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NO. 4.

CALCASIEU, La., is placing yellow pine lumber in the yards at Laredo, Texas, and selling it profitably at \$32 per thousand.

The Wisconsin Central road recently put into use a new style platform car, arranged particularly for carrying lumber and long timber. Its capacity is 30 tons, and it has three trucks—one under the contra.

THERE is an unusual demand for "second growth" pine in Addison county, Vt., the dealers buying all that is to be had. The bulk of it is for the Massachusetts trade, and much of it is being sawed "through and through" at the local mill, being then shipped for use in box making.

NASHVILLE, Tenn., has one of the largest wooden pump factories in the world. Fifteen hundred pumps can be bored in a single day. There are four engines and three circular saws. A box factory is attached. The company handled 9,000,000 feet of lumber last year, worth \$207,000, and has now on hand several million feet of nice lumber. The works employ 215 hands and are lighted by electricity.

VALUE OF HARDWOOD.

The *Lumberman's Gazette* of Bay City, Mich., says:—On more than one occasion we have alluded to the value of hardwood timber lands in this state, and maintained that no true estimate had yet been put on them. In order to give our readers some conception of what these lands are really worth, it may be stated as an admitted fact that hardwood lands are always estimated at a much higher value than pine lands for agricultural purposes; but this does not comprise the extent of their value. The timber is rapidly coming into demand and favor, and should be protected and saved from destruction further than the absolute necessities of each particular case demands, as in a few years the timber will be of inestimable value, or at least to the extent of many times the worth of land on which it is standing.

HEAVY OPERATIONS.

The *Chicago Northwestern Lumberman* says: The Roscommon Lumber Company, of which S. B. Barker, of this city, is president, and C. B. Field, of Grand Haven, Mich., general manager, organized last season, has taken hold of logging this winter with much vigor. The company owns 375,000,000 feet of standing pine, tributary to Houghton lake, Roscommon county, Mich., and has built 12 miles of logging railroad from the lake into the heart of this great belt of timber, which is regarded as one of the finest bodies of standing pine in Michigan, as is evident from the fact that last fall the company sold 12,000,000 feet of it for \$12 a thousand for all over 12 inches, and \$7.50 for

all under that size. The company is now putting in 150,000 feet of logs per day over its railroad. The track of the road is iron, with small T rails, and is well ballasted with good ties. The gauge is three and a half feet. The track is expended out into the lake by means of piles and stringers. The cars will be run winter and summer, and the track extended further and further into the woods as it shall become necessary to reach the pine. The company has no mill, and consequently the logs will be put on the market.

AMERICAN FLOORING.

The *London Timber Trades Journal* says:—Among the fresh introductions of the new year if we had to report a cargo or two of cheap pine flooring ready prepared as shipped from one or other of the American ports, there might be cause for the Norwegian flooring trade to feel alarmed, for there is really no reason why pine flooring should not be extensively used here. In the States white pine is preferred to what they term yellow (pitch pine), and, when painted over, the floors become watertight, and will wear for years. There is less shrinkage about yellow pine than ordinary deal, as long as it is kept dry, which the paint insures, and it will stand as long as any other kind of wood. Irrespective of pine, however, the American plan of covering their floors with a coating of paint is one that should recommend itself to all householders here, on the score of being much cleaner and more wholesome than the present system. Water spilt on the carpet penetrates through the upper rooms and discolours the ceilings of those underneath, but if the boards were well painted when first laid down this would not happen. When a house has to be scrubbed down the scapsuds and dust rubbed into the floors of the ordinary English house must contrast unfavorably with that of a house that has undergone a similar cleansing in New York or other cities of the States, where painted floors are almost universal.

LONG LEAVED YELLOW PINE.

(*Pinus Australis*.)

This term is but imperfectly understood, and is just now greatly misused in the sale of southern lumber in the northern market. It is not strange that shippers of lumber should take advantage of the reputation of Georgia, Alabama and Florida pines, and attempt to sell everything in the shape of Southern pine lumber as long leaved. But this is so criminally unjust to those states that we feel compelled to refer our readers to the United States census of 1880 (10th census), showing the facts upon this subject. We do this with no desire to make invidious comparisons, but simply to set our timber interests right before the world.

Georgia, by her greater enterprise, has al-

ready proven the excellency of her lumber, and gained a world-wide reputation.

Alabama, however, has standing to-day over 2,000,000,000 feet more of the same long leaved pine than Georgia, in addition to which she has over 2,000,000,000 feet of short leaved pines (*Pinus mitis*). Florida, North Carolina and South Carolina have all long leaved pine. Arkansas, which is set down as having more pine than any of the southern states, except Texas, has all short leaved pine (*Pinus mitis*), with a considerable mixture of Loblolly (*Pinus Taeda*), but she has no long leaved pines. This being the true state of facts, it is highly unjust for dealers and manufacturers at St. Louis and other Mississippi river points to force their inferior pines upon the northern market on the reputation of the genuine long yellow leaved pine. We only ask each dealer to note what we say and investigate for themselves, and we also wish land explorers who contemplate timber investments or for milling to give these facts the weight to which they are entitled, and you cannot fail to see that our lumber should be classed far above the "short leaved."—*Gulf Stream*.

POWER OF NAILS AND SCREWS.

The following resume has been made of experiments upon the adhesive power of nails and screws. Haupt, in his "Military Bridges" gives a table of the holding power of wrought-iron rod nails, 77 to the pound, and about three inches long. The nails were driven through a one-inch board into a block, and the board was then dragged in a direction perpendicular to the length of the nails. Taking a pine plank nailed to a pine block with eight nails to the square foot, the average breaking weight per nail was found to be 380 pounds. Similar experiments with oak showed the breaking weight to be 415 pounds. With 12 nails to the foot square the holding power was 542½ pounds with six nails in pine 463½ pounds. The highest result obtained was 12 nails to the square foot in pine, the breaking weight being in this case 612 pounds per nail. The average strength decreases with the increase of surface. Tredgold gives the force in pounds required to extract three-penny brads from dry Christiana deal at right angles to the grain of the wood as 78 pounds. The force required to draw a wrought-iron six-penny nail was 187 pounds, the length forced into the wood being one inch. The relative adhesion when driven transversely and longitudinally, is, in deal, about two to one. To extract a common six-penny nail from a depth of one inch in dry booch, across grain, required 167 pounds, in dry Christiana deal, across grain, 187 pounds, and with grain 87 pounds. In elm the force required was 327 pounds across grain, and 257 with grain. In oak the figure given was 307 pounds across grain. From further experiments it would ap-

pear that the holding power of spike nails in fir is from 460 to 730 pounds per inch in length, while the adhesive power of screws two inches long, .22 inch in diameter at the exterior of the threads, 12 to the inch, driven into one-half inch board, was 790 pounds in hardwood and about one-half that amount in soft wood.—*The Woodworker*.

FOREST PROTECTION.

Recently two daily papers, published in New York, had editorials on the same day that read very much alike. They both started to discuss the question of duty on lumber, and ended by saying that it is a great necessity just now that our forests should be protected. It is easy to admit that a discussion of the tariff question would naturally lead to a mention of forest protection, but the conclusions of these editorials were so similar that it was not difficult to imagine that one brain suggested both. There is a great deal said nowadays about the protection of our forests, and many are of the opinion that it is the talk of philanthropists who have the good of the people at heart. That, looking down the dim future, these philanthropists see a want of trees, and will endeavor to supply that want by complying with the old adage, "a stitch in time saves nine." The *Lumberman* has known for some time that certain gentlemen were trying to create public opinion by getting as many of their communications as possible inserted in the newspapers, these communications vividly portraying the wicked way in which our forests are destroyed by axe and fire, and suggesting that such slaughter should be stopped. The *Lumberman* has also known for some time that pure philanthropy is not the only foundation this concerted move rests upon. These gentlemen, to use a term known in politics, are laying traps. They are not looking so much after the welfare of coming generations as they are after office. They hope that congress will make a big appropriation for the protection of forests, and that they will handle and absorb the appropriation as a remuneration for services in doing what little they may in the way of preventing forest fires, and the unnecessary destruction of small trees. Whatever reason there may be in the arguments of these gentlemen, their plans may meet with some opposition from the fact that the most lovable side of a man's nature is not that side that years aloud for the creating of an office, and then avows that it would suit him mighty well to fill the office, and goes to work by paying the newspapers to bring about that end. That forest protection in certain directions is needed admits of no question, and when, if ever, we have laws for that purpose, the many instances of them should be placed in competent hands. The bungling of late in connection with forestry ought to answer for some time.—*Northwestern Lumberman*.

DISTRICT OF NIPISSING.

We take the following from the annual report of the Ontario Commissioner of Crown Lands, as to the timber berths north of French River -

TORONTO, ONTARIO,
4th December, 1882

SIR, - I have the honor to report that in obedience to instructions received from the Crown Lands Department, and dated July 14th, 1882, I proceeded to the field and made a survey of certain timber berths north of French River, that is to say, I ran the south boundaries of timber berths numbers sixty-seven, fifty-nine, fifty-one, forty-three, thirty-five, twenty-seven, nineteen and eleven; the boundary lines between numbers forty-three and fifty-one, between nineteen and twenty-seven between twenty and twenty-eight, and between twenty-one and twenty-nine. I also produced the line from the southeast angle of number eleven due east to strike French River, and ran a line due south from the south-east angle of number twenty-seven, to the township of Blair; the total number of miles run being seventy-seven miles ten chains. The lines were all run astronomically, and corrected from time to time during the progress of the survey, by observations of Polaris at its eastern elongation; the chaining was done with a Chesterman's steel tape.

I began my survey at the southwest angle of berth number sixty-seven, being a point on Salter's meridian line at the distance of sixty chains seventy-seven links south from his eighteen-mile post, and running due east astronomically, at five miles one chain and forty-two links, I established the southeast corner of timber berth number sixty-seven; six miles further on established the southeast corner of number fifty-nine; and made each succeeding berth six miles wide, excepting number twenty-seven which was made seven miles. From the southeast angle of number fifty-one I ran north between forty-three and fifty-one, to the southwest angle of berth number forty-four, where I found an old post marking the position of said southwest angle: this line between numbers forty-three and fifty-one came out eighteen chains fifteen links short of the six miles. The line between nineteen and twenty-seven, etc., came out on Salter's line sixty chains sixty links west of the post planted during the present season to mark the southwest angle of the township of Dunnet, and the boundaries between number twenty-one and twenty-nine came out twenty-eight chains fifty-two links short of the six miles. This discrepancy between the theoretical and the actual distance between Salter's line and the one run by myself is abnormally great, even after making due allowance for the considerable length of the lines and the general rough nature of the country. The result is, of course, that some of the included timber berths will have less than their normal area. This circumstance is, however, of comparatively small consequence practically, as from all I could gather from information received from persons evidently well acquainted with the region, all the timber has been killed by the fire which swept through some years ago. There is thus no pine nor timber of any other kind of any commercial value on the berths specially affected by the error in question.

I shall now describe as concisely as I can, the tract of country that came under my observation during the survey. The geological formation is the Laurentian as is well known. The rock is gneiss principally; on the south boundary of timber berths number twenty-seven, however, a few belts of syenite, or syenitic gneiss were observed. The gneiss is of the ordinary micaceous character, and in many places it is very distinctly foliated, presenting a regularly banded aspect. The rock west of the Wahnapitao River contains a larger proportion of felspar than the rock further east. Towards the west side of timber berths number forty-three the strike is about north twenty degrees east, and has changed to north thirty-five degrees west, a few miles further east. Along the lines between numbers nineteen and twenty-seven, etc., the strike is more nearly east and west, being north of west, and south of east. Everywhere the strata appears to dip at a high angle. Along timber berths numbers sixty-seven, fifty-nine, fifty-one, forty-three, thirty-five and

about a mile and three-quarters over upon number twenty-seven, most of the surface is rock, and is generally rough and broken and is quite unfit for settlement, containing as it does a very small percentage of arable land. The small areas of good land over the distance named, occur on timber belts number fifty-one and thirty-five, as shown in the field notes, and in small areas along the Wahnapitao River. East of this stream, all along number forty-three, and for a mile over upon number thirty-five, the country is almost totally barren of soil, the surface being almost exclusively occupied by barognoss rock, or mossy swamps. In going east, as a point one mile and three-quarters east of the southwest angle of number twenty-seven is reached a marked change may be noticed in the topographical features of the country; the surface becomes level, or gently undulating, the rocks appearing to have been by glacial action, planed down to a more or less uniform surface. This character of country prevails, with a few exceptions, as far east almost as Wolseley River, and north to Salter's base line.

From the point above mentioned, one mile and three-quarters east of southwest angle of number twenty-seven, as far east as almost to the end of the third mile on number nineteen, there is excellent land interspersed occasionally by small patches of rock cropping out. The soil is chiefly a brown clay loam of good quality. This tract of arable land extends south to the gorge of French River, but it is doubtful whether it extends very far to the north. To the east and to north of this tract of good land, as far as my survey extended, the land is rocky and unfit for settlement, the percentage of good land being very small.

The line going south from the southeast angle of timber berths number twenty-seven, to the south channel of French River, passes over nearly level or gently rolling land all the way, interrupted of course by the north channel of the stream last mentioned. The soil is a clay or sandy loam of good quality.

The timber plan indicates the distribution of the various kinds of timber. It is thus seen that the greater part of my line passed through a burnt country, the fire having gone over some parts a second time. The fire first appears to have occurred about fifteen years ago. Over this burnt country all the timber has been killed, and the burnt district extended as far as the eye could reach north of the line along the south of timber berths fifty-one, forty-three, etc., up to Salter's base line, and from information received from the Indians, I am led to believe that there is very little if any green timber, except perhaps towards the northwest, near Wahnapitao River and close to Salter's base line. Over some parts of this burnt district there has been very good pine, as is evidenced by the dead trees still standing; the prevailing timber has been white birch, poplar, balsam and cedar; there is now a young growth of small poplar, white birch, red cherry and willow coming up. In reference to the portions of my survey covered by green timber, I may say that the only place where pine of much value was seen, was between the Manzenazing River and the second mile post on the south boundary of timber berth number fifty-one. The trees, however, are rather under than over medium size, and much of the timber was valueless for lumber under present circumstances. Near the southeast corner of timber berth number eleven there is a small grove of very good pine, and farther west, between that and Wolseley River, there are some groves of white and red pine; the trees, however, are of small diameter, although of thrifty growth. In the green woods along the south boundaries of numbers sixty-seven, and fifty-nine at various points, scattering pine occurs among the other timber; there is some also at different points around Tyson Lake.

Besides the pine, the other kinds of timber seen were white birch, balsam, poplar, cedar, hemlock, maple, black birch, yellow birch, basswood, ironwood, black ash, etc. Between the south boundary of timber berth twenty-seven and French River, and along the line running south from southeast angle of number twenty-seven, to the south channel of French River there is some very fine timber, hemlock, black and yellow birch, maple, basswood, etc. Around

Tyson Lake there is much hemlock, hen lock, balsam and cedar. The Wahnapitao River is a fine stream with an average width of about one hundred and fifty feet; it is broken by numerous rapids, but is still a fine river for floating rafts. The water is good and palatable, although of the dark color common to the streams of the country; among the fish found in it are the black bass, pike, pickerel, etc. The Manzenazing River is a stream of sufficient capacity for floating sawlogs, although those that lumbered upon it some years ago, found it advisable to erect dams across it at several points between Collins' Inlet and Tyson Lake. Mullin and Pictou Rivers, as far as my observation extended, might each be described as a series of narrow lakes connected by a small stream broken by many rapids, and capable, perhaps, during a freshet, of floating small sized sawlogs. These streams flow in the direction of the strike of the strata, through grooves formed by the erosion of a stratum softer than those on either side of it. Wolseley River is a stream large enough to float timber at any season almost; it has numerous expansions along its course. The water in all the streams crossed, except the mere brooks, was dark coloured, although sweet and wholesome. Tyson Lake and Manzenazing River contain pike and black bass.

Partridges abound in the woods, and some prairie chickens were shot in the brule north of French River. I saw numerous traces of bear, red deer and moose.

I have the honor to be, Sir,

Your obedient servant,

(Signed) JOHN McAREE,
Provincial Land Surveyor.

THE NORTH WEST.

The Winnipeg Times says:—The industry of manufacturing lumber will no doubt be for a long time to come a large and increasing one in the Northwest, where towns and cities spring up and increase so rapidly, necessitating large supplies of lumber for building purposes. For some time past the quantity of lumber manufactured has been doubling every year, and next year the ratio of the increase will probably be still greater. A Times reporter yesterday called upon a prominent lumber man in this city, and obtained from him some information as to this industry.

"What are the principal lumbering firms in the Province?"

"The principal dealers having offices in the city are the Rainy Lake Lumber Company, J. R. Sutherland & Co., Dick, Banning & Co., the Winnipeg Lumber Company, D. E. Sprague and Brown & Rutherford. Outside the city the principal dealers in the Province are the Keowatin Lumber Company, at Rat Portage, and Walkley & Burrows, of Selkirk."

"Where are the logs cut?"

"The logs are obtained from the shores of the Rainy Lake, Lake of the Woods and Lake Winnipeg, while some of the dealers import from the United States. The Rainy Lake Co. have 125 square miles of limits on the shores of that lake. Dick & Banning own 100 square miles on the Lake of the Woods. Walkley & Burrows, Brown & Rutherford and Stubbs Bros. each own 50 square miles on Lake Winnipeg. D. E. Sprague has a limit on the Rosseau River. J. R. Sutherland & Co. and the Winnipeg Lumber Company buy their logs from the States, the stuff being delivered in booms on the Red River."

In reply to a question from the reporter, the interviewer said the capacity of the principal mills is as follows:—Winnipeg Lumber Company, mill at Winnipeg, about 75,000 feet. J. R. Sutherland & Co., mill at St. Boniface, 100,000 feet. Rainy Lake Lumber Co., mill at Fort Francis, twenty million feet per season. Mill at Rat Portage, ten million per season. Dick, Banning & Co., mill at Rat Portage, 50,000. Walkley & Burrows, 25,000. Dr. Sprague, 25,000. Stubbs Bros., 20,000. With the exception of the Rainy Lake Co., these figures represent the capacity per ten hours. The total capacity per ten hours is about half a million feet.

"How many men are employed at these mills?"

J. R. Sutherland & Co., employ about 100;

the Rainy Lake Co. 300; Stubbs Bros., Brown & Rutherford and Walkley & Burrows, each 150; Dick & Banning 75; the Winnipeg Lumber Company 100; Dr. Sprague 50; or a total of a little under 800 men.

"Then there are the lumbermen?"

"Yes, I suppose that each of the above firms with the exception of those who import their raw material, would employ about double the number of men in the woods that they do in the mills."

"Henceforth," said the gentleman interviewed, in reply to a question from the reporter, "there has been a great deal of lumber imported, but now the lumbermen here are in such a position that they can supply the demand themselves, and they will soon be able to undersell the Minneapolis dealers."

"Is there any likelihood of lumber becoming any cheaper?"

"It will be cheaper for those who can buy wholesale or in large quantities, but it is probable that the retail prices will never be very much less. Those who have been buying in Minneapolis will now be able to buy here just as cheaply, and this being the case it will be to their advantage to purchase here, the importation of lumber is becoming less every year."

"Could you give an idea of the quantity of lumber cut during the past few years?"

"Next year I believe there will be placed on the market about 125 million feet. The quantity last year was 40 millions, and this was about double the product of the previous year."

"Who are your principal customers?"

"Contractors and builders, in this city, in Portage la Prairie, Brandon and other places as far as the end of the line, and in the country west and south. Most of it is used for house-building purposes, and there is some manufactured into bridge timber and fencing."

"Are there good facilities for floating the logs?"

"Yes, as good as can be found in the world."

"What pay do lumbermen receive?"

"About \$35 a month on an average. Some first rate men can get more than this, and the pay of a foreman is, of course, considerably higher."

BUSINESS AT BOSTON.

The Boston correspondent of the *Northwestern Lumberman* writes as follows under date of Feb 1:—Since my last letter the thermometer has been bobbing around anywhere between zero and 60 degrees above; one day so cold and blustering that out-door work had to be given up, and the next day so warm that overcoats had to be unbuttoned to insure comfort. This variable sort of weather generally upsets business, and, on the whole, trade is rather quiet. I have not met a yard man as yet but that expresses the opinion that the spring trade will soon start up, and a great amount of lumber will be used. I think the trade is more and more coming to the conclusion that prices will not drop; that is to any material extent. Some of the coarser grades may be shaded in price, as is always the case where there is an over supply, but fine common and better will, in all probability, remain firm. Certain dealers are always afflicted with a chronic mania for running down prices. I can't conceive what the object can be for any person to use his best endeavors to break down prices, especially when they are not exorbitant. For the last year prices have not varied enough to prevent any yard man from selling "short," and getting out with a fair profit. At the same time, customers who have placed orders for future delivery, have had them filled acceptably. If prices had dropped how would it have been? All those orders would have been cancelled, and much trade lost in consequence. As a rule, I notice the parties who are always talking about prices dropping are either small buyers, with equally small ideas, or that class who are always finding fault with grades. The most reliable dealers we have in Boston are satisfied with present prices, and, when in want, buy like men, and do not go around the market besting down the price on a two-horse-load of lumber, and figuring if they need more of the same grade they can buy the balance of the same cut cheaper. I believe the trade are becoming disgusted with

this class of trade; it certainly ought to, for it is a disgrace to any responsible concern to cater to it.

The railroads are pretty well filled up with a varied assortment of pine and hardwoods. The arrivals for several weeks past have been few. Many cars have been detained from three weeks to two months in transit by snow blockades. As to prices, on a strict market quotation, I can note no material change, although every day sales are made at what may be called very low prices, which can be attributed to several causes. First, some of the small dealers will have cars in that are paid for, and they are obliged to realize on them to meet other obligations, and I have known of cars being sold at an actual loss on this account. Again, the thickness may be sacrificed, but the most frequent cause is that the shipper (most low price sales being commission lots) has hurried sales to get his money, and the lumber has been sold at the best offer, which, in a dull season, is naturally small. I might add that very few cars sent on commission are A 1 in quality. Parties want sell their good lumber and ship the balance. This statement of course has exceptions, but they are extremely few.

WISCONSIN LUMBER CAMPS.

Mr. E ward Jack, Government lumber agent for the Province of New Brunswick, who has lately been examining some of the pine forests of Northern Wisconsin was interviewed lately respecting that country and its timber resources.

"Is the country remarkable for any particular kind of timber?" was asked.

"The pine there is as sound a quality of wood as I have ever seen, being remarkably free from defects of all kinds. In some places it grows so thickly that a million feet superficial of sawlogs have been cut from forty acres of land, and the country where it grows is not nearly so subject to forest fires as large parts of New Brunswick and Ontario."

"How are the lumber operations carried on in Wisconsin?"

"The hauling roads are graded in the autumn, the stumps being grubbed from the roadbed, which is levelled and skidded where there are holes; the main roads are cut wide enough to enable the teams to pass, as in many places they have two tracks, one for the loaded and one for the unloaded teams."

"Is not some trouble experienced from want of snow?"

"There is frequently not snow enough for hauling purposes, and then large sprinklers are used. The source of supply for the sprinklers is a large square tank, drawn by either two or four horses. With it the road is sprinkled where required. It is usually done in the night or every evening. Some seasons sprinklers are not used, but they are always on hand.

"Is the system of work pursued in camp the same as in Canadian lumber camps?"

"There is one chopper to two sawyers, and after the tree is chopped down the sawyers square the butt with a saw. The feller marks the length of each log and cuts off the top of the tree. The sawyers then saw it into the required lengths, the swampers, who are usually two to a team, trim the logs and swamp the roads. The logs are drawn to skid-ways, which are an inch or two higher at the front than the sleds. Where the ground suits logs are sometimes piled up eight or ten feet high. One of the swampers aids the teamster in rolling up the logs on the skid-ways. Where the rolling is heavy both swampers aid. There are two men whose business it is to load the teams, the teamster having nothing to say about it; one of these is called the "boss loader." The logs are scaled and marked on the skid-ways, so that the boss loader gets the contents of each log on its end, and the days work of each team is entered up in the log-book each night with the name of the teamster. The teams have names allotted to them in the autumn according to the teamster, and this name is preserved during the whole season, whether there be a change of teamster or not.

"The camp is usually built of logs," continued Mr. Jack, "and it is generally covered by pine splits. There are usually two windows, one at each end. In the camp there is a large

box stove. The berths are arranged as in a ship, two or sometimes three deep; two men occupy each berth, and two men have three pair of blankets. This constitutes the sleeping camp. The cooking and eating camp is generally a couple of rods from the sleeping camp. In it is a large cooking stove and reservoir for water. One man cooks for as many as forty men, and he is assisted by a "cookoo," whose business it is to keep on fires, attend to the sleeping camp, wash dishes, and cut wood, which is drawn up to the door for him. When water is convenient he carries it. Where the country is mountainous or hilly the men who attend to the roads sand the hills and keep them clear of snow. The teamsters' breakfast is usually over by 4 o'clock. About half the number of teams have their burdens loaded over night, and those proceed at once to the landing; the rest of the teams go to their respective skidways with the leaders, who are provided with lanterns. They have one lantern at each end of the sled, on the side opposite the skidways; the logs are then loaded and drawn to the landing. The swampers, choppers, and others are called for breakfast soon after the teamsters have left, they are expected to be at the stump as soon as there is sufficient light to work. An alarm clock is placed in the camp by which all early operations are regulated. Socially and morally Ontario camps are far ahead of those in Wisconsin. Many residents of Ontario are now in Wisconsin, especially among the iron prospectors of the Pongee range, where extensive deposits of ore occur."

"It the fans served to the men in camp of good quality?"

"The men's food consists usually of pork, beans, beef, tea, coffee, sugar, syrup, bread, and when obtainable, potatoes are used. Frequently they use boiled rice, pies and puddings. Food is abundant and good, although the quality of the pork is not so good as that used in the woods in Canada, a great deal being distillery-fed. Horse feed is composed of hay, oats, and bran. Ground feed for horses is also frequently used; this is a mixture of corn, oats, and mill sweepings, which is not at all to be recommended, frequently subjecting the horses to colics."

"Logging tramways" are frequently made use of in Wisconsin instead of rails. Poles from four to ten inches in diameter are made use of. The road is roughly levelled, and these poles are placed six feet apart, and are connected by cross ties laid under them at distances of from four to ten feet. The rail is fastened to the cross ties by means of wooden pins driven through both. The trucks made use of to run on these rails have four wheels to a car. These wheels are loose on the axle, and there is three inches play between the shoulder, to enable the cars to pass around sharp curves. The rim of the wheel is hollowed out, having a flange on both sides. These cars will hold 2,500 feet of scaled logs; this load can be drawn by one horse. These tramways are used in many places in Wisconsin. The weight of these cars, wheels and all, need not exceed 600 lbs. The average cost of constructing such roads, with rails and ties complete, is about \$100 per mile."

WOODS AND FORESTS.

We take following from the annual report of the Commissioner of Crown Lands for Ontario: The sawn lumber and square and waney timber business has been active and remunerative during the past season. In my report for 1881, I mentioned the fact that the former article had realized greater value than for years past, and that prices obtained for square and waney pine, of good quality and fair average, were higher, than during any former period. It is satisfactory to be able to state that during the season just closed there has been no falling off in prices, and that the demand for all kinds of wood goods continues brisk.

The year 1882 has offered no special points for comment in connection with the administration of the Woods and Forests branch of the Department.

It may not be out of place here to mention that a meeting of the American Forestry Congress was held at Montreal in August last, at which the Government of Ontario was represented by gentlemen qualified to note proceedings and deal with points brought forward by the

several speakers with regard to Agriculture generally, Practical Husbandry, Fruit Growing, Tree Planting, etc., and the officer in charge of the Woods and Forests branch was detailed to give special attention to matter relating to timber, and to means which might be suggested or proposed for the preservation of forest from fire. This subject in the original programme, was committed to a special section of the Congress to deal with, but on account of its great importance it was decided that it should be discussed at a meeting of the whole Congress. At this sitting various opinions were advanced as to the best means of preventing forest fires, and a committee of gentlemen from the United States and Canada, connected with the lumber business, was appointed to make such recommendations on the subject to their respective Governments, as might be deemed expedient. No intimation as to the measures the committee had resolved to recommend has yet reached the Ontario Government, but when made known they will receive the most careful consideration.

THE READY-MADE HOUSE INDUSTRY.

The Northwestern Lumberman says:—The Canadians are making such a considerable and profitable business of ready-made house manufacture that it seems strange that Americans, who have the reputation for seizing new opportunities for money getting do not branch out in this direction more extensively. True it is that the rapid settlement of the Canadian Northwest has stimulated the inventive genius over the line to devise some way to provide the shelterless now-goers on to the prairie wastes of the country with house, and the knock-down plan of preparation and shipment has proved to be the most feasible and quickest way to meet the exigency.

Illustrative of the manner this industry is progressing, it is mentioned in the London, Ont., Advertiser that the Truxes' planing mills at Walkerton, are turning out material for ready-made houses at a rapid rate. Orders for a whole row of houses can be filled in a few days, and it is not uncommon to see an entire street for Brandon or a block for Winnipeg sent out on a train 20 or 30 days after the order has been received. During the past season Messrs. Trux shipped 219 cars of knock-down house material to the Northwest. One of the partners in the concern accompanies each train, and superintends the putting up of the houses. Sometimes houses are ordered by telegraph in this fashion: "What can you furnish me a tidy cottage for, 22x40 feet, with bay window and veranda?" Next spring the enthusiastic house-builders expect to receive orders for entire villages, some thing after this style: "What is your lowest figure for five stores, two wagon and two blacksmith shops, one Methodist and one Presbyterian church, 25 cottages, a town hall and a lock up, to be delivered on or before July 1?" Orders have been received for 21 houses to be put up in Brandon next spring. The freight rate on these houses from Walkerton to Chicago is \$40 a car; from Chicago to Minneapolis, \$20 a car. The charge the balance of the way is enormous, owing to the lack of competition, the cost of a medium car through from the start to Winnipeg being \$361. The large ones used by the Truxes cost more. Considering the fact that Chicago is nearer Winnipeg than Walkerton, Ont., why cannot the knock-down house business be made profitable here, and still more so at Minneapolis, Duluth, or any other lumber point in the Northwest?

THE U. S. TARIFF.

The following petition has been presented to the two houses of the U. S. Congress.

To the Honorable the Senate and House of Representatives of the United States:

Your memorialists, citizens of..... County, in the State of..... do most respectfully remonstrate against the proposition now before your honorable bodies, and adopted in the Senate of the United States, looking to the admission of manufactured lumber of the Dominion of Canada to the market of the United States free from duty, to ruinously compete with a traffic giving employment to fully one million laborers and involving capital of not less than \$300,000,000 in its prosecution. Urg-

ing, that the admission of Canadian lumber free from duty would but be adding the present rate of duty to the value of Canadian standing timber, opening up a competition injurious to American manufacturers, while not decreasing the cost of building material to the millions who form the consuming classes, urging, further, that so long as the Canadian Government retains the tax upon lumber imported into Canada, it is manifestly unjust to admit Canadian lumber free, while the American product, now largely in demand in Winnipeg and some other portions of the Dominion of Canada, is burdened with a tax, thus effectually giving to the Canadian product the control of the markets of this country by the admission of their lumber product free in the Eastern States, whether it is most largely imported; and as well control of the Western markets through their ability to exclude the American product, except upon payment of duties, from Winnipeg, to which their own lumber may be sent without duty.

Hemlock Lumber.

The Northwestern Lumberman says:—An unusual large amount of hemlock logs will be banked in Pennsylvania this winter. Hemlock lumber seems to be growing in favor, even in the older sections of the country, where it has been used for years. Never before has so much attention been paid to hemlock in Michigan as there is this season, both manufacturers and capitalists having learned that it is not the kind of timber to be sneezed at. Nothing can prevent this interest keeping right along increasing. Merit will in due time command attention, and hemlock is now receiving some of the attention that would have been proper to have bestowed upon it several years ago.

Letter from Member of Congress.

HOUSE OF REPRESENTATIVES, Washington, D.C., Feb. 19, '82. GENTLEMEN,—Inclosed find \$1, and will you send me some of N. H. Down's Vegetable Balsamic Elixir by express. I have a bad cold, as has almost every one else here, but cannot find the Elixir, which I used frequently at home and consider a most valuable medicine; in fact the very best remedy for a cold that I ever used. Very truly yours, WILLIAM W. GROUT.

REST not, life is sweeping by, go and dare before you die, something mighty and sublime leave behind to conquer time." \$86 a week in your own town. \$5 outfit free. No risk. Everything new. Capital not required. We will furnish you everything. Many are making fortunes. Ladies make as much as men, and boys and girls make great pay. If you want business at which you can make great pay all the time, write for particulars to H. HALLERT & Co., Portland, Maine.

\$500 Reward!

We will pay the above reward for any case of Liver Complaint, Dyspepsia, Sick Headache, Indigestion, Constipation or Costiveness we cannot cure with West's Vegetable Liver Pills, when the directions are strictly complied with. They are purely Vegetable, and never fail to give satisfaction. Sugar Coated, Large Boxes, containing 30 Pills, 25 cents. For sale by all Druggists. Beware of counterfeits and imitations. The genuine manufactured only by JOHN C. WEST & CO., "The Pill Makers," 81 & 83 King St. East, Toronto, Ont. Free trial package sent by mail prepaid on receipt of a 3 cent stamp. ORMOND & WALSH, sole authorized Agents for Peterborough, Ont. w46d11222

Health is Wealth.



DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, a guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness, Mental Depression, Softening of the Brain, resulting in Insanity and leading to misery, decay and death, Premature Old Age, and Spermatorrhoea, caused by over exertion of the brain, self-abuse or over-indulgence. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars, sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by ORMOND & WALSH, sole authorized Agents for Peterborough, Ont. JOHN C. WEST & CO., Sole Proprietors, Toronto, Ont.

CHICAGO LUMBERMEN ON THE TARIFF QUESTION.

The *Northwestern Lumberman* says:—The vote of the national senate to place rough lumber on the free list of imports has awakened much interest among the lumbermen of this city, as might be supposed. The manufacturers are whistling a note of indifference, though it is plain that they are a little worried about its effect on their interests, while the jobbers are in the seventh sphere of elation. Thad Dean is going on a regular "bender" of jubilation, and thrusts his thumb into the vest of every manufacturer he meets, and laughs the laugh of triumph into their faces. He says the crushed jobber has done with gnawing bones, and will hereafter live on the fat of the land. He even offers to lend money to such houses as Kirby, Carpenter & Co., to help them weather the storm that he predicts will surely overtake them during the next market season.

In view of the fact that the tariff bill has not yet passed, and that a multitude of conflicting interests will have to be adjusted before it can, and that as the bill now stands it is an entirely different chicken from what it will be when the committee have done plucking at it, the jubilation of the jobbers on one hand, and the fear of manufacturers on the other, are a little premature.

Yet it is interesting to lumbermen throughout the country to know how the possibility that lumber will be placed on the free list is regarded by some of the representative men in the trade here, and the following expressions of opinions have been obtained.

Mr. A. A. Carpenter, of Kirby, Carpenter & Co., the Menominee manufacturer, appeared to the interviewer to be quite indifferent to the lumber schedule, or its fate in the tariff bill. He said that he was in favor of a modification of the tariff, but wanted an equitable and well-considered, moderate reduction. As to the lumber duties, he thought that their removal would have no such remarkable effect on the market and trade at this point as Mr. Dean and the other jobbers were confident of. The effect, if any, would be felt in diverting some of the Saginaw output to this market, for the reason that Canada lumber might become a more powerful competitor in Eastern markets. The removal of the duty on lumber might tend to stimulate production over the border, and the volume of increase would crowd Saginaw lumber to some extent in such markets as Albany, Burlington and Oswego, and possibly in Buffalo and Tonawanda and all other Eastern points. The tendency, too, would be to enable Canadian manufacturers to discharge their surplus into different American markets whenever such occasion should arrive—it would give them a wider and more diversified field of operations. He did not seem to have arrived at a positive conclusion as to the effect of free-of-duty lumber on this market in the coming season. Mr. Carpenter, being a careful man, probably dislikes to express a positive opinion in regard to the matter in its present undeveloped state. He thought that there was a probability that the duty on lumber would not be wholly removed, but that a splitting of the difference might be resolved on, so that when the tariff bill finally passes both houses of congress, the duty will be placed at about half what it is now. But if lumber was finally and absolutely placed on the free list, its chief effect would be to increase the price of standing pine in Canada. The difference between the cost of standing pine in Canada and the price of stumpage on this side of the line is about what the duty amounts to. Carpenter thinks that as soon as lumber is admitted into the United States duty free, both the government of the Dominion and the limit holders will put up the price of stumpage to somewhat correspond with the value of standing pine on this side. That would, of course, make the first item of cost of Canada lumber about the same as the American product, so that the only advantage the Canadian manufacturer would have over our own would be in the cheaper rate at which he can possibly procure labor and supplies, conditions that may change in the near future.

Mr. G. A. Van Schaick was found ready to speak right out on the lumber tariff question, as he generally is on any other. He always has an

opinion, and is not afraid to express it or bet on it. It is not invidious to say that Mr. Van Schaick's argument generally goes with his interests. He is engaged in business for all there is in it, and he don't propose to give it away by any damaging admissions. For this reason the following opinion of Mr. Dean's most ready and valiant antagonist is all on one side. He scouts the idea that Canadian lumber can make any ripple in the Chicago market. He goes directly to his conclusion by assuming that the Canadian mills are not prepared to turn out any appreciable increase of lumber, nor will they be for a year or two to come. They are set to cut deals for the English, Eastern and South American markets largely, and until their gangs are changed their output will mostly tend in the direction usual to them hitherto. Besides, all the Canadian line of trade is always from western markets, the Canadian product has been thus absorbed, and it does not appear probable that any considerable quantity of it will have to seek Lake Michigan markets. The opening of the Canadian Pacific railroad line will divert a large amount of lumber westward to supply the vast prairie region of Manitoba and the Northwest Territory, which will likely absorb the surplus of the Muskoka and Spanish river districts, while the eastern and ocean trade will take care of the Ottawa river product. Speaking of the Ottawa, Mr. Van Schaick said that he had the authority of H. W. Sago's statement that the pine on the stream was all gone for 200 miles on its lower portion, and that the cost of driving on the upper waters of the stream was so great, in consequence of rapids, that lumber manufactured from logs brought down from the region away up toward Lakes Nipissing and Temiscamingue would not compete ruinously to American profits, even if the duty were removed. He thought also that there was some doubt about the amount of available and handy pine in Canada, especially in the Georgian Bay districts, which, if any, would come in competition with Michigan lumber in this market. As Mr. Van Schaick looked at the situation, it would require two or three years of readjustment to bring to bear the full force of Canadian competition in the Chicago market. In the meantime the Saginaw valley supply will have been reduced by 2,500,000,000, the Menominee reserve to a large extent, and then if Canada wanted to shoulder around in the Chicago market she would be welcome to do it. As for him, he should not lose a wink of sleep about the lumber tariff on or off. And as the cheerful and alert lumberman leaned back in his chair, and beamed on the representative of the *Lumberman* with complacent smile between the toes of his boots on the table, nobody could doubt his word. Mr. Van Schaick also held firmly to the view that the effect of rescinding the lumber duty would be to bull Canada standing pine to about the amount per thousand now charged on importations, which was coincided in by Mr. Addison Ballard, who was present and listened to the conversation.

Thad Dean, the conspicuous among the bearish jobbers of Chicago, was decoyed into Mr. Carpenter's office, and asked to express himself on the tariff question. He was so occupied with glorifying his triumph in the national senate, and prodding Mr. Carpenter about it, that he had but little else to offer. His main hold, however, was the probability that Canadian cheaper lumber would so crowd the Saginaw "fellows," as he termed them, that they would be forced to seek a market westward, and thus the jobber would have a better chance, amid the competition and rivalry that would ensue, to buy and sell at a greater profit than has characterized the trade here for a year past.

YOUNG'S POINT.

From Our Own Correspondent.

A TRIP TO THE SHANTIES.—On Tuesday, the 23rd January, at the invitation of Mr. George Chalmers, your correspondent went on a three days trip to his three shanties, to see how the foreman and men were getting along in the woods with the great depth of snow that has fallen this winter, which is almost 3 feet deep on the level. We left on the above date for P. Cassidy's shanty No 1, about 5 miles from the shore of the head of Stony Lake, 30 miles from

the Point. After crossing the lake from C. Crow's Landing, in Dummer, we arrived at the shanty and had dinner. We found an old Peterborough boy, who is fond of living away from civilization, acting as cook. This old boy, who is nearly 40 years old now, was at one time a watchmaker with Messrs. Brown & Clark, of Peterborough; he looks hale and hearty, and evidently takes his billet after dinner. We started for Cassidy's shanty No. 2, in the Township of Methuen. This shanty was built a year ago, but Mr. Cassidy has made considerable improvement on it this winter, having made the roof higher and and more comfortable for the men. At the rear he has got a nice little office built, which is occupied by Mr. Maharty, the clerk, the blacksmith and the foreman. All the ready made clothing, etc., is kept in this place for safety. Mr. Cassidy took us to where the logs are getting dumped on the banks of Jack's Creek; it is a fine sight to see so many saw logs all heaped together on the ice. They are a fine lot of logs. Up to the time we were there, he had about 25,000 logs cut with about 17,000 drawn on the creek. The rest were skidded in the woods. He got 9 saw logs out of one tree last Monday; the top log was 13 inches in diameter at the small end, and altogether they were 117 feet in length. He has 65 men, 12 teams and 2 yoke of oxen in the two shanties. The men are very well behaved, and Cassidy is very much liked by them. He knows the lumbering operations thoroughly, and has been foreman for several large lumbering firms. On Thursday morning after breakfast we left for Apsley, a distance of 20 miles. It was a beautiful morning, but very cold, and splendid sleighing. We passed through some fine woods, thick with pine, belonging to Messrs. Fowlds, of Hastings; Rathbun & Sons, of Deseronto mills, and Ulyott & Sadler. They are all lumbering heavily this winter. We passed three or four shanties in full blast. We reached Apsley at 11 a. m., and after feeding the inner man and horses at A. McIlmoyl's hotel we started for Dugan's camp, in Anstruther, at 1 p. m., distance 17 miles. The miles in this part of the county are all Irish miles, they are so long and full of bends—making straight roads is out of the question. We passed through some beautiful pine limits belonging to Messrs. Ulyott & Sadler; they have four or five shanties in full blast in this section. We reached Dugan's camp about 3 p. m. It appeared a long road through the woods, marshes and small lakes. Arthur was busy at work along with his men in the woods. He has got about 4,000 of the largest pine logs I ever saw cut. He has also got out a large quantity of board timber 20 to 35 feet long, which will on an average measure 80 feet. Arthur has 20 men all told, five teams and two yoke of oxen. Albert Cook is the clerk, and Tom Cassidy cook,—and a first-class shanty cook he is. He is supplied with lots of beef, pork, potatoes, sugar, syrup, and dried apples, all of the best quality, and his motto is not to waste, but to turn out everything properly cooked to the men in the employ and also for the benefit of his employers. A bad, greasy, wasteful cook is an expensive item in the lumbering business. Dugan's logs and timber goes through Eels Lake, thence by Eels Creek into Stony Lake. It is to be hoped there will be lots of water this spring and summer in the creek so as to allow all the lumbermen's logs to float down. For some seasons past it has been hard work to get these down. All the dams and slides are to be put in good order before spring. We left the camp on Friday morning after breakfast—it was 33° below zero—and got to Apsley at noon. We started for the Point after dinner, very much pleased with our trip; the roads were good, but the weather extremely cold. The total distance travelled to the furthest shanty and back was 134 Irish miles.

PROTECT OUR FORESTS.

In view of the enormous consumption of timber in the United States, and the certain exhaustion of the supply; it would be well for the legislatures of the several states now in session, to pass laws regulating the cutting down of the forests, at least on public lands, and could they be made, so as to prevent the wholesale and reckless destruction of timber on private property it would be of inestimable value to our

rising generations. There are portions of the country where valuable forests of pine woods still exist, but being remote from easy transportation they are being felled for fire wood, rails, and other domestic uses, when by having in each county an inspector of forests these mines of wealth could be saved from destruction. Some few of our far sighted land owners appreciate the coming scarcity of these high nice woods, and are jealously keeping them, but as a rule, the ordinary farmer in search of a load of fire wood, would as leave cut down a walnut or poplar tree as one of a worthless variety for any other purpose than burning.

It should also be required by law of each land owner, in those localities where timber is scarce, to plant every year a given number of trees. By this simple legislation, if enforced, the loss of our forests could be mitigated to a considerable extent, and beautifying the country as well.

Walnut, black locust, oak, poplar, and cotton wood are all excellent varieties which experience has taught can be cultivated successfully. They are of comparatively slow growth, though the walnut and black locust will reach a marketable size in less than twenty years, while the others mature much more rapidly.

If every farmer in the country would plant around his farm, and as subdivisions for his fields, rows of the above trees, besides doing future a service, he would add much to the value and appearance of his property. The amount of land lost to cultivation by this slow growing crop, and its shade, would be insignificant in a country where land is as cheap as it is in ours. Were the legislators to pass a forest protecting law, and the farmers throughout the state aid its enforcement, and plant trees as suggested, the natural increase in our timber wealth would be far larger than any one would at first imagine.

In Spain it has been the custom from time immemorial for every person eating fruit to plant the seeds; as a consequence every highway and byway in that beautiful country teems with magnificent orange, lemon, pomegranate, peach and apple trees, bearing with each year vast amounts of luscious fruit, which is free to anyone who cares to pluck and feast upon it. This national orchard is the property of every Spaniard; because each one had aided to plant it during the past centuries. So would systematic tree planting become a national affair in America, and one which every citizen of the nation would have cause to be proud of.—*Lumberman's Gazette*.

MISAPPROPRIATION OF SAW LOGS.

The Ottawa *Free Press* of Jan. 31st has the following report:—Almost ever since the vast lumbering resources of the Upper Ottawa were first developed in years gone by, a class of individuals known as log thieves, have plied their nefarious calling along the banks of the river. Of late the illegal practice has not been carried on to so great an extent as in past years, when these purloiners made so bold as to even erect small mills in which to manufacture their ill-gotten timber. Logs to the value of thousands of dollars have been taken in this manner and sawn into boards and other timber. The high water in the spring and fall annually floats large numbers of logs on shore where they remain, and it is these that are more generally stolen. The mill and limit owners, by united efforts, have happily succeeded in exterminating this class, who have probably now turned to more honorable employment. The interpretation of the statutes in regard to stray logs has frequently given much trouble, and many cases brought by the limit owners against parties on a charge of cutting up and using stray logs for firewood, etc., have been decided adversely to the prosecution. A case has just cropped up which will be watched with interest by lumbermen. William Rowan, who lives about the Chats, in the township of Fitzroy, appeared before James Clark, J. P., in the Police Court, to answer the charge of unlawfully taking, holding and keeping in his possession a number of saw logs belonging to different lumbermen. Indictments were taken out against him by J. R. Booth, W. G. Forley, E. H. Bronson, E. B. Eddy, Sherman, Hurdman & Lord, Allen Gilmour, J. D. Gilmour and

Peter McNaughton. A. J. Christie was counsel for the prosecution and James Dowdall, of Almonte, counsel for the defendant. Jessie Smith, in the employ of the Upper Ottawa Improvement Company, laid the information against Rowan who pleaded "not guilty." Three witnesses besides Mr. Smith were examined. They were Mr. Green, manager of the U. O. I. Co., Mr. Ritchie and Mr. Hurdman. The evidence adduced clearly showed that the defendant admitted to Messrs. Smith and Ritchie that he owned the piles of wood on the shore of the Ottawa river from which were taken pieces of logs bearing the stamp of the different lumbermen who took out the indictments. The counsel for the defendant contended that his client, having a contract to supply cordwood to a Mr. Murphy, boat owner, and it was in a pile of this wood that the pieces of logs were found, he was not the responsible party. He also contended that the case should not be tried in Charlott County, as he held the wood was not piled in the township of Fitzroy, but a short distance outside.

The case was postponed.

THE SENATE AND THE TARIFF.

The action of the Senate in adopting an amendment to the tariff bill offered by Mr. Ingalls, by a vote of 25 to 23, which places lumber on the free list, naturally causes a stir among the lumber-producers of the northwest, and particularly in Michigan, where the manufacturers will, under this measure, be brought into ruinous competition with the vast Canadian forests and cheap labor. The lumber-producers of Michigan should thoroughly understand the nature of this amendment to the tariff. The Ingall's amendment, which was adopted by the Senate, repeals the existing duty on timber, squared or sided, sawed boards, plank deals and other lumber of hemlock, whitewood, sycamore and basswood, and all other articles of sawed lumber, staves of wood of all kinds, pickets, palings, lath, shingles and pine and spruce clap boards. This amendment, if accepted by the house, and becomes a law will take more than one million dollars out of the pockets of the producers of lumber on the Saginaw river alone, the present year, and more than \$4,000,000 out of the pockets of Michigan producers of lumber; and it requires no great stretch of imagination to understand that a matter of three or four million dollars annually out of the pockets of the producers, will cause a corresponding reduction of the income of the vast army of workmen employed in the manufacture of the lumber. It is a very serious matter.

The close vote on the amendment in the Senate gives rise to the belief that the bill will never pass the house, and it is important that the friends and advocates of American industry in congress receive a hearty support in their effort to defeat a measure that is calculated to rob American labor of its just dues.

The board of trade, etc., and manufacturers of lumber and other forest products generally in the state, should take active steps at once to forward delegations to Washington to strengthen our members in the struggle for protection to American industries.—*Lumberman's Gazette.*

THE ADIRONDACK FOREST BILL.

The Adirondack forest bill, which has been pending in the New York legislature, and has possibly become a law by this time reads as follows:—

"Hereafter, and from the passage of this act, no sales shall be made of lands belonging to the state, situated in the counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Saratoga, St. Lawrence and Warren. Nothing in this act shall be construed as prohibiting the commissioners of the land office from conveying land heretofore contracted to be sold and not yet conveyed to purchasers thereof."

SWEDEN.

The Stockholm correspondent of the *Timber Trades Journal* says:—At the late meeting of the Society of Sawmill Owners and Timber Exporters it was reported that the reserve of logs usually lying in the waterways up the country over winter was nearly entirely wanting

this year, the logs having already arrived at the mills. This is a circumstance to be taken notice of by importers, as any failure in the floating or delay in the arrival of the logs at the mills in 1883, would soon cause a scarcity of stock and sharp upward movement in prices. To judge from the quantity of snow that has fallen, a want of water in the river seems improbable; but, on the other hand, it will be unwise to reckon on such a floating season as the last, and consequently the inferences are that stocks will be proportionately less in autumn than at first open water.


The Montreal Gazette says:—A fair local enquiry exists for both hard and soft woods and former values are generally well sustained. There is also an American demand for pine for spring shipment and hard woods for immediate delivery. Dealers report the outlook for the coming year's business as very encouraging. The weather has been all that could be wished for lumbering operations in the woods and a heavy cut of logs is already reported.

An East Saginaw despatch says a large meeting of the lumbermen was held at the Board of Trade rooms there, and a committee of twenty-five was appointed to go to Washington to bring influence to bear against the proposition to put lumber on the free list. Telegrams were sent to Chicago, Minneapolis, Muskegon, Manistee, and Lake Huron shore points urging similar delegations of lumbermen to meet the Saginaw delegation in Washington to effect unity of action.

WALTER LINTON, of Waterloo, writes that Hagyard's Yellow Oil has done great good in his family, his wife being cured of Callosities lumps that other medicines failed to remove, he also states that a neighbor was promptly relieved of Rheumatism by the same remedy.

FORTUNATELY Valvular disease of the heart is not very common. Its disturbed action may be due to indigestion, irregularities &c. A Stomach disturbed by wind, or indigestible food will cause pain and fluttering by crowding on the nerves of the heart. Burdock Blood Bitters will speedily remedy all such difficulties.

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All sufferers from this disease that are anxious to be cured should try Dr. Kassar's Celebrated Consumption Powder. These powders are the only preparation known that will cure consumption and all diseases of the Throat and Lungs; indeed, so strong is our faith in them, and also to convince you that they are no humbug, we will forward to every sufferer, by mail, post paid, a Free Trial Box. We don't want your money until you are perfectly satisfied of their curative powers. If your life is worth saving, don't delay in giving these Powders a trial, as they will surely cure you.
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THE CANADA LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY
TOKER & Co. PETERBOROUGH.

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Advertisements intended for insertion in any particular issue should reach the office of publication at least four clear days before the day of publication, to insure insertion.

All communications, orders and remittances should be addressed and made payable to Toker & Co., Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

PETERBOROUGH, Ont. FEB. 15, 1883.

A large amount of Wisconsin pine land is changing hands. Speculators are disposing of it, and operators are securing the same for practical operations.

REPORTS from the Wisconsin pineries are to the effect that the anticipated cut of logs will be secured unless a general break-up should occur, and the same may be said to be true of Michigan.

THE Prince Arthur's Landing Herald says: Messrs Manning, McDonald, McLaren & Co., have a force of 1,200 men at work this winter getting out timber and ties for the Syndicate, to be used on the prairie section.

By a provision of the new constitution of the state of Louisiana, wood-working factories, saw and planing mills, and many other varieties of manufacturing establishments, are exempted from taxation for a period of ten years, provided that not less than five hands be employed in any one factory.

Mr. Wm. LITTLE, of New York, has published a pamphlet on the United States "Tariff on Lumber, and the Tariff Commissions," being a review of the evidence of the Saginaw Board of Trade. He claims that the state of trade in Michigan and in Canada is very inaccurately and unfairly compared.

THE Timber Trades Journal says:—The timber trees blown down by the very destructive gale in October last on the estates of the Marquis of Shigo at Westport, County Mayo, have been purchased by Mr. Robert Howson, of St. Asaph, North Wales. The fall is an immense one and will take twelve months to remove.

THE loss sustained by the Canada Lumber Company by the recent fire at their premises, at L'Assomption, is about \$25,000. Of this amount \$20,000 is covered by insurance in the Commercial Union and Fire Insurance Association of London, England. The former company has paid the amount of its risk, but suit has been entered against the Fire Association, which is still pending.

THE Newmarket Eras says:—For the first time since commencing operations in Newmarket, the Messrs. Cano have got all the logs teamed in that they had cut. Another gang of men are at work now, however, chopping more trees down, and the firm intends to team them in as long as the snow lasts.—Great skidways of logs now cover the flats and there will be lots of work at the mill this spring.

THE Northwestern Lumberman says:—Louis Sands, of Manistee, Mich., has purchased the Cypress Hill limit, 600 miles west of Winnipeg, Man., embracing 150,000,000 feet of pine, at a consideration of \$200,000. He will build a small portable mill thereon, beginning the work about April 1. The Canada Pacific will pass within 12 miles of the limit. It is safe to say there is money in the purchase.

FRENCH cabinetmakers are constantly on the alert to secure the beams and timbers from buildings in course of demolition. In pulling down a house in Paris recently, in addition to the large sum realized from this source, a hoard of 300,000 francs was discovered in the walls, while works of art were hidden behind the wainscots. All the woodwork of the house was bought by cabinetmakers and decorators.

THE Georgian Bay Lumber Company are having a fine new tug boat built at Port Severn to do their work on the river above the mill. The vessel will be 65 feet long by 14 feet wide. Mr. James Storey, of Collingwood, is contractor. The company are also erecting a fine large boarding house, two storeys high, 30x70 feet, with wing 24x24. It is expected it will be completed by the time the mill starts, in the spring.

MR. T. H. SHEPARD, who has charge of the lumber camps of the Rainy Lake Lumber Company, arrived in Winnipeg, lately. He states that by the spring over 20,000,000 feet of logs will be cut in the woods there. Two hundred and forty men engaged in the woods and the company has thirty-five teams in the bush. The saw mill at Rainy Lake is being enlarged, so that an extra number of men will be engaged next summer.

THE Wilson Hoop Company's factory, at West Bay City, Mich., is now turning out 120,000 barrel hoops and 25,000 short hoops per week, and the company expects to have on hand next spring 3,000,000 hoops. Elm timber is used, largely hauled in by farmers in the surrounding country. This timber growing profusely along the river, was once considered nearly worthless, but hoop-making has furnished a use for it. A considerably quantity of elm also comes in by rail.

A correspondent of the Buffalo Lumber World writing from Johnsonville, S. C., incidentally mentions a curious instance of the influence of animals in controlling or preventing forest growths. It appears that the fondness of hogs for the juicy roots of young pines leads them to seek them assiduously, so that where hogs are allowed to roam in that region one can hardly find a young long-leaved pine in a thousand acres of pine forest. There being no young trees to take the place of the old ones used up by the lumbermen and turpentine gatherers, that species of pine timber is rapidly being exterminated.

THE Minneapolis Lumberman has this to say of a gentleman who formerly operated chiefly in this city: W. C. Yawkey, of Detroit, Mich., a lumberman who is worth over half a million, has been attending the St. Cloud land sale, and has invested quite liberally in pine lands. He also, in partnership with Judge Evans, purchased lands on the Wisconsin, on which there is about 95,000,000 feet of standing pine, and none of which requires over a three-mile haul. It is believed that the gentleman cleared \$100,000 in the operation. Mr. Yawkey has sold a vast amount of his Michigan lands during the past year, and the Lumberman would not be surprised if both he and Judge Evans decided in the not distant future to locate in Minneapolis.

THE Ottawa Free Press of February 9th says:—We are informed that the British and Canadian Lumbering Co., headquarters in Toronto, have purchased the extensive saw mill near this city, known as Skead's mill. The sum is said to be in the neighborhood of \$100,000. The transfer is likely to be of great benefit to this city, as the company purchasing is a powerful concern and will, we are assured, run the mill to its full capacity. Shipment of lumber will likely be made by railroad.

THE Prince Arthur's Landing Herald says: We understand that L. Belanger has the contract for taking out the timber and erecting Marks' new mill, the dimensions of which will be 100x40 feet. The steam hammer is busily engaged putting down the piles for the foundation. It would not be at all surprising to us, judging from the way things are shaping at present, if a transfer of the Canadian Pacific Railway between here and Rat Portage would be made from the Government to the Syndicate at an early date.

A SHORT-SIGHTED POLICY.

To the Editor of the Canada Lumberman.

DEAR SIR,—Your valuable paper is doing a good work by encouraging all thinkers and lovers of our country to look into our future welfare regarding our demand and supply for lumber, and by many able remarks about tariffs, and the protection of forests, all of which should be our first duty to think of—who have the faculty to think at all. I may be pardoned for mentioning one or two facts which, perhaps, have not come under the notice of the public, and it is time they did. Lately our streams and the river St. John are threatened to have a regular slaughter carried on in our short lumber trade, shingles, and clapboards, by Americans. They have built and are building mills to manufacture our cedar and clapboard stuff, which if allowed to be carried on they will, before six years, cut and carry away all our stock of short lumber, and manufacture it on the American side to save the duty, and build up American mill owners and capitalists, instead of our own, and damage our future short lumber prospect, which is now our only dependence in the lumber line to help us build up our country with mills and manufactories. I find no fault with the tariff, but I blame the Government for not enforcing it. We have laid down in the tariff one dollar per cord on shingle bales and one dollar per M. on spruce and pine logs, export duty, but our Finance Minister will not enforce it. So here we are giving a premium of one dollar per M. on logs, and one dollar per cord on shingles right to Brother Jonathan to come over the lines and slaughter our lumber to help build up his country, and damage our own. On one stream there will be three million cedar got out to stock one mill on the American side, besides the clapboard lumber, and I may venture to say that much more is being got out in other parts for the same purpose, to save American duty. No doubt over fifty million shingles will be manufactured out of the Province limits this year, besides the host that was cut before and went scot free, we may put at three million feet of cedar cut on one stream at the least, nine million cords, and at one dollar per cord we are losing nine thousand dollars of a revenue robbed from our streams besides the clapboard lumber. The above will show to any man of sense the necessity of entering a complaint and having the slaughter of our forests looked into by the proper parties paid for doing their duty.

Respectfully yours,

A PROTECTIONIST.

Little Falls, Madawaska.

THE ADIRONDACK WILDERNESS.

The need of saving the woodlands of the Adirondack wilderness, out of which flow the Hudson River and other streams of great commercial, manufacturing and sanitary value to the State, has long been recognized by observing and thoughtful citizens. The outer and more accessible portions of the original forest region have long been stripped of their timber, and vast areas of little use for agriculture have thus been made treeless and barren. So long as the forests of Maine and Michigan and other wood-land regions in the North and West were able to

supply timber at a less cost for transportation to market, the remaining Adirondack forests were practically protected from the inroads of lumber men. That protection they are rapidly losing, and quite recently vast tracts of heavily wooded lands in that region have passed into the hands of timber cutters.

There is no question that the general clearing of the Adirondack region of its protecting forests would produce effects of the most disastrous character to the valleys of the streams flowing therefrom, effects like those which, during the past few months, have brought death and desolation to so many European river valleys. The rainfall of the Adirondack region is great, the drainage slopes steep, and without the controlling and restraining influence of the existing swamps and forests about their sources, the rivers which drains this northern wilderness would show only great and sudden alterations flooded and empty channels, destructive at once to the agriculture of their valleys, to the manufacturing interests which cluster along their banks, and to the commerce of the Hudson, the channel of which has already been seriously obstructed by the detritus washed in from unprotected hill slopes and other spaces stripped of their original forests.

It is gratifying to note that the State Legislature, or rather the Senate, has taken ground against the further invasion of the Adirondack forests, at least for that part of the region under State control; and it is much to be hoped that the Assembly will do as well. Senator Frederick Lansing's bill, forbidding the sale of 660,000 acres owned by the State in the Adirondack region, was passed by a vote of 24 to 5, January 23. It is a good indication of increasing public appreciation of the need of preserving the wooded character of that part of the State. The timber there, if cut at all, should be cut only under rigid control, and with the most careful provisions for immediate re-wooding of the cleared ground.

STEALING A MARCH ON THE DRIVE.

Since December 14, 1882, the C. N. Nelson Lumber Company, of Stillwater, Minn., has been doing an extensive log-shipping business over the St. Paul & Duluth railway, from Mission Creek station to Stillwater and Lakeland, for the purpose of getting logs to start its mills with in the spring before the drives come down. It is a novel move in the logging industry of the upper country, and it is thought that, if the plan works satisfactory, lumbermen in the St. Croix valley will not depend so much on the streams for log conveyance hereafter. Really, there is no reason why logs cannot be run to mill by rail in Minnesota and Wisconsin as well as in Michigan, where vast numbers of logs are conveyed on the Flint & Pere Marquette, the Mackinaw division of the Central, and other railroads. The C. N. Nelson Lumber Company will ship to Stillwater about 4,000,000 feet by rail, continuing the movement till April 1. The cost of rail shipment is about \$1 a thousand more than by water, or \$4,000 for the 4,000,000 feet. But the company no doubt expects to make up this additional cost by getting in ahead of rivals on the spring cut. It intends to have a quantity of lumber dry and ready for sale while the other fellows are driving the streams.—Northwestern Lumberman.

A FORESTRY BILL.

A bill known as the "Dakota Forestry Bill," has been introduced into Congress. It provides for the granting of 400 sections of unappropriated lands in Dakota to the coming state, to be immediately selected by the Secretary of the Interior, appraised and sold at their appraised value on ten years' annual payments, no deeds or patents to be given to the purchasers until after they have planted at least twelve acres of forest trees on each quarter section, and kept them in a good growing condition for at least eight years, the trees to be planted at such place or places on the quarter section as shall be designated at the time of the purchase by a Forestry Commission, for which the bill provides. The money derived from the sale of the lands is to form a fund, to be invested in Government bonds or other good securities, the interest on which is to be used for the establishment and maintenance of a school of forestry

and experimental stations. This institution is to be under the supervision of a board of three commissioners, two of whom are to be practical foresters, appointed by the president and confirmed by the Senate, and one appointed by the governor of the state of Dakota and confirmed by the highest branch of state legislature, the commissioners to hold the office for ten years, or during good behavior. If the proceeds of the lands sold for this purpose exceed \$200,000, the excess is to be used in the construction of buildings and establishing of experimental forestry stations, if it be found necessary to do so. It is not expected that it will become a law by passing this Congress, but it is intended to press the matter in successive sessions.—*The Lumber World.*

DESERONTO.

The Bolloville *Intelligencer* gives a full account of Messrs. Rathbun & Sons' mills at Deseronto, from which we take the following extracts:—

"The noise produced by the echo of the hammer and the movement of the hand-saw, greets the ear, as one approaches the vicinity of the big mill and on entering it the whizz of activity becomes conspicuously apparent. Here is a gang of stone cutters; there a party of masons; scattered promiscuously are laborers who distribute material where it is required. Carpenters and joiners ply their avocations and tend their contributions to the hum that is all pervading.

The mill originally was 90x150 feet. An addition was subsequently made to it of 30x70 feet, and an extension of a like size is now being added. The exterior of the original building—or all that was left of it, that was in good condition—still stands; the contents of the interior have gone with their usefulness—to be supplanted with what is modern and better adapted for quick despatch and better progress. "To be abreast of the times" is a motto that the enterprising firm of Rathbun & Son aim to achieve, and, as a result, all the newest and most approved mechanical devices, innovations and appliances that can be procured are theirs. The firm is an embodiment of push and with capable and efficient managers controlling each department and a systematic style of management, it is not to be wondered at that the firm has gone on and prospered as it has. "It has resurrected Deseronto" and the mills are the life of the village. All the foundation timbers of the big mill are new; all the floor timbers are new and the flooring will be new. Two new abutments for the two new gangs, 18 feet square and nine feet deep, made of cut stone obtained near Shannonville, have just been completed. They rest on a foundation of oak, and the bolts by which the machinery is to be fastened go through them. The gangs will be of the most approved pattern—the Wicks Bro.'s patent. They possess an excellent motion created by oscillation, and are considered superior to anything in use in similar establishments in Canada. The rigging is very strong and durable, and is of cast iron. These gangs, instead of cutting one log at a time as formerly, will dissect six. Canting is dispensed with, as the stuff is carried by live rollers. The cut is taken by transfer chains from the slabbers to the gangs, instead of being handspiked as formerly. There will be two slabbers for one of the gangs, and a pair of twin circulars for the other, that will slab the sides of the logs. The machinery outfit of the mill will comprise an improved slabber, two gangs, two slabbers and two new circulars, all of the most improved type. All the cut will be transferred by machinery, and from the time a log leaves the water, no hand will touch it until the lumber is on the pile ready for shipment. The work of renovation was begun on the first of January, and will be finished by the first of April. Fifty men are employed in putting the mill in order, and the labor, improvements and machinery will cost \$60,000. When the mill is in motion, it will cut 250,000 feet of lumber per day. The lath mill is an adjunct of the big mill and is now being provided with new machinery, which has been procured from Ottawa and other points in Ontario. In addition to turning out stuff for heading, sashes, blinds and panel material, it will daily contribute 150,000 lath. In the cedar mill there are 115 men and boys employed. Here

are made lath, shingles, box stuff, ties and dimension timber of almost any size and length. The machinery in this is of the best pattern extant. The sash factory gives employment to 120 men and fills demands from all parts of the universe. It recently received an order for 1,000 glazed sash and 1,800 doors which are to be sent to South Africa, and is daily burdened with calls for doors and mouldings throughout the Province.

The Weiland Volo works have given an order for 10,000 axe boxes, which are being made in the sash factory.

An immense quantity of lumber is piled along the docks.

Orders for house building material are numerous. "Necessaries" for eight structures have been provided during the past month.

An electric fire alarm system has been perfected by Mr. Rathbun and is in operation in all his places of business.

When the chemical works are in operation, the mills will be lighted with gas.

NEW BRUNSWICK'S FOREST WEALTH.

The St. John *Telegraph* of the 1st inst., states the clearances of lumber for trans-Atlantic ports from St. John for January, 1883, to have been as follows:—

Deals, battens, deal ends	3,910,839 sup. ft.
Scantling and boards	41,379 "
Pine.....	300 tons.
Birch.....	272 "

The shipments were made in eight vessels of 5,047 tons. The largest shipment was to Bordeaux, to which port went 1,300,418 feet of deals and 40,993 of scantling and boards. Discussing on "our forest wealth" the *Telegraph* says:—

The annual cut of spruce and pine lumber in this province, including what is used for domestic purposes as well as what is shipped abroad, probably averages over four hundred millions of superficial feet. The shipments last year of deals, etc., amounted to 375,864,368 sup. feet, and 45,000,000 sup. feet are estimated to be held over. The stock wintered over last season was 33,000,000, so that we find the cut for last year was 387,864,368 sup. feet, exclusive of the amount required for home consumption. How long the lumber lands of the province can stand this enormous drain is a question not readily answered; but it is evident that sooner or later the important industry of the manufacture and shipment of deals will be greatly curtailed. Under careful management, such for example as Mr. Gibson gives his reserves on the Nashwaak, the supply of spruce can be considerably prolonged, and it is to be regretted that no proper system of forestry has been adopted by the province, such as obtains in European countries, and is fitted to secure the co-operation of the lumbermen in the conservation of the forests. In view of the constantly increasing demands for lumber of all kinds on this continent, and the rapid exhaustion of the forests in the New England and Northern States, it is gratifying to know that this province possesses a vast store of wealth as yet comparatively untouched. The hardwood lands, of which there are millions of acres as yet unexplored, will, in the near future, take the place, in part, of the spruce lands.

It is impossible to give even a vague estimate of the amount of merchantable hardwood in this province, but it is enormous, and when it begins to find a market its manufacture will give employment to much capital and labour. In the northern part of the province alone there is a belt of land, irregular in outline, and broken by softwood land extending from the rear of the settlements on the St. John to those on the Bay of Chaleur, and containing fully two millions of acres, clothed with a forest of certain future value, and in every county there is more or less country of the same class. At the very moderate approximation of one thousand superficial feet per acre, the total amount of merchantable wood will be seen at once to be immense.

Wood and Coal.

The relative value of wood and coal has been made the subject of scientific investigation. It is stated as safe to assume that two and a quarter pounds of dry wood are equal to one pound of average quality of soft coal; and that the fuel value of the same weight of different woods is nearly the same, when dry: that is, a pound

Lumber Drivers' Calks

For Use in Stream Driving to insure a safe footing in Slippery Places.
25 in ball and 5 in heel are the numbers usually required.

PRICES for the six different sizes and for Calk Sets and Punches for adjusting Calks, on application to

T. McAVITY & SONS,

Dealers in Lumber and Mill Supplies,
ST. JOHN'S, N. B.

of pine is equal to a pound of hickory. The different woods weigh as follows, per cord: Hickory or hard maple, 4,508 pounds; white oak, 3,850 pounds; beech, red and black oak, 3,250 pounds; poplar, chestnut and elm, 2,350 pounds; average of pine, 2,000 pounds. The value of these woods for fuel, as compared with coal, is given as follows: One cord of hickory or hard maple equals a ton of coal; white oak, 1,715 pounds; beech and red and black oak, 1,050 pounds; average pine, 925 pounds. *Northwestern Lumberman.*

WORTH KNOWING.—A Fact Worth Knowing. The best household remedy known for Coughs, Colds, Bronchitis, Asthma, Whooping Cough and all throat and chest troubles tending toward Pulmonary Consumption is Hazyard's Pectoral Balsam, to be procured of any druggist.

DOORS, MOULDINGS, Etc.

WANTED AN AGENCY FOR ENGLAND for the sale of the above, by a gentleman with experience of the trade, large connections, and first-class references. Has worked the American Joinery for England for some years. Address D. M. 270, Messrs. Deacon's, 154 Leadenhall Street, London, England. 14

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The MURRAY BAY LIMITS

COMPRISING ABOUT
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These limits control the whole territory on the Murray River. The limits are very valuable, heavily timbered with Spruce and Pine, interspersed with valuable hard woods, Poplar and White Birch. Apply to

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QUEBEC.



NOTICE.

SEALED TENDERS addressed to the Superintendent General of Indian Affairs, and endorsed "Tender for Indian Supplies," will be received at this office up to noon of SATURDAY, 10th MARCH, 1883, for the delivery of the usual Indian Supplies, duty paid, in Manitoba and the North-West Territories, consisting of Flour, Bacon, Groceries, Ammunition, Tents, Oxen, Cows, Bulls, Agricultural Implements, Tools, &c. Forms of tender and full particulars relative to the Supplies required, can be had by applying to the undersigned or to the Indian Superintendent, Winnipeg. Each Tender must be accompanied by an accepted Cheque of a Canadian Bank for at least five per cent. on the amount of the tenders for Manitoba, and ten per cent. on the amount of the tenders for the North-West Territories, which will be forfeited if the party declines to enter into a contract when called upon to do so, or if he fails to do the work contracted for. If the tender be not accepted the cheque will be returned. The lowest or any tender not necessarily accepted.

(No newspaper to insert without special authority from this Department through the Queen's Printer.)
L. VANKOUGHNET,
Deputy of the Superintendent
General of Indian Affairs.
Dept. of Indian Affairs,
Ottawa, 30th Jan., 1883.

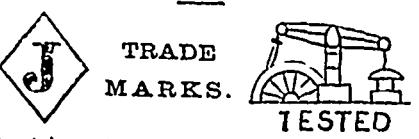
LUMBER

Shingles, Doors, Sash, Flooring, &c.,
WANTED,
STATE QUANTITIES AND PRICE TO
SHORE & DAVIS,
Head Office, 614 Maine Street, Winnipeg, Man.

**MINNESOTA
PINE LANDS
FOR SALE.**

THE SUBSCRIBER OFFERS A TRACT OF
8,000 ACRES
OF PINE LANDS, in St. Louis County, Minnesota, carefully selected and estimated to cut FORTY MILLION FEET, well located on good driving stream, tributary to Duluth.
A. McOALL,
Lumber Merchant, Simeco, Ont.

PUBLIC NOTICE



Granted according to Act of Parliament and Registered in England, Germany, Canada and the United States

And Beam Engine Marks.

It having come to the knowledge of Messrs. Thomas Jowitt & Sons, of Scotia Works, Sheffield, in the County of York, Merchants and Manufacturers, that several manufacturers and merchants in Sheffield and in various parts of the Dominion of Canada, are putting the above mentioned marks of **J** and "Beam Engine," which are the exclusive property of the said Thomas Jowitt & Sons, and which trade marks have been duly registered in the Trade Marks Registry of London, and the latter of which has been duly granted to Albert Alsop Jowitt, of the said firm of Thomas Jowitt and Sons, by the Cutlers Company of Sheffield, aforesaid, NOW NOTICE IS HEREBY GIVEN, that legal proceedings will be immediately instituted against anyone trading in Goods of Steel or of Steel and Iron combined, whether with or without a cutting edge, which Goods bear either of the above marks, unless such Goods are of the manufacture of THOMAS JOWITT & SONS.
Dated this 21st day of October, 1882.

YOUNG WILSON & Co.,
EAST PARADE,
SHEFFIELD, ENGLAND.

Solicitors to the said
THOMAS JOWITT & SONS

\$72 A week made at home by the industrious. Best business now before the public. Capital not needed. We will start 300 women, boys and girls wanted everywhere to work for us. Now is the time. You can work in spare time, or give your whole time to the business. No other business will pay you nearly as well. No one can fail to make enormous pay, by engaging at once. Costly outfit and terms free. Money made fast, easily, and honorably. Address True & Co., Augusta, Maine.

DISCUSSION ON TREES.

We take the following from the annual report of the Fruit Growers' Association, of Ontario:

MR. BEADLE.—With regard to trees for towns and cities, the best growing tree, and the one which has been the most popular on that account, is the silver-leaved maple. It is sometimes called the soft maple, but there are other soft maples. The botanical name is *Acer dasycarpum*. It grows so fast that sometimes the branches split during high winds, and I have found it necessary to take the saw or the pruning knife to the trees and head them back so as to make them grow more compactly. If this were not such a fast grower, and we were not in such a hurry to have shade trees, I would prefer the sugar maple. It is a more cleanly tree, if possible, than the silver maple. It does not sprawl much; it has a brighter and closer foliage, and, I think, is more symmetrical and beautiful to the eye. If you ask me what tree I would take next to that I get puzzled. There are several trees. There is a tree that we call the ash-leaved maple. It is not a maple; it is not an ash. Botanists have put it under the head of *Negundo aceroides*. It is a hardy tree—I suppose a more hardy tree than the sugar maple. It will grow as far north as any tree can grow. It does not make as large a tree as the sugar maple. It makes a very pretty medium-sized tree with a rather compact head and pinnate leaves. The prettiest native evergreen for ornamental planting is what is commonly called the hemlock, but it needs to be planted with some care. It needs nurses. If you take one hemlock tree in any part of the country and set it out on the lawn by itself, ten to one but it will die out; but if you will plant a little group of trees—a hemlock to each three or four Norway spruce—and let them grow together, and gradually cut out your Norway spruces so as to have a clump entirely of hemlock, after a while you will have one of the most graceful groups of the prettiest of all the evergreen tribe. Our balsam fir, while it is young, makes a pretty ornamental tree, but when it gets to be twenty-five or thirty years old it loses its lower branches and ceases to be an object of beauty. Our white spruce would be my choice in preference to the balsam fir. I think it will hold its limbs pretty well. It certainly will hold its limbs at the ground much longer than the native balsam. The Weymouth pine—our common pine—is a beautiful thing; but you ought not to plant it on small lawns. It is a beautiful tree planted alone, and allowed to have free scope to develop itself. Will it pay to plant the black walnut for commercial purposes? I suppose there are none of us who can speak from experience. If a man has a piece of land that is suitable for the black walnut and not so very suitable for tillage purposes, being broken and uneven, I believe that it will pay a person well who will take care of a plantation of that sort for twenty-five years. The wood, as we all know, commands a very high price in the market for the sake of the lumber it makes. It is continually growing scarcer, and the price is going up. I can see no reason why a plantation of that kind well taken care of should not pay well. I have heard it said that the nuts ought to pay something. If you go to a grocer in town and ask him for a bushel of black walnuts he will charge you half a dollar for them; but I think you could scarcely sell ten bushels of them if you wanted to. Will it pay to plant the white ash for commercial purposes? We know that wood is used for almost everything, agricultural implements, carriage making—in every useful branch of industry where woodwork is wanted the white ash will come in play; and, I believe, under the same circumstances where black walnut might be made profitable white ash might be too. To the westward of us, in the United States—in those treeless prairies—they are planting the white ash very freely. They have great faith in it as a tree for forming shelter belts, as well as a timber tree. I believe the hickory would also pay. The nuts of that will sell for something. I do not know what the market price is. I know that the wood is being sought for for various purposes—for spokes of wheels, for felloes also, I believe—and for hammer handles, and that sort of thing. I believe a plantation of hickory on broken soil—on ground untable for it—would be a profit-

able investment for a man to make. I think the time is coming when these subjects should be agitated and discussed. It would not take long to compute how much lumber you could get off a given acreage by knowing a little of the growth of these trees. I have been told about the hickory, that the demand for hoops is becoming so great that it would pay to set out a thick plantation of hickory trees, let them grow to perhaps a little thicker than your thumb, and then cut them down and split them in two hoops.

MR. DRURY.—There is one native evergreen which I think the secretary has overlooked—that is, the cedar. I was not aware, myself, until this last summer, that it was possible to get it to present such a fine appearance—no! until I had an opportunity of visiting the farm of Mr. Dawson, in the county of Kent, about a mile from Chatham. There I saw cedars carefully trimmed and pruned to the most beautiful shapes. Of course, we know that if we allow a tree to grow as it will, without any pruning or shaping, it is not likely to present a very attractive appearance. The cedar is a tree that could be used for hedges. I do not say that it would be a lasting tree, but I have known it to last as a hedge for twelve or fourteen years. I saw a hedge of that sort on Mr. Dawson's farm. Near my own place a large orchard is partly enclosed by a cedar hedge, and it presents a very nice appearance. Then, too, I think the Secretary has hardly placed the spruce in its proper position as an ornamental native evergreen. The spruce, in my opinion, is one of the very finest native evergreens. Its color is very pleasing, and without giving it any attention it will grow into a very nice shape. I fully agree with what he has said in regard to the hemlock. The white pine also is a tree that can be pruned into shape. I have seen a very nice little arbour made by planting four or five pine trees in a circle, and then trimming the inside and the outside. This can be seen on Mr. Dawson's farm. I am disposed to think it would pay just at present to plant the white ash for commercial purposes, because it is a tree that is growing in considerable numbers in various parts of the country already.

MR. BEADLE.—Is it the red cedar you are speaking of?

MR. DRURY.—No; it is the white cedar—the *arbor vite*.

MR. BEADLE.—It is the *arbor vite*, but not the white cedar; what is known by botanists as the white cedar does not grow here. The *arbor vite* would make a very pretty hedge, and bear trimming as you have said.

MR. BEADLE.—Questions have very often been asked me within the last year or two as to what size the black walnut will attain in a given number of years. I have been endeavoring to find some answer to the question, but I have not succeeded very well. I am hoping, however, to get more correct information from England on that subject. I think the probabilities are that there are English authorities more reliable than anything we have in this country as to our Canadian black walnut. We find that the Canadian black walnut was introduced into England in 1656; and I know of one tree that is about 153 years old, standing in England at the present time. That tree is now upwards of five feet in diameter. It is at Fulham Castle. It is now in a perfectly healthy condition.

MR. DRURY.—We have in our neighborhood a black walnut tree I could not tell you the age of it, but it is very little less than two feet in diameter at the base of the trunk. The limbs branch low—probably six or seven feet up. I asked the present owner of the property how old it was. He said, "Oh, I don't know; it must be about 120 years old, I think." I asked him how he knew. "Why," he said, "it was planted by my grandfather." "But," said I, "the county has not been inhabited more than seventy years." I think it was probably planted about seventy years ago. There is another tree I took Mr. Beadle to look at, it is planted in another part of our county, which would make about two standard sawlogs. That tree also must be about seventy years old. There is a hickory tree that stands very near my house on a neighbor's premises, which forty years ago I saw an uncle of mine pruning up. It was a little bigger than my thumb at that time. That

tree has more than twenty inches of diameter of trunk now. The whole tree is not standing; it forked, and in a heavy gale of wind it split down, and half of it has fallen. I fancy that the black walnut or hickory could be brought up in thirty years—perhaps twenty years—to quite a commercial size, and I believe it would be profitable if properly cultivated; but it would be necessary to cultivate close so that the branches would not lie too low.

THE LUMBER TARIFF.

The Chicago *Northwestern Lumberman* of Jan. 27, says:—On Monday of this week, during the progress of the debate on the tariff bill in the Senate at Washington, the duty on lumber was discussed, mainly by Mr. Conger, of Michigan, and Mr. Van Wycke, of Nebraska. The Michigan senator, of course, favoured a continuance of the present duties on lumber, and the gentleman from Nebraska voiced the opinions of his prairie constituency. It is to be remarked that Mr. Conger held that there was still timber enough in the country to last 50 years, which hardly comports with Mr. Sargent's eight-year theory, that he is so industriously circulating in eastern journals. Neither does it accord with the position taken by the stumpage owners a year or so ago, when they desired to build the market for both raw and manufactured material. There is a peculiar mixture in the motives of the pine interest these days, mainly owing to the tariff question. Before it came up in the present Congress there was scarcely a stumpage owner to be found who did not predict the early extinction of the pine forests. That cry was on the wrong track as soon as the commission began to use palace cars and the club room at the hotels. It was then discovered to be logical that if our pine supply was becoming rapidly exhausted, free Canadian lumber would supplement it, and for that reason the consumers, especially in the timberless regions of the west, would have a right to clamor for the removal of duties on the Canadian product. Hence we find the pine interests blowing hot and cold nowadays—Mr. Conger, the Michigan valiant, stoutly maintaining in the Senate that the supply will last 50 years, while the lesser lights, like Mr. Sargent and his agents, and individual pine owners, who have not yet "got on to the racket," are still insisting that the pine forests of the country will have been utterly slaughtered in eight years.

The fact is that few outside the Saginaw valley interest, which Mr. Conger represents in the Senate, care much about the duty on lumber, for the reason that Canada lumber can never come into lasting and serious competition with the product from Lake Michigan westward. New York, New England and the Canadian Northwest will absorb the larger share of Dominion lumber, and there will be but little need for the mill men and merchants over the border to come west in search of customers, except in instances where there is special demand or local scarcity.

The success of Mr. Ingalls' motion to amend the bill so as to admit squared timber and sawed boards free of duty, was certainly a triumph for the advocates of free lumber, so far as the Senate is concerned. The action of the house in the matter, and the final fate of the amendment, will be awaited with much interest by all who are interested in pine.

FANCY WOODS.

The development of taste in matters relating to the internal woodwork of houses has of late years spread to floors, and parquetry floors have become the fashion. It may be expected that future taste will extend to the selection of coloured woods for the making of floors, and ere many years we may see such woods as mahogany, ebony, rosewood, walnut, teak, greenheart, birch, &c., blended together for the production of an artistic floor.

Judging from the direction public taste has of late followed, we should say that the business of the "fancy" wood merchant will develop in future years, and that instead of coloured woods being as now to a very great extent exclusively employed for cabinet purposes, they will be made very general use of for the internal woodwork of better class dwelling-houses. When the practice of introducing coloured woods into

houses becomes generally adopted, the business of the "fancy" wood merchant will enormously develop, and then the tropical forest of Central America will be called upon for new large supplies.—*Timber Trades Journal*.

SOUTHERN PINE FORESTS.

The *Lumberman* will be much obliged to one of its many readers in the south, providing he knows, if he will explain the absence of small pine trees in so many of the yellow pine forests. This state of things is remarked on by every observer who visits the yellow pine woods. Several reasons have been given, but to the *Lumberman* they are unreasonable reasons. One is that the hogs, which are so abundant in the southern woods make food of the roots of the small trees as soon as they are old enough to have roots, and another is that the annual burning over of the forest lands destroys the young trees. When traced up, the hog theory is a poor one, for if yellow pine trees sprang up in the southern woods as white pine does in the white pine regions of the North, all the hogs would be kept very active, even if they set about to make the killing of the little trees their life work. The other theory is fallacious from the fact that in forests that are not burned yearly there are no young trees. The writer of this has ridden over thousands of acres of forests in the South that were so devoid of any kind of underbrush that it was difficult to get enough branches with which to decorate the horse's head. In the Northwest small trees are so plentiful that thousands, and probably millions, of them are cut annually when making roadways. The lumber business is a comparatively new one in the South, and considering the small number of infant trees found in the forests there, it is at least interesting to speculate as to what extent the forests, when once cut off, will reproduce themselves.—*Northwestern Lumberman*.

Managing Belts.

A mechanic gives the following directions for managing belts. He says: "I have for the last twenty-five years, on every Saturday evening, turned the inner side of my engine belt outside, let the engine run slowly, and washed the belt well with warm water and soda, applied with cotton waste. Next I take a piece of sheet metal and scrape the belt well, then wash with clean warm water and dry off. I collect the waste off from the shafting and apply as much of it to the belt as possible. The washing must be done as quickly as possible, so as not to dissolve the glued parts. I let the belt stand on the pulley till Monday, then give another scraping and turn the belt as before. I keep the pulleys very clean. I have long been surprised at the economy I have effected with very little trouble. I have not bought a new belt for the last ten years. There is an engine near me 14 inches by 36 inches (mine is 12 inches by 36 inches.) I have nearly double the shafting and belt, and my neighbor cannot run with less than 38 pounds of steam when all the belts are on loose pulleys. Mine will run at full speed with five pounds."

Art in Furniture.

In art furniture this country is steadily advancing. Cumbrousness has long been banished from our homes. Our furniture makers prove themselves fully equal to the production of the stately and picturesque furniture of the Elizabethan period; in addition to original designs free from all incongruous effects. This country is rich in furniture woods, beautiful in grain and exceedingly diversified in color, ranging from the palest maple to the deepest and most lustrous hues.—*American Lumberman*.

LITTLE BY LITTLE.—The constant dropping of water will wear away even the hardest stone. So the constant irritation of a cough will so wear upon the lungs as to induce incurable Consumption. Hagar's Pectoral Balsam will cure the worst cough, speedily and effectually.

MR. THOMAS W. RACE, Editor and Proprietor of the *Mitchell Recorder*, writes that he had a prejudice against Patent Medicines, but being induced to try Burdock Blood Purifiers, for Bilioussness that occasioned such violent headache and distress as to often disable him from work. The medicine gave him relief, and he now speaks of it in the most favorable terms.

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Dec., and for the first 12 months of the year:—
MONTH ENDED 31st DEC., 1882.

Timber (Etern).	Quantity Loads.	Value.
Russia	7,060	17,005
Sweden and Norway	24,409	39,566
Germany	15,028	46,974
United States	5,282	21,740
British India	2,499	35,210
British North America	29,550	140,065
Other Countries	35,030	40,784
Total	121,332	347,950
<i>Timber (Sawn or Split, Planed or Dressed).</i>		
Russia	26,747	63,542
Sweden and Norway	66,507	147,868
British North America	90,378	233,690
Other Countries	18,592	60,254
Total	192,224	505,255
<i>Staves, (all sizes)</i>		
Mahogany (tons)	0,992	39,120
Total of Hewn and Sawn	2,777	27,554
Total of Hewn and Sawn	315,556	853,205
12 MONTHS ENDED 31st DEC., 1882.		
<i>Timber (Etern).</i>		
Russia	299,533	629,620
Sweden and Norway	609,187	968,906
Germany	297,031	844,425
United States	156,472	644,216
British India	59,913	512,339
British North America	277,745	1,348,564
Other Countries	339,516	429,748
Total	2,018,407	6,277,823
<i>Timber (Sawn or Split, Planed or Dressed).</i>		
Russia	1,173,318	2,071,737
Sweden and Norway	1,052,933	4,166,450
British North America	1,010,413	2,092,049
Other Countries	335,006	1,072,908
Total	4,176,760	10,892,250
<i>Staves (all sizes)</i>		
Mahogany (tons)	125,696	647,227
Total of Hewn and Sawn	36,004	351,000
Total of Hewn and Sawn	6,195,167	10,170,073

SWEDEN.

The Stockholm correspondent of the *Timber Trades Journal* says:—The one great determining fact which stands boldly out in relief is the enormous production of sawn and planed lumber in Sweden in 1882, and which was doubtless greater by over 100,000 Petersburg standards than in any preceding season. This is clear from the following comparative return of export for the first eleven months of the last six seasons, viz:—

	1882 Std.	1881 Std.	1880 Std.
Sawn and planed wood	715,000	611,000	632,000
Hewn wood	105,100	89,700	102,600
	1879	1878	1877
Sawn and planed wood	620,000	556,000	637,000
Hewn wood	72,500	74,000	111,000

(The hewn wood is calculated per standard of 150 and the sawn, &c., per standard of 165 cubic feet.)

Estimate of first open water stocks of sawn and planed wood in the north of Sweden.—1882, 356,252 standards; 1883, 404,704 standards.

The above results have been rendered possible by the uncommonly successful manner in which floating was carried on in the past season, as well as by the long and favourable shipping period. This immense export could not naturally fail to bring prices down somewhat towards the close of the season for the comparatively high limit at which the larger productions were mostly sold early in the year. Importers who bought largely under the expectation of a very heavy consumption, and which was but partially realized both in France and England, may thank their stars that circumstances were against consignment shipments in autumn, otherwise prices would probably have given way sufficiently to have caused financial embarrassment to some of the younger importing firms in Britain that bought so largely.

The *Northwestern Lumberman* says:—The Muskegon Car Works recently received from Kansas City an order for 350 freight cars, which is being filled as rapidly as possible. The company is considering an order from one company for 500 freight cars, and is negotiating to build street cars for several cities. If the Muskegon builders are not specially favored with orders, the car-building industry must be looking up.

Chips.

The *Northwestern Lumberman* says that the snow is reported so deep in the Duluth district beyond the Northern Pacific junction that the skidding of logs has become difficult.

The 1882 cut of pine in Michigan, Wisconsin and Minnesota will amount to about 10,000,000,000 feet, against 7,768,000,000 feet last year, and everybody wonders how long it can go on.

Since it has become possible to transport lumber cut in east Tennessee, the timber interests are developing rapidly. Many new mills have been built, and the supply seems almost inexhaustible.

The shipments of forest products to foreign ports, from Puget Sound, as reported to the Port Townsend custom house for 1882, were as follows: Lumber, 59,064,000 feet; lath and pickets, 3,869,000; shingles, 4,090,000.

On the north branch of the Cedar, in Michigan, there is a log jam of four or five miles in extent. The Rust, Eaton & Co. dam was opened January 14, but the freeze-up was of a too positive character to make the move of immediate benefit.

The pine land suit between A. J. Fair, of Detroit, and John Whyte, of Ridgetown, Ont., in the United States Court, has been settled, Mr. Whyte making a reduction of \$15,750 on his claim. Fair loses about \$7,000, but will resume business on a sound footing.

Lewis Sands, a prominent Michigan lumberman, has agreed to advance \$200,000 to John Adams, of Winnipeg, for the purpose of working the latter's timber limit of 37½ square miles, near the Cypress Hills, N. W. T. It is intended to commence the erection of mills at once and push on developing the limit.

During the yellow-fever epidemic at Pensacola, Fla., millions of feet of timber accumulated in Covington county, Ala., and the country bordering on the Conecuh river, waiting the subsidence of the scourge to be floated down, and which is now going forward. These retarding operations will result in something of a boom.

About one-half of the stock expected to be got out on the Menominee river, Winnipeg, is now banked, estimated at 200,000,000 feet. There is about two and a half feet of light, dry snow in the woods. The weather is extremely cold, which makes hard hauling, but the operators are icing their logging roads wherever practicable, to obviate this. On the whole, the outlook is favorable for a larger crop of logs than was started in for.

The *Montreal Gazette* says.—Mr. Senecal is reported to have purchased the lands of the Hall estate, which comprise some of the finest timber districts and agricultural tracts in the province, including the Gatineau mills and river frontage at Quebec suitable for elevators and wharves. The purchase, which is placed at the high figure of \$2,000,000, has been made on behalf of a colonization company represented by Mr. Senecal.

The Northern Pacific road is adapting the forestry idea to a somewhat new and practical end. It is planting trees as a defence against future snow-drifts. The company has had gangs of planters at work during the fall, and intends continuing the plan every season. Bonus is also offered settlers on the company's land grants to encourage the planting. A forest of well-grown trees will prove the most effective snow-shed possible, while it will cost less, last longer, and grow constantly in material value.

The *Northwestern Lumberman* says:—The belief is general among manufacturers that the price of lumber the coming season will rule lower than in 1882, but with hardly an exception they are of the opinion that the consumption of lumber will be something to be talked about in after years. There are many indications that an immense amount of lumber will be sold the coming season, but there is liable to be some disappointment on the part of members of the wholesale trade in certain directions. There is a large quantity of lumber beyond the Mississippi river, and should the consumption in that territory be very large, the trade of the dealers who look to that section for customers will not bear the usual proportion to it.

ROBERTSON'S LIGHTNING CANT-DOG

STEEL RING,

The Lightest, Cheapest and Most Durable Cant-Dog in the World.

PETER ROBERTSON,
Chaudiere - - - Ottawa.

MACHINE OILS, ETC.

MCCOLL BROS. & Co.
TORONTO,

MANUFACTURERS and WHOLESALE DEALERS IN

Machine and Illuminating Oils

Four (4) Medals and Three (3) Diplomas awarded to them in 1881, by the Leading Exhibitions of the Dominion.

SEND FOR PRICES, ETC.

AMERICAN HEAVY Oak Tanned Leather Belting

Rubber Belting, Rubber Packing,
Rubber Hose, Linen Hose,
And Cotton Hose.

A Full and Complete Stock always on hand.
Write for Prices and Discounts.

T. McILROY, JR.
WAREHOUSE—10 & 12 King Street East,
P.O. BOX 556. TORONTO.

Market Reports.

TORONTO.

From Our Own Correspondent.

FEB. 9.—There is little worthy of record in lumber matters to give you at present, and about the only paying business in the wood line just now is that of cordwood; owing to the severe wintry weather a thriving trade is being done by the coal and wood dealers, and lumber dealers are looking quite glum in consequence of their enforced idleness. There is scarcely anything coming in by rail, as all the railroads running into the lumbering districts are completely blocked with snow. Operations in the woods are also at a standstill in consequence of the great depth of snow, and perhaps it is just as well that the elements has done for the lumberman that which he was unwilling to do for himself, viz., curtailed the quantity originally intended to have been got out. The retailer will not have cause for complaint either, when the spring opens there will be a general rush and the building trade will resume more than its wonted activity. Some dealers have felt like trimming their sails in view of lower prices with the opening spring trade, but I for one feel positive that prices will hold up during the coming spring and summer months. Little anxiety may be felt on that score. Prices remain firm at last quotations:

Table with columns for item names and prices. Includes 'MILL CULL BOARDS AND SCANTLING', 'Shipping cull boards', 'cantling and joist', 'Cutting up planks to dry', 'Sound dressing stocks', 'Picks Am. inspection', 'Three uppers, Am. inspection', '1 1/2 inch flooring', '2 1/2 inch flooring', '3 1/2 inch flooring', '4 inch flooring', '5 inch flooring', '6 inch flooring', '7 inch flooring', '8 inch flooring', '9 inch flooring', '10 inch flooring', '11 inch flooring', '12 inch flooring', '13 inch flooring', '14 inch flooring', '15 inch flooring', '16 inch flooring', '17 inch flooring', '18 inch flooring', '19 inch flooring', '20 inch flooring', '21 inch flooring', '22 inch flooring', '23 inch flooring', '24 inch flooring', '25 inch flooring', '26 inch flooring', '27 inch flooring', '28 inch flooring', '29 inch flooring', '30 inch flooring', '31 inch flooring', '32 inch flooring', '33 inch flooring', '34 inch flooring', '35 inch flooring', '36 inch flooring', '37 inch flooring', '38 inch flooring', '39 inch flooring', '40 inch flooring', '41 inch flooring', '42 inch flooring', '43 inch flooring', '44 inch flooring', '45 inch flooring', '46 inch flooring', '47 inch flooring', '48 inch flooring', '49 inch flooring', '50 inch flooring'.

MONTREAL.

From Our Own Correspondent.

FEB. 10.—Since the date of our last report we have had steady cold weather, and in some regions heavy snow storms have prevailed and fears are entertained that the snow will be so deep as to make hauling a matter of some difficulty. Business here has been very quiet, nothing reported beyond the usual retail demand, which has not been very active since the date of our last report, but this is usually the case at this season of the year. The prospects are good for the trade as soon as spring opens. We have no change to make in our quotations which are firm and steady as under, ex yard:—

Table with columns for item names and prices. Includes 'Pine, 1st quality', 'Pine, 2nd', 'Pine, shipping culls', 'Pine, 4th quality deals', 'Pine, mill culls', 'Spruce', 'Hemlock', 'Ash, run of log culls out', 'Bass', 'Oak', 'Walnut', 'Cherry', 'Butternut', 'Birch', 'Hard Maple', 'Lath', 'Shingles, 1st', 'Shingles, 2nd'.

been very dull for the past two weeks. Wood in the country is plentiful if we have not too much snow to get it out of the bush. Prices remain steady as follows:—

Table with columns for item names and prices. Includes 'Long Maple', 'Short', 'Long Birch', 'Short', 'Long Beech', 'Short', 'Long Tamarack', 'Short'.

OTTAWA.

From Our Own Correspondent.

FEB. 9.—A case is now before the court here which is of the greatest importance to lumbermen. Ever since the lumbering interest of the Ottawa Valley was first developed numerous mean individuals have plied the nefarious occupation of stealing and making use of saw logs along the banks of the main river and on the streams. The number misappropriated in this manner has been enormous. These parties who would be more familiarly named as pirates of the Upper Ottawa, have made so bold at times as even to erect small mills to cut up their ill-gotten timber. The lumbermen and limit owners have united of late years and gradually the grievance is abating. Many prosecution cases have come before the courts at different times, but strange to relate the convictions of the accused by juries have not been of great number. A man named Rowan who lives in Fitzroy township, appeared before the court here a few days ago, to answer the charge of feloniously stealing a number of saw logs. Indictments were taken out against him by five different lumbering firms, among them Messrs. Brouson & Weston, E. B. Eddy, Perley & Pattee. The defendant has been committed for trial and his trial will come off at the next assizes. The lumbermen are bound to prosecute to the last all such cases that are heard of in future.

Your correspondent had a conversation to-day with a lumberman who has just returned from the woods. He said that the prospects for a very large output of lumber this season were excellent, and almost unprecedented. The different shanties in operation—larger in number than any previous season—were meeting with much success. As to the alarming reports of dangerous diseases being prevalent in certain localities he could say that there were no grounds for such reports. He entertained a rather gloomy outlook, however, for the future of this city as a centre for the manufacture of lumber, believing that the mill owners would in a few years be compelled to follow up the timber with their mills.

The British Canadian Lumbering Co., headquarters in Toronto, have purchased the extensive saw mill near this city known as Eddy's South Shore Mill. It formerly belonged to Senator Skead, but has been operated for the past five years by Mr. E. B. Eddy. The price paid was about \$100,000.

Mr. J. Poupere, Crown Timber Agent at this city, has issued a statement of the revenue accrued in 1882 classified to revenue as now divided to Quebec, Ontario and the Dominion. It is as follows:—

Table with columns for item names and prices. Includes 'Saw Logs', 'Ground Rents', 'Rooms', 'From Indian Land's Ground Rents', 'Timber Dues', 'Slides and boom duties', 'Total, Quebec', 'Total, Ontario', 'Total, Dominion'.

Collections for A. J. Russell and John Poupere, by H. J. Chaloner, at Quebec, after adjustment at Ottawa. Quebec, \$89,249.41; Ontario, \$65,778.21. Slide and boom dues on bonds taken at Ottawa—Dominion, \$30,649.68. Grand total, Quebec, \$157,564.71; Ontario, \$270,158.87; Dominion, \$114,004.61.

BOSTON.

Cotton Wool and Iron says—Operations are of a very restricted character in almost every department. The season is unfavorable to outside business, and consumers are only ordering as a rule what they require for their present

limited wants. At the latter part of February there is likely to be a moderate start-up in trade. At the sheds of the different railroad corporations there is a large stock of lumber on storage. Good grades seem to be held pretty steady, with calls slow and irregular. Furniture manufacturers are beginning to make inquiries for hardwoods, in anticipation of active operations, and prices for desirable grades seem to hold their own quite well. Pine is quiet but fairly steady. The prospect is that building operations will be pretty active the coming season if prices are favorable. There is quiet a demand for medium and low cost houses in the city and suburbs.

Table with columns for item names and prices. Includes 'Selects, Dressed', 'Shelving, Dressed, 1st', '2nd', 'Dressed Shippers', 'Dressed Box', 'Sheathing, 1st quality', '2nd'.

ALBANY.

Quotations at the yards are as follows:—

Table with columns for item names and prices. Includes 'Pine, clear', 'Pine, fourths', 'Pine, select', 'Pine, good box', 'Pine, 10-in. plank, each', 'Pine, 10-in. plank, culls, each', 'Pine boards, 10-in.', 'Pine, 10-in. boards, culls', 'Pine, 10-in. boards, 16 ft.', 'Pine, 12-in. boards, 18 ft.', 'Pine, 1 1/2 in. siding, select', 'Pine, 1 1/2 in. siding, common', 'Pine, inch siding, common', 'Spruce, boards, each', 'Spruce, plank, 1 1/2 in.', 'Spruce, plank, 2 in.', 'Spruce, wall strips, each', 'Hemlock, boards, each', 'Hemlock, joist, 4x6, each', 'Hemlock, joist, 2x4, each', 'Hemlock, wall strips, 2x4, each', 'Ash, good', 'Astr. second quality', 'Cherry, good', 'Cherry, common', 'Oak, good', 'Oak, second quality', 'Hasswood', 'Hickory', 'Maple, Canada', 'Maple, American, per M.', 'Chestnut', 'Shingles, shaved, pine', '2nd quality', 'extra, sawed, pine', 'clear', 'cedar, mixed', 'cedar, XXX', 'hemlock', 'Lath, hemlock', 'Lath, spruce', 'Lath, pine'.

BUFFALO.

We quote cargo lots:—

Table with columns for item names and prices. Includes 'Uppers', 'Common', 'Culls'.

CHICAGO.

The Northwestern Lumberman says:—Yard men are purchasing next to no lumber for the coming season's sales. The manufacturers on the east shore are still in possession of their stocks, with the prospect of having plenty of dry lumber on hand next June. The wholesale dealers of this city expect to see this lumber coming to the docks here in heavy volume after the opening of navigation, and are preparing to give it a regular white-bear pounding when it does come. The manufacturers themselves acknowledge that there is a prodigious stock of lumber in the country, and are openly predicting a lower range of market values next season. The markets of the interior are watching the attitude of the Chicago Exchange, and whenever a change is made in the list here, it will be quickly followed at other points. All over the Northwest lumber is selling at an average of about \$1.50 below the various printed lists, with the exception of the one at Stevens Point, Wis., and possibly others at unimportant points. The prospect of the abrogation of the lumber tariff has excited the manufacturers of Michigan and eastern Wisconsin districts to a considerable degree, and an effort to stir up and bring to bear an effectual opposition to the measure, has been made in the Saginaw valley and this city. The agitation of this question just now serves to intensify the uncertainty in regard to the near future of the lumber business.

The intensely cold wave, which for the past two weeks has demanded all the energies of the dwellers in the northern states in the effort to keep warm, has militated against the shipment of lumber to Chicago as well as elsewhere, the

receipts of the past week being only about 50 per cent. of the amount received during the corresponding week of 1882, while the total receipts of the month show a falling off of 25 per cent. in lumber and 13 per cent. in shingles in the comparison between the two years. The larger part of the lumber received during the winter is of hardwoods and southern pine, although a small proportion is of special bills of white pine which have been sawed to order.

Receipts and stock on hand of lumber and shingles, etc., for the week ending Jan. 18, as reported by the Lumberman's Exchange:—

Table with columns for item names and prices. Includes 'RECEIPTS, Lumber, Shingles', 'FROM JANUARY 1, 1883, TO FEBRUARY 1, 1883, INCLUSIVE', '1883', '1882', 'Inc.', 'Dec.'.

OSWEGO, N. Y.

Table with columns for item names and prices. Includes 'Three uppers', 'Pickings', 'Pine, common', 'Common', 'Culls', 'Mill run lots', 'Siding, selected, 1 inch', '1 1/2 inch', 'Mill run, 1x10, 12 inch', 'selected', 'Shippers', 'Strips, 1 and 1 1/2 inch mill run', '1 1/2 inch culls', '1x6 selected for clapboards', 'Shingles, XXX, 18 inch, pine', 'XXX, 19 inch, cedar', 'Lath'.

TONAWANDA.

Table with columns for item names and prices. Includes 'CARGO LOTS—SAGINAW INSPECTION', 'Three uppers', 'Common', 'Culls'.

THE LIVERPOOL TRADE.

We take the following from the annual review of the Timber Trades Journal:—After reviewing the course of business in the timber trade for the past year, we can hardly avoid coming to the conclusion that it must be regarded as a disappointing one. The building trade has been in a most unsatisfactory condition, as the numerous failures of builders testify, and with the long credit given by the trade, even to the lowest class of consumers, some of the merchants have unfortunately figured in the lists of creditors with a frequency most disheartening. That this long credit system is not shortened is a fact that is admitted by every one, excepting perhaps the buyers; but it is certainly a state of matters to be greatly deplored that no joint action is taken by those most deeply interested to bring about some considerable curtailment of what is known as "Liverpool terms," i.e., six months' credit. But such is the keenness of competition that, if such an arrangement were entered into, doubtless some one would be found to "keep the word of promise to the ear and break it to the hope," and the evil would again spring up in form as rank as ever.

Amongst the most striking features of the trade during the past year has been the extensive employment of steam tonnage in conveying not only cargoes of deals across the Atlantic, but pitch pine timber from the ports in the Gulf of Mexico, to which reference is made in more detail below under their separate heads.

Turning now to the details of the most important articles of our trade, we commence with

CANADIAN WOODS.—The importation of Quebec yellow pine, including both waney board and square timber, has been about 36,590 logs during the past year, against 30,594 logs in 1881, and 48,147 in 1880. There has been a very steady demand throughout the year, although prices have been high in comparison with previous seasons, and there is evidence that prices quite equal to, if not in excess of, these will have to be paid in future.

The stock on hand now is only 292,000 ft. of square and 275,000 ft. of waney, as against 348,000 ft. of square and 353,000 ft. of waney last year at this time, or a decrease of nearly 20 per cent., and as the cost of production is increasing year by year, owing to the high prices demanded for labour, the greater distance from which this timber has to be drawn to the rivers,

and other expenses in like proportion, we need not expect to see prices any lower, especially as the past season opened with freights at a very moderate rate.

The quantity of St. John, N. B., yellow pine imported, shows a slight increase over that of last year, but is below that of the previous one; but this favourite wood has now become so difficult to procure that it is confined to very few hands.

RED PINE TIMBER, which once formed a considerable item in the Canadian imports, has become a very insignificant factor, owing to the better sizes, cleaner growth, and above all the lower price at which pitch pine can now be had, in point of fact it bids fair to supersede it in most directions. The stock on hand has accumulated from 26,000 ft. last year to 65,000 ft. this year, whilst the consumption during December, 1882, amounted only to 3,000 ft.

CANADIAN OAK has been in fair demand during the year, notwithstanding the high cost of importation, and prices have not fluctuated greatly, the range being from about 2s. 11d. to 3s. 2d. per foot for primo qualities of ordinary average size. The consumption of this wood for wagon-building purposes is, however, becoming year by year interfered with by the growing favour in which scantling, cut to the exact sizes required, is now asserting itself. The stock on hand is about the same as that of last year, viz., 335,000 ft., against 347,000 ft. in 1881.

BIRCH has throughout the year maintained a high average price, and as there has been a steady and at times a strong demand for this wood, most of the importations have gone rapidly into consumption as soon as landed. The stock is very moderate, being only 102,000 cubic feet, and as advices from St. John, N.B., point to a continuance of high cost of production, there is every likelihood that we shall not see any fall in value for a long time to come.

PINE DEALS show a decrease in the quantity imported during the two previous years, the quantities, including Quebec spruce and red pine, being in 1882, 1,123,480 pieces; in 1881, 1,263,513 pieces; and in 1880, 1,767,366 pieces; and, as the imports of Quebec spruce and red pine have been in excess of the usual quantity, the decrease in pine is in reality larger than it would appear from the figures above quoted. The stock on hand of Quebec deals includes, as do the figures of import, also all the Quebec spruce and red pine deals, and as these are estimated at about 1,000 standards, it brings down the actual stock of yellow pine deals to less than that of last year, when there was but a limited quantity of Quebec spruce and red pine deals on hand. The demand throughout the year has been fair, but the prices obtainable here have not left much margin for profit, and consumers of these goods have no cause to regret their purchases during the past season.

SPRUCE DEALS.—The import for the past year has been 5,413,005 pieces, against 4,660,126 pieces in 1881, and 6,130,917 pieces in 1880, that is to say, it has been an average of the two previous years. We commenced the year with a moderate stock on hand of only 16,000 standards, about one-half the quantity held at the commencement of 1881, and although there was a fair demand, prices did not advance during the first three months of the year to a point satisfactory to shippers, and as might naturally have been expected looking at the exceedingly light stock held at the end of March, when it had dwindled down to only 10,400 standards. Any hope of a rise in the market was about that time shattered by the sudden engagement of large quantities of steam tonnage at very low rates of freight, which had been released from its ordinary employment by the shipment of grain from the United States, owing to the action of a "ring" who tried to "corner" that market. We then saw the unusual sight of large steamers of 1,200 to 2,000 tons register discharging entire cargoes of spruce deals, and then even these were surpassed in size by the engagement of Messrs. Geo. Warren & Co's. steamers Kansas, of 3,455 tons, and Missouri, 3,331 tons register, each vessel carrying 1,400 to 1,500 standards of deals. Under the pressure to sell consequent upon this state of matters, prices gave way until the beginning of July, when the grain market in the United States suddenly demanded its more than usual amount

of tonnage, to carry off its accumulations, and this not only rid the timber trade of all its steam tonnage, but drew largely upon the better class of sailing vessels, and in consequence thereof freights went up with a bound of over 15s. per standard on previous rates, with the natural result that by the beginning of August our market displayed an amount of animation to which it had been a stranger, and a corresponding advance in prices soon manifested itself, so that St. John, N. B., deals sold in cargoes at £8 10s. per standard, or an advance from the lowest rates of about 25s. per standard. This state of matters did not, however, last long, as by the commencement of the last quarter of the year prices began to decline under the increased importation, chiefly consisting of Lower Port goods, and, as this has been well kept up, the market has steadily weakened, until the rates at the close of the year are below what they were at the beginning, and we end with having a stock of spruce deals of all kinds estimated at about 22,000 standards, or about 25 per cent. more than we had at the end of 1881. The failures of two houses engaged largely in the importation of these goods, viz., Messrs. Peter Sutherland, jun., & Co., and Messrs. Carvill Brothers, have no doubt contributed greatly to this result, as both firms towards the termination of their business naturally pressed their goods on the market with great force.

PITCH PINE.—The importation has been very large, reaching the enormous quantity of 86,435 logs, compared with about 68,000 logs in 1881, and 59,000 logs in 1880. This is a startling increase, which should be duly weighed by the shippers of this wood in the United States, for it is quite evident that, large as are the resources of the Liverpool market, there is a limit even to its capacity for swallowing gigantic supplies such as those in question, and it might be said, without wandering far from literal accuracy, that cargoes have been sent into port with out cessation for the whole of the past year.

With regard to North of Europe woods, the import of fir timber has been light, only 12,290 logs being landed, against 13,043 in 1881, and 33,757 logs in 1880. Trivial as this may appear, it has proved more than enough for the demand, as the stock on hand is now 59,000 ft., against 50,000 ft. last year. That such goods as Meinel and Dantzig fir are rapidly losing the position they once held becomes every year more apparent, as neither in price nor in dimension can they compete with pitch pine, which is now being extensively used as a substitute. There is very little disposition to buy for spring shipment at the present f.o.b. prices asked by the Baltic houses.

REDWOOD DEALS.—These have been imported in much larger quantities than in the previous year, and slightly in excess of 1880, the figures being 772,886 pieces, 248,059 pieces, and 715,664 pieces respectively for the years 1882, 1881 and 1880, and a very large proportion of this increase has been in Finland goods, the low prices at which Uleaborg, Tornea, and similar have been sold proving a strong temptation to this market, where there is always a demand for cheap goods. The stock, however, of deals and boards together is about 47½ per cent. more than that of last year, when it consisted of 3,311 standards, whereas it now stands at 4,891 stds.

NORWEGIAN FLOORING has been unduly pressed upon an already well-supplied market, and prices, especially towards the end of the year, have given way. For cargoes of all white, with a large proportion of 3rds and narrow, shippers are now asking £8 10s. per standard, c.i.f. for 1st white 6½ and 7x1, other qualities and dimensions with the customary additions and reductions; but the price, moderate though it may appear, is not obtainable for f.o.w. shipments. This stock too is largely in excess of last year, say 2,861 standards now, against 1,633 standards in 1881, or 60 per cent. additional.

AMERICAN BLACK WALNUT WOOD has been imported very extensively, and although primo qualities have realized high prices, they have not always been satisfactory to the shippers, for not only is there a strong market for this wood in the United States, but the Continental markets, especially the German ports have, with few exceptional times, offered better inducements than this country.

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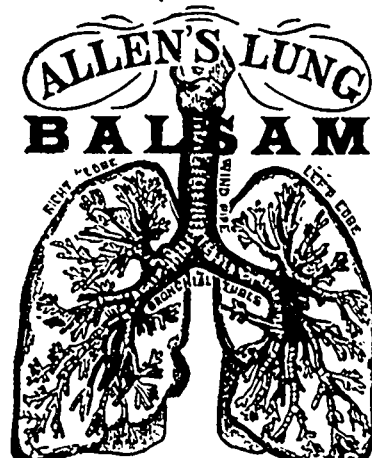
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And all other Kinds of HARDWOOD LUMBER.

White and Yellow Pine Lumber and Timber.

Oak Ship Plank and Timber. Pine Deck Plank and Ship Stock Generally.

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HARMLESS TO THE MOST DELICATE.
In Consumptive Cases
It approaches so near a specific that "Ninety-five" per cent. are permanently cured where the directions are strictly complied with.
There is no chemical or other ingredients to harm the young or old.

As an Expectorant it has no equal. It contains no Opium in any form.

SOLD BY ALL DRUGGISTS

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SOLE AGENTS,
MONTREAL.

PERRY DAVIS' VEGETABLE PAIN KILLER.

PARRY SOUND.

The North Star says:—Extensive improvements are being made in the Parry Sound Lumber company's mills. In the water mill, the location of some of the gangs is being changed and fresh rock-bolting and strengthening is being done. The steam mill is being entirely rebuilt and refitted, and when completed will make one of the most convenient mills in Canada.

The Parry Sound River Improvement Company are applying for incorporation under the provisions of the Ontario Joint Stock Companies' Letters Patent Act. They propose to operate all rivers and streams between Moon River and Shawanaga River.

Snow is so deep in the woods now as to materially interfere with lumbering operations.

Smallpox in the Lumber Camps.

St. PAUL, Minn., Feb. 8.—There is great excitement in the lumber camps in the upper Mississippi country on account of the spreading of smallpox. A committee has arrived from Aitken, to urge the importance of grappling with it at once. At Caldwell's camp, in Big Fork, there have been eleven cases and eight

deaths. Three Indians caught the disease and carried it to Lake Winnchagoshiah, where the deaths already among the Indians number thirteen. It is almost certain that fatality accompanies the disease among the Indians. Cold Devil Camp is broken up. The lumbermen travelled 100 miles in the deep snow, the temperature below zero, being refused accommodation by the way. There are 2,000 lumbermen in the lumber regions in the upper Mississippi, and a stampede is feared which will spread the disease widely.

The Longest Bridge in the World

China possesses the longest bridge in the world. It is at Langang, over an arm of the China Sea, and is 5 miles long, built entirely of stone, 70 feet high, with a roadway 70 feet wide, and has 300 arches. The parapet is a balustrade, and each of the pillars, which are 75 feet apart, supports a pedestal on which is placed a lion, 21 feet long, made of one block of marble.

GOOD ADVICE.—If our readers will accept proffered advice, they will always keep a bottle of Haggard's Yellow Oil at hand for use in emergencies, such as Burns, Scalds, Wounds, Lameness, Croup, Chills, Rheumatism and all varieties of aches, pains and inflammations. It will ever be found reliable.

PLANTING FORESTS TREES.

At the annual meeting of this year or the Ontario Fruit Growers and Forestry Association:—"The best variety of forest trees to plant for ornament and for profit" was then considered. Mr. Gott spoke of the many beautiful varieties of trees which were proper for shade and ornament, among others being montanum French spruce, white walnut, the different varieties of pine, basswood, Canada balsam, etc.

Mr. REASON, while endorsing mainly the suggestions of the preceding speaker, dissented from him so far as the Canada balsam was concerned, as he considered it a most worthless tree.

Mr. ARNOLD spoke in favour of the magnolia, walnut, and Austrian pine.

Mr. ROY spoke of the beauty of the Austrian pine as an ornamental tree. He also recommended the cultivation of walnut trees both as ornaments and as a paying investment.

Mr. SMITH recommended the growing of the poplar both as a shade tree and for its pecuniary value, as it was used very extensively in pulp mills for making paper.

Mr. BECKE stated that, independent of its beauty, the basswood had great economic value. In the Georgetown mills more than half the pulp used in the making of paper was produced from basswood, which was now worth from \$4 to \$5 per cord.

Mr. WRIGHT stated that besides its beauty the basswood was very valuable as bee pasture, which was a very important consideration in a northern country, where they could not grow such a variety of flowers as in more southern sections.

REV. DR. WILD, being present, was requested to address the Association. He stated that he was deeply interested in trees, and had a very extensive collection himself in his orchard. He considered that the destruction of forest trees in Canada was a very serious evil, and had an injurious effect even so far as climate was concerned. He read everything relating to tree culture as carefully as he did matters relating to theology, and thought that man's moral and social condition was affected in no remote degree by his surroundings, among which none were more favourable for a development of taste for the beautiful than trees. The doctor, in conclusion, wished the Association success in their deliberations and gave them his hearty sympathy in their efforts to encourage the cultivation of ornamental and useful trees.

Mr. DENNEY thought that if the legislature enacted a law by which a fine of \$10 would be imposed for defacing or destroying trees growing by the roadside it would prevent an obstacle to their growth much more serious even than the destructive attacks of cattle.

Mr. DRURY, M. P. P., spoke of the Act recently passed by the legislature relating to the planting of trees by the roads. The effect of such growth of trees in enhancing the value of land and increasing the beauty of the country was ably remarked, and in conclusion the speaker expressed the opinion that within a year many municipalities all over the country would take action upon the bill, and encourage by all possible means the planting and cultivation of trees. If the meeting of the Association resulted in nothing else but in awakening a public interest in tree planting it would have accomplished much.

It was then moved by HENRY SLIGHT, seconded by W. PENNERTON PAGE, "That the Fruit Growers' and Forestry Association protest strongly against the reckless way in which the telegraph companies unnecessarily destroy trees, in our street in towns and on the country roads; and that the Dominion Government be memorialized in relation to the matter."

FREE LUMBER.

The Port Huron Times says: "Senator Conger fought hard to prevent the senate from voting to put lumber on the free list, but did not succeed. To take off the tariff on lumber will be to raise the price of lumber in Canada and lower it but slightly here. The benefit will be almost entirely to the Canadians, and very little or none at all to consumers in the United States."

The above is most certainly a forced construc-

tion of the effect of the free lumber section of the tariff bill, at least so far as this country is concerned. While that clause, if finally adopted, might raise the price of lumber somewhat in Canada, yet the inevitable result would be to lower the price not only of lumber itself in this country, but also of labor, to correspond with that of Canada. It is fraught with the most serious results to about one million men, who are dependent upon the lumber industry for support for themselves and families. It is certainly unjust to the American manufacturer to admit Canadian lumber free into the United States while the Canadian government retains a tax on lumber imported into Winnipeg and other portions of the Dominion where there is at present a demand for the same. It is virtually passing over the control of the lumber market in the east to the Canadian producer. It also enables them to lay heavy hands on the western market, because they are enabled to exclude the American product from the places alluded to by a tax, while their own lumber may be sent there free from any such obstruction.—Lumberman's Gazette.

HOW CLOTHES-PINS ARE MADE.

A writer thus describes a clothes-pin factory: The process of making the pins is a very interesting one. The wood used is mainly white birch and beech. The logs are cut and hauled to the shores of the lake or streams emptying into it, whence they are floated down to the mill. As fast as required they are hauled into the mill by a windlass and chain, worked by steam power, and sawed into lengths of sixteen or twenty-two inches, the former to be made into pins, and the latter into boards for the boxes required in packing. The sixteen inch lengths are next sawed into boards of the required thickness by a single machine, then into strips of the proper size by a gang of twelve circular saws, and finally into five-inch lengths by a gang of three saws. The logs have now been cut up into blocks about five inches long and three-fourths of an inch square. Falling as they leave the saws on to an elevator belt, they are carried into an upper story, and, returning to the first floor, are deposited in troughs, whence they are fed to the turning lathes, of which there are several, each being capable of turning eighty pins per minute. They are then passed to the slotting machines, in which a peculiar arrangement of knives inserted in a circular saw gives the slot the proper flange, after which they are automatically carried by elevator belts to the drying bins on the second floor, where they are subjected to a higher temperature, generated by steam pipes, until thoroughly seasoned. There are several of these bins, the largest of which has a capacity of 100 boxes (72,000 pins) and the smaller ones fifty.

The pins are now ready for polishing and packing. The polishing is accomplished by means of perforated cylinders or drums, each capable of holding forty bushels, in which the pins are placed and kept constantly revolving until they become as smooth as if polished by hand with the finest sandpaper. A few minutes before this process is completed a small amount of tallow is thrown in the drums with the pins, after which a few more revolutions gives them a beautiful glossy appearance. The polishing drums are suspended directly over the packing counter on the first floor of the mill, and being thus immediately beneath the ceiling of the floor above, are readily filled through scuttles from the drying bins on the second floor, and as easily emptied upon the counter below, where they are sorted into first and second grades and packed in boxes of five gross each. The sorting and packing are done by girls; 250 boxes are packed per day.

THE London Timber Trades Journal says:—Complaints have reached us of the lengths of several cargoes of deal ends running some inches short. It is most important that shippers abroad should carefully attend to the cutting of the ends to their proper and specified lengths, as not only is the loss of wood a serious matter, occurring as it does in ends so frequently, but the loss of labor in selecting out and laying aside the short lengths seriously adds to the cost of using them.

SAW MILLS!

Having POLE ROADS to their Timber keep up the Mill Stock and run the year round.

Pole Roads are Cheap, Durable and Speedily built. The Cars can be built by any handy man in a couple of days, and will carry 2,000 feet of Hardwood Logs at a Load, drawn by one Span of Horses.

The Wheels are adjustable on the Axles to accommodate themselves to any bend in the poles.

The Iron Work complete, including Bolts and Washes, with a diagram of Car, are supplied by the undersigned. Prices on Application.

As to cost and utility of Pole Roads we will refer without permission to E. WATT, Gesto, P.O.; W. EDGAR, Kilroy, P.O.; DUNSTAN & IRWIN, Essex Centre, and JAMES NAILOR, Oil City, who are now running respectively 10, 8, 5 and 3 miles, and are stocked with our Cars.

C. NORSWORTHY & CO.,
ST. THOMAS, ONTARIO.

Patentees and Manufacturers of Moore's Improved Taper Cone Feed Saw Mills

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Have been awarded Three Years in succession at the Provincial and Dominion Exhibitions in Montreal, First Prizes

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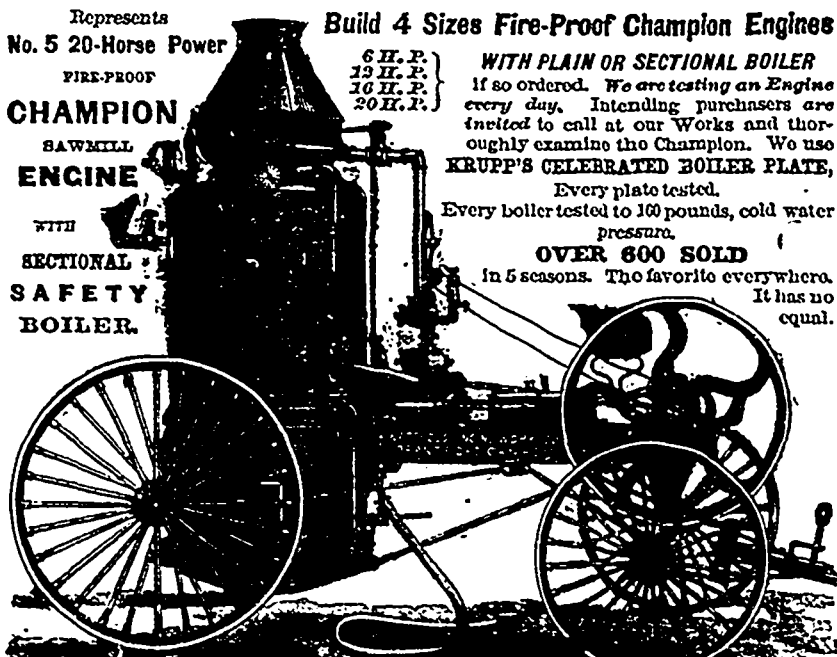
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Lumber Merchants.

FREE LUMBER AND FOREST PRESERVATION.

There has been abroad in the land for a few years a number of people who have gone daft with the idea that the forests of America are being denuded at a tremendous rate and that if something is not instantly done the continent will speedily become a sahara of desolation. The idea popped up in the senate the other day as an argument in favour of placing lumber on the free list. The thought of the statesman that introduced it seemed to be that it would be altogether generous and politic for the United States to admit Canada lumber free, and encourage the people of the Dominion to destroy their country by stripping it of its forests. It never seemed to have occurred to the Delaware Senator that it was quite as important to preserve the Canadian forests as the forests of the United States, the former exerting rather more influence upon the climate of the continent than the latter. Ingalls, of Kansas, a state whose forests were destroyed centuries ago, or never existed, but which seems to be progressing pretty well without them, caught on to Bayard's notion that "there was a striking inconsistency in keeping upon the statute book a law offering a bonus for the cultivation of timber and at the time keeping out foreign lumber by a duty." He thought it plethora of wisdom, but it is rather a catch-ponny notion, after all. Preserving the pine forests of Michigan, Wisconsin and Minnesota would not clothe the prairie states with the shelter of trees needed to make them more acceptable and delightful as places of residence. Removing the duty on lumber would not justify the stoppage of forest culture. Michigan is not suffering from the destruction of her forests. If other states are, let them pay a bounty for tree planting, if it will pay. The duty on lumber is justified by the duties on iron, steel, woolen goods, sugar, tea, coffee, etc., and the general policy of protection, and it should stand or fall with them. Whether at some future time there will or will not be a dearth of pine in the United States cannot affect the question. The development of Michigan will not be stayed by any consideration of that kind. Billions of feet of the best timber that ever grew has been reduced to smoke and ashes in the progress of clearing Michigan and other States, and the operation will go forward until the utmost extent that can be reduced to cultivation has been reached. The pine and other woods of Michigan will not be preserved by rendering their conversion into merchantable shape unprofitable. When the axe of the lumberman can no longer be lifted up against them at a profit, the axe of the settler will fall them and the clearing fires sweep them away. Should the competition of the Canadian lumbermen become so sharp that as to induce the curtailing of operations in the Michigan lumber woods, there would be but little saving of timber for the future. Let some of the eloquent advocates of forest preservation go through the woods and view the havoc made by the fires of 1871, and they will be less urgent on the subject. The destruction of the Huron peninsula in 1882 is another illustration of what a fire in a forest can accomplish. The pine forests of Michigan are more and more subject to such visitations, and before such encroachments and the axes of the settlers they are sure to go down, whether lumbered or not. Indeed, if abandoned by the lumbermen they would sooner disappear. The hardy settlers are among them engaged in pushing the wheat line northward. They will not cease their efforts on account of arguments advanced by the advocates of forest preservation, until Northern Michigan is covered with cultivated farms. If there is any argument in favor of protective duties upon anything whatsoever, it applies equally to lumber. Forest cultivation is another matter, in no way complicated with the duty on lumber.—*Lumberman's Gazette.*

TIMBER CONTRACTS ON WALPOLE.

The Wallacuburg Valley Record says:—"The Indians on Walpole Island are greatly excited over the sale of the balance of their standing timber. Mr. Tennant, of Malorytown, some time ago contracted for the white oak timber measuring less than 16 inches at the butt, and has removed nearly all, his time being almost

up. In December he offered \$7,600 for the larger timber, but as Mr. Hiram Little and others offered more, his offer was raised to \$10,000. On Tuesday last the Indians were assembled to vote on this offer, Mr. Watson, of Sarnia, the Indian agent, being present. Meantime, however, Mr. Little increased his offer to \$14,500 and a new dock and warehouse, and he further agreed to pay for the tops of the trees, when cut, at a rate which he claims would give the Indians a further sum of over \$5,000 for work and timber. The offer of Mr. Tennant was that the small timber that he has not yet removed should be allowed to revert to the Indians, in addition to the \$10,000 paid in cash, but it is claimed by Mr. Little and many of the Indians that the small timber referred to is worth less than \$500, and if not removed at once by Mr. Tennant it will revert to the Indians. On the other hand it is claimed that no legal tender was made by Mr. Little, though 100 printed copies of his offer were circulated on the Island and placed in the hands of the Indian agent before the voting on Tuesday, on which day a majority of 14 voters approved of Mr. Tennant's offer, the vote being 67 for and 53 against. Mr. Little now claims that a large majority of the Indians were opposed to the bargain, but that they were bribed, and yesterday he secured the affidavits of about sixty Indians to prove this and is now adding very largely to the number. He has also engaged counsel and telegraphed for Indian Superintendent Dingman, of Strathroy, who will be here in a few days to investigate the matter. It is claimed by Mr. Tennant's agent that no bribery was practiced until Tuesday morning, and that then it was not resorted to until it was found necessary to checkmate the actions of their opponents. He further states that affidavits are already in the hands of Indian Agent Watson, proving bribery on the part of those opposed to the offer of Mr. Tennant being accepted by the Indians. Mr. Little's tender was never voted on, the Council on Tuesday being called to accept or reject the offer of Mr. Tennant. We give this week only a brief outline of the situation without comment, but as the matter in question is an important one it will receive attention in future issues of the Record.

FOREST DESTRUCTION IN THE STATES.

The Mail says:—The following article from the New York Bulletin calls the attention to some facts of very considerable interest to our cousins across the line; and if it be the fact that the situation of lumber in Canada is not very much better than it is there, the article is of little less interest to us than to them:—

In a recent article on the lumber industry of the United States in 1880, as reported by the Census Bureau, attention was called to the rapid destruction of American forests now in progress—so rapid indeed that it appears to be a question of but a few years when, at the present rate of cutting, the domestic supply of merchantable timber will be quite exhausted. We have now another bulletin from Mr. Sargent, the special agent in charge of the forestry section of the census, which sets forth in even a more striking light the extent of the slaughter of the small timber of the country for fuel.

The total value of the products of the lumber industry in 1880 was \$233,367,720, more than half of which represented the destruction of white pine—a rate that it is calculated would practically use up the supply within eight years from the census year. The other portion of the total products represents, presumably, a less rate of cutting in proportion to supply, but yet sufficient to indicate a lease of life not much greater than in the case of white pine alone. And then, too, when the pine is gone the saws will be put into the other timber.

But the lumber industry by no means brings forward the whole, or even the larger part, of the forest destruction that is going on. The total value of cordwood consumed in the United States for fuel in 1880 amounted to \$312,962,373, and that to at an average valuation of less than \$2.25 per cord. Taking this into consideration, and the fact that cordwood is a lower grade of wood than lumber, it will be readily appreciated that the total value of the consumption for fuel represents a much greater destruction of trees than does the lumber industry;

certainly twice, perhaps three times as much.

The map accompanying the bulletin indicates a very small area of the country in which the use of coal for fuel predominates. The area is not a continuous one, but is represented by spots, some of a considerable size, contiguous to the large cities lying about the 41st parallel of latitude and extending all the way from Massachusetts to Nebraska. These areas are separated into two groups, eastern and western, by the intervening wood consuming region of Indiana and Western Ohio. Following this line and enclosing these areas is a wider belt in which wood only is used for fuel to any extent. Grouping the returns by states into sections, we have the distribution of fire wood consumption in 1880 as follows:—

	Cords.	Value.
New England	3,750,878	\$ 14,931,020
Middle States	20,025,700	67,370,183
Southern States	67,290,310	112,188,605
Western States	43,352,207	90,837,368
Far Western and Pacific States	5,482,221	25,613,055
Total domestic use	140,537,439	\$306,950,040
Total, other consumption.	5,240,693	15,012,333

Total consumption..... 145,778,137 \$321,962,373
This total is further increased by an item of \$5,276,736 for wood put into charcoal. No estimate is given of the amount of standing fire wood, and it is, therefore, not possible to say at what rate the consumption is encroaching upon the supply and annual growth. But everyone knows that in most of the Eastern and Middle States this source of fuel has been practically exhausted; far enough, at any rate, to make wood dearer than coal. The area of complete destruction constantly widens with the area of dense population. It is evident, therefore, that in the course of another generation or two the forests of the whole country will be in the condition they are now in at the East. It is beginning to be considered certain that these changes are having a material effect upon our climate and upon our crops.

It is this phase of forest destruction that appeals to the thoughtful agriculturalist in behalf of tree culture. For the purposes of fuel and many minor uses, it is quite practical to plant trees and get satisfactory profits in comparatively few years. Many kinds of trees grow rapidly. Even some of the hardwoods do—as walnut, cherry, &c. The long-leaved pine is a very rapid grower. The late Governor Ross, of Delaware, one of the most prominent and successful agriculturalists of that State, seeded a portion of his fair acres in long-leaved pine when in middle life. It was not done broadcast, but in rows some thirty feet apart. The result was a source of continuous pride and satisfaction to himself and to the community. He lived to see a beautiful little forest of stately pines. Trees planted in this way admit of other crops between the rows for many seasons, and wood can be taken in a few years by thinning out in the rows as the growth requires. And it need hardly be added that the study of trees, and their adaptation to climate, soils, &c., is in itself a pleasant and wholesome recreation.

POLISHING WOODS.

A correspondent of the Scientific American asks: 1. For the best way to polish fancy woods? A. Soft woods may be turned so smooth as to require no other polishing than that produced by holding it against a few fine turnings or shavings of the same wood while revolving. Mahogany, walnut, and some other woods may be polished by the use of a mixture as follows: Dissolve by heat so much beeswax in spirits of turpentine that the mixture, when cold, shall be about the thickness of honey. This may be applied to furniture or to work running in the lathes by means of a piece of clean cloth, and as much as possible should be rubbed off by using a clean flannel or other cloth. Hard woods may be readily turned very smooth; fine glass paper will suffice to give them a very perfect surface; a little linseed oil may then be rubbed on, and a portion of the turnings of the wood to be polished may then be held against the article, while it turns rapidly around, which will in general give it a fine gloss. You may also try alcoholic shellac varnish, 2 parts; boiled linseed oil, 1 part; shake well bo-

fore using. Apply a small quantity with a cloth, and rub vigorously until the polish is secured. 2. To make paper-hanger's paste? A. First heat water to boiling, then add flour with constant stirring. To prevent the formation of lumps the flour may be passed through a sieve, so as to insure its most equable distribution; agitation is continued until the heat has rendered the mass of the desired consistency, and, after a few moments further boiling, it is ready for use. In order to increase its strength, powdered resin in the proportion of one-sixth to one-fourth of the weight of the flour is added. To prevent its souring, oil of cloves, or few drops of carbolic acid is added.

A STRANGE COMMUNICATION.

We have received in an envelope bearing the postmark "Dublin," and the name of the Shelburne Hotel, Dublin, surmounted by a Viscount's coronet, the following production, It is satisfactory to learn that we are safe on this side of the Atlantic, and that we owe this additional benefit to our great agricultural and lumbering industries:—

THE END OF THE WORLD.

TO THE INHABITANTS OF PLANET EARTH.

When Fires refuse to burn
Our God doth then appear,
Continents He will turn
Into a Hell this year.
The winds will cease to blow,
There will be Drouth and Heat;
Corn for Food will not grow,
Nor will Oats, Pease, or Wheat.
British Isles' scape alone
An Angry Iron Rod,
On them descend the throne
Of King Jehovah-God.
Sinners who will repent
Can now obtain the keys,
Which save from punishment,
Found only on their knees.

For the purpose of obtaining a large supply of Grain, Timber, and Lumber for the British Islands, Canada and the United States will be exempted from calamities this year. J. G. SWORD.
City of Dublin, Ireland.

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Account Books Ruled and Bound to any desired Pattern.

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CONSUMERS IN CANADA,

we have arranged with the well-known firm of

FROTHINGHAM & WORKMAN

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To take our sole Agency for the Provinces of ONTARIO and QUEBEC. By this means consumers who want only single wheels, or goods in small quantity, can supply themselves easily and avoid the trouble of special importations, while dealers can secure the most liberal terms, fully equal to those they could obtain by buying of us direct.

Messrs. Frothingham & Workman will carry a full stock of TANITE EMERY WHEELS, and a sample line of Machines, and can fill all orders promptly.

The Tanite Company, Stroudsburg, Monroe Co. Pa.

September 28th, 1882.

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BY THE USE OF

Brown's Patent Spalt and Shingle Mill,

for making Shingles, Barrel Heading, Box Stuff, &c., from spalts, board trimmings, slabs, and mill waste generally, turning material otherwise worthless into valuable products. I have made arrangements with the patentees to manufacture and sell for the Dominion; have made and sold a good number of these machines which are giving excellent satisfaction and can give the best of references.

Our Steam Feed for Circular Mills,

is now the Best Feed where Steam is the motive power. It is easily operated, is simple, rapid, and is never likely to wear out; sixteen 16 ft. boards, or eighteen 13 ft. boards, have been cut by it in one minute. It is the established feed for steam mills, I make a specialty of its manufacture; will guarantee satisfaction.

Our Patent Twin or Span Circular,

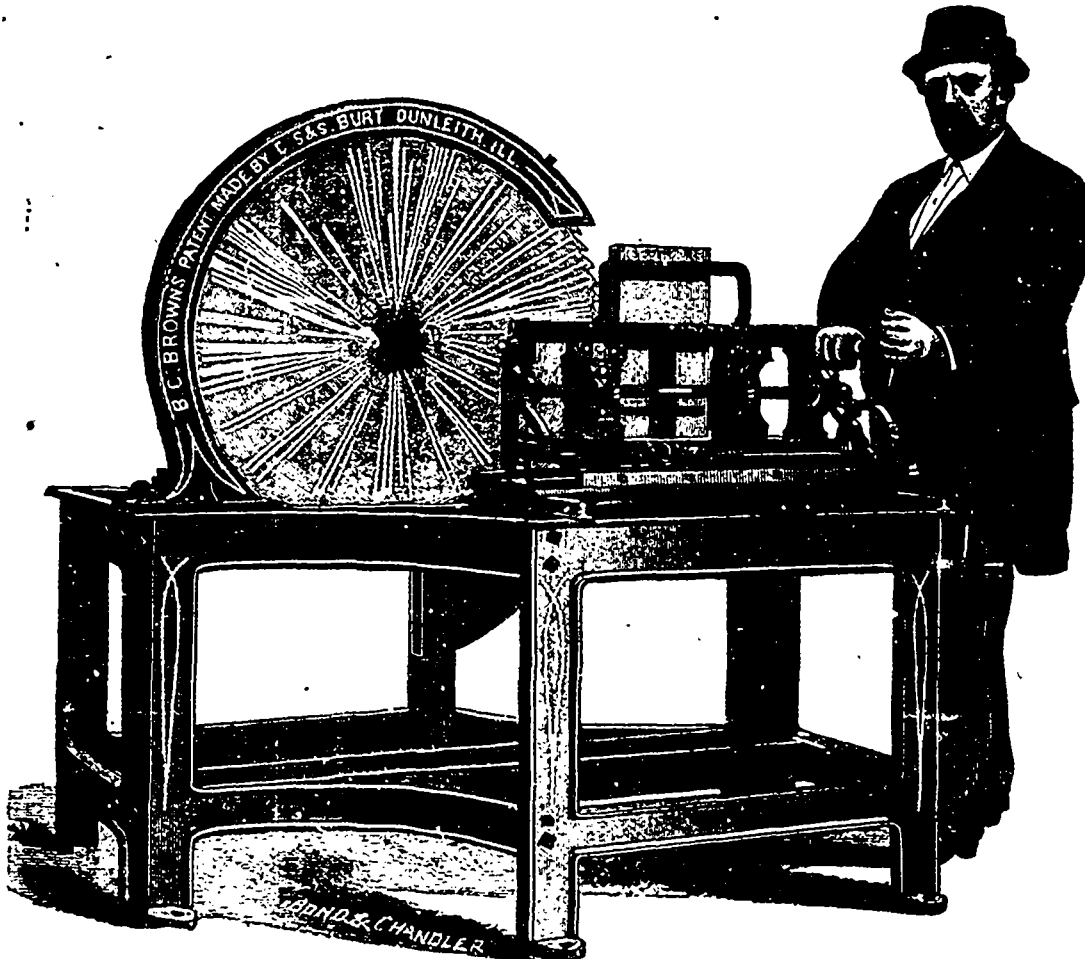
with Steam Feed for Steam Mills, and Rope or Rack Feed for Water Mills is fast coming into general estimation and is used in place of Gang Slabber in our best Canadian Mills. One of our Span Circulars which will slab logs 25 inches in diameter down to 7 and 8 inch stocks, will do the work of three slabbers, with an immense reduction in first cost, running expenses and labour. Two of these machines can be seen at work in Messrs. Gilmour & Co's Mill, Toronto, and Georgian Bay Lumber Co's Mill, Waubesaugone and Port Severn. I am also introducing a new style of Mill Engine, neat, substantial and simple, with Corlies Frame and Balanced Valve, all carefully designed and honestly made.

Covel's Automatic Saw Sharpener,

is now well-known and highly appreciated, when placed at work on a mill it sings out its own praise; I keep it constantly on hand, ready for immediate shipment.

Our Standard Circular & Gang Mills & Machinery,

are too well known to need any reference, any further than to say that I spare no pains or expense to have my work all first-class and give satisfaction, and as I make Heavy Saw Mill Machinery a specialty, any party wanting a First-class Mill will find it to their advantage to give me a call.



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