the West it is improbable that the mills will undertake to stock and hold their lumber for the purpose of retailing to them. Indeed, the millmen have generally been compelled to realize on the most of their winter's cut before a succeeding winter

to enable them to carry on operations in the woods. Again, country consumers will buy their lumber from convenience where they ship their products. Dealers and river markets are a necessary evil (?) and convenience to millmen and will never lose their occupation.

#### TRADE OF 1873.

During the past season the calculations of manufacturers in the Northern pineries, as everywhere else, met with disappointment from first to last, and through no shortsightedness of theirs so much as the fact that the basis of their calculations have uniformly and persistently proved unsubstantial. At the entrance of spring, the appearance indicated unfavorable results to the log drive, the snow having disappeared in the ground without increasing the volume of the streams, and the prospect of having to carry over in the woods a larger "cut" than they had anticipated was not promising a profitable end to their labor and investment. There is no doubt that many put in a greater amount of logs than they had previously intended, but a flattering outlook (which was proven adversely) induced them to use all exertion to make as good a showing as possible for their winter's work. The heavy rains coming later filled up the streams wonderfully fast, and the "drives" resulted to the satisfaction of all concerned, bringing out logs two and three years old, which produced an abundant supply on a very indifferent market. The demand for lumber was extremely backward in developing, and there existed a marked depression all over the country with varying exceptions. The failure of some dozen extensive operators in the East occurring in May for want of sufficient funds to carry over their large stocks and inability to provide against being forced to go on the market, added another depressing effect, and was felt throughout. The trade afterward seemed in a condition to respond to any decline in grain or money values, although of only a temporary nature. We give the following statement showing the extent of the log yield for 1873 :

#### STATEMENT OF LOG YIELD.

Total amount of feet cut on the Chip- pewa, Black, Wisconsin, and Upper Mississippi.....	1,081,380,000
Amount on hand 1st January, 1873, feet.....	480,000,000
Total.....	1,461,380,000

By comparison with our statement of last year, the supply for 1873 will be found to be 118,120,000 feet less than for 1872. There were 310,620,000 feet less cut during the winter of 1872 and 1873, but the amount of old logs left over from the season of 1872, was 430,000,000 feet, showing a difference in excess of amount left over from the season of 1871 of 192,400,000 feet. This was yet a larger stock than events warranted, but with the poor facilities of presaging future occurrences at command of the present generation, lumbermen must be content to believe this one of the impenetrable mysteries of Providence, which is, however, meagre consolation.

There was less lumber needed to satisfy the demand during the period from April to October than even for the corresponding period of 1872, and few opportunities were given to make inroads into new stocks. The inactivity painfully apparent during September, which culminated in a senseless panic and the prevalence of utter lassitudes and passiveness ever since, placed manufacturers, especially those holding lumber, in serious predicaments; and the situation was only intensified by maturing liabilities at this most inopportune time. Of course it was impossible to make a fair disposition, and the condition has improved little or none except in the exhibition of better feeling.

#### ST. LOUIS MARKET.

In placing before the business community identified with the lumber trade of our city an exhibit of the past season's transactions we would mention the fact that the large profits characterizing the business of five, ten and fifteen years ago, are fast becoming less sure and are reduced to a more certain method of fair profits according to the energy and tact necessary to keep up with the requirements of the times. It is, therefore, very desirable and convenient to have a complete exposition of each year's results, to establish a foundation for judgment and ideas of the coming year, and we are glad to continue our circular for their benefit, and hope for more co-operation in preparing our future statements. The demand for city consumption in the spring was excellent and a goodly amount of lumber was required, but the shipping trade was comparatively small and did not meet the justified expectations. A great many houses were erected, but operations suf-

fered a serious impediment in the stringency of money in the fall. The receipts of lumber were much larger than for 1872 in the aggregate, and more capital found employment than ever before.

White Pine.—The first arrival of rafts was about March 30, a month earlier than previous year. Prices opened at \$16 to \$18 afloat; lath \$3.25 to \$3.50; shingles \$3.50 to \$3.75 on raft. Minneapolis and Chippewa fleets ranged until first of summer at opening figures with moderate sales, afterwards declining to \$14@16, and then as low as \$13@15 towards middle of August. Wisconsin river lumber ranged as high at one time as \$28 for extra selections, and from \$27 down to \$13 for common. Shingles and laths were in firm demand throughout.

The receipts by river exceed those of 1872, 44,913,000 feet, being over forty-six per cent. more; and by railroad are less by 15,608,000 feet. The stock on hand shows to be 52,134,379 feet over the amount on hand 1st January, 1873. Shingles 2,589,250 and lath 423,450 less.

Yellow Pine.—For this article there was less demand during the year, which was naturally the consequence of the depression in white pine. The receipts, the main portion of which were from the Iron Mountain railroad in southeast Missouri, fell below the receipts of 1872 nearly twelve million feet, a large and surprising difference.

The quantity of these lands contiguous and in marketable distance from the two lines of railroad entering St. Louis from that direction is limited and cannot hold out much longer; probably less than five years will see it all cut within five miles of the Iron Mountain railroad, and it will be at the present rate of consumption. There is left a good part of the best timbered lands in the state without communication with St. Louis, bearing large quantities of yellow pine, besides various hardwoods. The price of green flooring was \$25 uniformly, for first and second clear, except during December, and \$13 to \$16 for third rate, city inspection. The reason for no variation was the fact that it has not allowed a living profit for the past three years, and it was impossible to decline. The market could well afford these prices compared with that of white pine. The demand along the line of the Iron Mountain road for use of the road and local demands was quite good, but at hardly remunerative prices, yet compared well

with St. Louis for the same qualities. The millmen had poor success, the effects of low prices and high freights being disastrous to the majority.

Miscellaneous.—The demand for walnut was very good until the panic and prices were firm with upward tendency. It has suffered like all kinds since September. Poplar being in excessive supply as the season advanced declined from \$23 to \$16 and \$18 during summer and did not recover. Other kinds were in light supply and only moderate request.

The tables below of receipts, shipments and stock on hand will be found interesting and should receive thoughtful attention as they have been prepared with care and all possible degree of accuracy.

## RECEIPTS OF 1873.

White pine, by raft, ft.....	142,013,000
White pine, by railroad, ft.....	9,240,000
Yellow pine, by railroad, ft.....	22,355,000
Yellow pine, by river, ft.....	985,000
Poplar, by river, ft.....	5,818,000
Poplar, by railroad, ft.....	5,951,000
Hard wood, from all points, ft.....	12,512,000
Shingles, pcs.....	57,111,000
Laths, pcs.....	18,892,000
Logs, white pine, ft.....	27,000
Logs, hardwood, ft.....	13,000

## SHIPMENTS, 1873.

Lumber, ft.....	64,360,000
Shingles, including local trade, pcs.....	59,700,250
Lath, do do do do.....	19,315,400

## STOCK ON HAND THIS DATE.

White pine, ft.....	149,721,467
Yellow pine, ft.....	4,422,564
Poplar, ft.....	6,085,869
Walnut, ft.....	4,974,500
Hard-woods, beside walnut.....	1,988,800
Shingles, pcs.....	10,406,750
Lath, pcs.....	3,427,500
Pickets, pcs.....	843,760
Logs, white pine, ft.....	12,550,000
Logs, hardwood, ft.....	4,450,000

Fully ten per cent of white pine on hand is held for account of manufacturers, and will be on the market for next season.

## LUMBERING IN THE UPPER MISSISSIPPI VALLEY.

Upper Mississippi River.—There were cut and banked on this river and tributaries above Minneapolis during the winter of 1872 and 1873, 176,380,000 feet of logs, and with 50,000,000 feet on hand at the commencement of the season, the total stock reached 226,380,000 feet for 1873. There were 161,880,670 feet scaled and manufactured at Minneapolis during the year, and 34,500,000 feet at points above. There are now 30,000,000 feet of logs in booms ready

for 1874. The operations are about ten per cent above the aggregate of 1872.

St. Croix.—On this river and tributaries the amount of logs put in during last winter footed up 180,000,000 feet, and there were 80,000,000 feet on hand in the entire river, to commence with. The amount run in booms at Stillwater was 166,000,000 feet, of which 63,000,000 feet were manufactured at that place, and the balance, 103,000,000 feet, run through for points below. There are about 40,000,000 feet on hand, so far this winter, at Stillwater.

Chippewa.—The total feet of logs cut on Chippewa and tributaries, in season 1873, was about 400,000,000 feet, and the stock on hand at beginning was 80,000,000 feet. There were 264,760,000 feet of lumber manufactured at Eau Claire, Menominee and Chippewa Falls, and 55,000,000 shingles and 75,000,000 lath. There are now 70,000,000 feet in the river. The amount banked did not include all cut.

Black River.—There were cut and banked on this stream, &c., during the winter of 1872 and '73, 175,000,000 feet of logs; run out during the summer of 1873, 195,900,000, of which amount 50,000,000 feet was manufactured into lumber at La Crosse. There were 10,000,000 feet of lumber also run out. There are about 175,000,000 feet of logs back in the river to come out.

Wisconsin—During the winter of 1872 and '73 there were cut and banked 60,000,000 feet of logs, and there remained over from the previous winter 40,000,000 feet, in booms and small tributaries, which gave a total supply of 100,000,000 feet. About 70,000,000 feet were run into booms. The amount of lumber manufactured during the season was 80,000,000 feet, and the quantity being held for 1874 is variously estimated at 30,000,000 feet to 40,000,000 feet.

## REVIEW AND PROSPECTS.

The various estimates and statements which precede these remarks tend to show that the year was in some respects an anomaly in the history of the lumber trade. The supply (speaking of pine) was smaller than the previous year, yet the stocks on hand now (with the exception of Chicago) are larger in the majority of important markets in the west. This is incontrovertible evidence that the demand and sales were of less magnitude than during 1872, from causes noted be-

fore. There is one thing in this trade which is hardly correct from the natural order of things, and that is, the supply has not been governed by the demand, as the supply is necessarily furnished before the extent or character of the demand is known, and lumbermen have almost invariably used their last opportunity to make their cut as large as they could. The stocks of lumber held have cost as little as they ever will, and there is every reason to believe that the trade will increase. The value of stumpage is rapidly enhancing, and is an object of interest and investment by capitalists. As regards St. Louis, although holding large stocks (unusually so) of white pine, yet the receipts are not as large as during 1869 and 1870, and still there are more avenues of trade opened, and railroads have since developed large sections of country. The stock is not as large it should be considering that St. Louis should control a great portion of trade that up-river towns receive. And first of all the question of railroad freights and facilities are paramount and merit attention they do not get. Persistent efforts on the part of the dealers would not be useless and will bear fruit eventually. In the northern pineries the expectation and general belief is now that not more than one-fourth on some streams, to one-half on others, will be put in this winter. Wages have been reduced 33 per cent., and it is feared by some that the lumbermen will endeavor to increase their cut just in proportion as is saved in this way. For instance we will suppose there are 200,000,000 feet put in Chippewa, the present winter. It requires the labor of 12 men in a season's work to cut and bank 1,000,000 feet of logs, and to bank 200,000,000 feet there would be a saving (counting the reduction as one-third) to allow the putting in of 100,000,000 feet for nothing at last year's prices for the 200,000,000 feet; but this would necessitate the employment of more men, and their cost of living, which determines the whole question and brings the figures lower. These are suggestive figures, and may prove unnecessary under the circumstances. It is urged by some of our advisers that provisions are higher in their districts and the roads very bad, which will place the cost of logging at 95 per cent of last year. The stringency of money will prevent the usual operations, and there cannot be heavy stocks got out. Building will,

we believe, receive an impetus as an investment, as the unstable value of railroad and corporation stocks and bonds will deter many from using that mode of investing. We sincerely hope that the best wishes of all will be fulfilled the present year.

#### BUSINESS OF MONTAGUE AND WHITEHALL, MICH.

The Montague Lumberman, a new weekly published by F. C. Sholes, of which the sixth number dated Jan. 3, has just come to hand, furnishes the following accurate figures about the operations within its immediate field of observation:

##### Montague.

###### LUMBER.

	No. of Feet.
Heald, Avery & Co.....	13,698,073
Ferry, Dowling & Co.....	9,156,175
John C. Cook & Son.....	5,951,092
Weston Bros.....	6,139,283
Fonteneau & Co.....	4,370,400
James Dalton & Bro.....	3,631,916
Total.....	41,949,644

###### SHINGLES.

Mills.	Ft logs.
D. C. Bowen & Co.....	2,600,000
Ferry, Dowling & Co.....	1,800,000
Total.....	4,400,000
Total feet logs cut.....	46,349,644

##### Whitehall.

###### LUMBER.

Mills.	Feet.
Cone & Green.....	5,752,925
Fischer & Keller.....	4,603,070
Staples & Covill.....	4,200,006
Hedges & Green.....	2,666,000
Lewis & Covell.....	2,702,679
J. Alley & Co.....	2,518,355
T. B. Wilcox & Co.....	2,305,229
A. B. Bowen & Co.....	2,110,000
D. C. Bowen & Co.....	2,000,000
Franklin & Johnson.....	1,925,119
Brown, Nelson & Co.....	1,761,513
Farnham's water mill.....	1,190,000
Peterson & Anderson.....	1,110,302
Wilcox & Morgan.....	1,000,313
Jas. Pierson.....	1,000,000
Johnson & Hagarman.....	984,108
Blodgett & Burns.....	408,312
Total.....	38,289,325

###### SHINGLES.

Mills.	Ft. Logs.
Johnson & Hagarman.....	900,000
Norris & Green.....	897,000
Staples & Covill.....	200,000
Total.....	1,997,000
Total of logs cut.....	40,286,325

The total number of shingles cut by Whitehall firms, was 27,803,000. The number cut by Ferry, Dowling & Co., was 9,706,000; the number cut by Johnson & Hagarman was about 5,000,000 and that of D. C. Bowen & Co., over 12,000,000.



## THE MILWAUKEE AND ST. LOUIS AIR LINE.

The party commanded by of Chief Engineer Morrell, detailed for a preliminary survey of the Milwaukee and St. Louis Air Line railway, have returned to this city, having completed their work. This will be a strictly air line. It will intersect every important east and west railroad south of Milwaukee, about twenty in all. In connection with the Wisconsin Central, it will afford direct rail communication between the greatest lumber resources and the widest field of consumption in the United States. It will make Milwaukee a formidable rival of Chicago as a shipping point for Michigan lumber. It will bring cheap coal from Illinois to the iron manufactures that abound in Wisconsin all the way from Milwaukee to the Superior terminus of the Wisconsin Central railway. It is one of the most promising railway projects of the day.

## PRODUCT OF EAU CLAIRE DISTRICT FOR 1873.

EAU CLAIRE, Jan. 1st, 1874.

EDITORS WISCONSIN LUMBERMAN:—I send you the following table of the lumber manufactured in Eau Claire, and vicinity for 1873. The statistics are compiled from files of the *Eau Claire Free Press* and may be relied on. I hope they will reach you in time for your January number.

Yours Precisely,

SCISSORS :

	Lumber.	Lath.	Shingles
Northwestern L Co			
Eau Claire.....	14,175,000	4,455,000	7,000,000
D. Shaw & Co .....	3,584,000	3,250,000	90,000
Ingram & Kennedy.....	25,500,000	3,250,000	8,000,000
Smith & Buflington.....	4,500,000	2,500,000	2,500,000
Boyd & Randall.....	4,000,000		
W. B. Esterbrook.....	7,500,000	2,500,000	
Eau Claire L Co.....	45,000,000	10,000,000	10,000,000
Graham, W. & Co.....	5,000,000	2,000,000	
Wheaton L Co.....	2,000,000	50,000	
John Barron & Co.....	9,000,000	3,000,000	
Huysen's 2 mills.....	6,000,000	1,000,000	
Carson & Band, Eau Galla.....	11,000,000		
Knapp, Stout & Co. Menominee.....	55,000,000		
Union L Co. Chippewa Falls.....	12,000,000	10,000,000	
Jackson & Phillips, Jim's Falls.....	5,000,000		
Gravel Isl. mill, Chippewa Falls.....	6,000,000	2,000,000	
Robson's mill.....	12,000,000	4,000,000	
Stanley Brothers .....	8,500,000	1,500,000	
Smith, Brooks & Co. Bloomer.....	1,000,000		
Total.....	275,759,000	49,506,000	27,500,000

## THE EAGLE RAPIDS IMPROVEMENT CO.

At a recent meeting of the Eagle Rapids Improvement Co., in Chippewa Falls, Messrs. A. E. Pound, Coliche Allen, L. C. Stanley, John Barron, C. A. Bullen, H. P. Graham, O. H. Ingram, J. Robson, and T. C. Pound, were chosen directors; Mr. O. H. Ingram, president, Mr. A. E. Pound, vice president, and Mr. B. E. Reid, secretary and treasurer. Mr. Graham, who was president of the company, last winter, declined to accept the position again, as his duties as senator from that district, would compel him to be absent all winter. His successor, Mr. Ingram, is a gentleman of energy and large practical experience, and will make an excellent officer. Concerning the importance of this enterprise the *Chippewa Herald* says: The completion of the dam at Eagle Rapids, with the sorting works, etc., will be a grand improvement. It will add to the value of pine lands, largely, because the stock got out will be safe from floods and ice gorges. Heretofore, if a logger received eighty per cent. of his stock, it was considered large; in many cases sixty and seventy per cent. was all that was received. When the Eagle Rapids Improvement is finished, and in good working order, there is no reason why the total amount will not be received. The completion of that work, will make capital feel more secure. It will do away largely with the uncertainty of logging investments, and furnish mill men with a full amount of stock. It will encourage home manufacture.

## THE TRADE AT WILLIAMSPORT, PA.

From the *Williamsport Gazette and Bulletin* of Jan. 3, we hastily condense a statement of the movements of lumber at that point for the past year. The next number of the WISCONSIN LUMBERMAN will contain valuable and extended statistics from many points, for which we now have neither the time nor space.

According to our cited authority, the shipments from Williamsport by canal and rail aggregate 248,462,489 feet, an excess of 44,955,787 feet over the trade of 1872, and only 26,400,903 feet less than in 1871, the heaviest year in our history, when the shipments ran up to nearly two hundred and seventy millions.

The operations of the boom for a period of twelve years show nearly one billion logs rafted out, measuring nearly two billions of feet, which will serve to exhibit the enormous magnitude of the lumber interest centering at this city.

The manufacturers commence the business of 1874 with a stock on hand of 226,942,276 feet, which is 73,880,223 feet greater than that carried over from 1872. Considering the financial crisis and general depression of business, this is really less than might have been expected two months ago. As a less amount of stock than usual will be cut this winter, the trade of 1874 will not differ much from the past year, if there is a fair resumption of business in the spring, and prices remain about as they have been. And the indications are that there will be no material decline.

When it is taken into consideration that the value of manufactured lumber—placing it at a moderate estimate—reaches fully six millions of dollars, it can readily be seen that the amount of capital invested by the manufacturers of Williamsport is no very inconsiderable sum. Our lumber traffic is greater than that of any other point east of Michigan, and we have one or two of the largest mills in the world.

Owing to the magnitude of the manufacturing interests of the city, business men labor under much inconvenience for banking accommodations. Our banking facilities are entirely inadequate to the actual demands of business men, and were the volume of currency proportionately increased, business would move more briskly and the city improve with greater rapidity.

**THE CUT IN MICHIGAN FOR THE SEASON OF 1873, AND THE AMOUNT ON HAND.**

In the *Detroit Free Press* we find the following summary of the cut of lumber in the state of Michigan during the season of 1873, together with the amount on hand, and the number of feet of logs on hand and to be put in :

	LUMBER.	
	Cut.	On hand.
Port Huron.....	36,969,000	8,800,000
Saginaw, shipment.....	479,945,955	90,000,000
Flint.....	64,000,000	21,750,000
Saugatuck.....	65,000,000	*12,000,000
Ford River.....	18,600,000	4,000,000
Newaygo.....	125,000,000	*25,000,000
Menominee.....	123,983,000	40,000,000
Big Rapid.....	20,000,000	13,000,000
Grand Rapids.....	68,699,387	6,000,000
Grand Haven.....	117,535,000	26,000,000
Muskegon.....	329,688,855	60,000,000
White Lake, etc.....	88,579,168	13,000,000
Pentwater.....	6,744,818	1,500,000
Ludington.....	83,670,191	3,120,000
Frankfort.....	7,800,000	300,000
Manistee.....	183,245,071	*30,000,000
Detroit, Lansing & Lake Michigan Railroad.....	300,000,000	80,000,000
Total.....	2,120,885,124	435,370,000

\*Estimated.

**LOGS ON HAND AND TO BE CUT.**

The following table shows the number of feet of logs on hand at some of the more important points in Michigan from which reports have been received, and also the number of feet to be cut and put in the streams the present winter. Taken in connection with the preceding table it will afford an idea of the probable condition of trade next year.

	On hand.	To be put in
Menominee.....	15,000,000	102,000,000
Flint.....	32,500,000	26,000,000
Manistee.....	30,000,000	100,000,000
Ludington.....	27,800,000	50,000,000
Pentwater.....	3,720,000	10,000,000
White Lake.....	15,000,000	47,000,000
Muskegon.....	90,000,000	*225,000,000
Grand Haven.....	60,200,000	77,000,000
Grand Rapids.....	10,000,000	*50,000,000
Big Rapid.....	8,000,000	10,000,000
Ford River.....	5,600,000	*8,000,000
An Gres.....	24,000,000	20,000,000
Rifle River.....	18,250,000	35,000,000
Port Huron.....	11,500,000	10,000,000
Tittabawassee.....	85,000,000	*125,000,000
Total.....	523,970,000	914,000,000

\*Estimated.

In regard to the Saginaw valley, the amount shipped is only given, as no official figures regarding the actual amount cut has been published. The cut of last season was 602,000,000 feet, but the product of this year will probably fall short of that at least a hundred million feet. The amount given above as shipped does not represent the actual shipments, but the figures are probably as near correct as it is possible to get them.

### PROSPECTS FOR A PROFITABLE SEASON IN WISCONSIN.

The *Chippewa Falls Avalanche*, a bright paper just started by Messrs. Gorer & Hollister takes a cheerful view of the lumber prospects of Wisconsin. We have not omitted to present a variety of opinions and estimates—from both our own correspondents and our exchanges—which conflict with our own views. With the following, however, the WISCONSIN LUMBERMAN substantially agrees. We do not anticipate a redundancy of logs from Wisconsin pineries this winter:

There are no idlers here and no drones—all is bustle, life and vigor in the pine woods. Early in the fall we had croakers here (you may find this class of worthy gentlemen everywhere) who predicted that the lumbering business was ruined, that the country was ruined, and that we were all going down the hill together to eternal poverty and eternal distress. But how have the predictions of these croakers been verified? Are we ruined? Not a bit of it. On the contrary the lumbering interest to-day in the Chippewa Valley is on a sounder footing than it ever was before, and we predict for next season—with all due respect for the opinion of croakers—more remunerative profits on manufactured lumber than we have had at any time since the war. The cry is hard times, &c., but what of all that. Let there but be even a moderate foreign demand for wheat during the winter, by the first of May next or as soon as the river is open for the running of rafts, the supply on hand will be but meagre and the prices of course must appreciate. There is this much also to be considered in taking a candid review of this whole question. There are no old logs now on hand. On all the streams there was a perfect "drive" last spring and all the logs, new and old, were carried below. Now in lumbering as in everything else there are contingencies and drawbacks, and these must be looked into before one can be guided to a just decision. These contingencies and drawbacks may come next spring in an insufficient supply of rain. The natural result in the event of an insufficient supply of rain would be a poor drive and a

short crop of logs at the mill. The most of the logs that will be cut on the Chippewa this winter are very far up the river, and the driving of these logs all the way down to the places of manufacture is a very important question for consideration. Even with favorable water we cannot expect to get down over two-thirds of the amount put in, and this will of course have its effect upon the market. From a full survey of the field and looking at this question in every aspect in which it has presented itself, the conclusion to which we arrive is, that both high grades and low grades of lumber will command a ready sale next summer, and that the price will be such that a very liberal profit on the business will be realized.

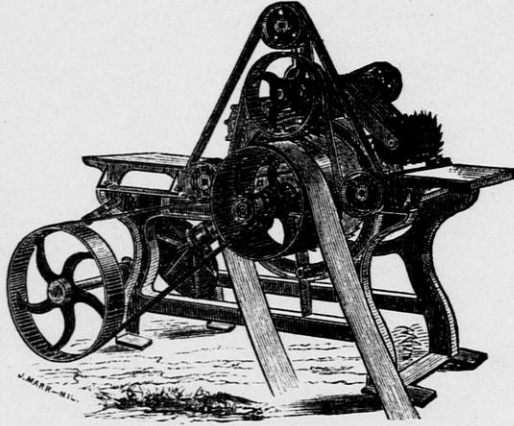
### THE FRENCH LUMBERING COMPANY.

The "French Lumbering Company" was formed January 1st at Chippewa Falls. We are unable to add this name to our "Lumbermen's Register" this month—which, by the way, we must say is yet only a suggestion of what we intend to make it. The directors of the new company are: Louis Vincent, Charles Longevin, Charles Mandelert, Peter Lego, Joseph Mandelert, and its officers Louis Vincent, President; Peter Lego, Vice President, and Charles Mandelert, Secretary and Treasurer. Its capital stock is \$50,000. The French Lumbering Co., have purchased the Gravel Island Mill, which has a capacity of 12,000,000 feet. They will occupy in their business the old stand of Vincent, Mandelert & Co., on Bay St., Chippewa Falls.

C. W. Carpenter, writing from Greenwood, Wis., says:

Hard-wood logging is being indulged in by the loggers in this vicinity to quite an extent this winter. S. M. Andrews has an unlimited contract with Schofield & Co. in this kind of lumber. This is the first time that anything has been done in this line, and it is quite probable that the old plan of piling and burning the hard-wood in clearing land in this vicinity, is about played out.

# ATTENTION LUMBERMEN!



## GANG BOLTER.

YOU CAN GET, ONLY AT THE

# Cream City Iron Works,

The Best Steam Engine,  
The Best Circular Saw Mill,  
The Best Water Wheel, (new invention.)  
The Best Shingle Mill, “  
The Best Gang Edger, “  
The Best Gang Lath Mill, “  
The Best Gang Bolter, “  
The Best Automatic Bolter, “  
The Best Swaging Machine, “

We are willing to risk the amount asked for either machine that a trial will verify this assertion. Also on hand

Leffell, Bryson and other Turbine Water Wheels, Judson's Governors, Bird's Chain Pulley Blocks, Patent Oilers, Feed and Flour Mills, Steam Guages, etc., etc.

But we make a SPECIALTY of making the BEST MACHINERY for manufacturing Lumber, Shingles, Lath, etc.

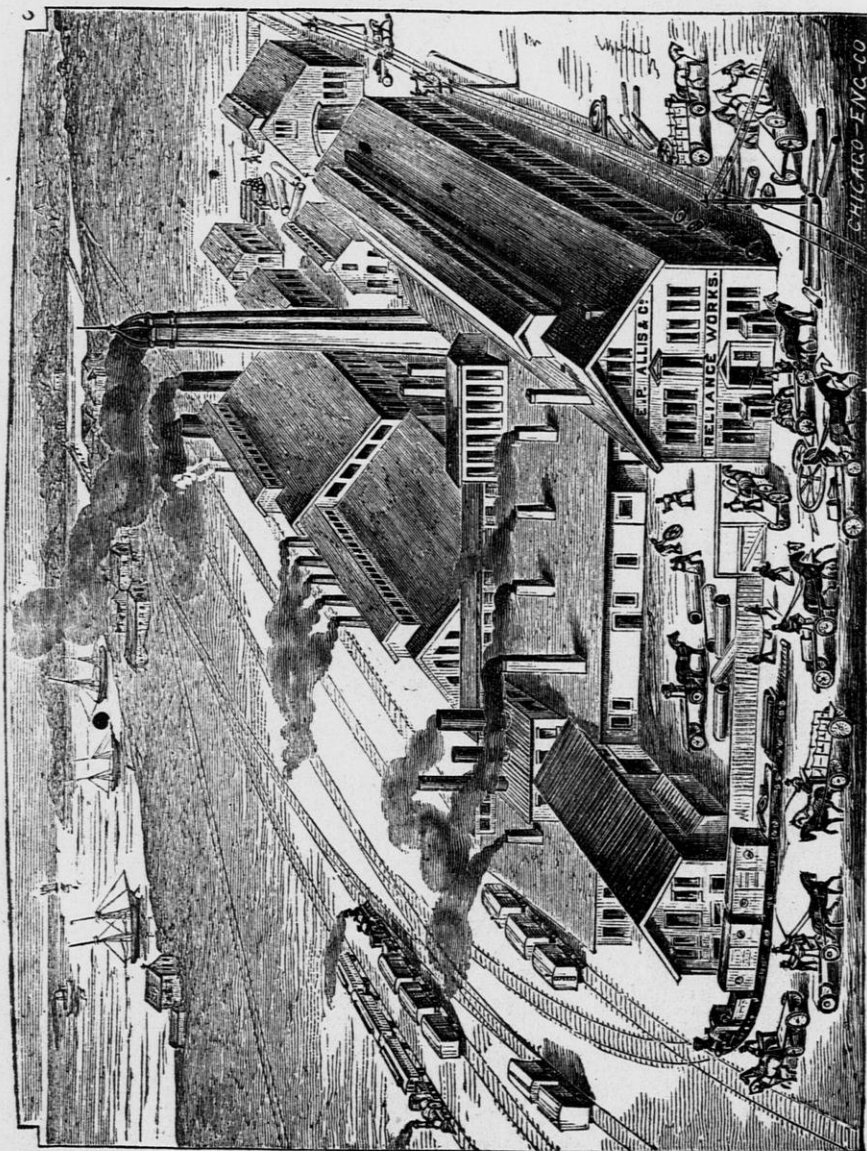
## FILER, STOWELL & CO.,

Northwest corner Clinton and Florida Sts.,

MILWAUKEE, WISCONSIN.

# RELIANCE WORKS

E. P. Allis & Co., Prop's, Milwaukee, Wis.



FOUNDRYMEN, MACHINISTS AND MILL BUILDERS,  
MANUFACTURERS OF  
STEAM ENGINES.

No. 1.

No. 1.

# WISCONSIN CENTRAL RAILROAD.

OPERATED BY

THE PHILLIPS AND COLBY CONSTRUCTION COMPANY

**SPECIAL**

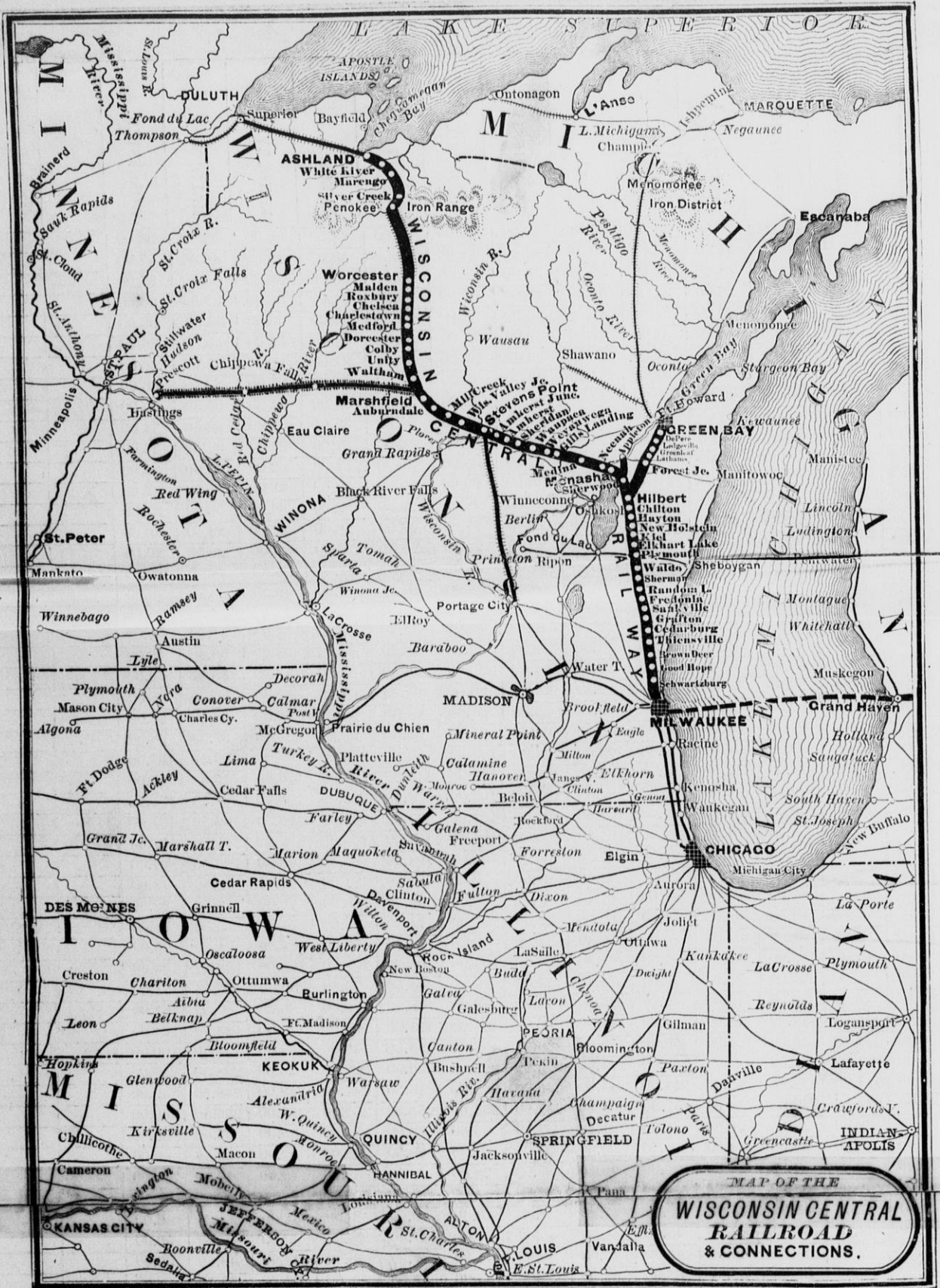
..... I T Y A N D T H A T T Y

FROM

TO	PLYMOUTH.	ELKHART LAKE.	KIEL.	HOLSTEIN.	HAYTON. CHILTON.	HILBERT.	FOREST JUNCT'N.	LATHAMS. GREENLEAF.	LEDGEVILLE.	GREEN BAY. DEPERE.	SHERWOOD.	MENASHA.	WEY-AUWEGA.
*CHICAGO ILL.....										31.50		35.00	37.50
*RACINE, WIS.....	25.00	26.00	27.00	28.00	29.00	30.00	31.00	32.00	32.00	32.00	31.00	32.00	35.00
*SOUTH MILWAUKEE.....	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	22.00	22.00	21.00	22.00	25.00
MILWAUKEE.....	15.00	16.00	17.00	18.00	19.00	20.00	20.00	21.00	21.00	21.00	20.00	21.00	24.00
THIENSVILLE.....							19.00	20.00	20.00	20.00	19.00	20.00	24.00
CEDARBURG AND GRAFTON..							18.00	19.00	19.00	19.00	18.00	19.00	24.00
SAUKVILLE.....							17.00	18.00	18.00	18.00	17.00	18.00	24.00
FREDONIA.....							16.00	17.00	17.00	17.00	16.00	17.00	24.00
RANDOM LAKE.....							15.00	16.00	16.00	16.00	15.00	16.00	23.00
SHERMAN.....							14.50	15.00	16.00	16.00	14.50	16.00	22.00
WALDO.....							14.00	14.50	15.00	16.00	14.00	15.00	21.00
PLYMOUTH.....							14.00	14.00	14.00	14.50	14.00	14.00	20.00
ELKHART LAKE.....												14.00	20.00
KIEL.....												13.00	19.00
HOLSTEIN.....												12.00	18.00
HAYTON AND CHILTON.....												11.50	17.00
HILBERT.....												11.00	17.00
*BURLINGTON, WIS.....	27.00	28.00	29.00	30.00	31.00	32.00	33.00	34.00	34.00	34.00	33.00	34.00	37.00
*CLINTON JUNCTION, WIS..	33.00	34.00	35.00	36.00	37.00	38.00	39.00	40.00	40.00	33.00	39.00	33.00	43.00
*BELOIT, WIS.....	33.00	34.00	35.00	36.00	37.00	38.00	39.00	40.00	40.00	38.00	39.00	38.00	43.00
*FREEPORT, ILL.....	41.20	42.20	43.20	44.20	45.20	46.20	47.20	48.20	48.20	41.00		35.00	44.00
*MT. CARROLL, ILL.....	37.00	38.00	39.00	40.00	41.00	42.00	43.00	44.00	44.00	44.00	43.00	44.00	47.00
*FULTON, ILL.....	44.80	45.80	46.80	47.80	48.80	49.80	50.80	51.80	51.80	51.80	50.80	51.80	54.80
*ROCK ISLAND, ILL.....	45.00	46.00	47.00	48.00	49.00	50.00	51.00	52.00	52.00	52.00	51.00	52.00	55.00
*DAVENPORT, IOWA.....	46.00	47.00	48.00	49.00	50.00	51.00	52.00	53.00	53.00	53.00	52.00	53.00	56.00
*COUNCIL BLUFFS, IOWA....							91.00	92.00	92.00	92.00	91.00	92.00	95.00
*OMAHA, NEB.....							101.00	102.00	102.00	102.00	101.00	102.00	105.00
*ST. JOSEPH, MO.....							91.00	92.00	92.00	92.00	91.00	92.00	95.00
*ATCHISON, KAN.....							91.00	92.00	92.00	92.00	91.00	92.00	95.00
*LEAVENWORTH, KAN.....							91.00	92.00	92.00	92.00	91.00	92.00	95.00
*KANSAS CITY, MO.....							91.00	92.00	92.00	92.00	91.00	92.00	95.00
*DUNLEITH, ILL.....							57.00	58.00	58.00	58.00	57.00	58.00	61.00
*GALENA, ILL.....							56.00	57.00	57.00	57.00	56.00	57.00	60.00
*DUBUQUE, IOWA.....							58.00	59.00	59.00	59.00	58.00	59.00	62.00
*CEDAR RAPIDS IOWA.....							59.00	60.00	60.00	60.00	59.00	60.00	63.00
*FORT DOGGE, IOWA.....							93.00	94.00	94.00	94.00	93.00	94.00	97.00
*ALTON, ILL.....							65.00	66.00	66.00	66.00	65.00	66.00	69.00
*EAST ST. LOUIS, ILL.....							65.00	66.00	66.00	66.00	65.00	66.00	69.00
*SEDALIA, MO.....							108.00	109.00	109.00	109.00	108.00	109.00	112.00
*FORT SCOTT, KAN.....							143.00	144.00	144.00	144.00	143.00	144.00	147.00
*DENISON, TEX.....							213.00	214.00	214.00	214.00	213.00	214.00	217.00
*SHERMAN, TEX.....							233.00	234.00	234.00	234.00	233.00	234.00	237.00
*DALLAS, TEX.....							240.00	241.00	241.00	241.00	240.00	241.00	244.00
*FOND DU LAC, WIS.....													20.00
*BURNETT JUNCTION, WIS..													25.00
*MINNESOTA JUNCTION, WIS..													26.00
*WATERTOWN, WIS.....	26.00	27.00	28.00	29.00	30.00	31.00	32.00	33.00	33.00	33.00	32.00	33.00	36.00

FROM

STEVENS POINT.	MILL CREEK.	AUBURNDALE.	MARSHFIELD.	WALTHAM.	UNITY.	COLBY.	DORCHESTER.	MEDFORD.	CHARLESTOWN.	CHELSEA.	ROXBURY.	MALDEN.	WORCESTER.
38.50	40.50	41.50	42.00	43.50	44.50	45.00	46.50	48.00	48.50	49.50	50.50	52.00	53.00
36.00	38.00	39.00	40.00	41.00	42.00	42.50	43.00	44.00	44.50	45.00	46.00	46.50	47.00
26.00	28.00	29.00	30.00	31.00	32.00	32.50	33.00	34.00	34.50	35.00	36.00	36.50	37.00
25.00	27.00	28.00	29.00	30.00	31.00	31.50	32.00	33.00	33.50	34.00	35.00	35.50	36.00
25.00	27.00	28.00	29.00	30.00	31.00	31.50	32.00	33.00	33.50	34.00	35.00	35.50	36.00
25.00	27.00	28.00	29.00	30.00	31.00	31.50	32.00	33.00	33.50	34.00	35.00	35.50	36.00
25.00	27.00	28.00	29.00	30.00	31.00	31.50	32.00	33.00	33.50	34.00	35.00	35.50	36.00
24.00	26.00	27.00	28.00	29.00	30.00	30.50	31.00	32.00	32.50	33.00	34.00	34.50	35.00
23.00	25.00	26.00	27.00	28.00	29.00	29.50	30.00	31.00	31.50	32.00	33.00	33.50	34.00
22.00	24.00	25.00	26.00	27.00	28.00	28.50	29.00	30.00	30.50	31.00	32.00	32.50	33.00
21.00	24.00	25.00	26.00	27.00	28.00	28.50	29.00	30.00	30.50	31.00	32.00	32.50	33.00
21.00	23.00	24.00	25.00	26.00	27.00	27.50	28.00	29.00	29.50	30.00	31.00	31.50	32.00
20.00	22.00	23.00	24.00	25.00	26.00	26.50	27.00	28.00	28.50	29.00	30.00	30.50	31.00
19.50	21.00	22.00	23.00	24.00	25.00	25.50	26.00	27.00	27.50	28.00	29.00	29.50	30.00
19.00	21.00	21.50	22.00	23.00	24.00	24.50	25.00	26.00	26.50	27.00	28.00	28.50	29.00
18.00	20.00	21.00	22.00	23.00	24.00	24.50	25.00	26.00	26.50	27.00	28.00	28.50	29.00
38.00	40.00	41.00	42.00	43.00	44.00	44.50	45.00	46.00	46.50	47.00	48.00	48.50	49.00
44.00	46.00	47.00	48.00	49.00	50.00	50.50	51.00	52.00	52.50	53.00	54.00	54.50	55.00
44.00	46.00	47.00	48.00	49.00	50.00	50.50	51.00	52.00	52.50	53.00	54.00	54.50	55.00
45.00	47.00	48.00	49.00	50.00	51.00	51.50	52.00	53.00	53.50	54.00	55.00	55.50	56.00
48.00	50.00	51.00	52.00	53.00	54.00	54.50	55.00	56.00	56.50	57.00	58.00	58.50	59.00
55.80	57.80	58.80	59.80	60.80	61.80	62.30	62.80	63.80	64.30	64.80	65.80	66.30	66.80
56.00	58.00	59.00	60.00	61.00	62.00	62.50	63.00	64.00	64.50	65.00	66.00	66.50	67.00
57.00	59.00	60.00	61.00	62.00	63.00	63.50	64.00	65.00	65.50	66.00	67.00	67.50	68.00
96.00	98.00	99.00	100.00	101.00	102.00	102.50	103.00	104.00	104.50	105.00	106.00	106.50	107.00
106.00	108.00	109.00	110.00	111.00	112.00	112.50	113.00	114.00	114.50	115.00	116.00	116.50	117.00
96.00	98.00	99.00	100.00	101.00	102.00	102.50	103.00	104.00	104.50	105.00	106.00	106.50	107.00
96.00	98.00	99.00	100.00	101.00	102.00	102.50	103.00	104.00	104.50	105.00	106.00	106.50	107.00
96.00	98.00	99.00	100.00	101.00	102.00	102.50	103.00	104.00	104.50	105.00	106.00	106.50	107.00
96.00	98.00	99.00	100.00	101.00	102.00	102.50	103.00	104.00	104.50	105.00	106.00	106.50	107.00
62.00	64.00	65.00	66.00	67.00	68.00	68.50	69.00	70.00	70.50	71.00	72.00	72.50	73.00
61.00	63.00	64.00	65.00	66.00	67.00	67.50	68.00	69.00	69.50	70.00	71.00	71.50	72.00
63.00	65.00	66.00	67.00	68.00	69.00	69.50	70.00	71.00	71.50	72.00	73.00	73.50	74.00
64.00	66.00	67.00	68.00	69.00	70.00	70.50	71.00	72.00	72.50	73.00	74.00	74.50	75.00
98.00	100.00	101.00	102.00	103.00	104.00	104.50	105.00	106.00	106.50	107.00	108.00	108.50	109.00
70.00	72.00	73.00	74.00	75.00	76.00								





# WISCONSIN CENTRAL RAILROAD,

OPERATED BY

THE PHILLIPS AND COLBY CONSTRUCTION COMPANY

---

## **SPECIAL**

# LUMBER TARIFF,

(LUMBER, LATH AND SHINGLES,)

In Effect January 1st, 1874.

---

### **SPECIAL CONDITIONS.**

The Rates in this Tariff are for car loads of 20,000 pounds, which is to be considered a full car load, although 22,000 pounds may be allowed as a maximum weight. For the excess over 20,000 pounds, proportionate rates must be charged. Any excess over 22,000 pounds is subject either to be unloaded where discovered, at risk of owner, or charged third class rates, at option of the carrier.

When actual weight cannot be ascertained, Agents will use the following table of estimated weights and measurements for local points:

**WISCONSIN CENTRAL  
RAILROAD  
& CONNECTIONS.**



**WISCONSIN CENTRAL  
RAILROAD.**

**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 Sheboyan and Fond du Lac Railroad, will find this the QUICKEST and MOST COMFORTABLE ROUTE.

**CONNECTIONS:**

At Plymouth, with Sheboyan and Fond du Lac Railroad.

At Green Bay, (Fort Howard), with Chicago and Northwestern, and Green Bay and Minnesota Railways.

At Amherst Junction, with Green Bay and Minnesota Railway.

Ask for Tickets via Wisconsin Central Railroad, the best equipped and most popular Road in the Northwest.

J. HARRIS, Gen'l Sup't, Milwaukee. H. PRATT, Gen'l T. A., Milwaukee. H. M. SCHOLLAR, Traveling Agent.

**3,000 ACRES  
Valuable Pine Lands,**

IN BAYFIELD CO., WIS.,

**FOR SALE.**

Plats and estimates of Pine Timber furnished on application.

**Farming Lands.**

**Kossuth Co., Iowa.**

W 1/4 of S E 1/4 of Sec. No. 9, T. 100, R. 29, 80 acres.

**Martin Co., Minn.**

N W 1/4 Sec. 9, T. 104, R. 29, 160 acres.

**Shawano Co., Wis**

N E of N E 1/4 W 1/4 N E 1/4 and S E 1/4 Sec. 25, N E 1/4 W 1/4 of S E 1/4 and E 1/2 of S W 1/4 Sec. 36, T. 27, R. 16, E. 600 acres. Also, a valuable improved farm of 374 acres—100 improved. Good buildings, &c.

**Waupaca Co., Wis.**

N W of N W 1/4 Sec. 19, and N E of S E 1/4 Sec. 16, T. 24, R. 14, E. 80 acres. Also, N 1/2 of N E 1/4 Sec. 8, T. 25, R. 15, E. 80 acres, improved.

**Village Property.**

**Dane Co. Wis.—Village of Mazomanie.**

The middle 86 feet of Lot 1, block 4, with brick building thereon, and the N 88 feet of Lot 2, block 4, with frame building thereon.

**Monroe Co., Wis.—Village of Tomah.**

Lot 1, blk 39, with frame dwelling house thereon.

Any of the above property will be sold on reasonable terms.

I also have mortgages on desirable Real Estate for sale. Apply to the undersigned, No 409, Broadway, Milwaukee.

**JAMES B. TURCK.**

**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 Cheboyan 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 instalments, 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.

**CURTIS & CO.,**

MANUFACTURERS OF

**All kinds of Saws.**

Circular, Gang, Mulay, Mill, Pit,



Cross Cut and Scroll Saws, Billet Webs.

ALSO,

**MANDAELS & 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 EVER MADE..

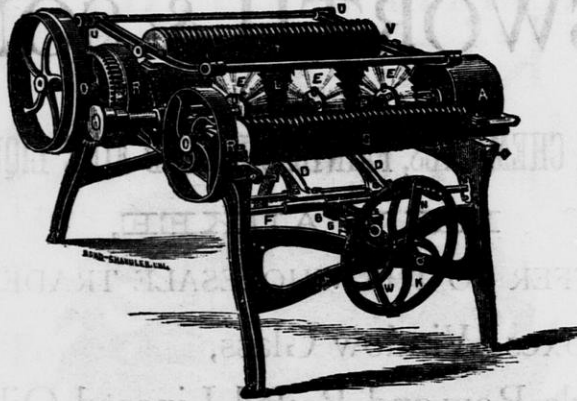
Send for Price Lists.

**117 VINE STREET, ST. LOUIS, MO..**

SOLE AGENT FOR WISCONSIN OE

# Caldwell's Pat. Parallel Gang Lumber Edger,

Patented October 13, 1868.  
Patented August 19, 1873.



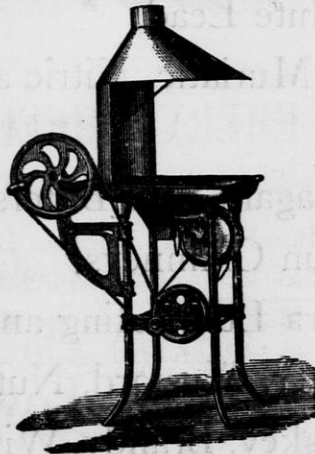
Do not fail to send for Circulars of this  
Machine.  
Made with 2, 3, 4 or 5 Saws.

Also Agent for C. S. & S. BURT's (Lows and Evert's Patents)

## Shingle and Heading Machinery, ERIE CITY IRON WORKS SAW MILLS, ENGINES AND BOILERS,

AMES' IRON WORKS  
Portable and Farm Engine

GREENWOOD'S  
HEADING AND STAVE MACHINERY,



Portable Forge.

KAESTNER'S  
Portable Grist Mills,  
AND ALL KINDS OF  
Iron and Wood-Working Machinery,

### Portable Forges, Supplies, Etc., Etc.,

Write or call for Circulars or Information, **O. L. Packard's Machinery Depot,**  
**103 WEST 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. ☛*

# PEIRCE & WHALING

*Milwaukee, Wis.,*

HAVE IN STOCK,

1,200 Tons American Iron,

50 Tons Sleigh Shoe Steel, Flat and Curved,

70 Tons Chain, All Sizes,

2,500 Boxes Horse Nails, North Western, Ausable,

Globe, National and Brundage.

AND A FULL LINE OF

Horse and Mule Shoes, Perkin's Patent,

Toe Calks,

Heavy Hardware,

Blacksmiths Tools,

Plow Materials.

---

SEND FOR OUR CATALOGUE AND PRICES.

---

## PEIRCE & WHALING,

133, 135, 137 and 139 *West Water Street,*

MILWAUKEE, WIS.

**JOHN NAZRO & CO.,**  
**WHOLESALE**  
**HARDWARE,**  
**MILWAUKEE,**

Will occupy in a few months their

**Mammoth New Store,**

Corner of South Water and Reed Streets, near the Milwaukee  
 & St. Paul Passenger Depot,

**ON THE SOUTH SIDE.**

—••—  
 Meanwhile they offer at the old stand, on East Water Street,  
 all kinds of

**SEASONABLE GOODS,**

INCLUDING

**CROSS-CUT SAWS, WOOD SAWS,**  
 Champion, Lightning and Perforated Tooth.      Lightning, Livingstone's, Braced and Common.

**AXES,**  
 Leading Brands.

**HORSE SHOES,**  
 Burden's.

**COIL CHAIN,**  
 Full Assortment.

Carriage and Tire Bolts, Augurs and Augur Bits, Rafting  
 Augurs, Skates and Sleigh Bells, and Stock Re-  
 plete with everything in the line of  
 Hardware, Metals and  
 Tinner's Goods.



# Mann, Beals & Co.,

Manufacturers of and Wholesale Dealers in

## BOOTS AND SHOES,

Constantly keep on Hand a Large Stock of

## BOOT AND SHOE PACKS,

ESPECIALLY ADAPTED FOR THE

## LUMBERING TRADE.

---

We sell more of this class of goods than all the rest of the Northwest put together.

Consequently can afford the trade a better assortment at lower prices than any other house.

---

**THE LUMBERING TRADE A SPECIALTY.**

---

**MANN, BEALS & CO.,**

91 *Huron Street,*

**MILWAUKEE**

# 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.

## 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.

## 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 of 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	Harmon S C.....	Berlin
Laird & Co.....		Troan E.....	Black Earth
McCartney D.....		Ward J S & Bro.....	Black River Falls
Foster N C.....		Edmonds J.....	
Smith & Riekett.....		Elliott A.....	
Oleson & Co.....		Given P G.....	
Clinton McLaren & Co.....		Ice J.....	
Hall A & Co.....	Ahnapee	Price W T.....	
Young D.....		Shephard A.....	
Jewett Lawrence & Co.....	Algoma	Spaulding D J.....	
Sawyer P.....		Mark Bump.....	
Lane F.....	Alma	Burchard Harrison.....	
Pretz Z.....	Alma Centre	Porter W B.....	
Reynolds & Tibbetts.....	Appleton	Sawyer A E.....	
Jerard J F.....		Smith John B.....	
Ross Huntress.....		John and James Dickson.....	Bloomington
Rose & Heath.....		Barron John.....	Blue Mills
Phillips Dr.....	Arena	Briggs & Barnes.....	Boaz
Yorker S. J.....		Bucker A.....	Buffalo
Goodrich J & Co.....	Augusta	Rouch & Erding.....	
Randall S.....		McCarty J.....	Bloomer
Bennett & Hurd.....		Smith, Brooks & Macauley.....	
Parr G.....	Avoca	Nelson H & Co.....	Boscobel
Bowen E.....	Albany	Weston, Miner & Co.....	
Morrison Creek Lumber Co.....	Albion, Jackson Co	Pierce & Sly.....	Franch
Smith J B.....		Yerty J & Kripp.....	Brandon
Ashland Lumber Co.....	Ashland	Bowen E.....	Brodhead
E Inglalls & Co.....		Lamson C & Co.....	
Daniels E W.....	Auroraville	Usher & Hassinger.....	
Holbrook M S & Co.....	Arkansaw	Blake Francis W.....	Burlington
Humphrey D & Bros.....		Wodford & Davis.....	Barton
Miles & Knight.....		Betcher & Alley.....	Bay City
Flower J H.....	Bangor	Carney & Fairbanks.....	
St. Louis & Wisconsin River Co.....	Barnum	Phillips L D.....	
Hodgman S & N, Spring c Mackie.....	Beaver Dam	Haines H.....	Bell Center
Townsend Jones & Co, Spring c Second		Delveux A & C.....	Bellevue
Gratiot E H.....	Belmont	Randall Johnson.....	Binghamton
Goodhue W T.....	Beloit	Herman Henry.....	Black Creek Station
Peet & Keeler.....		C B Fay & Co.....	Casco
Gray James.....		Horn F W.....	Cedarburg
Weed J H & Co.....		Wehausen Henry.....	
Peck S W.....		Deniston J C.....	Cadiz
Talbot H G.....	Berlin	Deniston C R.....	
Treadway S N.....		Martin & Deniston.....	
Cohn L S.....		Staines J M.....	

Bock.....	Calumet	Sexmith G W, .....	Fond du Lac
Edwards J & Co,.....	Centralia	Moore, Galloway & Baker.....	
Garrison & Blinchnley,.....		Parker N & Co.....	
Jackson H W.....		Mhills N D & Co.....	
Lefevre H.....		Hamilton & Finley, .....	
Lyon R C.....		Bryant & Brown.....	
Clark & Scott.....		Hunter, Stewart & Co.....	
Frahern W C.....		Dale J L,.....	Forrestyll'e
Graves James.....	Charlestown	Curtis & Cornish.....	Fort Atkinson
Montgomery Geo H.....		Wilcox, Southwell & Co,.....	
Union Lumbering Co.....	Chippewa Falls	Coe & Lyman.....	Fairchilds
Allen C.....		Pedrick & Co.....	
Marriet, La Beulf & Co.....		Cook & Foster,.....	Fort Howard
Phillips Jackson.....		Howard Mill Co,.....	
Robson John.....		Lamb, Watson & Co,.....	
Vincent, Mandilett & Co.....		Schwartz & Kennwitz,.....	
Woodruff & Taft.....		Clinton, Lavid & Co.....	
Lyon & Co,.....	Clark's Mills	Taylor A.....	
Crosby P,.....	Clinton	Clapp & Mead,.....	Fountain City
Lampheer H P,.....		Matthales F & C,.....	
Wilcox Bros & Co,.....		Bohan & Grant.....	
Bond A D,.....	Columbus	Bowman W,.....	Frankfort
Long & Henderson,.....		Arpkee J,.....	Franklin
Aldrich V M,.....	Cooperstown	Cooley & Race,.....	Fredonia
Wright P,.....	Coral City	Bergtresser L,.....	Fremont
Stricher M,.....	Cross Plains	Schroeder & Co,.....	
Bates, Hoag & Co,.....	Darien	Kinsman C C.....	
James T & Co,.....	Darlington	Townsend E.....	
Pratt & Carpenter,.....		Edwards J & Co, .....	Frenchtown
Woodward T,.....		Freeman A W,.....	Genoa
Clark H,.....	Deansville	Wightman E D,.....	Germantown
Gormley P & Co,.....	Delevan	Natchway H,.....	Gibson
Watson J J & Co,.....		Clark & Thorp,.....	Glenbeulah
Blake Samuel,.....	DePere	Rasfans & Co,.....	Glen Haven
Kingsley W O,.....		Olds J S,.....	Glenmont
Marsh G S,.....		Coulson T,.....	Grafton
Ritchie James,.....		Berrey Bros,.....	Glenmere
Monroe John.....		Bowen E & Co.....	
Stetson Q S.....		Hubbard S.....	
Struthers Thomas.....		Smih Charles.....	
Hiles G,.....	Dexterville	Arpen A,.....	Grand Rapids
Nason S L,.....		Arpen J,.....	
Remington H W.....		Byron F,.....	
C M & A R Worth.....	De Soto	Clark & Scott.....	
Kinney Francis.....	Durand	Langworthy, Mehan & Co,.....	
Plummer & Morse.....		Meehan P & J,.....	
Hoard & Earl, .....	Doylestown	Neeves Geo & Son,.....	
Peck M N,.....		Rablin John.....	
Knapp, Stout & Co,.....	Dunnville	Roe & Butterfield,.....	
Rosenberg & Co,.....	Dykesville	Sampson H,.....	
Stockman W H,.....	Eagle	Scott Thos B,.....	
Smith W F,.....	Elkhorn	Miller John.....	
Larson & Olsen,.....	El Paso	Whipple E E.....	
Magee Bros & Anderson.....		Hickerson N H.....	Grantsburg
Eau Claire Lumber Co.....	Eau Claire	Graves J A,.....	Gravesville
Northwestern Lumber Co.....		Modlin Henry,.....	
Bangs & Fish.....		Earle & Case, Washington,.....	Green Bay
Boyd A.....		Lamb, Watson & Co,.....	
Burdock, Preston & Co.....		McCartney D,.....	
Chubb H C.....		Sanford & Co,.....	
Estabrook W B.....		Schwartz & Kennett,.....	
Graves D P.....		Shirland & Co,.....	
Ingraham & Kennedy.....		Whitney & Foster,.....	
Graham, White & Co.....		Woodruff J W & Co,.....	
Kiley Hiram.....		Benjamin S A.....	
W Maxter & Bro.....		Holmes & Thompson.....	
Ira Mead.....		Kellogg C W.....	
Pinkham J.....		K aus Anton.....	
Daniel Shaw & Co.....		Lefehre Charles.....	
Smith & Buffington.....		Lucas J & T.....	
H D Stockman & Co.....		Marshall L M.....	
Tarrant E.....		Hcrling Theo,.....	Green Bush
Wilcox & Co.....		Bailey D. R.....	Hammond
Carson & Rand.....	Eau Galle	Schmidt Adam,.....	Harrisville
Week John.....	Eau Pleine	Cook J,.....	Hartford
Hutchinson & Bro.....		Mills J D,.....	Hartland
Webster & Palmer,.....	Embarrass	Olmstead Sheldon P,.....	
Fifield E,.....	Evansville	King P,.....	
Parker A,.....		McCutcheon A,.....	Helena
Mack H & Bro.....	Evanswood	Roands W P,.....	High Cliff
Shaw J,.....	Fall River	Tripp N D,.....	Hillsborough
Griffith J Q & Son, .....	Fond du Lac	Fisher J, Lake.....	Horicon
Meyer Charles J L,.....		Bally D R,.....	Hudson
Merayman & Co,.....		Palmer M P & Co,.....	
McDonald Alexander,.....		Andrews F M & Co,.....	Jenny

Matthews Thos.....	Jenny	Bunker & Vroman, Mifflin c Carrol,.....	Madison
White C F.....		Stein C R, Washington av,.....	
Jewett A & Sons,.....	Jewett's Mills	Walsing & Bailey,.....	Malden Rock
Sutherland Sol,.....	Jud a	Malden & Jones, Quay,.....	Manitowoc
Blair & Wagner, Jackson,.....	Janesville	Emerson L,.....	
Fifield & Bro, River.....		Guyles & Pankratz, Quay,.....	
Lovejoy & Blount, W Milwaukee,.....		Horn W H, Commercial.....	
Rexford J D, Academy,.....		Hubbard H F,.....	
Rockwood & Sons, High,.....		Cooper & Jones.....	
Schutt U, River,.....		Smith Ira B.....	
Clapp J R,.....	Juneau	Smith, Fliegler & Co.....	
Taber J B & Co,.....	Kenosasville	Wallach A & Co.....	
Backus N G,.....	Kenosha	Wallich 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 H & Co,.....	
Brauman B,.....	Knowlton	Menomonee Mfg Co,.....	
Brook V,.....		Spaulding, Houghtaling & Johnson,.....	
Wallace & Redford.....		McCartney Wm.....	
Starke & Bros.....		N Ludington Co.....	
Hurlburt H H,.....	Kilbourn City	Witbeck H & Co.....	
Cloespeck M,.....	Kosuth	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.....		Pope, 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
Moorer R M.....		Harker & Bainbridge,.....	Mifflin
Bright & Withee,.....		Greene N S & Co,.....	Milford
Bussell 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 t
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,.....		Brnneau 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 mitl.....	
J. H. Ross & Co.....		Nic. Schuh & Son, dealers.....	
Barron John,.....	Lafayette	Engelmann, Babcock & Salling, Manufac- turer 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.....		Kellogg A S,.....	Neshoto
Mikeljohn James,.....	Little Wolf	Cooper, Myers & Co.....	
Furitze W,.....	Logansville	Cooper & Jones.....	
Hankevitz F,.....	Lomira	Raymond & Jones.....	
Zeider L,.....		Lamb W,.....	New Franklin
Vaedsch & Runkle,.....	Lowell	Latham & Smith.....	New Franklin
Amby P,.....	Lyndon	Smart J & E (manufacturers) Bridge,...	New Lisbon
McMillan A,.....			

Bradford & Co.....	Necedah	Eighme R P.....	Oshkosh
Burch G B & Co.....		Wetherby David.....	
Dawes W F & Co.....		McAllyster J P.....	
Shorey P & Co.....		Hanson W E.....	
Weston T & Co.....		Crowell & Son.....	
Sherry Henry.....	Neenah	Webb, Albert & Co.....	
Hewitt & Woods.....	Neillsville	Myers & Van Every.....	
King G W.....		Williamson G M & Co.....	
Blakely C.....		James & Stille.....	
Clark A W.....		Nash, Lines, Libbey & Co.....	
Green A.....		Morgan Bros.....	
Lindsley F D.....		Fraker J S.....	
Ross Robert.....		Spalding & Peck.....	
Putnam L G.....	Neosho	Campbell Wm & Sons.....	
Cooper & Jones.....		Libby D L & Co.....	
Hale & Springsted.....	New London	Regan, Cheney & Pratt.....	
Bell Marcus.....	New Richmond	Doe & Miller.....	
Crozier & Jacobs.....		Ripley & Mead.....	
Moore & Bro.....	Northport	Dorby & Curran.....	
Wisconsin mfg Co.....		McMillan R. & Co.....	
Streeter J & A C & Co.....	Oconomowoc	Pawyer P & Son.....	
Vilas G, opp depot.....		Raine C N & Co.....	
Woodruff Bros, n depot.....		Reed L B.....	
Brungnist W.....	Oconto	Sheldon L P & Son.....	
Hall & Server.....		Laabs J & Co.....	
Leigh John.....		Buckstaff Bros & Chase.....	
Oconto Lumber Co.....		Foster & Jones.....	
Comstock & Simpson.....		Henderson & Wilson.....	Palmyra
Hart L W.....		Wentworth, McGregor & Co.....	Portage City
Holt, Balcomb & King.....		Gillon N.....	Pine Grove
Pierce L M.....		Glawe C.....	
Winslow & Englad.....		Bruce, Fuller & Co.....	Rock Falls
Brownsigg John.....	Okee	Garland & Nichols.....	
Monizeneux E.....		Bates & Hoag, Second n Main.....	Racine
Vanderpool & Clark.....		Hall & Scott.....	
Woodley Samuel.....		Hood S & Co, Main c Second.....	
Johnson H & Co.....	Omro	Murray, Slanson & Co, Second.....	
Curtis & Burlishesser.....		Peck S B & Son.....	
Gerard N.....		Tremble & Doud, State.....	
Morton, Arnold & Morton.....		French D C.....	Randolph Station
Webster & Foster.....		Cushman A G.....	Readstown
Wilson A.....		Smith Timothy.....	Reedsburgh
Foster N C.....	Cswego	Rudolph C J.....	Richland Centre
Aiken F & D.....	Onalaska	Richardson Mrs. W.....	Richland City
Hali Chas.....		Learmouth J.....	Rio
Hayden L D.....		Barlow J B & Co.....	Ripon
Jenks C L.....		Pedrick M.....	
Moore R M.....		Bowman Na.....	Roundhill
Nichols Chas H & Co.....		Moore J P & Co.....	Royalton
Bradley C G.....	Oscola	Judd, Walker & Co.....	Saint Croix
Dresser & Wilso.....		Roberts George.....	Sandy Bay
Talboys & Hauscome.....		Halasz Chas.....	Sauk City
Knapp L E.....	Oskosh	Obrecht U.....	
Jenkins J & Co.....		Cowles H H.....	Scott
Harris M.....		Carrol S.....	Seneca
Osborn & Christenson.....		Campbell Y.....	Sharon
Conlee Bro & Co.....		Treat J A.....	
Lane C & W.....		Naber & Wiley.....	Shawanaw
Gill & Son.....		Hockner A.....	Sheboygan
Copeland Alex.....		Schrage Joseph.....	
Freeborn John.....		Weeks A L.....	
Turner Bros.....		Haseltine C P.....	Sherman
Sturtevant & Son.....		Kelly W P & Co.....	
Steven-on Chas.....		Stafford & Gray.....	
Bray Jefferson.....		Nutwig Ole.....	Siegel
Danforth Joseiuh.....		Harriman Samuel.....	Somerset
Danforth E M.....		Irwin O L, Maple.....	Sparta
Edwards Henry.....		Johnson S E.....	Springfield
Elwell Joseph.....		Stafford L R.....	Staffordsville
Farrow T H.....		Bailey D C.....	Stevens' Point
Reynolds Paul.....	Oshkosh	Blake & Mitchell.....	
Jewell, Lawrence & Co.....		Benson P & Bro.....	
McNair Jas.....		Burns, Thompson & Co.....	
Barnes W W.....		Boynton N.....	
Doughty & Bro.....		Brown E D.....	
Streeter Geo.....		Burr, Emmons & Co.....	
Rockwell & McCord.....		Bean T G & Son.....	
Bray & Chote.....		Campbell P.....	
Lynch John.....		Clark Owen.....	
Wall & Fitzgerald.....		Cooper B F.....	
Rumery & Kellogg.....		Cronkhite, Plummer & Co.....	
Hutchinson Thos.....		Clements D R.....	
Miller L J.....		Cook Cornelius.....	
Fuinely & McDonald.....		Curran H & J D.....	



Homestead Seth.....	Stevens Point	Barrett J.M.....	Trempealeau
Glichrist A. B.....		Healy Benj B.....	
Goodhue Geo J, Jr.....		Huct John.....	Trim Bell
Gamble Ross.....		Reed Joseph.....	Tyrone
Hungerford Seely.....		McCaul & Son.....	Tomah
Hutchinson & Bro.....		Hinton T.....	Trap River
Hubbard.....		Mann Joseph & Co.....	Two Rivers
Karner S H.....		Goyt C.....	Ualo
Kelly Bros.....		Foster N C.....	Upper Duck Creek
Knox Bros.....		Lucas J & Bro.....	
Meehan Bros.....		Taylor A.....	
McCulloch H D.....		Aritz P.....	Wauceda
McDill T & Bro.....		Smith & Foster.....	Wauzeka
McMillan & Sons.....		Lewellen & Lunn.....	Waterloo
Moe Louis L.....		Squires & Sheldon.....	
Lester and Plummer.....		Coe O K.....	Watertown
Park G L.....		Hamlin & Sleeper.....	
Pike E L.....		Streeter J & A C & Co W Water.....	
Perry I & J.....		Hammond Alfred.....	Waukechon
Quinn Jas.....		Semple A.....	
Rennie John.....		Semple F.....	
Robeson J M.....		Kimball R N, Madison.....	Waukesha
Reading & Van Order.....		Richardson Silas.....	
Richardson Chas.....		Morse O A.....	Waupun
Clifford Wm J.....		Yewdike A H.....	
Rouseau & Stevens.....		Andrews & Parcher.....	Wausau
Sherman S A.....		Ancutt & Callon.....	
Scott Bros.....		Allen Henry.....	
Sheckels Wm.....		Bernhard & Simpson.....	
Wadleigh & Walker.....		Brown John.....	
Woods.....		Clarke J C.....	
Whitney Ebenezer.....		Clark T W.....	
Wade Geo & Co.....		Cohn & Curran.....	
Warner.....		Daniels H.....	
Welch Adam.....		Fitzer Al.....	
O C Wheelock.....		Gray Robt.....	
Callahan Chas.....		Hermann & Miller.....	
Redfield John.....		Kickbush & Bro.....	
Isherwood J & H.....		Leahy Capt J.....	
Blow Louis.....		Lawrence & Peters.....	
Johnson J O.....		Manson Rufus.....	
Martin John R.....		McLain Henry.....	
Lawson & Co.....	Stoughton	McGinnis Daniel.....	
Severson S H.....		McCrossen Jas.....	
Turner O M.....		McGinnis John.....	
Ives W A.....	Sturgeon Bay	Nichols Ed.....	
Anderson Geo.....	Seymour	Plummer B G.....	
McIntosh, Ross & Perry.....		Single Ben.....	
Pope G M.....		Single Jas.....	
Procker & Blair.....	Sheboygan	Stafford M.....	
Freyverg E.....		Wenhime & Kickbush.....	
Thompson & Schrader.....		Zastrow Ed.....	
Winter M.....		Shaw Daniel & Co.....	West Eau Claire
Graham W.....	Sheldon	Wheaton Lumber and mfg Co.....	
Wait S.....		Shell Bros.....	West Salem
Wilson George.....		Allen N H & Co, Railroad.....	Whitewater
Callon Wm.....	Sherman	Esterly Geo W & Co.....	
Gray J.....		Littlejohn A M.....	
Davidson D.....	Saumico	Nutt M E & Killips.....	Winneconne
Klaus & Wright.....		Jones, Wellington & Co.....	
Trumble M E & Co.....		Knapp Bros.....	
Gray O.....		McArthur & Co.....	
Lamb, Watson & Co.....		Starks, Stickles & Co.....	Woodland
Marshall & Co.....		Schultz C.....	Wyocena
Weed A & Co.....	Saumico	Converse H.....	
Coburn R G.....	Superior	Wells & Craig.....	
Howard John D.....		King P & Sons.....	Wyoming
Peylon H M & Co.....		McCutchen H.....	
Mann J H & Co.....	Sun Prairie	Baker & Blair.....	Yankeetown

ILLINOIS.

Brown T H & A L.....	Chicago	Morris & Williams.....	Chicago
Deucer & Weise.....		Northwestern Plaining Mill.....	
Driver Thos.....		Palmer, Fuller & C.....	
Dufour Bros & Rowe.....		Rickets & Mavor.....	
Farson, James & Son.....		Russell S T.....	
Fullam & Co.....		Sheriffs John & Son.....	
Gess & Phillips Manuf'g Co.....		Sinclair J H & Co.....	
Holtständer, Randall & Daniels.....		Walker, Kelton & Co.....	
Kirby, Carpenter & Co.....		Ward, Stephens & Co.....	
McDougal & McKinlay.....		Welles, Ludington & Van Shaick.....	
Mears C & Co.....		White C M.....	
Meyer C J L.....		White G E.....	

THE

# Wisconsin Lumberman

IS devoted exclusively to the Lumber interests of the Northwest, and will endeavor to become the champion and advocate of all measures pertaining to the welfare of those interests. Statistics and information will be gathered and examined with great care, that THE WISCONSIN LUMBERMAN may become standard authority with the manufacturers and dealers throughout the Northwest.

At least one member of the editorial corps will be traveling almost constantly through the Pineries of Wisconsin, Minnesota and Michigan, seeking information, statistics and opinions from reliable sources. Illustrations of prominent lumbermen and scenes throughout the different pineries will form a prominent and attractive feature of THE WISCONSIN LUMBERMAN, thus rendering it a pleasant and welcome visitor to the family of every Manufacturer, Logger, Landowner or Raftsman in the Northwest.

THE WISCONSIN LUMBERMAN will be increased in size in proportion as its patronage will warrant. It is for the manifest interest of all persons engaged in lumbering to assist in substantial manner our efforts towards furnishing a class publication that shall rank first among its kind.

THE WISCONSIN LUMBERMAN PUBLISHING CO.,

*Grand Opera House, 62 Oneida St.,*

MILWAUKEE, WISCONSIN.