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# THE CANADA LUMBERMAN.

VOLUME VIII. }  
NUMBER 7. }

PETERBOROUGH, ONT., JULY, 1888.

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## THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER.

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### TERMS OF SUBSCRIPTION:

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THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Especial pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicuous position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

The tenth annual Industrial Exhibition, which is to take place in Toronto this year, from the 10th to the 22nd of September, promises to eclipse all previous efforts in this direction. We have received a copy of the prize list and programme of attractions, both of which are complete in every particular. Any of our readers who may desire a copy of this prize list can readily obtain one by dropping a post card to Mr. W. J. Hill, the secretary, at Toronto. The prospects for the success of this year's show are very promising, and the directors have set apart a more than usually large amount for special attractions.

THE great Joggins raft seems always to be in some fresh trouble. Some wire rope imported for it in the expectation that it would be admitted free as being for a ship and which was entered accordingly has been seized by the Customs authorities who do not recognise the raft as a ship. And then the question as to whether some of the piles are not really sawlogs and subject to export duty has not been definitely decided. Obstacles by sea and land seem to be in the way of the third attempt of trying to carry out this singular venture. There ought to be a good profit on the first successful trip if all the preliminary expenses are to be covered. There has certainly been a display of great perseverance.

A DECISION of importance has been given in the Supreme Court of California. The Santa Clara Valley Mill and Lumber Company owns three saw mills in Santa Cruz County, where there are also other millowners. To limit the cut and keep up prices the Company leased the other mills, or when that could not be done made contracts with the owners to limit the output. One of these contracts bound the millowner to make and deliver to the Santa Clara Company two million feet of lumber at \$11 per thousand and not to sell any other lumber in that or adjacent counties under penalty of \$20 per thousand

so sold. The contract was broken and the Santa Clara Company sued for damages. These were refused by the Court and on appeal the Supreme Court of California has sustained this judgment in favor of the defendant on the ground that the contract was against public policy being in restriction of trade and to create a monopoly.

ON every hand we learn of the great scarcity of long bill stuff, especially 20, 22 and 24 feet stock. The deficiency does not seem to be caused so much through the scarcity of long logs, but mainly owing to the risk entailed in floating long timber to the mills. The large number of jams, and the consequent heavy loss of logs, this season so far, is indeed a serious question to the lumbermen. It is therefore not surprising that they refrain as far as possible from incurring additional risks by putting many long logs into the streams. There is no uniformity in price for bill stuff at the present time, although prices generally rule high. There is certainly a good held for speculation in the manufacture of this class of stock where the risks incurred are not too great.

THE lumbermen of old Canada have begun to turn their attention to the pine on the other side of the Rocky Mountains. More than one of them is likely to be operating on the Pacific coast. As to the quantity and excellence of the pine and other wood there is no doubt, and the only question would be as to the market if the output were greatly augmented. There seems, however, every likelihood of rapidly increasing settlement on the great prairies and this must bring a demand for lumber in that direction. The markets in Australia also should be capable of extensive development, for they have little but hardwood and their requirements are large. British Columbia should certainly be able to compare with Norway in Melbourne, Sydney and Adelaide if some enterprise were shown in pushing the trade which has its peculiarities.

THE Mills' tariff bill now before Congress is certainly meeting with bitter opposition from numerous quarters, but the following, taken from a Wisconsin paper, takes the palm for unadulterated prejudice. The paper referred to bewails the situation thus:—"Let the Mills bill pass, and this country would stagnate. Our logging and milling interests would result in a failure. Wolf river, now the scene of active life, crowded with logs and covered with log drivers, would be as desolate as a forsaken churchyard. The mills at Three Lakes, Gagen, Cedar, Cavour and Crandon would soon become the abodes of bats and owls. Spiders would spin their webs about the engines and between the saw-teeth: rust would eat away and dust cover up the now brightly polished machinery. The great pulp mill at Monico would digest no more spruce, poplar, balsam or what-not, and pulp wood lands would soon go back for taxes to a county too poor to pay its officers' salaries."

SOMETIME previous to the first of June notice was given by the Grand Trunk Railway that commencing on the 1st ult. a storage charge of 25 cents per car load per week on lumber would be exacted. This bit of news did not come as a surprise to the Toronto lumber dealers, as the threat had often been made before, but for some reason or other invariably failed to mature. The recent difficulty between the wholesale and retail dealers of the Queen City, however, seems to have had something to do with the recent decision of the Grand Trunk authorities. Certainly the best of feeling does not exist between the middlemen and the retailers, and as a consequence each are making a strong effort to get the best of the situation. Another month has come and gone, but notwithstanding the order above spoken of the question of storage seems to have again fallen through, and the old system is still in vogue. One thing is certain and that is that the lumber trade of Toronto, under present conditions, has to depend altogether too much on the railways for storage room. What is wanted, and what must sooner or later be had, is a central piling ground in close proximity to the various railways, large enough to accommodate the wants of the wholesale trade of the city. The matter is already we understand, receiving more or less attention.

THE stir created by Senator Clemow's sawdust committee of the last session of the Dominion Parliament has resulted in something tangible being effected. Negotiations have been in progress between the Chaudiere lumbermen and the Government in reference to the examination of the Ottawa river for the purpose of determining to what extent the sawdust discharged from the mills injures the river, and it is understood that Sir Hector Langevin has consented to the application of the lumbermen for the appointment of a commission of engineers to investigate the matter. It is understood that Mr. Sandford Fleming will undertake the examination, provided he receives from the Government copies of the survey of the river made for the government some years ago by Mr. Gray, C.E. The lumbermen have agreed to pay all expenses. It is to be hoped that the great lumber interests of the Chaudiere will not be effected by such an examination, but that it will prove to the mutual interest of all parties concerned to allow the matter to drop.

SOMETIMES the settler is told, especially by the party politicians on the hunt for votes, to look upon the lumberman as his natural enemy, or at least as having antagonistic interests. Many a settler in the backwoods knows the truth to be very different, finding in the lumberman his best friend and most remunerative customer. A striking instance is given of this fact by a gentleman who has been visiting Lake Temisaming last winter. He describes the lumberman as being busily at work there and having a number of shanties established in that far away region. Settlers are also becoming numerous and they are looking forward to finding for years to come customers in the lumber shanties for all they can raise, and at good prices. What they consider good prices may be judged from the quotations, \$30 a ton for hay, \$1 a bag for potatoes and 75 cts. a bushel for oats. No wonder the settlers in the Township of Dymond appreciate the lumbermen and wish to keep them to themselves, declaring even that they have no wish to see a railway built so that they may retain this profitable monopoly. Many a now flourishing agricultural community has thus been built up in its early days by the timely aid thus given by the lumbermen, though they do not always remember these past benefits at a later period. A look at the map to note the exact situation of Lake Temisaming shows how far a field lumbering is now carried on in Ontario, what were distant backwoods a few years ago now coming well to the front by comparison.

THE magnificent redwood forests of California are the theme of a recent article by the San Francisco *Bulletin*. It describes the great inroads that have been made in the accessible timber, but fortunately the redwood forests of the Pacific slope seem to have far greater powers of reproduction than the Canadian pine woods, so that in some cases there is a very valuable second growth. Our contemporary says, however, that the redwood forests of Mendocino, Humboldt, Del Norte and Siskiyou are still almost in a virgin state. Not being accessible from the sea nor penetrated by railways, they have to a great extent been left in the hands of the government, though they are open to purchase at \$2.50 an acre. It is expected that railways will traverse them before long, when being made accessible they will become immensely valuable. Michigan lumbermen, the *Bulletin* says, have already invested largely in these forests. We know that these same Michigan lumbermen had already made extensive purchases in the forests of the Southern States and in the pine lands of Ontario. This would seem to indicate that these gentlemen foresee a serious denudation of the Michigan forests at no very distant epoch, and may be taken as a note of warning to our own lumbermen to be somewhat conservative in their operations, and not to sacrifice their prosperity for an insufficient return by being too eager to force sales prematurely if a little holding back would give better results. The Michigan lumbermen by the by are not alone in investing in Pacific coast forests, some of our Ontario lumbermen being reported to have done the same in British Columbia, where the magnificent forests will some day acquire a very high value.

THE Act which has just passed the Dominion Government for the suppression of gambling in stocks and merchandise makes

it a misdemeanor, punishable by five years' imprisonment and a fine, (1) to make a contract for the sale or purchase of stock in any company or undertaking in Canada or elsewhere, or of merchandise with the intent to make profit by the rise or fall in price, and without the bona fide intention of acquiring any such stock or merchandise; (2) to make a contract for the sale of stock or merchandise with the intent to profit by the rise or fall in the price thereof, when there is no delivery or bona fide intention to give or receive delivery of the stock or merchandise so bought or sold. This section applies to every one who "acts, aids, or abets in the making or signing of any such contract or agreement." It is also a misdemeanor, subject to a year's imprisonment, to habitually frequent any office or place when such contracts are made, signed, or negotiated. By the second section the onus of proving the bona fide nature of the intention with which the contract was made rests on the party charged under the act. By section 3 every one, either principal or agent, occupying, using, managing, or maintaining the place in which the contracts prohibited in the first section are made, negotiated, or signed, shall be held to be the keeper of a common gaming house, the house or place shall be held to be a gaming house, and the tablets, blackboards, slates, and other implements used in recording prices or fluctuations in the prices of stocks, shares, merchandise, etc., shall be held to be gaming implements within the Dominion Act for the suppression of gambling houses.

THE forests of Quebec were the theme of discussion recently in the Legislative Assembly of the Province. In the first place Mr. Poupore obtained an order of the House for copies of all correspondence exchanged between the lumbermen of the province and the Commissioner of Crown Lands on the subject of the protection of the forests against fire, for which protection \$5,000 were voted in the year 1884. It is to be hoped that this step will lead to due attention being given to this very important matter of so great interest not only for the trade but for the public revenue and for the whole community. Immediately afterwards Mr. Tessier moved a resolution, which after a long preamble, setting forth the evils resulting from the destruction of forests, the benefits derived from forests, cultivation and the large profits which the different countries of Europe drew from their forests, declaring that "it is of the highest interest for the Government to take measures to introduce the study of silviculture which has produced such good results in Europe and India, so as to permit the Province to draw from the forest means of augmenting its revenues and to promote systematically the interests of colonization by furnishing the colonist with a safeguard for the future." The resolution was adopted. The system of setting apart forest reserves in the Province of Quebec is to be abandoned and it is said that regulations are to be adopted reserving a certain amount of timber for the settlers on each lot. It is to be hoped that this does not indicate the encouragement of settlers upon the limits, for that is a system which infallibly leads to much distinction of property, and to friction which might well be avoided. Till these regulations are actually framed it would be premature to say that they must necessarily be mischievous, but the report is not assuring.

DURING the month just closed the tariff on lumber has had a generous share of attention in the debate in Congress over the Mills bill. Notwithstanding a most persistent opposition, the lumber clauses of the bill, taking off the United States customs duties, were accepted. It was surprising what wide differences of opinion there were, even among those of the same side, whether for or against the reduction. Hardly any two speakers seemed quite in accord as to the exact incidence of the duty, some holding that the Canadian manufacturer paid it, and others that it was paid by the United States, while others thought that it was divided in various proportions. Some maintained that the change was simply making the Canadian lumbermen a present of the amount of duty, while others declared that it would give the people cheap building material reducing the profits of the United States lumbermen. It was urged that it would preserve the pine forests of the North-Western States while depleting those of Canada, but others argued that by diminishing the value of the United States forests it would make owners less careful of the property. In the course of the debate "Sunset" Cox, of New York, is reported as saying that the lumbermen were almost all millionaires, men who had made the forests of Michigan almost a calcined desolation. He wanted to protect the forests against a tariff which offered a premium to selfish people to cut them down, leaving scars and waste places and breeding places of malaria. Mr. Dockery of Missouri, said the explanation of the failure of lumbermen's wages to increase lay in the fact that 90 per cent. of the workmen were Canadians. Mr. Guenther, of Wisconsin, predicted that the Democratic party, if it passed this bill, would go to that place paved with good intentions where every limb and knot of timber would be used,

not to raise the revenue, but to raise the temperature to at least 600 deg. above zero. The debate on the pending paragraph expiring, the amendment to strike out from the free list timber hewed and squared, and timber used for spars and whaves, was rejected by a vote of 61 yeas to 101 nays. On June 19th an arrangement was concluded whereby the tariff bill was laid aside for a week or ten days, therefore for the present it is difficult to foresee what will be the ultimate outcome. There is, however, no doubt but that the prospects are improving for a removal of the lumber duties at no distant date, even if the measure is not carried this year.

## CORRESPONDENCE.

TORONTO, June 17th, 1888.

Editor Canada Lumberman.

SIR,—In your issue of June 1st there appears a letter signed by one "Pinus," in which assertions, too one-sided in their nature, are made, that I cannot allow it to pass entirely unchallenged. The present state of affairs as described by "Pinus" has been caused, and maintained up to the present by the retail men themselves. They one and all decline to purchase at the mills, or to quote their own words, "decline to buy a pig in a sack," and desire to see what kind of lumber they are getting for their money; therefore the lumber has to be brought here for their inspection, and if not sold (in order to release the cars) must be piled off until such times as a purchaser is found. Again the retail dealers are so close in financial matters, that I think I may say, that, without exception, they all require the wholesale dealer to pay the entire freight charges before they accept a car of lumber—and this is done in nearly every case, so that the assertion made by "Pinus" that the retail dealers contribute largely to the revenue of the railway company is not correct, and the railway companies are well aware of this fact, and therefore grant privileges to wholesale dealers which they would not otherwise give them.

"Pinus" is well aware that the wholesale dealers have tried in vain to compromise all differences existing between the wholesale and retail men, and all in vain. Some of the retail (or if "Pinus" would like the term better—yard men) are so utterly selfish they want to have all their own way, and give nothing in return. The offer made by the wholesale men was as follows: If the yard men will agree to buy all the lumber they require from the middle-men, and not go to the mills, we on our part promise not to break bulk or sell to any consumer. This offer was declined by some of the most important men in the yard trade, and the matter stands so. There is still another more important phase of the question left untouched by "Pinus," and that is the financial part. I venture to assert, without fear of contradiction, that during the entire of the last winter, that retail men did not return more than 25% of their paper as it matured, and the wholesale dealers had to carry them through, and one considerable dealer has shown his appreciation of the wholesale dealers leniency, by making away with all his effects and absconding from the country, leaving many creditors to mourn his dishonesty. Is it any wonder I would ask "Pinus" in view of facts above given, that we prefer to distribute our lumber as suits us best, and to reduce our risks as far as possible?

Now as to what quantity of lumber a dealer must sell at one time in order to be classed as a wholesale dealer. I would ask "Pinus" if a grocer sells 10 or 20 lbs of sugar or tea is he not called a retail dealer, and if on the other hand he sells a brl. of sugar or a chest of tea does he not stand as a wholesale man; and the same with a dry goods man, if he disposes of cloth by the yard he is classed as a retailer, if by the bale, as a wholesale man. I therefore claim the same latitude for the lumbermen. If we sell less than a car load we are retail dealers, if by the 1,000 ft. and car load lots, we are retail and wholesale dealers, and just there comes the rub with "Pinus." He evidently desires to be able to sell by car load or smaller quantities and still claim to be only a retailer. "Pinus" had better take the advice given to the shoemaker, "stick to your last, my friend." If "Pinus" and his confederates in the trade will only do this, and so not touch on the preserves of the wholesale men, there will be some chance of a full and complete separation of the operations of both retailers and wholesale men. Then in conclusion let me define our position and our wishes as to the equity of the relations sought to be established between the railway companies and the wholesale dealers. We desire to pay for all we receive, and we frequently pay for a little more than we absolutely get. We have made the following offer for their acceptance: Allow 12 ft. as a suitable space for piling off one car of lumber, charge us for that space, and if we do not keep the space occupied that will be our own fault. Can "Pinus" say that we are trying to gain any advantage over the retail men by this offer? There is little to fear, but the railways will charge us much more per foot than any retailer is paying for his holding, and that coupled with frequent doubling up of parts of cars, and first

cost of unloading will make our cost of handling equal to the yard men's. We ask for no monopoly, and will certainly not claim squatter sovereignty. We only ask fair play and to be allowed to do our own business in our own way, paying for all the privileges given us, and asking favors from none. I trust this explanation of the position we wish to occupy will satisfy even "Pinus."

Truly yours,

WHOLESALE.

## Trade With Australia.

Editor Canada Lumberman.

SIR,—I enclose you a letter which arrived here some weeks prior to my return from Australia via England. It may be of service to your numerous readers. It is from the Hon. Phillip Santo, of Adelaide, South Australia. I know Mr. Santo very well. No man in Adelaide has a better reputation. I have no personal interest in the matter referred to in this letter. I presume, however, that I told him what I told many others in that prosperous British colony, that there ought to be a larger trade, especially in timber, between them and the Canadians, who were in possession of as extensive forests and as great a variety and as excellent quality of timber as any country in the world. A great deal of the lumber used is at present brought from the Baltic. What I saw (and I saw a good deal of it) was apparently from second-growth pine, with more knots than could be counted, and with no board above six inches wide. It seems to me a large trade might be established between these two great colonies of Great Britain in other branches of industry as well. I saw spades, shovels, hoes, forks, and other horticultural, and agricultural implements imported from the United States. I think we can send as good and as cheap. They must soon (as I predicted in various parts of the country) have stoves such as we use, both for cooking and heating purposes. These are not manufactured at all in Australia. Yours, etc, D. V. LUCAS.

Grimsby, June 16th, 1888.

ADELAIDE, S. Australia, March 12, 1888.

Rev. Dr. D. V. Lucas, Montreal, Canada:

DEAR SIR,—Since you left South Australia I have felt very sorry that I did not speak to you on a matter of business in which I have no doubt you are quite able to obtain for me information that would be of great service in forwarding the object I have in view.

If I am correct, I understood from you when in Adelaide that some of your friends were engaged in the timber and shipping trade. I have been supplied with spruce deals, clear pine, Canada siding and shelving from Boston and New York, and in this way the timber has cost me much more than it should do by direct shipments from some port in Canada.

If, on receipt of this, you can place it in the hands of some good house in the timber trade who would be desirous of doing business with me I think it could be made mutually profitable.

We are short of stocks of this description of timber at present and I think we shall be so for some time. The information I would like to have, if possible, is: The prices on board or afloat at Port Adelaide, say cost, freight, and insurance; the shippers to draw on me at 60 days after sight for the value of the timber and insurance, freight to be payable in the colony, vessel to be about 400 tons or less, the timber to be sound and good in quality. As time is an object with us, your friends might telegraph prices at once, and I will reply. If they do not like to telegraph they may write, but in this way we shall not have the necessary information in time for this season's supply. If they should telegraph, they will only have to state price of each kind of timber in the order in which the specifications enclosed herewith are numbered, say No. 1, price per thousand feet super., which would mean spruce deals, so much per thousand feet super.; in the same way No. 2 would mean dressed shelving; No. 3, Canada siding; and No. 4, clear pine, all at per thousand feet super. as 12x1, as per specification. The vessel to be consigned to me with usual commissions.

Should your friends require any reference I would refer them to the Bank of South Australia, London. \* \* \* I remain, dear sir, yours, faithfully,

PHILLIP SANTO.

P. S.—If this matter be carried out satisfactorily, I have no doubt but that it will lead to a considerable business in the future, as our silver and tin mines are opening out most satisfactorily, and the consumption of timber must be very large in the future.

## SPECIFICATION OF SPRUCE TIMBER SUITABLE FOR THIS MARKET.

No. 1. Say 500 pieces 7x3, 400 pieces 9x3, 8,000 pieces 11x3. Length to run, say from 12 feet upwards to 25 feet; greater proportion to run 15 feet and upwards. Short lengths required for stowage to be 11x3. Timber to be thoroughly dry when stowed, and all sound and of good quality, as free from knots as possible.

No. 2. Shelving dressed, say as follows: 12x1 inches, 10,000 sup.; 14x1, 4,000 sup.; 16x1, 3,000 sup.; 18x1, 3,000. To run full size when dressed: bright and clean and as free from knots as possible.

No. 3. Canada siding, 3 to 8 inches thick, 9, 10, 12, 14, 16 and 18 inches wide and wider, 12 to 16 feet long. About 15,000 super.

No. 4. Clear pine, 3 to 8 inches thick, and mostly from 12 to 26 or 28 inches wide; length 12 to 16 feet. About 20,000 super. Both siding and clear pine to be free from knots.

The above approximate specifications of proportions of the different kinds of timber to be increased or diminished according to the carrying capacity of vessel.

## THE FIRE RECORD.

Nicholson's saw mill at Victoria Harbor was recently burned. Loss, about \$3,000.

Mr. John Elwood's shingle mill on the Semiahmoo spit, near Westminster, B.C., was burned recently. This mill was turning out large quantities of shingles.

Mr. Bachelier's saw mill, located between Kingarf and Black Horse, in the county of Bruce, was totally destroyed by fire last month. The loss is estimated at \$2,500; no insurance.

The Cedar Hall saw mills and the lumbering establishment at Lake Metapedia have been burned down. They belong to the Howard, Guernsey Company, and the loss is reported to be extensive.

On the 25th May Nickerson Bro's. mill, near Victoria Harbor, Ont., together with docks, shop, lumber, and about 200 cords of wood and slabs were destroyed by fire. Loss \$4,000; insurance \$1,500.

Barnes & Co.'s box shoo factory at the Chaudiere, with all the valuable machinery, was destroyed by fire the latter part of May, causing a loss of \$100,000 and throwing 125 men out of employment.

The lumber piles burned during the burning of the new shoo factory at the Chaudiere were owned by Shepherd, Moore & Co., and by Pierce & Co., successors to Grier & Co. Their loss will be about \$2,000.

The rotary saw mill, owned by James Brown, near Wellsford, and a saw mill at Baltimore, both in the Province of New Brunswick, were destroyed by bush fires last month. A large number of deals belonging to the last named mill were also destroyed.

During the early part of June the planing mill and factory at Penetanguishene, Ont., owned by John Craig & Sons were destroyed by fire, together with considerable dressed lumber. No insurance. Loss from \$4,000 to \$5,000. The firm will rebuild as soon as possible.

The extensive planing mills belonging to Taft, Morgan & Co., at Burlington, Vt., were totally destroyed by fire during the past month. The Sheppard & Moore Lumber Co., near by, had a narrow escape. The business of both these mills is largely connected with the interests of some of the largest Ottawa firms.

During the progress of the great fire at Hull, Que., fire broke out in the blacksmith shop in connection with Hurdman's lumber mill on the Hull side of the Suspension bridge. It originated in the blacksmith shop by a piece of burning iron catching on to the woodwork. In a few seconds the place was in flames. The mill hose were quickly run in though, and in about five minutes the fire was under control. The north end of the building and the roof were pretty badly burnt. The loss on the building was light. In the same building separated by a wooden partition are the machines by which the mills are lit by electricity. The fire got into this room and two of the machines were burnt. They are valued at \$5,000. About fifteen minutes before Hurdman's fire broke out, Messrs. Pennoek & Mason had concluded a risk on the building. They won't lose much though.

On Sunday evening, June 10th, a very destructive fire occurred in the huge lumber piles belonging to the Lakefield Lumber and Manufacturing Co., at Lakefield. How the fire originated is not positively known, but incendiarism is strongly spoken of. A strong wind prevailed and at the outset it was generally feared that all that was left of last season's cut—about four million feet—would become a prey to the devouring element; but through the heroic efforts of the fire brigade and citizens of the village, and the prompt response of the Peterborough Firemen to the call for aid, over three quarters of the lumber was saved. The portion destroyed, however, was the most valuable part of the stock, being the best quality pine 16 feet boards. The total loss foots up to about \$15,000. The Company had \$20,000 insurance on the entire stock, divided equally between the Western and the Liverpool, London & Globe.

## CASUALTIES.

A young man named John Payne, of the township of Horton (Ont.) recently lost his life while driving on the Wahnapitae river.

James McCabe, a teamster, employed in Cozzens' lumber yard at Sarnia, was instantly killed a short time since, through the team he was driving running away.

A man named Samuel Gilgore, 22 years of age, engaged on one of the Messrs. Strickland's drives, was drowned in Jack Creek, near Apsley, Ont., recently.

A workman in Neil McKenzie's saw mill, at St. Pierre Baptiste, Que., had his arm completely shattered some days ago by a piece of timber being thrown from a saw.

A man named Belard, working at one of Mr. W. C. Edwards' mills at Rockland, Ont., was instantly killed some days ago by a board flying from a cutter and striking him on the chest.

A young man named Fleming Johnson while working in W. S. Loggie's shingle mill in the Cassidy factory, Chatham, N.B., had one of his hands cut off at the wrist by a saw which he was trying to relieve of rubbish.

Tom Sanderson, a river driver, was thrown into the Black River at Brosse's Falls the other day and in the plunge he struck his head against the log with such force that he was fearfully cut and nearly fractured his skull.

A sad accident happened at Cape Cove, Que., on June 6th. Silas Vibert, fell under a circular saw mill, both of his legs being cut off and a large wound made on his shoulder. The unfortunate young man died the following morning.

A young man named Dodge, aged 17, working for Carswell, Thistle & Mackay on the Black Donald Creek, was killed on a roll-way recently. Three logs rolled on to him, crushing him to death. Several other men had narrow escapes.

A young man named Penton, of Three Rivers, who is working in the Ottawa Lumber Company's Mill, at the Calumet, met with a painful accident recently, one of the fingers of his left hand being completely severed by a butting saw at which he was working.

William Parsons, an Englishman, 24 years old, who was married in Toronto last New Year's eve, was assisting to place a heavy timber in the lower pier of a mill-race in course of construction, at Suspension Bridge, when he fell into the river, was carried through the rapids and drowned.

An accident occurred on Whitestone Lake, near Parry Sound, by which two men working on McCormack's drive named John Morlev and John Amou, lost their lives. It appears that the men were crossing the lake in a canoe which by some means capsized and both men were drowned.

The lumbering firm of J. R. Booth & Co., have been advised that a Jos. Desjardins employed as a driver on their drive of logs on Black river was drowned at Floodwood creek on the 15th of June. No particulars as to how the unfortunate man lost his life have been received. Desjardins hails from Montreal.

Mr. R. Clark, engineer at McGibbon's Mill, Penetanguishene, was trying to put the belt on the pumping machine some days ago and was caught in some mysterious manner and whirled round the shaft and left insensible. He is unable to tell what happened after taking hold of the belt, and he has evidently narrowly escaped what might have been a fearful death. As it is his spine seems to be injured, and he will be laid up for some time.

On June 2nd six men in the employ of Pierre & Co., Ottawa, attempted to run the rapids of Mile Roche at the head of Lake Traverse, on the Pettewawa river, against the orders of their foreman. The boat swung around in the current and upset, drowning Cleophas Theorel, of Point Clair, Hyacinthe Malett, of Buckingham, and Dennis Beaudry, of Papineauville. It is indeed unfortunate that so many men, through bravado, place themselves in the jaws of death, in order to satisfy their desires for foolhardy feats. Casualties of this nature are becoming very frequent.

An accident, which was nearly attended with fatal results, occurred June 3rd on the tramway of the Calgary Lumber Company at Cochrane, N.W.T. A train carrying Lieut. Cochrane, R.N., and party, consisting of Lord and Lady St. Maur, Lady Adela Cochrane, and others, as well as a number of mill hands, was ascending the grade near the mill when one of the cars left the track, throwing one of the hands, Fred. Thompson, off the car and on to the track under the engine which was pushing behind the train. The flange of one of the driving wheels took off Thompson's right ear and he was badly cut about the head and the skull slightly fractured. The rest of the party were badly shaken up, but escaped without serious injuries. Lady Adela Cochrane showed great pluck, and was one of the first to render assistance to the injured man, bandaging and dressing his wounds with the ability and celerity of a trained nurse.

## ITEMS OF INTEREST.

The Canadian parliament has voted \$1,000,000 for the proposed ship canal at Sault Ste. Marie.

It is estimated that the consumption of lumber is about 500 feet for every individual, therefore every million increase in population calls for 500,000,000 feet of lumber.

To find the diameter of a pulley for any speed multiply diameter of pulley on main shaft by the revolutions (or speed) required, the quotient will be the diameter in inches of required pulley.

A botanical phenomenon in which the people of Leominster, England, take pride is a pair of trees—an oak and an ash—which appear to have but a single trunk. They grow together for about four feet and then divide.

A lumber stacking machine, worked by one man, which takes the place of fifteen men, has been invented. The lumber is carried on chains from the trimmer and dropped on the cars in better shape than by the men who formerly did the work.

The great demand for cedar, especially during the past fifteen years, has served to develop an industry second only to that of pine. The supplies necessary for street paving, telegraph and electric poles, and cedar fence posts has sent large gangs into the cedar swamps and to-day the cedars of Canada alone far transcend in the yearly value of the output the historic cedars of Lebanon.

## PERSONAL.

Mr. James Scott, of the Georgian Bay Lumber Co., is removing from Waubashene to Toronto. He does not sever his connection from the above company, however.

Mr. B. S. Davidson, an old time lumberman of Goodwood, Ont., was among the callers at this office during the past month. He reports the lumber business in his section in a prosperous condition.

Mr. John Anderson, of Leux Rivieres, late manager of Messrs. A. & P. White's steam saw mill, has left for Washington Territory, where he proposes entering into the lumber business in connection with his brothers.

R. W. Phipps, of Toronto, is shortly going to England to investigate forestry matters there and observe the system of tree-planting in the British Islands, thereby expecting to get valuable information for his next forestry report.

We learn that Mr. A. Cadenhead has accepted the position of manager of the Ontario Lumber Co.'s business at Midland, Ont., vice Mr. F. Hammet, resigned. Mr. C. is, we understand thoroughly experienced and in every way qualified for the position.

Particulars concerning the death of Mr. Murdoch McDonald, formerly of Black River, and who was well known amongst the lumbermen of Northumberland and Gloucester, (N.B.) have been received by his friends. McDonald was one of a party of eleven lumbermen who started from Boston July 1st, 1887, under arrangements with G. D. Emery of Chelsea, to go to Central America and get out mahogany logs for him.

We regret to have to announce the death of Daniel Hilliard, M.P.P. for North Lanark, which sad event took place at the family residence in Pakenham on June 23rd. Deceased was extensively engaged in the lumber business and had the reputation of being a clear headed and successful business man. He was returned to the Legislative Assembly of Ontario at the last general election as a supporter of the Mowat administration.

When Mr. James Walsh, of the lumber firm of James Walsh & Co., Toronto, dropped into the LUMBERMAN office a few days ago, togged out in a white choker and silk hat, we thought our time had come to make reparation for our sins. A short but pleasant interview, however, convinced us that our visitor was not of the clerical persuasion, but an old-time subscriber to THE LUMBERMAN who desired to pay his subscription up to 1890. We were pleased to see him look so hale and hearty, and also to learn that the business of his firm was prosperous.

Mr. W. W. Belding, of Katrine, Ont., dropped into THE LUMBERMAN sanctum some days ago and in paying his subscription up to 1890 informed us that he was contemplating still further additions to his new mill at the above point. His next move, he informs us, is to put in a hand mill and shingle making machinery, and while here interviewed the Wm. Hamilton Manufacturing Co. on the subject. Mr. Belding informs us that his cut of lumber this year will be in the neighborhood of five and a-half million feet. He secures his logs from the south branch of the Maganetawan river.

## THE C. P. R. CO'S NEW STEAMER.

Arrangements are about concluded between the Canadian Pacific Company and the Polson Iron Works Company, for the construction by the latter in Toronto of a large steel steamer to run with the "Alberta" and "Athabaska" between Owen Sound and Port Arthur. The new steamer will be wholly built in Toronto, and taken apart for transportation through the Welland Canal. She will be thirty feet longer than either of her two sister ships, and will be one of the largest vessels afloat on fresh water. She will use the engines of the "Algoma," which were saved almost uninjured when that vessel was wrecked on Isle Royale. Two very large steel steamers are to be built in Buffalo for the Canadian Pacific Company, to run between Buffalo and Chicago.



## THE NEWS.

## ONTARIO.

—Mickle & Dyment's new mill, Barrie is about finished.

—Gravenhurst mills are running ten and a-half hours a day.

—Messrs. Hilliard & Dickson have started up their mill at Pakenham.

—Hamilton lumber dealers complain of a very poor quality of lumber.

—The drives in the Pettawawa district are all coming down satisfactory.

—Phillips & McLeod, planing mill operators, Aurora, have dissolved.

—The various drives around Minden are reported as making good headway.

—Chew's saw mill at Midland narrowly escaped being burned some days ago.

—N. Dyments' drive on the Thessalon river recently broke, causing a loss of 3,000 logs.

—The retail lumber trade of Hamilton is reported to be in a fairly flourishing condition.

—The new boat built for the Georgian Bay Lumber Co. has been successfully launched.

—The Georgian Bay drives are all well forward, and so far it has been a remarkable good driving season.

—Brown & Mahood, shingle manufacturers of Utterson, have assigned for the benefit of their creditors.

—Basswood logs for the Lumber Cutting Machine Company, Belleville, have commenced to arrive at the boom.

—The big new mill belonging to the Canada Lumber Co., at Carleton Place, has commenced a satisfactory run.

—Messrs. J. R. Booth, E. B. Eddy, and R. Hurdman & Co., of Ottawa have put on night gangs in their mills.

—The Ontario Lumber Co., will cut in their three mills this year 20,000,000 feet of lumber and 5,000,000 shingles.

—Miller Brothers have built a new custom saw and shingle mill on the K. and P. railway, at McLaren's Mills station.

—Mr. J. D. Shier, of Bracebridge, has added about \$1,500 worth of new machinery to his sawmill during the past winter.

—All the mills in the Georgian Bay district, with the exception of the Emery Lumber Co's mill at Midland, are now running.

—It is expected that 10,000,000 feet of lumber will be cut this season at the mill of Messrs. Christie, Kerr & Co., Bradford.

—Messrs. Moore Bros. are reported to have sold their timber limit on Bye's Creek to Mr. Richard White, of Pembroke.

—Burton Bros. tug "Matamoras" recently brought down 2,000,000 feet of logs from Beaver Stone river to Byng Inlet.

—Messrs. Walsh & McKinnon, of Little Current, are making extensive additions to the machinery in their saw mill this season.

—Bush fires have again been raging in the back country in the vicinity of Kingston. Much valuable timber has been destroyed.

—Mr. McCormack's mill east of Sudbury will shortly commence running. This is the same mill operated by Lee & Potter last summer.

—The Rathbun Company are having difficulty with the Knights of Labor, at Kingston, through refusing to discharge non-union employees.

—The Georgian Bay Consolidated Lumber Company are having a small tug built at Midland, to be used at Byng Inlet to run between upper and lower mills.

—Mr. Jacob A. Shaver, of Ancaster, has associated himself with one or two other gentlemen, who are about going into the lumber business in the city of Hamilton.

—Burglars recently entered the lumber office of A. Caldwell & Son, at Lanark, blew the safe door clear across the office, and secured a remuneration of \$23 for their work.

—The Blind River Lumber Co., of Blind River, and Buzzwell & Co., of the Spanish, supply a great quantity of lumber for the buildings in course of erection at the Sault.

—During the latter part of May Messrs. Cook Bros. had 10,000 logs adrift from the mouth of the Mississago river, a large portion of which have, however, been secured.

—There is an immense quantity of cedar lying around Lake Manitou ready to be towed by the tug to Vanzaat's landing to be put through the saw mill in course of construction there.

—Hamilton dealers complain that they are now compelled to pay \$1 per thousand feet more on bill stuff than heretofore, and find it impossible to raise the price in the local market.

—The Ottawa Lumber Co.'s mills at the Calumet have upwards of 150,000 logs in their booms at the Rouge, and will give employment to a very large number of men during the season.

—The lumbering firm of Perley & Pattee, Ottawa, have a gang of men employed making improvements in the tramways used to convey sawn lumber from the mills to the piling grounds.

—The general store trade of the Georgian Bay Consolidated Lumber Co., has been consolidated under the name of the Canada Trading and Supply Co., with headquarters at Waukegan.

—It was agreed at a recent meeting of the North West, Ontario and Manitoba Lumber Association to continue the present price list, with the exception of a slight advance in some sizes in dimensions.

—Messrs. Bronson & Weston, of Ottawa, have secured the services of the government dredge, St. Louis, to deepen the canal in front of their new piling grounds at the Deep Cut, so as to allow loaded barges to approach their wharves.

—Davidson & Hay, of Toronto, are locating a mill on the limit recently purchased by that firm close to Lake Nipissing. They have three townships, Hawley, Appelby, and No. 29, off which they expect to take 70,000,000 feet of lumber.

—Messrs. Vigar Bros, Port Arthur, are making considerable improvements in their sawmill. A Cunningham patent steam feeder, together with other additions to their machinery, will, it is expected, give the mill double the capacity it formerly had.

—During the early part of June the houses along the bank of the Ottawa river at Gatineau point were inundated, the water being so high that the occupants were obliged to use the upper portion of their houses and in some cases to abandon them.

—The Rathbun Company have been exceedingly fortunate with their stream driving operations this year. Although the water was low and they had other difficulties to contend with, all their logs will soon reach the booms at Trenton and Belleville.

—Mr. C. Young, of Young's Point, has completed the contract for supplying timber for the coffer dam, stop-logs, piers, etc. being constructed at that place. His saw mill is kept very busy, and it is said that he contemplates increasing its capacity shortly.

—Letters patent have been issued to the Ryan Manufacturing company of Canada with a capital of \$100,000. The business of the company will be to manufacture house furnishings, builders' supplies and hardwood specialties, with headquarters at Toronto.

—Mr. G. B. Green, manager of the Upper Ottawa Improvement company, says that the drive of logs on the upper Ottawa is very successful this season. Very few logs have been stuck in the small streams and the smaller drives are coming out into the main stream in good time.

—Manager Lake, of the Rathbun Company's business at Picton, says that the company's sales from January to April, inclusive, for the present year have very largely exceeded the sales made in any previous year since the advent of the Company to Picton, and that in the months named the sales were double what they were in the same period last year.

—Word has been received by the insurance agents of Ottawa, that at a meeting of representatives of insurance companies held in Montreal it was decided to advance the rates of insurance on the yards adjoining Barnes' mills, recently destroyed by fire, but just rebuilt. This means several thousand dollars a year more to pay by the lumbermen. The lumbermen will protest.

—A representative of THE LUMBERMAN recently inspected a main driving belt in a large manufacturing concern in Toronto, manufactured by the Canadian Rubber Co., which has been in continuous service for the past fourteen years. It is still in good condition and doing its duty nobly. This is merely a sample of the quality of the above firms' manufacture.

—The government and the lumbermen have about come to an agreement for settlement of the arrears owed by the lumbermen for water leases at the Chaudiere. The lumbermen agree to pay the balance due by them under the old leases, and take new ones at reduced rates, with conditions providing for the preservation of the water power at the falls. They also want the flow of water on the falls regulated by artificial works.

—Messrs. Flatt & Bradley, the well-known lumbermen of Hamilton and Casselman Ont., and East Saginaw, Mich., have just secured an order from England for five million feet

of lumber, to be shipped during the present season. We understand that the consignment will foot up to upwards of \$75,000. Messrs. Flatt & Bradley are to be congratulated on their success in securing such an important order from across the sea.

—The E. B. Eddy Manufacturing Company is the first Ottawa lumber firm this season to saw new logs cut during the past winter. A small portion of the firm's drive of new logs from the Colonge River arrived at the Chaudiere on the 19th of May, and are now being cut into lumber. This is the earliest that logs have ever reached Ottawa from the lumber districts. The main drive cannot reach the Chaudiere until late in June.

—Messrs. Perley & Pattee have been advised that a serious fire is raging on their limits on the Pettawawa river. The information is brought by one of the employes of the firm, and the particulars are very scanty. The destruction is supposed to have been started from fires made by settlers for the purpose of clearing their lands. No estimate can be formed of the probable loss, as the full extent of the fire is not known, but the limits are of the best in the lumbering districts of the Upper Ottawa.

—The Chaudiere lumbermen, says the *Journal*, are anxiously looking for their drive logs. The reserves held in the booms at Thompson's Bay and Deschenes were very small this season owing to the short cut last season. The cutting this spring promises to have a short rest as most of the firms will have completed cutting their reserves before this season's drive is in the booms at the Chaudiere. This spring has despite the high water been a very favorable one for the lumbermen and a large quantity of timber has been turned into the yards.

## QUEBEC.

—Lake Megantic lumbermen have been very successful in drive operations so far.

—The Cookshire Mill Company, Cookshire, who have an extensive saw mill plant at Cookshire, are building another large mill at Sawyerville.

—Stevadores report ship labor getting scarce at Quebec. Some difficulty is experienced in producing enough men to load the vessels now ready to take in cargo.

—A combination, calculated to injure the business of the legitimate lumbermen, has been formed by the Quebec Timber Farmers, who have fixed a uniform scale of rates.

—The Mantais Mills, Lake Megantic, has been considerably improved this season by the addition of new machinery. The capacity will hereafter be about fifty thousand feet per day.

—A new regulation respecting the removal of timber on Indian lands has been passed. It provides that purchasers of these lands be required to clear five instead of fifteen acres, and after the necessary buildings have been provided the agent may grant a settler's license.

—The demand for lumber in Montreal during the month just closed was fairly good, but despite this a rather gloomy feeling prevails regarding the future. Dealers have experienced some uneasiness owing to the imminent danger to which stocks at the Chaudiere were exposed. That material is now, however, practically out of the millowners hands, having already been disposed of and being in process of delivery. There has been a fair amount of orders from the country and prices are steady and without change.

—One of the largest lumber failures which has occurred in the province of Quebec for some time, took place the early part of June when Mr. W. Little the lumber merchant of Montreal, assigned with liabilities upwards of \$200,000. The principal creditors are Ross & Co., of Quebec, \$79,354; Bank of Montreal, \$24,953; La Banque de Peuple, Three Rivers, \$17,394; E. H. Lemay, Montreal, \$10,885; Dame Anne Tovell, \$9,234; E. B. Eddy & Co., Hull, \$7,077. The assets consists of timber limits in St. Maurice district, valued at \$40,000; timber limits in Compton, \$60,000; land in Florida, \$10,000; lots in Rat Portage, \$600. The Hon J. G. Ross, of Quebec, has been appointed provincial guardian, and has substituted Mr. Samuel C. Fatt in his place. A supplementary list of assets and liabilities has been filed in Court. The list, besides the large creditors already given, shows the names of persons largely interested but secured. Dundee Mortgage and Trust Company, \$37,470; Andrew Allan, \$20,247; H. G. Burleigh & Bro., Whitehall, N. Y., \$9,540; Leonard G. Little, \$2,500. The Banque du Peuple at Three Rivers is indirectly interested for \$18,199. The total liabilities, as stated at the time are about \$200,000, and the assets are fixed at about \$116,000. Among the principal assets are:—Lumber at the Ross Mills, Three Rivers, \$13,500; logs and timber on the St. Maurice River, \$40,000; laths in Canada and the United States \$23,000.

—The freight rates at present are 42/6 to 45/0 from Quebec to London or Liverpool, and probably the same to Glasgow.

—The demand for lumber in Montreal during the month just closed was fairly good, but despite this a rather gloomy feeling prevails regarding the future. Dealers have experienced some uneasiness owing to the imminent danger to which stocks at the Chaudiere were exposed. That material is now, however, practically out of the millowners' hands, having already been disposed of and being in process of delivery. Supplies at first hands are very small. There has been a fair amount of orders from the country and prices are steady and without change.

#### NEW BRUNSWICK.

—Messrs. Allan Bros., Carleton, are supplying the machinery for the new lumber mill of Mr. D. J. McLaughlin, being built at Pollet River.

—Messrs. Murray & Shaw, Flat Lands, near Chatham, are building a shingle mill which will be equipped with the newest and best machinery.

—S. T. King & Sons, of St. John, are the purchasers of the lumber business of Mr. E. C. Gates, of Calais. Mr. Charles King, of the firm, will look after the business.

—The Chatham New Brunswick *World* says, spruce logs which were worth but \$6 there last year, and no demand for them at that, find a ready sale now at \$7, and the supply is not equal to the probable demand.

—Extensive forests fires have been raging in the eastern section of New Brunswick, and doing an immense amount of damage. Immense tracts of forests lands, besides mills, farm houses, barns and standing crops have been destroyed. The town of Moncton had a narrow escape.

—W. H. McLeod, of Richibucto, Geo. K. McLeod, of St. John, Jas. F. Atkinson, of Kouchibouguac, Wm. E. Cleaver, of London, Eng., and John Curran, of New Mills, Restigonche Co., seek incorporation as the "Kent Lumber Company." Capital \$80,000 in \$100 shares.

#### MANITOBA AND THE NORTH-WEST.

—P. McLaren's new saw mill at Macleod, Alberta, has been completed and put in operation.

—The capital stock of the Calgary Lumber Company has been increased from \$85,000 to \$170,000.

—Hunter & Moore have opened their lumber yard, at Crystal City, and have a large stock of building material.

—Cedar shingles from British Columbia are being used extensively throughout Manitoba. They are said to give the utmost satisfaction both as to price and quality.

—Campbell & Stevens have opened a lumber yard at Glenboro, and M. W. Naughton has opened a yard at Killarney, both in Manitoba. J. R. Reilly & Co., have opened a yard at Regina, Assa.

—The ties from the Riding Mountains for the N. W. C. railway have all passed this place on their way down the river. The drive from the mountains which was made in 20 days is the fastest time on record for such a large quantity of timber. There are over 30,000 ties and a lot of bridge timber.

—A bush fire set fire to Mr. Strevel's ties at Stott's Hill near Whitemouth, and before it was stopped 10,000 of them were destroyed. About two weeks previous another lot of 10,000 of the same ties were destroyed. These were the ties once intended for the R.R.V.R., but the Government never took them over. Mr. Strevel, however, claims that the ties belong to the Government; while the Government say they belong to Mr. Strevel.

—We learn from the Edmonton *Bulletin* that the damage to timbers on the head waters of the Saskatchewan and the Athabasca this spring has been very great. The country from the 52nd to the 55th degree of north latitude and from the Rocky Mountains eastward to about the 5th principal meridian contains the available supply of sawing timber of the Northwest. The area of this region is very great, but it was never as densely or as uniformly timbered as the wooded lands of Eastern Canada. The good spruce is in patches with considerable areas of scrub and even open prairie. However, the whole region is so thoroughly cut up by the main streams mentioned, their greater tributaries the Red Deer, the Brazeau, the Pembina and the McLeod, and many smaller branches that the greater part of it is really accessible. Many million feet of spruce well fitted for lumber, which within the memory of man was standing green and growing in the country mentioned is now lying in brule of no use for any purpose, an impediment to travel and furnishing a perpetual supply of tinder with which to kindle and spread new fires. Even within the past five years the loss on known and immediately available timbered lands must have mounted into the hundreds of thousands of dollars. As is well known, in the Northwest series of wet and dry years alternate.

During the former the timber is comparatively safe, the only loss arising from local fires in the fall. No matter how dry the weather may be for a time the ground is always moist, and when it is so the fire does not travel far. After a succession of dry years the reverse is the case. The soft mould, full of vegetable matter, becomes thoroughly dry and in the woods even heavy rain fail to wet it. When fire is once started in a section of country having such a soil in such a state it is bound to run through it all. Nothing has ever been done to stop this destruction. The timber destroyed had no market value and no one was interested in it. Now, however, matters are different. Local saw mills are turning the spruce to account in yearly increasing quantities and eastern speculators have seen the bonanza that must be in limits of good timber lying on the headwaters of navigable streams flowing on the lower part of their course through agricultural lands. There is bound to be an influx of immigrants shortly who will need this timber and will cause the loss of every stick to be felt. At the same time the past dry seasons have brought the country in the condition in which it is most liable to fires.

—In a description of the town of Calgary, N. W. T., printed in the *Winnipeg Sun*, the following reference is made to the largest lumber firm in the Northwest: The Eau Claire and Bow River Lumber Co., organized in 1883 with a capital stock of \$300,000, is situated at Calgary N. W. T. The company have purchased ten timber limits situated on the Bow, Spray and Kanabaskus rivers, covering an area of 500 square miles, estimated to contain 300,000,000 feet of growing timber, which is cut and put into the rivers and brought to Calgary on water down the Bow river, where they have established the largest sawmill in the N. W. T. They have also in connection with their mill a dam and extensive river improvements, booms, piers, etc., in order to hold and handle the large cut of logs brought down each year. They have for this year's manufacture five million feet of logs, and are in a position to furnish anything in the line of building material, etc.

#### BRITISH COLUMBIA.

—H. W. Petril is erecting a saw mill at Lilloet.

—John Elwood's shingle mill near Westminster, has been burned out.

—Fader Bros. have bought a disused saw mill plant at Vancouver. They will add machinery and operate the mill.

—The Brunette Saw Mill Company, Westminster, have recently built a 80x30 foot addition to their works, into which \$1,500 worth of new machinery will be placed, consisting of a flooring machine, lathing machine, bolter, and a machine for cutting box lumber out of slabs.

#### AMERICAN NOTES.

—The southern California lumber boom is said to be on the wane.

—It is said that the lumber business in New York is duller than it has been for ten years.

—Duluth expects to receive upward of 500,000,000 this season from the Georgian Bay alone.

—The drives of the Penobscot River and tributaries in Maine aggregate upward of 100,000,000 feet.

—A big hemlock combination has been formed in New York State, to be known as the Pennsylvania Lumber Storage Co.

—The season at Bangor, Maine, opened with high rains and a slack demand for lumber, with prices bordering downwards.

—A Muskegon, Mich., paper reports the local surgeons as saying that accidents in the saw mills are scarcer than ever before.

—A congressman has estimated that there is not less than \$700,000,000 to \$1,000,000,000 worth of lumber in the forests of Arkansas.

—P. O. Scribner, of Tonawanda, N. Y., has chartered the mammoth lumber barge Wahnapeta for two trips from Lake Superior to that port.

—The Tennessee Lumber Company's property and the Mill Creek Distilling Company's works, Cincinnati, have been burned. Loss, \$180,000.

—Hargreaves Bros., & Tripp, lumbermen Detroit, Mich., have made an assignment for the benefit of creditors to Francis G. Russel. Assets \$2,274.85; liabilities, \$7,072.39.

—Dubois, Pa., a thriving lumber town of about 10,000 inhabitants has been completely wiped out by fire. Over thirty lives were lost and about 4,000 people left homeless.

—Unless there is some unforeseen accident, more lumber will be made in Minneapolis this year than in any preceding year. The total cut is expected to run considerably over 300,000,000.

—Wood fiber for paper makers' use is manufactured in twenty-one States. The industry employs \$20,000,000 capital and 22,000 men. The State of Maine alone produces

84,000 pounds of ground wood fibre and 188,000 pounds of chemical wood fibre.

—A giant poplar tree, that measured 11 feet 8 inches in diameter at the base, and was 240 feet high, was recently felled near Taylorsville, O. It is estimated that it will yield 20,000 feet of lumber.

—From New York state comes the cry that there is more or less cutting of prices going on. Some Buffalo firms are in the habit of knocking considerable off the price in their strenuous efforts to secure trade.

—A curious freak in the tie trade is reported from Duluth, Minn. Vessels are carrying cedar ties to that port from Sault Ste. Marie for the Manitoba road, and taking back tamarack ties to the "Soo" from Port Arthur for the Grand Trunk. A heavy trade is thus carried on.

—New York City it is said is not demanding lumber as vociferously as it is wont at this season of the year. There has been a slowness in that quarter, that does not seem just natural. Not but that a great deal of lumber is being shipped there, but it is hardly up to the usual standard.

—A Muskegon, Mich., shingle manufacturer stated on Friday to a representative of the *News*, that the output of shingles from the Muskegon mills for 1888 will be at least 100,000,000 less than that of last year. Shingles are averaging better in price than last season, and decrease in the cut will redound to the interest of the manufacturers.

—Figures show that more lumber was sold in Chicago in May than in any month in the history of the market—20,000,000 more than was sold in March, the sales aggregating 229,000,000 feet. Of this total 151,000,000 feet went in local consumption, leaving only 78,000,000 for the out of town trade. A year ago in May the local consumption reached only 34,000,000 feet.

—There is a fairly encouraging tone to the reports regarding the British market for American woods. A steady trade continues in prime walnut logs and lumber. A quiet, steady trade is reported in whitewood, with stocks large in both logs and lumber. Prices fairly maintained. There is considerable activity in American oak. Gum seems to have been deserted, the market being overstocked.

—A resident of Chicago has in his possession a copy of the Ulster county, N. Y., *Gazette*, dated, "Saturday, January 8, 1800," and a sample of the contents is given in the style of the following advertisement, showing that the people of olden times did not notice little incongruities such as are involved in this ad:

**FOR SALE—THE ONE-HALF OF A SAWMILL, WITH A** convenient place for building; lying in the town of Rochester. By the mill is an inexhaustible quantity of pine wood, and also a stout, healthy, and active negro wench. Any person inclined to purchase may know the particulars by applying to JOHN SCHOOLMAKER, JUN., at Rochester, November 13, 1799.

The *Courier* says the Saginaw cargo lumber market is dull, but June is invariably a quiet month. No sales of consequence are being reported, but a number of small lots have changed hands. There are no changes in quotations. What demand there is is limited to common lumber. Box stock is firm, and Norway strips sell readily, but bill stuff is dull and featureless. The demand for coarse box lumber seems to be fully equal to any demand for such lumber the valley has ever experienced and contracts are being made at \$10.50 and \$11 per thousand for green stock. Norway strips are also in good demand; also hemlock strips. While some claim that the demand for good lumber has improved the evidence on the face does not show much of an improvement. The dry lumber is nearly all sold and but very little green is being contracted ahead.

—The manufacture of hemlock in Michigan is increasing rapidly. In the Saginaw valley hemlock, bill stuff and lath are being largely used in home building, while a large quantity will find shipping market. As its use extends people are finding out that it makes a stiffer frame than pine, and is of greater value in all dimension sizes about a building.

#### Canadian Lumber in the States.

There is a general impression that the presidential elections in the United States will have a detrimental effect on the American lumber market and that in consequence the Canadian lumbermen will suffer to a certain extent.

A reporter visited the Chaudiere this morning with a view to obtaining the opinion of the Chaudiere lumbermen on the subject. The universal statement was as far as this year's cut is concerned almost every foot of it was sold before it was taken from the limits last winter, at fair average prices. It is now possible that the elections may effect the sale of next winter's cut, as the market is at present and will be until some time after the election in a demoralized state. The lumbermen have been expecting this however and many of them have made arrangements elsewhere for the sale of most of the cut for 1889.—*Ottawa Journal*.

QUEBEC TIMBER DUES.

The Quebec Government having changed the system of computing the Crown dues on saw logs from charging by the piece to charging on the 1,000 feet broad measure, several changes in the regulations were found necessary. The following are the most important:

As heretofore licensed holders are bound to furnish sworn statements from their foremen or persons in charge of the number and description of all pieces of timber, saw logs and other wood goods cut under their direction, or to their knowledge upon the berths operated by them the previous season.

In addition to this clause the new regulations provide that license holders shall also provide specifications of measurement sworn to any time after the expiration of the license for the season (30th April), but not later than the 1st day of September, by the cutters duly qualified, whose engagement with the producer shall not previously have been disapproved of by the Crown Timber Agents, as well as an affidavit in corroboration from the proprietors themselves, or their representatives.

As the new table for computing the contents in feet board measure is particularly hard on small logs, the lumbermen had almost fully decided not to take out any logs below 13 inches in diameter. To meet this, however, the new regulations provide that "Parties cutting timber, sawlogs, or wood goods of any kind on Crown Lands, and failing to haul all the wood in the trees cut down, because it may not appear to have a commercial value, shall include the same in their returns, and the quantity may be estimated and the dues thereon charged and payment enforced or otherwise subject to the report of the Forest Ranger." Thus placing in the hands of the Forest Rangers very great powers, which are liable for various reasons to lead to great abuses.

The rate per foot B. M. for saw logs is placed at 30 cts. per M ft. more than the Ontario Government charge, but in reality the rate is full 55 cents per thousand feet more when the difference between the tables prescribed by the regulations and the Doyle rule as shown below is taken into consideration. There is a petition now being prepared to the Quebec Government, protesting against enforcing the new rule and asking the adoption of the Doyle rule which is that which has been in use in Ontario for many years. It is hard to predict the result, but it would be surprising if the Government acceded to it, as they seem determined to squeeze the last cent out of the lumbermen.

The following shows the quantity for logs of each size computed by the new rule compared with the Doyle rule for logs from 7 to 22 inches; a little attention to which will bear out what has already been said in regard to the difference between the Ontario and Quebec charges.

SAW LOGS, 16 feet long.				SAW LOGS, 13 feet long.			
Quebec Rule.		Doyle Rule.		Quebec Rule.		Doyle Rule.	
Diameter.	Contents in each piece.	Diameter.	Contents in each piece.	Diameter.	Contents in each piece.	Diameter.	Contents in each piece.
7	19	7	8	7	24	7	9
8	26	8	13	8	32	8	10
9	37	9	21	9	45	9	25
10	48	10	29	10	59	10	36
11	54	11	40	11	67	11	49
12	65	12	52	12	86	12	64
13	81	13	66	13	100	13	81
14	97	14	81	14	120	14	100
15	108	15	98	15	133	15	121
16	130	16	117	16	160	16	144
17	152	17	136	17	187	17	169
18	173	18	159	18	213	18	195
19	200	19	183	19	247	19	225
20	227	20	208	20	280	20	256
21	249	21	235	21	309	21	289
22	282	22	263	22	347	22	324

It will thus be seen how largely the new table favors the new government at the expense of the lumbermen and how the latter are totally at the mercy of the former.

WASTES IN LUMBER.

Statisticians have proven that the primitive forest, before touched by the lumbermen, shows less than ten per cent. of actual money producing wealth. Think of a loss of over ninety per cent. in cutting and sawing before economic values are reached. The wanton waste of lumber is often one of the striking features of the camps. In California it is still worse; only the largest of trees are cut. Those measuring less than two feet in diameter are rarely touched but to ring and subsequently burn. In this country, even with the rare and valuable roots, we leave a large unsightly stump, often the most

dense and beautiful part of the tree. Generally speaking, the roots of these trees are not widely divergent nor extremely thick, and it is strange the woodsman insists in cutting off so far above ground.

Apropos of this may be mentioned a little experience of the writer: Two years ago in the usual run of business, an old wood lot came in my possession. One part of this was the remnant of an old walnut forest, being thickly studded with stumps from three to four feet high, and literally strewn with tops and limbs from a foot in diameter down to four inches. Some of these were quite lengthy, but the larger ones were, of course, crooked and scraggy. To make a long story short, these stumps were grubbed out, the tops all trimmed, and the entire lot being taken to the mill, the result being the interior of a new house was almost entirely finished with walnut. All the stationary stands, book cases, wainscoting, stairs, balustrades, and the like, besides much of the furniture was made from this walnut slash, besides which four thousand feet of beautifully grained lumber for special purposes was gotten out, which netted thirty-seven dollars per thousand feet. This one hundred and fifty dollars more than covered the cost of clearing, hauling and sawing, leaving the field perfectly clear and nearly ready for the plow.

Of course the field was a good one; but, all things considered, I venture the assertion that the aggregate profits from the slash and remains were greater than from the original forest, for the lumber from this particular field was sold in a bunch, mill run, for twenty-five dollars per thousand, and, including first cost of the land, nearly three-fourths of this price must have been exhausted before the lumber was ready for market, proving conclusively that the lumbermen of eight years ago did not hew close to the line. Whether he has learned to hew any closer may be demonstrated by visiting any section where trees, even the more expensive, are being cut. The stumps and tops still cumber the ground, while the manufactories are continually making small pieces from the plank sawed long and wide, whereas the trees would go a great deal farther, and the results would be as good or better by working no closer and down lower, making many shorter cuts, but producing much handsomer grain, as demonstrated in the foregoing. Besides, it should be borne in mind, that these results may be materially enhanced by working at the start. Cutting low, below the ground, means a longer butt cut, always the best of these hard wood trees, and, in connection with the upper cuts, limbs and benches can often be worked into much better advantage than after the main logs are cut.

What is true regarding valuable lumber, applies with all its force, only in a modified form, to all varieties of timber. Any stump that shows unbroken soundness on the top represents a waste in proportion to its height. The peculiar construction of tools, and the nature of the average tree renders it nearly as easy and much more profitable to cut off at the very bottom, and there is no reason why the long, straight limbs should not all be worked up into merchantable goods, and that, too, at a fair profit to producer and consumer.—*Exchange.*

RECIPROCITY AND THE LUMBER TRADE.

VIEW OF A LEADING LUMBERMAN.

At the ordinary fortnightly meeting of the Commercial Union Club of Toronto, Professor Goldwin Smith presiding, the subject of "the effect of Reciprocity on the Lumber Trade of Canada" was discussed. Much interest was given to the proceedings owing to the presence of a large number of lumbermen, who were in the city attending the annual meeting of the Ontario Lumbermen's Association, some of whom took part in the interesting discussion.

Mr. A. H. Campbell was the first speaker. In introducing Mr. Campbell to the meeting the Chairman said he observed a number of gentlemen present from outside Toronto who were not members of the club. He would take the opportunity of assuring them that, notwithstanding what they might see in party journals to the contrary, this was no party movement. The club addressed itself to what is believed to be for the interest of the whole community. Its members belong to both political parties: Mr. Campbell who was to address them, was a Conservative.

Mr. Campbell then spoke. He said that when the present agitation for unrestricted reciprocity with the United States commenced, the benefits which would accrue to the lumber trade were so great and so manifest, that he feared his judgment might be warped by selfish considerations, and that what might be good for him personally might be detrimental to the interests of the country at large. A full consideration of the circumstances and of the various interests and industries which would be affected convinced him, however, that all the important interests, including farming, mining, stock-raising, with the fishing and carrying trade of Canada, would

equally share in the benefits of a free market with a people having a population of sixty millions, and consequently that this movement, he felt, was in the general interests of the whole country. Amongst the most important of our industries was that of lumber. From the lofty tree growing in the distant forest to the finished board manufactured for the varied uses of commerce, it employed the labor of a large number of men and horses, and provided the means of living to many families in the country. He had not the statistics for the export trade from Canada to the United States for 1887, but in 1885 it valued \$9,355,736; in 1886, \$8,545,506, and taking the value for 1887 to be not less than that for 1886, they would have a sum of money far exceeding \$26,000,000 in three years. Of that sum about \$5,289,308 was paid into the United States treasury in duties, and very nearly the whole of that money would be saved to this country had there been unrestricted reciprocity. Another way in which lumbermen would benefit by Commercial Union was that they could export dressed instead of rough lumber, and by the difference in weight reduce the freight. When the reciprocity treaty existed they had good trade with the States. The year 1866 was perhaps the most prosperous year lumbermen ever experienced in Canada. Since the abrogation of the reciprocity treaty he paid over \$350,000 for duty on exported lumber, and he was not a very large operator. The great want in this country now was a market. What made the National Policy a national failure was the want of a market. Under the National Policy instead of chimney stacks marking the country the mills were reducing labor or wages. High protection ever meant over-production, and over-production meant failures, ruin and distress. Commercial Union, or, as he preferred to call it, reciprocity, meant the opening of a market for our products. "Canada for the Canadians" was a great cry at one time, but it seemed to him to have ended as they might have expected, viz., Canadians were living upon each other. Why did England Colonize but to find a market. Why were France, Germany, etc., so anxious to get colonies but in order to have an outlet for their goods. Commercial Union would give them the large market which they needed. Not only would lumbermen be benefitted; the good effect would reach almost all classes of manufacturers and the farmers. American capital would flow into the country and the country would prosper. What made Maine such a large manufacturing country but that they had a market of 60,000,000 people. He believed our manufacturers were as good business men and more economical than those on the other side of the boundary line. Speaking generally, he was of opinion that about 800,000,000 feet of lumber were cut in Ontario yearly, and only one-third of that quantity was used in Canada.

Mr. Gordon Waldron asked whether a larger market and the investment of more capital would not have the effect of depleting our forests too rapidly?

Mr. Campbell, in reply, said the greater the demand the more valuable would lumber become, and consequently the greater would be the care to preserve it from fire and destruction. The cry that the country would be denuded of timber was a fallacy. Young trees were always growing, and thinning the forests would facilitate the growth of trees.

Mr. James Pearson pointed out that the increase in the value of lumber, consequent on Commercial Union, would increase the selling value of the limits, and thereby increase the public revenue derived from the sales of timber limits.

Mr. Geo. Kerr, Jr., suggested that the Government should begin at once to plant large areas of land with young trees.

Mr. Thomas Conlon, of Welland, said the inland marine was for the past few years fast disappearing from the lakes. This was a very serious matter, and one reason for it was found in the fact that vessels trading with American ports had often to return without a cargo. Boats took lumber from the Georgian Bay to Chicago, and because of the interpretation put on the American coasting laws they could not load with wheat from Chicago to Boston via Collingwood because both Chicago and Boston were American ports. Canadian vessels were not allowed to trade between American ports. There were minerals, copper, granite and marble, which would be developed. Commercial Union was of vital importance to the marine interests as well as to the lumbering interests.

Capt. Wm. Hall, a large vessel-owner, and one of the Vice-Presidents of the Commercial Union Club, endorsed what had fallen from the previous speaker, and gave an interesting account of his own experience and observations in connection with the inland marine trade of Canada. He keenly regretted the circumstances which had long depressed the shipping trade of the country and the disabilities under which owners of vessels engaged in the coasting trade found themselves in consequence of the restrictionist policy pursued by the government. He closed by warmly endorsing the Commercial Union movement and predicting its ultimate triumph.

### United States Lumber Dens.

An extraordinary story was told by Mrs. Eben Obenauer, at a meeting of ladies of the Central M. E. Chapel, Detroit, relating to the lumber dens of the north parts of the state. Mrs. Obenauer is a missionary employed in the pliceries.

"A fair example of what these places are," said Mrs. Obenauer "is the stockade den at Seney, in the Upper Peninsula. Seney itself is turned against all good influences. Before going I was counseled against speaking there for fear of bodily harm. The minister who had preceded me had been carried bodily from the hall. The town is the headquarters for four large lumber companies, and though there are but twenty-five houses in it thirteen of them are used as saloons.

The den at the place is surrounded by a high board wall that reaches to the gable of the roof of the house enclosed. Why is the wall needed? Not to keep the lumbermen out, not to keep the women out, but to keep imprisoned the girls whose lives are by compulsion made a continual debauch. Great care is exercised in admitting strangers to the den and everyone unknown must be vouched for. One man gained admittance through the assistance of the groceryman who supplies the place. After leaving the bar room he heard a scream. He turned back and saw, lying prostrate on the floor, with the blood streaming from her mouth, a young woman who had been felled.

In the dance hall of the house he saw eighteen nude women dancing in a circle with the keeper in the centre brandishing a club. This is the state of things throughout the lumber country of Wisconsin and Michigan.

"What is the remedy? The governor of this State, when appealed to refused to meet the issue, dodging it on a technicality. The powers of the State, the officers of this commonwealth, either through fear or cupidity, dare not touch this terrible blot on the State."

Others spoke on the matter, and it was unanimously resolved to call a mass meeting at an early date. Evidences will be collected giving specific details, and Gov. Luce will again be called on to act.

### Lumber Exports in Australia.

The San Francisco *Journal of Commerce* says:—"The lumber trade with Australia forms one of the greatest departments of our business with that country. Except for some of the fine timber of Western Australia, that great island continent may be said to be almost absolutely dependent on importations for that indispensable adjunct of modern civilized life—a good supply of lumber. We ship largely from this city, more largely still from Puget Sound and Humboldt Bay. Out of somewhere about one hundred and thirty millions feet of lumber exported from the Pacific coast of the United States in a year, Australia takes nearly one-half. The exact quantity taken runs from fifty to sixty millions feet annually, and is steadily increasing. Our business with Australia commenced away back in the fifties—in 1853, it forming the bulk of our exports for that year. Puget Sound began shipping to Australia largely as far back as 1856. In 1869 the exports to Australia increased very heavily. The record was even beaten in 1878. It has varied from year to year according to the demands of the colonies and must be much greater in the future than it has ever been in the past."

### Prevention Of Boiler Scale.

The scale in boilers is formed from impurities of the water, and if pure water only is fed into the boiler, no scale is formed. This being settled beyond doubt, many methods have been proposed to purify the feed water in a rapid and cheap manner. To prevent scale by the use calcium hydrate and soda, F. Scheukel employs one or more tanks, according to the supply needed for the works, in which the water from the river is purified, and another tank for the purified feed-water. As purifying tanks he uses four iron boxes (or cylinders of old steam boilers), not over 5 feet high, which have an outlet cock about 6 inches above the bottom. They are heated by steam to 60° at least, and are preferable surrounded by some non-conducting material. Besides, they are furnished with a stirring arrangement, preferable a Koerting steam-jet stirrer. The pure water tank is placed on a level below the purifying tank, so that the purified water can flow directly into it from the purifying tanks, without the use of a pump. The water in the purifying tanks is heated as much as possible and the required quantity of thin milk of lime added and stirred; this quantity being either calculated after the analysis of water or ascertained by experiment. Only so much lime is to be added that red litmus paper dipped into the water, after 15 to 20 seconds begins to turn blue. Then the calculated quantity of pure (96 to 98 per cent) soda dissolved in hot water is added, stirred, and the water allowed to settle. In 20 to 30 minutes the precipitate formed is thrown down in large flakes and the perfectly clear water is drawn off into the feed water tank. With ammonium oxalate

it must not give any turbidity; and if another sample taken becomes turbid on the addition of calcium chloride, too much soda has been used. The advantages of this method of purifying the feed-water are: that the boiler requires no cleaning for a whole season; that the iron of the boiler-walls is not attacked; that the water does not froth and stop up the gauge-cocks, etc.; that the steam is free from acid; that steam is easier generated and thereby fuel is saved; that no breaking out of scale is required, its cost saved and the interruption of work caused thereby is avoided; that, finally, the method is comparatively inexpensive.

The purification of water by milk of lime and soda is known, but as regards the practical application, the above communication is valuable. The "Pharm Centralhalle," however, remarks that soda is not the cheapest purifier for all calcareous water, but for such as contain considerable proportions of calcium nitrate, besides gypsum, barium chloride would be cheaper to employ.—*Practical Mechanic.*

### Don't Do these Things.

Don't open a cock or a valve under pressure, and let steam into cold pipes suddenly. If you do there will be a bill of repairs to pay, to say nothing of the liability of killing or maiming some one for life. A man was employed in a brewery cleaning barrels with steam from the boiler. He opened the globe valve suddenly and blew up the barrel losing one arm by his imprudence.

Don't suppose that a safety valve is going to think for itself, and don't fancy it is all right because it was tried last month, or last year, perhaps. Try the safety valve daily, and examine it, so as to be sure that the stem is not bent, or that the weight has not been shifted by accident or design.

Don't omit to keep the water gauge in good order, and be sure that the openings into the boiler, both steam and water, are not stopped up partially by scale or something lodged in them. Where the openings are of different sizes the water level will not show properly. Test the gauge by the gauge cocks, and be sure that it is right.

Don't suppose that the boiler is all right internally because it has never blown up yet. Get into it, and see whether it is or not. The man-hole plate ought to come off every week, and the engineer should satisfy himself by inspection that the braces are all right.

Don't forget that the blow cock is a thief which is very apt to run away with a great deal of coal unless it is tight. It should not leak a drop.

Don't be too liberal with oil or fat in the cylinder. Some men are constantly slushing the cylinder with grease, under the impression that it makes the engine run easier. After one or two revolutions all the grease that does not cover the rolls of the cylinder is carried out with the exhaust and scattered over the surrounding country. On a wooden roof this invites fire, and on a metal roof it soon causes leak by corrosion, for fatty acids are the most active of corrosive agents. Use sight feed cups in preference to any other agents; they not only save attendance, but they feed oil as it is needed—drop by drop.—*Milling Engineer.*

### Solid Emery Wheels.

At a meeting of the Polytechnic Section of the American Institute, held Dec. 8th, L. Duvinage, in a paper of which this is an abstract, said that the increased quantity and quality of work that goes out of the modern machine shop was due to the skillful use of solid emery wheels. He said that a grain of sand from the common grindstone magnified, would look like a cobble stone, a fracture of which shows an obtuse angle, whereas a grain of corundum or emery would look like a rhomboid, always breaking with a square or concave fracture. No matter how much it is worn down in use it does not lose its sharpness; hence it is evident that the grindstone rubs or grinds and heat the work brought in contact with, while the corundum or emery-wheel with its sharp angular grit cuts like a file or circular saw.

There are two general classes of emery wheels in the market—one class of wheels has the grains of emery joined and consolidated by a pitchy material as rubber, linseed oil, shellac, etc. These must run at a high speed to burn out the cementing material by friction, loosening the worn out grains and thus revealing new cutting angles. These are non-porous wheels. Truing up this class of wheels is done with a diamond tool.

The other class consists of two kinds, one made by mixing the emery with a mineral cement and water into a paste, which will harden and bind the grains together; the other kind by mixing the emery with a mineral flux or clay, moulding into shape and burning in a muffle at a high temperature. These are porous wheels in which the grains of emery are held together by water having affinity therefore. This class of wheels, unlike the grindstone, has sharp grains of emery bedded to-

gether among matter which, in some cases, is as hard and sharp as the emery itself. Such wheels cut very greedily, and do not need to be run at any particular speed.

The dresser made of hardened steel picks, is the proper tool for toning up this class of wheels.

Manufacturers in metal goods aiming in reducing the cost of production, would do well to look into the adaptability of the solid emery wheels or rotary file and other labor-saving machinery before deciding on reducing wages of labor. A glance at the first page of this journal will show our readers where all kinds of emery wheels for the different classes of work can be purchased.

### New Postal Arrangement.

By the new postal arrangement between the United States and Canada, which went into effect on March 1, 1888, articles will be allowed to go into either country, if admitted by the domestic law of either, except sealed packages (which are other than letters) and publications which violate the copyright laws of the country of destination, liquids, etc.

All articles exchanged under this arrangement are required to be fully prepaid with postage stamps, at the rate of postage applicable to similar articles in the domestic mails of the country of origin, and are required to be delivered free to addresses in the country of destination.

Articles other than letters, in their usual and ordinary form, on their arrival at the exchange post office of the country of destination, will be inspected by custom officers of that country, who will levy the proper customs duties upon any articles found to be dutiable under the laws of that country.

### EXCHANGE ECHOES.

#### Chicago Timberman

The *Timberman* has hitherto striven to fairly present the views of the advocates and opponents of free trade in lumber by the removal of \$2 duty on Canadian manufactured pine. It is a foregone conclusion that the Mill's tariff bill will be modified, and now only serves the purpose of affording a subject for the evaporation of language laden wind. There is one point, however, that has been, to some extent, overlooked in the discussion of free lumber and that is that the removal of the import tax on Canadian lumber will not benefit the consumer over here in the least. The argument all along has been that the removal of this tax would give the Americans cheaper lumber. Does anyone for a moment suppose that this will be the case? On the contrary, the Canadian market will take its cue from prices prevalent over here, and the Canadian lumbermen will at once put up prices to correspond with the American market. They certainly would be fools if they did not, and the generality of them are not built that way. The serious attention of the advocates of free trade in Canadian lumber is invited to mentally discuss the above fact, and ask where the great benefit to the consumer is to come in. The *Timberman* has only seen one advantage in the free introduction of Canadian lumber to American markets, and that was confined to the economizing of our own forests. Outside of this foreign supply to prolong the diminution of our home stock, the removal of the restriction upon Canadian lumber, would not depreciate the price of lumber a mill a thousand.

#### Detroit Free Press.

The capital employed in sawed lumber in 1880, according to the census, was \$181,186,122. The wages paid amounted to \$31,845,974; and the cost of materials was \$146,155,385. The value of the product was \$233,268,729; and the profits of the lumbermen were \$55,267,370, or 30 per cent., and upwards on their capital. The duty is \$2 per thousand feet. The lumbermen, like all beneficiaries of the war tariff, stoutly deny that the duty is added to the price; and if this is so the removal of the duty would not effect the amount of the lumbermen's profits. It may be safely assumed, however, that the cost to the consumer is enhanced by some portion of the duty, though not, perhaps, by the full amount. It may, therefore, be assumed, also, that the cost to the consumer will be reduced by the removal of the duty, though not to the full extent of the duty. The American manufacturer will still have the cost of importation from foreign countries in his favor, and he will take the full benefit thereof. Suppose that the removal of the duty reduces the cost of lumber to the consumer \$1.50 a thousand. This on sawed lumber would be about equal to a little over 12 per cent. reduction on the value of the lumber product. On the figures for 1880 as already given it would mean a reduction of \$28,317,112 and a net profit in round figures of \$27,000,000, or somewhat more than 14 per cent. on the capital invested. What excuse is there in such a showing for any reduction in the present rates of labor, or any threat that such a reduction shall follow the removal of the duty on lumber?



## Chicago Lumber.

It becomes apparent as the season advances the lumber merchants at leading points are not, as the phrase goes, climbing over each other in their anxiety to secure stock for their yards. There have been some heavy purchases made, it is true, but when it is possible to get at the bottom of these transactions it is usually discovered that they were made on a basis somewhat more favorable to the buyers than the current prices for bulk lumber at the market. Trades have been heard of in which large blocks of stock have changed hands in the log at fully \$1 below the figures which were paid for the same kind of lumber a year ago. Those who are buying heavily are probably getting an average on their purchase of somewhere about this sum below the 1887 prices. This theory of the situation is measurably confirmed by the reported weakness of the great bulk supply point for the east—the Saginaw Valley—where all good stock is from \$1 to \$2 off from the opening prices. Some of the shrewdest jobbers and most careful observers of the conditions of the trade are convinced that they can supply themselves with about all the lumber they can find sale for at figures that will give them a full dollar difference in their profit accounts if they succeed in making a selling average equal to last year. While there is some doubt as to the latter point, the situation is not hopeless in this respect. Lumber is weak at distributing points, but a strong effort later in the season, after the heavy buying has been done, may enable operators to recover the little ground now lost.

## THE FRIENDS OF FREE LUMBER.

In the congressional debate on the lumber schedule in the tariff bill, Messrs. Weaver, of Iowa, and Wilson, of Minnesota, made arguments favorable to free lumber, in which they expressed themselves as follows:

Mr. Weaver—Mr. Chairman, the venerable gentleman from Pennsylvania [Mr. Kelly] and the gentleman from Maine [Mr. Reed] cannot both be right. The gentleman from Pennsylvania appeals to the committee not to destroy the lumber industry of this country. How can it destroy this industry if the other contention of the gentleman be correct that the price of lumber is not increased by the tariff? The gentleman from Maine contends that the price of lumber will not be affected. Then I say what harm is there in placing lumber on the free list?

The gentleman from Maine took good care not to deny that the lumber interests are combined in a "trust" for the purpose of limiting the supply and controlling the prices of lumber. It is not only true—historically true, and I refer gentlemen, to an article in the *North American Review*, by Mr. Lloyd, as far back as 1884, and to a recent work published by William C. Cook, of the New York bar; it is not only true that this lumber interest is engaged in a "trust" to limit the supply, and control the price, but it is also true that they control the local dealers, and require them to sell at a schedule price also.

And, sir, by reason of their further combination with the transportation monopolies, no man can engage in the lumber business without the consent of the Lumber Trust, and the transportation companies, which together constitute one of the most unconscionable trusts ever organized in this or any other country. It is organized for the purpose of plundering the people who are far removed from the great centers of lumber manufacture. I challenge the gentleman to deny before the American people that this lumber industry is engaged in a trust, the object of which is to absolutely determine who may, and who may not deal in lumber, to limit the production, and to control the price—a criminal organization at common law because in the nature of a conspiracy in restraint of trade.

Now, as an appeal has been made in behalf of these "trusts" by gentlemen on the other side of the House, I stand here and make my appeal in behalf of the people of the west who consume this lumber. Let this trust take its clutch from the throats of the people, and quit robbing the consumer. Let them pay some respect to other people's industries, which are just as sacred, and should be as inviolable as their own.

Now, I wish to call the attention of gentlemen to the fact that the law of 1883 also put railroad ties of wood on the free list. The railroads buy them ready hewn in Canada, made by cheap Canadian labor, ship them over here by the million, and thus they obtain cheap ties for their roads. But they are unwilling to treat the people with equal fairness. The same law puts the lumber which my constituents must use in constructing their houses, their granaries, and their barns on the dutiable list at the rate of from \$2 to \$3 per thousand feet. This is an unmitigated shame.

It is a plain discrimination in favor of the railroads and against the farmers and builders. This bill, sir, in a broad and catholic spirit, treats the monopolies and people exactly alike. It puts the lumber of the poor man upon the free list and at the same time it leaves the railroad tie on that list also.

Mr. Wilson, of Minnesota—Will my friend permit a suggestion? The gentleman from Maine made a point which seemed difficult to answer, but if any one can answer it the gentleman from Iowa can. He said that if this duty were taken off, the lumbermen of Canada, who are not one-fifth as wealthy as ours, would overwhelm us and run us out of the market. How can you answer that?

Mr. Weaver—That overwhelms me. Ask me an easy one. I tremble for my feeble country and her infant industries. Why try to answer such an argument? It is a mere chimerica of the brain and wholly absurd. It answers itself.

Mr. Wilson—But I do not wish, Mr. Chairman, to be interrupted.

Allow me to say, sir, in this matter that the property investment in the lumber interest equally in my friend's district and in my locality within the last fifteen years has risen in value to an extent I am sure of not less than 300 to 500 per cent., whereas the property of the agricultural community, who are compelled to pay \$2 a thousand feet to support and enrich this lumber interest, has not risen 1 per cent.

These are the facts for our consideration. And yet this tariff law compels the agriculturists, men who purchase from the lumbermen, to pay a heavy tribute to them; and I repeat that within the last fifteen years this agricultural property has not risen 1 per cent. to match the increase of 300 to 500 per cent. which this protection has afforded to the lumbermen. It is time that this condition of things was brought to an end. It is time that we stopped making these poor men support the millionaires. To keep up any longer this state of things is simply to legalize injustice, and although some of my best friends in the world are manufacturers of lumber I cannot vote to sustain this condition of things.

From remarks of Mr. Outhwaite, of Ohio. Take the state of Maine; total value of sawed lumber, \$7,933,868; total value of materials \$4,951,957; and this estimate of material is, of course, at the high price that the manufacturers adopt as their estimate. Take the one sum from the other and you have remaining \$2,981,911. From this subtract the amount of wages paid and divide the remainder by the capital, and it gives you 28½ per cent. on the capital invested. Take the number of employees engaged in that business, and divide that into the total wages paid, and you get as the wages paid to a lumberman during one year \$170. In other words, Mr. Chairman, a man working during the year in this business in the State of Maine gets for his subsistence \$170, while the capitalist upon every \$1,000 invested gets a return of \$285. Is not that a spectacle to show how protection benefits the laborer?

From the same page let us read the figures of the State of Michigan. The amount of wages paid there, as shown by a similar calculation, is in the lumber business \$305 per year, the percentage upon capital invested is 33.7. In other words, the laborer during the year gets \$305, while the capitalist upon each \$1,000 invested gets \$337, or \$32 more than the other laborer receives.

Mr. Reed—That portion of our lumber which is not produced in the United States is obtained solely from Canada. In the United States twenty-four thousand million feet of lumber are cut; the proportion imported from Canada is only about 2½ per cent. and it would be very difficult to make it 10 per cent., under the most favorable circumstances. Now, I do not expect to effect many of the members on the other side by the consideration I am about to submit; but I do say to them that if they were business men, with business education, they would see at once from these figures that there is no possibility of lessening the cost of lumber and material for houses by letting in Canada lumber. The sole effect of it will be that there will be just so much added to the price of Canada lumber, just so much added to the price of Canada "limits." This bill does not touch that; and the result will be that whatever amount of money may by reason of this bill fail to go into the treasury of the United States will go into the pockets either of Canadian subjects or of American subjects who have had the wisdom to purchase lands in Canada—except on the Pacific coast, where, by competition with Chinese labor, it is quite possible some damage may be done to the American industry.

## SAWDUST TURNING INTO SOIL.

Did any of *The Timberman* readers ever make a study of sawdust turning into soil? Doubtless many have, in some measure, given the idea a passing thought, but have not watched the action of nature in resolving back again into its original elements the capital she had lent out over a thousand years ago, to build up the stock in trade of a pine tree. The study is one of engrossing interest, and its results are well worthy of a brief notice in these columns. Twenty-five years ago, East Saginaw, Mich., was a scattering hamlet, built here and there among and along the edges of swamps and bayous,

bordering the Saginaw river. The sawdust and debris of the mills were used to fill up these inequalities, more for the purpose of getting rid of the annoying accumulations, than for any well defined knowledge of the value of such material, or its possible use as a future soil. From year to year the work went on. The swamps and bayous were filled up, and soil was spread on top of the sawdust of variable thicknesses, from sixteen inches to two feet. Strange, as it may seem, there was no settling of the ground, and heavy buildings were erected upon the soil thus made. These buildings are the best in the city, and snow no cracked walls. Sewers are dug through what was formerly a bed of sawdust, and while traces of the original material can yet be found, still there is a clear evidence of the transformation process going on, beheld in each shovel of matter thrown out. It would be difficult to fully and clearly explain this process. It looks as though the exudations rising up from beneath the over-lying debris are continually acting as distilling elements, by which the granules of sawdust gather to themselves earth incrustations, and finally become a homogeneous conglomeration of original soil without undergoing the action of decomposition. This hypothesis may not be any clearer than mud, but it is certain that one of the finest and most substantial cities in Michigan, rests secured today on a bed of sawdust, which latter has resolved itself back into its original elements within a quarter of a century. Can any one account for this?—*Chicago Timberman.*

## MIDLAND'S NEW PLANING MILL.

At the head of our beautiful bay, says the *Midland Free Press*, stands the most complete and best arranged planing mill in the Dominion, being built after the style of A. S. Mariani's mill of Quincy, Ill., which is considered one of the best in the United States. Messrs. Paterson & Hall commenced to build on the 9th of April and will have their mill ready for work this week. The main building is 20x54 ft. stone foundation, sides and roof covered with iron and practically fireproof. The engine house 30x32 ft. is built of stone and covered with metallic roofing. Adjoining the engine house is a shaving vault also of brick and stone, capable of holding three days' shavings, and in case of fire can, by pipes from the boiler, be instantly filled with live steam, one of the most effective agents to extinguish fire. The machinery consists of a double cylinder Lightning Matcher, capacity from twenty to thirty thousand a day. One No. 0 Sticker, capacity 10,000 lineal feet per day. One 26 inch Double Surfacer capacity; 40,000 feet. One Re-Sawer, and one Gang Rip, capacity 20,000 feet. The Re-Sawer was manufactured by an American firm, and the rest of the machinery is of Canadian production. To each machine is attached an automatic indicator which measures the lumber as it passes through. The boiler is made of steel 54 inches by 12 feet and 54-horse power. The engine is 12 x 20 cylinder, slide valve, and about 45-horse power. Engine and boiler were manufactured at the Toronto Engine Works. The shafting, with patent adjustable hangers, is all under the floor as a precaution against accident, as it does away with over-head belting; the pulleys are known as the Dodge wood-split pulleys and are considered the finest made. The mill will be kept clean by a large Sturtevant fan, which by means of exhaust pipes, carries all refuse direct from the machines to the shaving vault, from which it passes through a hopper bottom and is deposited convenient to the furnace door. The dock in connection with this mill is 200 feet long and 45 feet wide, and after the dredging is done vessels may load or unload at the end or either sides. A system of live rolls worked by a chain gear will run down the centre full length of dock, and convey the lumber to the planers as it is sorted. After passing through the machines the lumber is conveyed by rolls into cars on their own siding, or in case cars are not ready it is passed across the track to a large shed where it is protected from the weather for the time being. The object Messrs. Paterson & Hall have in view in erecting their mill here is to supply the Ontario market with every description of dressed lumber and moldings and their enterprise will prove a boon to the builders of Toronto and other large places, but more especially to those contractors who do not own planing mills. It is the intention of this firm to introduce into this country the long leaf yellow pine of Georgia, which makes a very handsome finish for buildings, and will be brought here by vessels from Chicago, but the principal part of the lumber handled will be cut in the mills of the Georgian Bay. It is expected that the mill will dress about 8,000,000 feet annually, but the proprietors will handle two or three million feet besides. The foreman of the mill, Mr. Wm. Pratt, has the reputation of being one of the best planing mill men in Canada, and was formerly employed by Withrow & Hillock, Toronto. The mill will be running shortly and as they have a stock of 1,000,000 feet of seasoned lumber on hand, parties ordering can rely upon prompt shipments.

TRADE REVIEW.

Toronto, Ont.

TORONTO, June 27th, 1888.

CAR OR CARGO LOTS.

Table listing various lumber products like '1 1/2 and thicker clear picks', '1 1/2 and thicker, three uppers', etc., with prices in dollars and cents.

YARD QUOTATIONS.

Table listing yard quotations for items like 'Mill cull boards & scantling', 'Shipping cull boards', 'Scantling & joist', etc.

Ottawa, Ont.

OTTAWA, June 28th, 1888.

Dimensions, Inches. Per M.

Table listing lumber dimensions and prices for Ottawa, including 'Mill culls', 'Cull strips', 'Scantling', 'Laths', 'Stock shorts', 'Outs from stocks', 'Shingles', and 'Difference in planed lumber'.

Hamilton, Ont.

HAMILTON, June 28th, 1888.

Table listing lumber products and prices for Hamilton, including 'Mill cull boards and scantling', 'Shipping cull boards', 'Scantling and joist up', 'Laths', 'Stock shorts', 'Outs from stocks', 'Shingles', and 'Difference in planed lumber'.

St. John, N. B.

ST. JOHN, June 29th, 1888.

Deals, Boards, Scantling, etc.

Table listing lumber products and prices for St. John, including 'Spruce deals', 'Deal ends', 'Scantling', 'Shingles', 'Clapboards', 'Flooring, Dressed', and 'Miscellaneous'.

Goderich, Ont.

GODERICH, June 28th, 1888.

PRICES IN CAR LOTS.

Table listing lumber prices in car lots for Goderich, including '1 inch Mill Culls', '1x6-8-10 & 12, common', '1x6-8-10 & 12, dressing', etc.

Montreal, Que.

MONTREAL, June 28th, 1888.

Table listing lumber prices in Montreal, including 'Pine, 1st quality', 'Pine, 2nd', 'Pine, shipping culls', 'Pine, 4th quality', 'Pine, mill culls', 'Spruce, per M', 'Hemlock, per M', 'Ash, run of log culls', and 'Shingles, 2nd, per M'.

Saginaw, Mich.

SAGINAW, June 26th, 1888.

CARGO LOTS.

Table listing cargo lot prices for Saginaw, including 'Uppers', 'Common', 'Shipping Culls', and 'Mill Culls'.

YARD QUOTATIONS—CAR LOTS DRY.

Table listing yard quotations for Saginaw, including 'Drop Siding', 'Flooring and Siding—Dressed', 'Finishing Lumber—Rough', 'Joist, Scantling and Timber', and 'Wide Select and Common—Rough'.

Philadelphia, Pa.

PHILADELPHIA, June 28th 1888.

White Pine.

Table listing white pine prices in Philadelphia, including 'Mich. uppers, 1 to 2 in. dry', '1 1/2 to 2 in. plank', '3 & 4 in.', '5 & 6 in.', '12 in. flooring quality', 'Edge barn, all widths', and 'Cypress shingles'.

Cargo Lots.

Table listing cargo lot prices for Philadelphia, including 'Yellow pine edge bds', 'Heart face boards', 'Hemlock Boards and Scantling', and 'Shingles and Posts'.

HARDWOOD.

Walnut.

Table listing hardwood prices in Philadelphia, including 'Nos. 1 & 2, 1 in., good dry, Indiana', 'Nos. 1 & 2, 1 1/2 in. good wide, Indiana', 'Nos. 1 & 2, 1 1/2 in. good western, straight', and 'Nos. 1 & 2, 1 in., good western'.

Oak.

Table listing oak prices in Philadelphia, including 'Nos. 1 & 2, 1 in., good western, straight', 'Nos. 1 & 2, 1 1/2 in. good western, straight', and 'Nos. 1 & 2, 1 in., good western'.

Ash.

Table listing ash prices in Philadelphia, including 'Nos. 1 & 2, 1 in., good western', 'Nos. 1 & 2, 1 1/2 in. good western', and 'Nos. 1 & 2, 1 in., good western'.

New York City.

NEW YORK, June 28th, 1888.

Black Walnut.

Table listing black walnut prices in New York City, including '1/2 in., all clear', '1 and 1 1/2 inches', '1 1/2 and thicker', and 'Rejects'.

Poplar, or White Wood.

Table listing poplar prices in New York City, including '1/2 in., 10 inches and over', '3/4 in., coffin boards', '1 inch, 10 inch and over', and '1 inch, 8 in. and over'.

Dressed Poplar.

Table listing dressed poplar prices in New York City, including '1/2 inch panel', '3/4 inch panel', '4, 5, 6 inch casing', and '7, 8, 9, 10 inch casing'.

Ash.

Table listing ash prices in New York City, including '1 inch, white', '1 1/2 to 2 inch', and '2 1/2 to 4 inch'.

Oak.

Table listing oak prices in New York City, including '1 inch plain sawed', '1 1/2 to 2 inch', 'Thicker', and 'Quarter-sawed, white, all clear, 6-'

Cherry.

Table listing cherry prices in New York City, including '1/2 in., white & clear', '1 inch', '1 inch strips', and '1 1/2 to 2 inch'.

Miscellaneous.

Table listing miscellaneous lumber prices in New York City, including 'Chestnut, clear', 'Chestnut common', 'Basswood white', 'Basswood common', 'Maple, clear', 'Birch, clear', 'Birch, 1 1/2 and 2', and 'Cottonwood'.

Boston, Mass.

BOSTON, June 29th, 1888.

Western Pine—by car load.

Table listing western pine prices in Boston, including 'Uppers, 1 in.', '1 1/2, 1 1/2 & 2 in.', '3 & 4 in.', 'Selects, 1 in.', '1 1/2, 1 1/2 & 2 in.', '3 & 4 in.', 'Moulding boards, 7 to 11 inch clear', '60 per cent clear', and 'Fine common 1 inch'.

Eastern Pine—Cargo or Car Load.

Table listing eastern pine prices in Boston, including 'Nos. 1, 2 & 3', 'Nos. 1, 2 & 3', 'Ship'g bds & coarse refuse', and 'West'n pine clapbds'.

Spruce—by Cargo.

Table listing spruce prices in Boston, including 'Scantling and plank, random cargoes', 'Yard orders, ordinary sizes', 'Yard orders, extra sizes', and 'Clear floor boards'.

Lath.

Table listing lath prices in Boston, including 'Spruce', 'Shingles', and 'Pine'.

Oswego, N. Y.

OSWEGO, June 29th, 1888.

Pine.

Table listing pine prices in Oswego, including '1 1/2, 1 1/2, 2 and thicker uppers', '1 1/2, 1 1/2, 2 and thicker', '1 inch selected sidings', and '1 1/2, 1 1/2, 2 and thicker'.

Table listing pine prices in Oswego, including '1 & 1 1/2 box or No. 2 culls', '1 & 1 1/2 sidings No. 1 dressing and better', and '1x10 & 12x12 to 16 feet dressing and better'.

Table listing pine prices in Oswego, including '1 & 1 1/2 in. strips 4 to 7 wide selected', '1 & 1 1/2 in. strips 4 to 7 wide selected', and '1 & 1 1/2 in. strips 4 to 7 wide selected'.

Table listing pine prices in Oswego, including '1 1/2, 1 1/2, 2 & 3 in. 1st & 2nd quality', '1 & 1 1/2 1st & 2nd quality', and '1 & 1 1/2 1st & 2nd quality'.

Table listing pine prices in Oswego, including '1 & 1 1/2 1st & 2nd quality', '1 & 1 1/2 1st & 2nd quality', and '1 & 1 1/2 1st & 2nd quality'.

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Table listing pine prices in Oswego, including '1 & 1 1/2 1st & 2nd quality', '1 & 1 1/2 1st & 2nd quality', and '1 & 1 1/2 1st & 2nd quality'.

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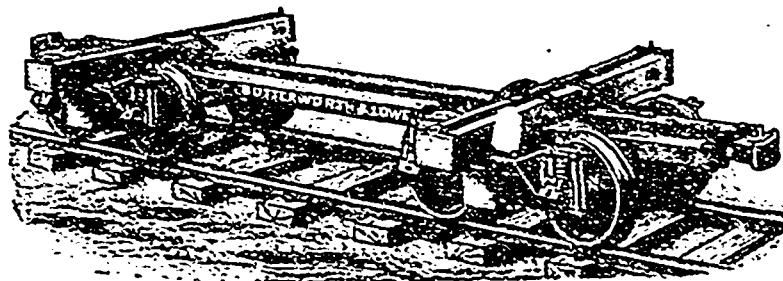
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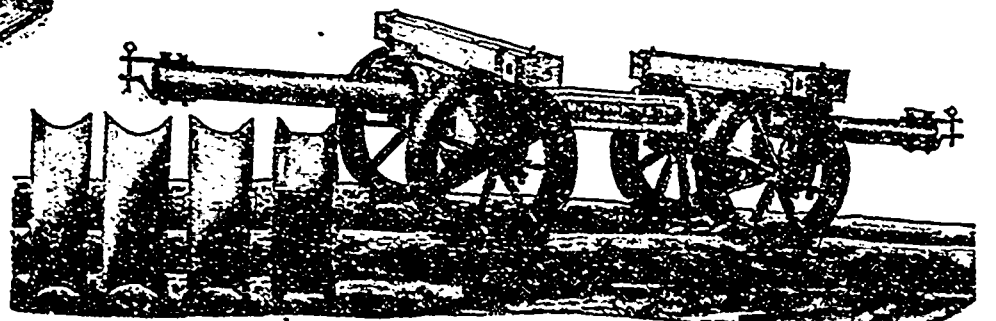
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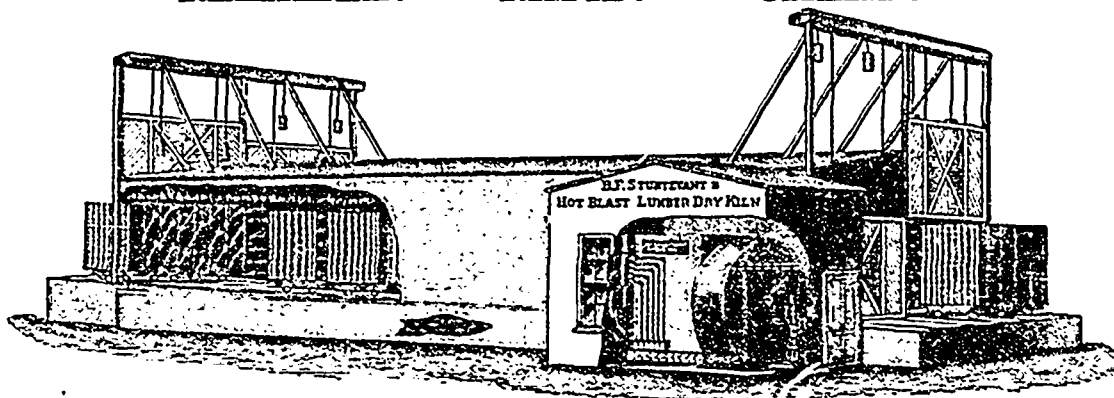
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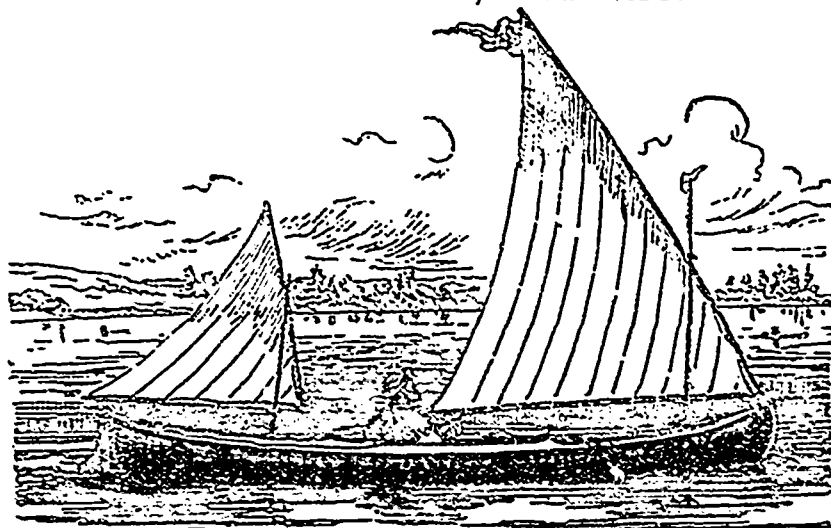


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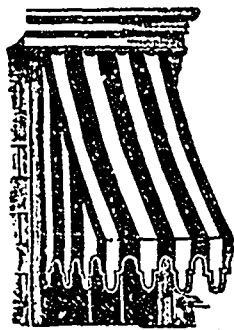
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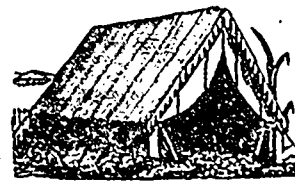
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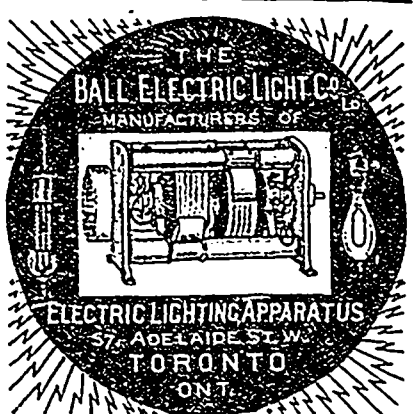


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MOST complete book of its kind ever published. Gives measurement of all kinds of Lumber, Logs, Planks, Scantling, cubical contents of square and round Timber; hints to lumber dealers; wood measure; speed of circular saws; care of saws; cord-wood tables; felling trees; growth of trees; land measure; wages, rent, board, interest, stave and heading bolts, etc. Standard book throughout the United States and Canada. Get the new illustrated edition of 1882. Ask your book-seller for it. Sent post-paid for 35 cents.

G. W. FISHER, Box 238, Rochester, N.Y.,  
or A. G. MORTIMER, Peterboro', Ont.



GRATEFUL-COMFORTING.  
**EPPS'S COCOA.**  
BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of the well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame." - *Civil Service Gazette*.

Made simply with boiling water or milk. Sold only in packets, by Grocers, labelled thus:  
JAS. EPPS & CO., Homeopathic Chemists,  
London, England.

COLUMBIA \* REFINING \* CO.'Y  
NEW YORK

CYLINDER,  
ENGINE AND  
MACHINERY OILS.  
Sole Manufacturers of the  
*Royal Lubricant and Royal Crank  
Pin Lubricant,*

Which is specially adapted for engines and shafting, and is a saving of 50 to 75 per cent. over oils.  
JOSEPH HARTON & CO.,  
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SOLE AGENTS FOR CANADA.  
Telephone 600.

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(LIMITED.)  
- MANUFACTURERS OF -

## Hydraulic Cement

PARTICULARLY adapted for Dams, Smoke Stacks, Foundations, Culverts, Cisterns, Cellars, etc.

ENDORSED BY LEADING RAILWAYS AND CONTRACTORS

ROACH + LIME,

For Building, Plastering, Gas Purifying, Paper Manufacturing, &c.

## Galt \* Machine \* Knife \* Works.



MACHINE KNIVES

OF EVERY DESCRIPTION FOR

Planing, Moulding & Stave Cutting.

SEND FOR PRICE LIST.

PETER HAY, - - - GALT, ONT.

## TO MILL OWNERS, MANUFACTURERS

AND ALL WHO ARE USING

## LEATHER \* BELTING

IF YOU WANT BELTING

Which will Run Straight on the Pulleys,  
Which is Thoroughly Well Stretched,  
Which will not Tear at the Lace Holes,  
Which will give Complete Satisfaction.

- SEND TO -

F. E. DIXON & CO.

MANUFACTURERS OF

PATENT LAP-JOINT STAR RIVET  
\* LEATHER \* BELTING \*  
70 King Street East, Toronto.

Sole Agents in Canada for the

## CELEBRATED PHOENIX OIL

The Only Perfect Belt Dressing.

All our Belting is sold at the Canadian price list. Please compare before purchasing. Send for Discounts and our Pamphlet on Belting.

MARKET QUOTATIONS.

(Continued from page 11.)

Buffalo and Tonawanda, N. Y.

BUFFALO, June 27th, 1888.

Table of lumber prices for Buffalo and Tonawanda, N. Y. Includes categories like Norway Pine-Rough, White Pine-Rough, and Dressed Lumber.

Dressed Lumber.

Table of dressed lumber prices including Base and Casing, Flooring, Ceiling, and Siding.

Shingles and Lath.

Table of shingles and lath prices including Shingles and Lath.

Detroit, Mich.

DETROIT, June 28th, 1888.

Uppers, Selects, Stocks, etc.

Table of lumber prices for Detroit, Mich. Includes Uppers, Selects, Stocks, etc.

Flooring, Siding, Ceiling, etc.

Table of flooring, siding, ceiling, etc. prices for Detroit, Mich.

Bill Stuff and Culls.

Table of bill stuff and culls prices for Detroit, Mich.

Shingles and Lath.

Table of shingles and lath prices for Detroit, Mich.

Burlington, Vt.

BURLINGTON, June 28th, 1888.

Table of lumber prices for Burlington, Vt. Includes Canada Pine Siding.

Table of lumber prices for Burlington, Vt. Includes Canada Pine Stacks.

Table of lumber prices for Burlington, Vt. Includes Canada Pine Stock.

Table of lumber prices for Burlington, Vt. Includes Canada Pine Stock.

Table of lumber prices for Burlington, Vt. Includes Canada Pine Stock.

Table of lumber prices for Burlington, Vt. Includes Canada Pine Stock.

Table of lumber prices for Burlington, Vt. Includes Canada Pine Stock.

Above prices delivered on a rate of \$30 per car load

Manitoba.

Following are the list prices of the Manitoba Lumber Association, f. o. b. at Rat Portage, Keewatin and Norman.

4th, do. \$17; 1st, 5 inch, \$31; 2nd, do. \$26; 3rd, do. \$19; 4th, do. \$16; 1st, 4 inch, \$31; 2nd, do. \$26; 3rd, do. \$18; 4th, do. \$15.

MANITOBA MATTERS.

[Correspondence M. V. Lumberman.]

WINNIPEG, June 11th. - The city lumber firms report an active inquiry for lumber from all over the province, and it is now certain that business will show an improvement over any year since probably 1882.

A meeting of the Northwest Ontario and Manitoba Lumber association was held at Norman, Lake of the Woods, recently, to consider the advisability of continuing the list prices.

A movement was on foot to erect a large saw mill at Brandon, Man., this season, but it will likely now be abandoned, as an attempt to get logs down to that point has probably ended in a failure.

In railway construction, there are now three roads being built in Manitoba. The Manitoba & North-western company has just completed a contract for an extension of about twenty five miles, and work has been commenced.

There has been good arrivals of pine and spruce deals at Liverpool from Quebec of late. The latest London wood circular to hand reports that none of the present season's Canadian timber is yet to hand in that market.

shorter railway haul of the lumber to the city, there would be a considerable saving in towage. At present the logs come from the territory principally to the south and east of the lake, and mills established in that locality would be considerably nearer the timber region than the present mills.

Wood Fiber for Paper.

The extent of the manufacture of ground and chemical wood fiber for paper makers' is not appreciated by those who have not investigated this industry.

From a statement presented to the House by congressman Dingley, it appears that wood fiber is manufactured in 21 States. The capital employed is about \$20,000,000, number of men employed 22,000, tons of fiber made 225,000.

Table listing manufacturers of wood fiber for paper, including Androscoggin Pulp Co., Brunswick, Indurated Fiber Co., North Gorman, etc.

The daily production of chemical wood fiber in Maine is as follows:

Table listing manufacturers of chemical wood fiber in Maine, including Poland Pulp and Paper Co., Canton, Somerset Fiber Co., Fairfield, etc.

The production and use of mechanical wood fiber began about 1868, and within a few years has rapidly increased. All the patents have expired except those on a recent process known as sulphite.

Before 1883, the duty on imported wood fiber, which is made in Canada, Norway, Sweden, and Finland, as well as in this country, was 20 per cent. In 1883 the duty was reduced to 10 per cent., and since that date foreign competition has increased.

EUROPEAN NOTES.

There has been good arrivals of pine and spruce deals at Liverpool from Quebec of late. The latest London wood circular to hand reports that none of the present season's Canadian timber is yet to hand in that market.

Sales of Canadian Timber.

Note of Messrs. Singleton, Dunn & Co.'s public sale at Yorkhill, Glasgow, 6th June, 1888:

ST. JOHN, N.B., SPRUCE DEALS.

Table with columns for Price (Pcs), Quantity, and Dimensions. Includes items like 67, 116, 247, 178, 234, 493, 864, 432, 190, 240, 331, 454, 290, 292, 290, 361, 361, 532, 2560, 424, 464, 362, 362, 911, 200, 243, 331, 725, 334, 68, 327, 119, 1143, 1651.

1st QUEBEC PINE DEAL ENDS.

88 6/8 x 12/23 x 3 2/3

QUEBEC RED PINE DEALS.

551 12 x 11 x 3 11d.

The most important items in the import list for the past week, besides several large consignments of pine deals by the regular liners from Quebec and Montreal, are two large cargoes of sawn and hewn pitch pine.

The official returns of the import of wood goods for the month of May at the port of London, go to show that there is a decrease of 17,909 loads of hewn timber as compared with last year for the same month, and a still more noticeable decrease in the quantity for the five months as compared with 1887.

An active trade continues in American whitewood and a large distribution continues to be made, while prices are fairly maintained.



SEALED TENDERS addressed to the undersigned, and endorsed 'Tender for Post Office etc., Pembroke, Ont.' will be received at this office until Friday 6th July, 1888.

Specifications and drawings can be seen at the Department of Public Works, Ottawa, and at the office of U. H. McKimm, Collector of Inland Revenue, Pembroke, Ont., on and after Friday 22nd June, and tenders will not be considered unless made on the form supplied and signed with actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to five per cent. of amount of tender, must accompany each tender. This cheque will be forfeited if the party declines the contract or fails to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order, A. GORFILL, Secretary.

Department of Public Works, Ottawa, 20th June, 1888.

THE RATHBUN COMPANY, DESERONTO, ONT., MANUFACTURERS OF

TERRA COTTA FIRE-PROOFING

For Use in Old and New Buildings.

Endorsed by Leading Architects. Absolutely Fire-proof. About as Cheap as Wood or Brick. Weight One-Third that of Brick. Does not Crack on application of Heat or Water. Deadens Noise. Gives Warmth in Winter; Coolness in Summer.

FOR SALE BY AUCTION

Friday, 6th July, 1888.

VALUABLE TIMBER LIMITS,

THE PROPERTY OF

HAMILTON BROTHERS

IN LIQUIDATION.

W. H. LEWIS, Auctioneer.

Will offer for sale by auction at OTTAWA CITY the following Timber Limits, comprising on Dumoine River and tributaries, Black River and Schyan River, All in the Province of Quebec.

751 1/2 SQUARE MILES

with large and well cultivated farms, general plant, supplies and stock in connection therewith, and on Gatineau River and tributaries, in the Province of Quebec.

934 1/2 SQUARE MILES

with farms, plant, supplies, etc., etc. Plans of above limits can be seen at Government Crown Timber office, or Hamilton Brothers' office, Sussex street, Ottawa city. Immediate transfer of above on sale being effected.

ALSO, with possession, say, the 1st December next, the property known as the Hawkesbury Mills, owned by the above firm, and used for manufacturing timber from above limits; situated on the Ottawa River, in the Province of Ontario, midway between Ottawa and Montreal, consisting of four saw mills and lath and scantling mill additions, driven by water, with sawing capacity of over 2,000,000 Feet Weekly.

blacksmiths', fitting, wheelwrights', and carpenters' shops, etc., etc. Extensive wharves and piling space for forty million feet of lumber. Large brick dwelling house with extensive grounds; ditto stone house, and seven good houses built of wood, and one hundred tenements now occupied by employees.

Valuable farm in the vicinity of over 1,000 acres, a large portion of which is covered with excellent timber. For terms of sale plans of properties and all particulars apply to Mr. Chas. Magee, Ottawa.

J. J. C. ABBOTT, GEORGE W. HAMILTON, G. C. HAMILTON, C. F. GILDER, Trustees.

Lumbermen

SHOULD SEND FOR A COPY OF

Scribner's Lumber & Log Book.

OVER ONE MILLION ALREADY SOLD.

Price 35 cents post paid.

ADDRESS

A. G. MORTIMER, PETERBOROUGH, ONT.

J. L. JONES WOOD ENGRAVER 10 KING ST EAST TORONTO SEND FOR PRICES

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

DRY LUMBER FOR SALE - 30 M 1 1/2 IN maple flooring for sale, 10 M 3/4 in. maple, 15 M 1 1/2 and 2 in. elm. Box 60, Uxbridge.

CHEMAINUS SAW MILL, B.C. - FOR SALE - a saw mill; nearly new, fully equipped, with water-power and steam-engine, a powerful steamer, stows, large real estate and timber leases; also hotel, store, manager's and workmen's houses; capacity 50,000 feet per day. Apply to Croft & Angus, Victoria, British Columbia.

FOR SALE - CHANTLER'S MILL - SHINGLES and lumber mill; never been run, owing to death of owner; will be sold cheap, and liberal terms will be given; good chance for party with small means; this mill is situated five miles from Bracebridge, on Lake Muskoka; logs can be had from any point on the lake with excellent booming ground. Apply to S. C. Kanady & Co., 18 Wellington east, Toronto, or G. W. Taylor & Co., Gravenhurst, Ont.

ATTENTION, LUMBERMEN - FOR SALE - at a sacrifice - new saw mill and one thousand acres pine timber; Parry Sound district. Geo. Coote & Son, Dundas.

SAW MILL - IN WESTERN TOWN - WITH woodworking machinery, mostly new; suitable for furniture or planing mill; a bargain, lithograph of buildings and particulars on application. Box 504, Globe office, Toronto.

TOMILLERS, LUMBERMEN AND OTHERS having capital awaiting good investment, splendid chance to purchase a 1 patent process flour mill, together with saw mill and timber limits on easy terms. Apply for particulars to Drawer 9, Minnedosa, Manitoba.

FIRST-CLASS LUMBER AND SHINGLE mill doing large trade; also, timber mill and large number of logs, for Toronto real estate. J. Huggard, 162, Dundas street, agent.

A LARGE PLANING FACTORY - WITH lots of power - adjoining our summer storage yard. William Leak & Co., Dundas street, Toronto.

1,000,000 - FOR SALE - ONE million lath. F. O. B. cars at Gravenhurst. Donogh & Oliver, Lumber Dealers, Toronto.

FOR SALE - STEAM SAW MILL - IN GOOD repair. Locomotive boiler, 30 h.p., and inspirator; engine 25 h.p. saw rig and carriage, edger, butter, shafting, belting, saws, patent canter and bull wheel; would take part lumber or city lots. Box 60, Uxbridge.

LUMBERMEN - VECTOR WANTED - IMMEDIATELY - one thoroughly up in inspection of pine and hardwood lumber, and who has a good general knowledge of the business. Apply by letter only to T. W. Walker, No. 4 Imperial Bank Buildings, Toronto.

TIMBER LIMITS FOR SALE, TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FENTON & Co., 50 Adelaide Street, East, Toronto.

FOR SALE CHEAP.

A WATERPOWER CIRCULAR SAW AND Shingle Mill with ten acres of cleared land, log house and stable situated on South river, about 4 1/2 miles from Trout Creek Station on the Northern Pacific Junction R. R., convenient to School, Church and Post Office and a large settlement in Hainsworth. Also about 30,000 feet of dry Hardwood lumber, cut and piled about two years, and about 50,000 feet of Hardwood sawlogs, principally Birch. If not sold sooner, will cut to order this coming summer. For information apply to THOMAS CORKERY, Barrett, Ont.

SAW MILL FOR SALE.

FOR SALE, IN THE VILLAGE OF BELMORE, Sawmill in first-class running order. Will be sold with or without stock. For terms, apply to H. R. PERKINS, Belmore, Ont.

PINE TIMBER LIMITS FOR SALE.

Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each, great bargain. Also limits in Georgian Bay Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies. Light iron and steel rails in stock.

Saw and Shingle Mill.

FOR SALE - A first class saw and shingle mill in good running order water power. For particulars apply to

WM. HAMILTON, Athlone, Ont.

LOCOMOTIVES FOR SALE.

Three second-hand locomotives in working order, rails and other equipment. One locomotive boiler suitable for saw mill purposes.

JOHN J. GARTSHORE, 49 Front Street West, Toronto.

TO LUMBERMEN.

Young man, (26) married, would accept permanent engagement. First-class penman, accountant and correspondent. Thorough practical knowledge of every department in the trade - the woods, the mill, the yard and the office. Good salary expected. Unquestionable character and references.

"BETA," Care of CANADA LUMBERMAN.

J. K. POST & Co., LUMBER MERCHANTS

And Shipping Agents. OSWEGO, N. Y.

MACHINERY FOR SALE

H. W. PETRIE'S list of Sawmill and general Wood-working Machinery, for quick delivery.

- ONE new 2 or 3 block sawmill with 6-inch saw, ONE saw mill with timber limit, in Parry Sound, ONE 2-block mill, small portable size, ONE automatic sawing machine, Bayley make, ONE 60-inch inserted and one 64-inch solid saws, TWO stove cutters with parts, ONE gang lath mill, new, ONE Waterous self-feed lath mill and bolter, ONE Goldie & McCulloch Hall self-acting shingle machine, ONE self-acting shingle machine, Green Bros.' make, ONE Waterous self-acting shingle mill and jointer, ONE Eureka self-acting shingle machine and jointer, 1. Frenchette, maker, St. Hyacinthe, P.Q., TWO Doherty hand swing machines, ONE upright swing with 40-inch saw, EIGHT wheel jointers, various makers, THREE drag saw machines, ONE 24-inch planer and matcher, Rogers' make, ONE new eclipse planer matcher and moulder, Galt make, ONE 24-inch planer and matcher, Pictor make, TWENTY-ONE INCH planer and matcher, EIGHTEEN-INCH planer and matcher, LITTLE Giant pony planer and matcher, NEW Economist 24-inch planer and matcher, ONE 27-inch revolving bed double surfacer, Galt make, ONE 24-inch surfacer, McKechnie & Bertram, ONE 24-inch pony planer, Frank & Co. builders, ONE 20-inch pony planer, Frank & Co. builders, TWENTY-FOUR-INCH surfacer, Kennedy make, TWENTY-FOUR-INCH surfacer, hardwood bed, TWENTY-TWO-INCH surfacer, wood bed, EIGHTEEN-INCH surfacer, all iron and steel, SIXTEEN-INCH buzz planer, Galt make, THREE SIDE moulder, all brass heads, Rogers' make, THREE SIDE moulder No. 2 Cant Gourlay make, TWO one-side moulders, McKechnie & Bertram make, ONE one-side moulder, wood frame, NEW 2-side moulder, Cant Bros' make, Galt, TENNING machine, double cope, Goldie & McCulloch, ONE J. A. Fay tenoner, small size, TWO Ross tenoners, ONE double cope tenoner, McKechnie & Bertram, BLIND slat tenoner, Cowan build, POWER morticer, Goldie & McCulloch make, TWO power morticers for heavy work, LARGE stock of foot morticers, new, at \$15 each, UPRIGHT boring machine with column, SIX power scroll saws, various makes, ONE 34-inch band saw, Hamilton Tool Co., TWO new band saws, Galt make, NEW 34-inch pedestal and 24-inch bracket band saw, ONE upright Goldie & McCulloch shaper, NEW iron top shaper, Cowan make, SHARPER heavy iron column, Cant Bros' make Galt, ONE wood frame shaper and counter shaft, ONE velocipede foot power shaper, Barnes, ONE automatic handle lathe, Sheldon Bros., ONE handle or g. vice lathe, Bailey, ONE axe handle or spoke lathe, new, ONE Blanchard spoke lathe, Fay make, ONE broom handle lathe, wood frame, NEW wood splitting machine. Send for photo. BOBBIN lathe with cutters for cotton and woolen mills, ONE iron bowl machine, American make, SET of hoop machines, Goderich make, SET match machinery for round matches, LOT of lumber and log cars for sawmill use, FOUR pole road cars, 7 feet 10 inches gauge, SANDPAPER, new, Galt make, FOOT mitering machine, Cant Bros. make, ONE chair mortising and boring machine, ONE set spoke machines, Fay make, Cincinnati, ONE knife grinder, Galt make, SIX saw benches, cut off and ripping, ONE hand wiring machine, TWO new wood turning lathes with rests, etc, ONE ceading and moulding attachment for planer and matcher, LOT of moulding and matcher cutter heads, SEND for list 13 and 14 and mention wants, Address H. W. PETRIE, Brantford, Ont.

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# THE POLSON IRON WORKS CO. LIMITED.

(Successors to Wm. Polson & Co., Toronto, and Thos. Worswick & Co., Guelph.)

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### \*HOISTING\* ENGINES\*

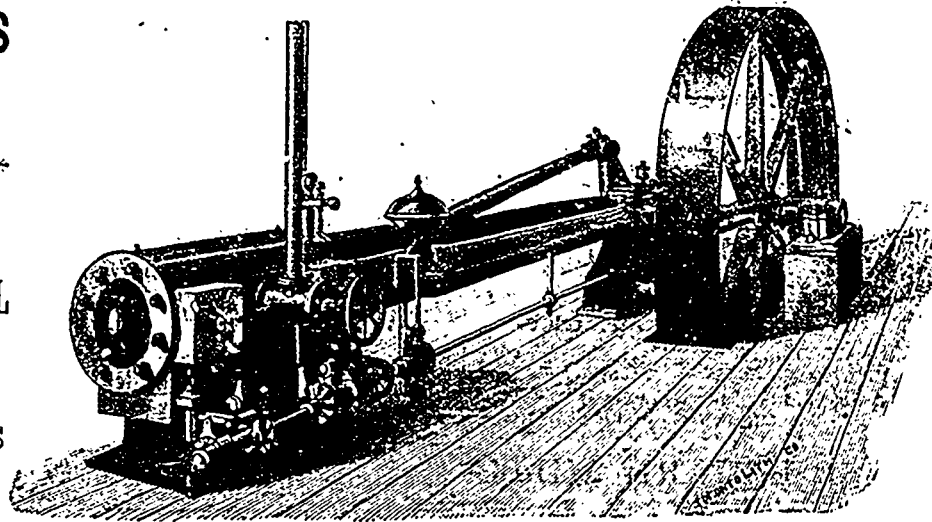
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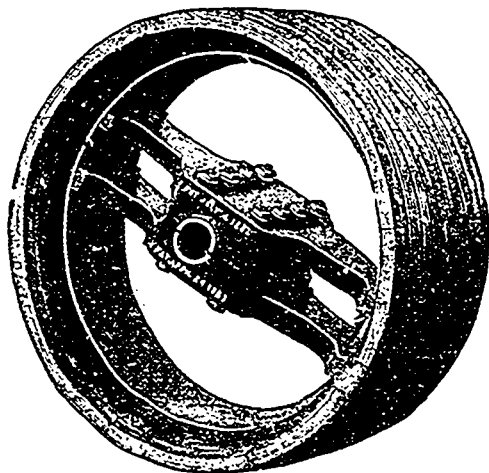
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DEALERS.

OFFICE AND WORKS: ESPLANADE STREET EAST, (FOOT OF SHERBOURNE STREET),

Toronto, Ontario.

## DODGE PATENT WOOD SEPARABLE OR SPLIT PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST,  
BEST BALANCED AND MOST CONVENIENT  
PULLEY IN THE WORLD.

With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.



As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities:—

Portion of Circumference embraced by Belt.	Rel. value of leather belt.		Portion of Circumference embraced by Belt.	Rel. value of leather belt.	
	On Wooden Pulleys.	On Iron Pulleys.		On Wooden Pulleys.	On Iron Pulleys.
.20	1.50	1.42	.20	1.90	1.40
.30	2.43	1.69	.30	2.40	1.70
.40	3.26	2.02	.40	3.30	2.00
.50	4.38	2.41	.50	4.40	2.40
.60	5.38	2.87	.60	5.90	2.90
.70	7.90	3.43	.70	7.90	3.40

Morrison's Encyclopedia, Haswell's Engineers and Mechanics' Pocket Book

A Dodge Patent Wood Pulley is better than iron from the

fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression along, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the center, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are: It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or

set screw in the ordinary way, cannot be screwed without tilting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft, also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell, the acknowledged authority and most quoted by American mechanics, summarizes thus: The ratio of friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 80 Adelaide St. W., Toronto.