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THE CANADA LUMBERMAN.

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NUMBER 12. }

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THE CANADA LUMBERMAN

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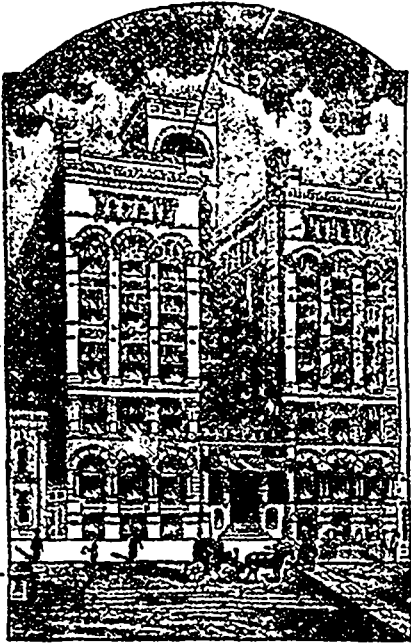
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OUR NEW QUARTERS.

The Offices of THE CANADA LUMBERMAN have been removed to the

CANADA LIFE BUILDING,
King Street, West, Toronto.

TO VISITING LUMBERMEN.

LUMBERMEN visiting Toronto are invited to use the office of the LUMBERMAN as their own. We shall take pleasure in supplying them with every convenience for receiving and answering their correspondence, and hold ourselves at their service in any other way that they may desire.

It has been conservatively estimated that the lumber cut in the American Pacific Northwest this year will be over two billion feet, valued at \$25,500,000. Of this amount Washington will cut about 1,250,000,000 feet and Oregon about 750,000,000 feet.

THE Superior Court of Quebec has recently been occupied in trying cases, dealing with matters arising from the defalcations of Mr. C. G. Davies, of Quebec, the local banks seeking to recover by them from Messrs. Bryant, Powis & Bryant, Limited, of London, the sum of £13,000.

THE lumber trade at Quebec continues inactive and the demand is as slack as it was in the spring. The only rafts sold were those of Thistle & Carswell, Hurdman & Co., William Mackay and Alexander Barnet, of Renfrew. There are many millions of feet of lumber lying in the coves near the city.

A CARGO of over 1,000,000 feet of ship stuff is on its way from Vancouver, B. C., per the ship Titan, to Wilmington, Del. The material is to be used in the ship yards of Wilmington and consists of big timber and decking. The purchase was made by the George W. Bush & Sons Lumber Company from the Royal City planing mills, and is due to the excellence of the lumber as compared with the Oregon and Washington saw mills.

MR. J. B. CHARLESON, who was sent out by the Quebec Government to examine and report upon the unexplored forests at the headwaters of the Upper Ottawa, reports that a region of 2,500 square miles north of the Ottawa, from Abbitibi in the west to Camachmaga in the east, is fertile in soil, temperate in climate and covered with rich forests of the finest pine, spruce and other commercial woods of the greatest value, and that the means of getting out this timber by water are excellent.

THE Grand Trunk railway has been unable to supply the demand for freight cars for some months past. The trouble is attributed to incapable management and the use of Canadian cars for carrying through freight from the western states to the seaboard. Deputations to the general manager have proved ineffectual, and there is now some talk of shippers holding a meeting to consider the question. It would appear that the solution of the question lies in the assumption of the railway system of Canada by the Dominion Government.

FOR years past the large amount of British Columbia lumber shipped to Australia has been carried in sailing vessels, taking between two and three months on the trip; but these long voyages will soon be a thing of the past if the scheme of shipping lumber by steamers proves a success. The first move in the direction of lumber steamers between British Columbia and the colonies has already been made. The steamer Remus is at Moodyville loading with lumber for Melbourne, Australia, and if successful the time between Australia will be reduced from three months to one, which would not only be the means of giving an impetus to the lumber trade on this Pacific coast, but would increase our trade relations with the Antipodes.

A MEETING of the Tonawanda and Buffalo lumber dealers was held at the Merchants' Exchange committee rooms in Buffalo, on the 1st ult., for consultation about business generally, and to establish prices. A list of prices was agreed upon, and a joint committee appointed in order to more fully express the views of the two associations, it being the intention to have a list of prices printed by each association, following the plan that the Chicago Exchange adopted long since. Statements made by leading members of the trade divulged the fact that there was a strong demand for low grades and not enough lumber on hand or in sight to supply the demand, and it was thought necessary to advance prices materially, from No. 1 cutting up to uppers. These markets now rank second only to Chicago as distributing points.

THE Canadian Pacific railway has recently received important concessions at St. John, N. B., which may to some extent affect the lumber trade. It has acquired a branch of railway running from its own line to the wharves on the western side of the harbor, the property including wharf and warehouse facilities. The property

was sold by the Dominion government to the city for \$40,000, and the city handed it over to the Canadian Pacific under lease for 999 years, and also agreed to exempt it from taxation for 20 years. The railway company engages to provide proper terminal facilities. In 1889 one hundred and thirty-five million feet of lumber were shipped from Ottawa to Portland and Boston, destined for the South American market, and it is considered by many to be within the range of probability that the shipments of lumber from Ottawa to South America may be diverted to the port of St. John.

THE work in the woods in the Ottawa district during the coming winter will be very small compared with that of former years, as hardly two-thirds of the number of shanties in operation last season will be worked the coming winter. Wages are a little in advance of what were offered a month ago. Log makers demand from \$18 to \$25 per month; teamsters, \$15 to \$17 and road makers, \$13 to \$15. Very little square timber will be taken out by the lumbermen in the Ottawa district as the market for square timber is dull, and the stock on hand ready for sale is enormously large. Some 8,000,000 cubic feet were cut in the Ottawa Valley last winter, whereas this winter there will only be about 500,000 cubic feet. About the only lumbermen going into it this year are Fraser, of Westmeath, Barnet & Mackey and Thistle & Carswell, of Renfrew, who are taking out a small raft each on the Petterawawa river, which will probably average 125,000 cubic feet each.

ACCORDING to the report of the Commissioner of Crown Lands, Province of Quebec, for the twelve months ending June 30th, the total revenue of the department during that time amounted to the large sum of \$918,627.77, the highest figure attained since Confederation. Of this amount \$59,870.99 were received from the sale during the twelve months of 129,214 acres of Crown Lands, \$51,580.98 for settlement lands, and \$7,985 for mining lands. On the 30th June, the quantity of unconceded Crown Lands, subdivided into farm lots, amounted to 7,368,066 acres, the increase over the figure of the previous year arising from the surveying of 72,722 acres more since then, and the resumption by the Crown of 31,710 acres through the cancellation of certain sales. Of clergy reserve lands, 3,780 acres were sold, and on the 30th of June last, the extent of these lands still in the Government's hands amounted to about 130,509 acres. \$11,896.96 were collected from the Jesuits' Estates. Gold mining licenses yielded the sum of \$96; \$9,811.75 were received from the leasing of fishing privileges in the salmon rivers and inland lakes, while timber dues, ground rents, produced the large sum of \$806,051.69. In his remarks the Commissioner says that the general revenue of the Department has exceeded the estimates by several thousand dollars, but he notes with regret that the receipts from the Woods and Forests branch has not come up to the mark, the circumstance being due to the sudden fall in the price of square timber, general dulness of the European market, and the heavy import duties in the United States on sawn lumber, all of which has contributed not only to prevent the descent of the timber but to retard the collection of timber dues and other important sums owing to the Department. Mr. Duhamel believes, however, that the abolition of the Canadian export duty on logs will lead to a marked improvement in the actual state of things, and that the revenue of the department next year will, at least, equal its figure this year.

THE New York Export Lumber Company, which virtually represents the lumber trade between the St. Lawrence and South America, has closed its yards at Hochelaga for the season, having despatched its last shipments. The shipment of timber of all kinds from the St. Lawrence ports this year show an immense falling off as compared with last year. The total shipments from Hochelaga have been 3,862,699 feet, as against 22,876,132 feet in 1889, while the quantity sent from other ports on the St. Lawrence has been 3,798,000, against 12,292,910 last year, making a grand total of shipments from the St. Lawrence for 1890 of only 7,660,699 feet, against 35,313,573 feet in 1889. This includes for each year timber of every sort, viz., spruce, pine, hardwood, and what is technically known as "small stowage," and exhibits a falling off for the season of 27,652,874 feet. The last smallest season within the decade was that of 1876, when the shipments from the St. Lawrence, all ports, were only 3,437,000 feet, or 4,223,699 feet less than this year. In 1877 the season was little better, only 8,787,928 being shipped. The falling off this year is attributed to the political disorder in South America.

THE cutting season of the Ottawa mills is now practically over, and as nearly as can be ascertained the output of sawn lumber in the mills of the Ottawa district will amount to about 598,000,000 for all grades high and low, and the value of this lumber at the established average would be \$9,568,000. Although the amount is much less than last year's output, nevertheless it is a very creditable showing considering the reasons for the decrease are many. The estimates for the season are given as follows:

J. R. Booth	85,000,000
Bronson & Weston	62,000,000
Perley & Pattee	50,000,000
Piercy & Co	45,000,000
Hurdman & Co.	24,000,000
MacLaren & Co. (Ottawa)	25,000,000
E. B. Eddy & Co.	10,000,000
McClymont	7,000,000
Gilmour	35,000,000
McLaren & Co. (Buckingham)	10,000,000
Ross Bros.	8,000,000
McCraeken, Boyle & Co. (Templeton)	5,000,000
W. C. Edwards (Rockland)	45,000,000
Hawkesbury Lumber Co.	50,000,000
Ottawa Lumber Co. (Calumet)	12,000,000
Canada Lumber Co. (Carleton Place)	40,000,000
McLachlin Bros. (Arnprior)	50,000,000
Gillies Bros. (Breside)	10,000,000
Miscellaneous	25,000,000
Total	598,000,000

HARBOR COMMISSIONER BALGER, of Three Rivers, in a report to the Dominion government, says the decline of trade in that important lumbering centre is not merely due to the general condition of this business, nor the gradual reduction in the produce of the timber forests, but to the absence of proper shipping facilities in the harbor. The want of the necessary space for piling and sorting the lumber is forcing the merchants and shippers to send the produce of the mills in the district of Three Rivers by lighters to Quebec and to Montreal, for transhipment into sea-going vessels instead of shipping direct, as in former years, and as both producers and shippers intended to do when the harbor commissioner was established, and hopes were entertained that Three Rivers would prove to be the nearest and most suitable and economical port for the shipment of lumber. As for the importance of such establishments it may be said that the River Nicolet alone produces annually from 25,000,000 to 30,000,000 feet, the Riviere du Loup, the Yamachiche, the Becancour, the Maskinonge and some establishments along the line of railway turn out a very large quantity all told, without alluding to Ottawa lumber, the shipment of a portion of which from Three Rivers has been entertained for years, and is still entertained by some of the most prominent firms in the lumber export trade.

A special general meeting of the Toronto Board of Trade was held Nov. 20th, to consider the shortage of cars on the Grand Trunk railway to meet the demands of the lumber and grain trade. The president, John I. Davidson, occupied the chair. There were present: Messrs. W. M. Stark, James Harris, J. B. Eager, S. C. Kennedy, James Carruthers, J. Carrick, W. Millichamp, J. N. Peer, J. C. McKeggie, J. D. Laidlaw, J. McLaughlin, D. D. E. Cooper, A. McFall, Wm. Kersteman,

jr., James Worthington, W. Christie, J. Donogh, W. B. Hamilton, Wm. Thompson, R. S. Baird, J. H. G. Hagarty, George Goulding, George Keith, George A. Chapman, Thos. Tait, C. P. R.; R. L. Nelles, G. T. R.; J. N. Sutherland, S. James, G. M. Bosworth, C. P. R.; A. M. Smith, H. N. Baird, C. Goode, G. B. Smith, M. P. P., Paul Campbell, L. A. Tiley, R. W. Elliot, J. Young, N. Weatherston. The president, in opening the meeting, said the question had become so serious as to require the interference of the Board. He had accompanied the members of the lumber section on Sept 20th to interview Sir Joseph Hickson on the matter and he had promised that the grievance should be remedied. It would be for the meeting to say whether this promise had been fulfilled. The question was discussed at considerable length, *pro* and *con*. It was then moved by W. B. Hamilton, seconded by George A. Chapman, and adopted. That the following be a committee to report to the council of the Board on the railway question. Messrs. A. B. Lee, representing the hardware section. R. J. Stark, representing the flour and meal section, S. Caldecott, representing the dry goods section and J. Donogh, representing the lumber section.

IN the Exchequer court judgment has been delivered in the case of the St. Catharines Milling and Lumber Company vs. The Queen in favor of the latter. It will be remembered that this company, which is composed of Capt. Murray, of St. Catharines; J. A. Gouin, P. H. Chabot, Oliver Latour, and T. E. Chevrier, Ottawa, obtained from the Dominion Government the privilege of cutting a million feet of lumber in the territory which the courts afterwards awarded to the Province of Ontario. The plaintiffs in 1882 obtained a permit from the Dominion to cut 1,000,000 feet of lumber in Keewatin, then a disputed territory. Under this permit the company cut 1,600,000 feet of lumber and paid the dues thereon to the Federal Government. The logs remained on the limit, as the Canadian Pacific railway refused to build a siding for their shipment. In the meantime a title to the disputed territory was finally granted to Ontario, whereupon the Government of that province seized and confiscated 1,600,000 feet of lumber. The company then filed a petition of right against the Dominion Government to recover \$159,255 for damages. The Crown would only admit a claim to the extent of \$2,375.59, and tendered this amount to the plaintiffs. His Lordship decided against the company and gave judgment for only \$2,375 reserving the question of costs. The sum awarded by the Exchequer court was simply the amount paid by the company to the Government as timber dues. Their claim for damages, and even the money spent by them in cutting logs, making roads, etc., was rejected. It is understood that the company will appeal the case to the Supreme Court of Canada.

A BALTIMORE correspondent writing to an exchange on the recent change in the tariff on lumber says: "I am surprised at the quiet position of the lumber press concerning the change in the tariff heretofore existing between the United States and Canada. We may as well acknowledge that we have been out-generated, or that in diplomacy the Canadians are our superiors. The only people in the United States who have been benefited are the few who did not unload their "crown lands," and who may now tow logs from such lands to American ports for manufacture. The Canadian lumber comes in at a duty of \$1 a thousand to compete with our home product. Prices have not, and will not, lower on white pine to consumers, but American manufacturers lose the chance to supply exactly the amount of lumber that comes from Canada. If I understand the situation, Americans can now invest millions of dollars in timber limits, but the product must be manufactured in Canada, which withdraws just so much capital from the states, furnishes labor to Canadians, and builds up manufacturing towns, all of which are consumers of Canadian product. Every foot of common grade from Canada debar the use of a like quantity of home product, and it is a well-known fact that home manufacturers are puzzled now to find markets for their coarser product. I do not believe in giving something for nothing, nor do I believe in giving Canadians a

market for their lumber, and accept their gift, which has "a string to it." If crown lands could be bought with no restrictions as to where the logs should be manufactured into lumber, Americans could then continue to furnish employment for American laborers at home. With lumber manufacturers in the United States the conditions are well recognized and party lines are ignored. The fact is that a prohibitive tariff as between Canada and the United States would benefit the many thousand manufacturers of lumber and their hundreds of thousands of employees, and would not raise the price a single dollar a thousand to the consumer."

COMMENTING on the reports published in the Ottawa press as to the results of Mr. Charleson's recent exploration of the timber limits in northern Quebec, the *Chronicle* says, the region explored by him extends from the source of the River Ottawa to the point where it expands into Lake Temiscamingue, a distance of about one hundred and fifty miles. For the whole of this distance the river runs from east to west, or in a direction exactly opposite to its general course, which is from west to east, through land for the most part well fitted for settlement, and the forests which border it are largely composed of valuable white and red pine timber. And not only are these valuable woods to be found in the river valley, but as stated a few days ago by Mr. Bailey, C. E., of Toronto, they extend to the height of land, and beyond it into the James Bay territory. Mr. Bailey states that the Ontario side of Lake Temiscamingue, between that lake and Lake Nipissing is even more valuable, the best of white pine being found in such quantities, that a Toronto company is about to build a railway through these lands to Moose Factory, on James Bay. There is one point in connection with these valuable discoveries, which should not be lost sight of. And that is as to how this timber is to be manufactured and brought to market. Quebec people must not imagine that they are going to control it, as heretofore, if the ancient methods of doing the business are to be pursued. The world moves, and since the recent construction of new railroads, the old plan of floating the timber and saw logs down the rivers is being rapidly changed; the logs are being sawn on the spot and their produce carried to market by rail as is done in the Western States. The great bulk of the logs now made in the Province of Quebec on the Upper Ottawa are sawn in Ontario mills at Ottawa, and their produce, instead of coming to Quebec in barges, goes to swell the earnings of Ontario railways, and to such an enormous extent, that last year the Canada Atlantic Railway carried—nearly all to the United States—the immense quantity of one hundred and fifteen million feet of sawn lumber, and the Brockville & Ottawa a very large quantity, probably the bulk of the four hundred million feet transported by the Canadian Pacific, of which it now forms part. If we in Quebec had only had the foresight to build the long projected railway from Quebec to Lake Superior, or even as far as Lake Temiscamingue, the most of this timber would have been sawn at local mills along the line, a chain of settlements would have sprung up in the interior, and Quebec Province and our port would have had the benefit of the trade. If this line were built now, not only would we secure the business of the one hundred and fifty miles of the Upper Ottawa, the timber of which is to a great extent untouched above Temiscamingue, but a valuable impetus would be given to the settlement of the interior of the Province, even without resorting to the rather narrow policy of the Ontario Government, which compels all logs cut on its lands to be sawed in that province. If we don't do this, it is certain as the sun shines that every log made on the Ottawa river north of Temiscamingue will be sawn there, and the produce carried to Toronto by the new road via Nipissing and thence to the United States. The question is a most important one, and merits the attention of our business men and of the Provincial Legislature. The territory in question, with the adjoining area in Ontario, embraces the most valuable timber lands now left in America, and should be carefully nursed, and so administered as to secure the colonization and development of the country in which it grows, as Providence intended it should.

WITH the current issue the CANADA LUMBERMAN closes its eleventh year, being the oldest trade journal published in Canada. It has encountered the usual number of vicissitudes during that period, but has also experienced a degree of prosperity of which but few journals in this country can boast. We do not think that we are overstepping the mark when we claim that it has won the favor and esteem of the influential trade it represents, and is becoming more and more popular with each new volume. We hope that the twelfth year will show equal, if not superior, results than during the past, and it will be the publisher's aim to do his share towards achieving that end.

It is reported that James D. Leary, of "big raft" fame, has bought a large tract of forest land in Queen's county, N. B., and should the weather be favorable for lumbering this winter, he will get out 30,000 pieces of piling for use on crib work and other contracts in and around New York. The sticks cut comprise the smaller growth of spruce, tamarack and other trees, which are too small for the New Brunswick saw mill men, and have hitherto been little used for any purpose. On being floated down the streams to the St. John River, they will be rafted to St. John harbor, from which place powerful tugs will tow them to New York.

MESSRS. J. & T. CHARLTON, of Tonawanda, N. Y., are a party to a couple of interesting suits recently entered in the Supreme Court at Buffalo. John P. Schell, a guardian for Louis Schell, a miner, sues to recover \$10,000 for injuries sustained by his son while employed in the Charlton mill, which incapacitated him from work, and in consequence of which he was "let out" by the Messrs. Charlton, and the father is deprived of the value of the son's services. The second suit is for \$50,000, and is entered by Schell himself to recover damages for personal injuries sustained while in the employment of the Messrs. Charlton.

SPLINTERS.

BURLAND & Co., lumber dealers, Toronto, have held a meeting of their creditors, and are said to have submitted an offer of 20 per cent. on liabilities of \$4,000.

THE Snider Lumber Co., of Waterloo, with a capital of \$40,000, has been incorporated by the Ontario government.

THE total exports from Canada of the products of the forest for the year ending 30th June last, foot up to the magnificent sum of \$27,289,264.

THOUGH somewhat in advance we accept this our last opportunity to extend to its many readers the CANADA LUMBERMAN'S best wishes for a very merry Christmas.

A CONFERENCE of United States lumber buyers took place at Whitehall, N. Y., the other day, to consider offers of lumber made by Canadian producers. It is expected that several large sales will be the result.

THE lumber barge Wahnapiatae, which lately went to pieces at Cleveland, O., had a capacity of nearly 2,500,000 feet. It was almost a mine of wealth to its owners, and will be greatly missed in the lumber trade.

WE trust that all subscribers who are in arrears to journal will assist in making the editor's Christmas happy by remitting the amount of their indebtedness as early in December as possible. Does this apply to you, reader?

MESSRS. BURLAND & Co., lumber dealers, of Toronto, made an assignment on the 19th ult. At a meeting of the creditors Mr. Burland made an offer of 10 cents on the dollar. The creditors adjourned for a week in order to take the offer under advisement.

AT a meeting of the creditors of Willmott & McIntosh, lumber dealers, Toronto, held last month, the

offer of fifteen cents on the dollar for the estate by Mr. Willmott was refused. Mr. W. J. Holliday, inspector, J. O. Buchanan, J. Donogh, E. Farquhar and Dr. Willmott, directors, were appointed and authorized to realize on the estate as soon as possible.

CANADA exported nearly a million of dollars worth of goods in excess of what she imported during October. The total exports for the month amounted to \$12,038,421, of which \$4,036,342 were products of the forest. The total for October last year was \$14,034,274. For the four months, however, there is an increase in our exports of nearly half a million.

MR. JAMES MCGHEE, of Toronto, trustee of the estate of Wm. & Robert Henry, deceased, is offering for sale 5,000 acres of timber lands on the Manitoulin Island, at the low price of \$5 per acre. These lands are patented and unpatented, and will be sold *en bloc* to close out the estate. For particulars see advertisement on another page.

THE death is announced of Mr. Geo. Coy, a leading partner in the well-known saw manufacturing firm of the R. H. Smith Co., St. Catharines, Ont. Deceased, though a comparatively young man, was a gentleman of considerable prominence both commercially and socially, and his death, which resulted from *phthisis pulmonalis*, will be much lamented by a very large circle of friends.

HEAVY MORTGAGES.

Chattel mortgages to the amount of \$625,477.25 were given November 24th by the J. E. Potts, Salt and Lumber Co., of Detroit, Mich., to different creditors, and were filed with Au Sable city and Oscola township clerks. The mortgages cover all lumber, timber, lath, railroad fixtures, goods and personal property of the said Company in the township mentioned and in others in the state. Among the parties and amounts mentioned in the mortgages are as follows: George W. Yarker, Toronto, and Sarah A. Tisdale, Simcoe, \$51,900; the Union Bank of Canada, Montreal, \$49,434.47; Dominion Bank, of Toronto, \$148,185.75; Bank of Montreal, \$170,994.79; Imperial Bank, Toronto, \$44,399.60.

The Company owns about 3,000,000 feet of stumpage, upon which the Federal Bank, of Toronto, has a contract lien, the original amount being \$800,000. Since the J. E. Potts Salt and Lumber Co. was organized in 1882, it has been doing business on borrowed capital, and while J. E. Potts was in good health the firm prospered and did an immense business. For some months past the management of the concern has fallen upon Col. Tisdale, president of the Company. John E. Potts is a Canadian, who began life as a clerk, and when at the age of 19 he established a store at Port Rowan in company with Wm. Dawson, and met with success. He first embarked in the lumber business at Simcoe in 1865, and from that time on he was remarkably successful in business. In 1876 he went to Michigan and began operations at Au Sable, and since 1884, Col. Tisdale, of Simcoe, has been his partner. The Company owns several large saw mills, as well as a magnificent domain of Michigan forest, also a couple of lumber barges. The Company practically owns a town of some 600 inhabitants called Potts, in Oscola county. It is a settlement built up around one of its big saw mills, and at the junction of several branches of the Company's logging roads and in the midst of a fine tract of magnificent pine. The possessions of the Company in north-eastern Michigan are enormous. It has bought pine wherever it could be had and pushed its railroads into the tracts, cut the logs and left. Pine fast disappearing, the hardwood was next secured, until now the Potts deeds cover section after section and mile after mile of maple and beech timber.

Representatives of the creditors of the Company met in Detroit on the 26th ult. Nichol Kingsmill, of Toronto, represented the Dominion and Union Banks, J. A. Worrell, the Bank of Montreal, M. Hay and M. A. Gilbert the Imperial Bank of Toronto, George Kap-

pelle as solicitor for the Imperial Bank, and J. D. Montgomery, solicitor for the Bank of Montreal. Fred. W. Sibley, of Detroit, and George W. Yarker, of Toronto, were also present. All seemed satisfied apparently with the explanations made by Mr. Tisdale. There is no disposition, so far as known, to close the Company up at once. Mr. D. Tisdale, president of the Company, is preparing a statement of the Company's business, which he hopes to have ready soon.

Alfred Lucking, attorney for the Company, says: "Unless the mortgagees become ugly and sacrifice things the business will go right along, every debt will be paid in full and stockholders will have a handsome surplus. No one knows the exact cash value of the assets. The liabilities have not yet been figured up. They are perhaps \$200,000 over and above the mortgages, besides certain old indebtedness secured years ago by other property, the amount of which I do not know. There is no truth in the report that Mr. Potts is insane. He has been very sick at his home, 32 Stinson Place, this city, since last July, but is now better."

PETRIE'S NEW MACHINERY DEPOT.

Toronto secures another important industry by the establishment of Mr. H. W. Petrie's extensive machinery depot, which is this month being removed from the city of Brantford. The name of Mr. Petrie is too well known to readers of the CANADA LUMBERMAN to require an introduction in these columns. Commencing business in a small way some 15 years ago, in the purchase and sale of new and second hand machinery he has by strict attention to business and fair dealing stepped up the ladder of business success, until to-day, his establishment ranks second to none of a similar character in the Dominion. Having decided that the growth of his business demanded a more central location and better shipping facilities, Mr. Petrie some months ago completed the purchase of a tract of land on Front street, a few yards west of the Cyclorama building, and adjoining the Union Station, on which he immediately commenced the erection of a solid brick and stone building to accommodate the extensive and varied assortment of machinery which he carries in stock.

The fine structure has a frontage of forty feet and a depth of one hundred and twenty-four feet, four storeys high. The foundations are of the solidest description, each post resting on a stone four feet square, and the walls are also supported by stone foundations of equal thickness. The front is of the best Burlington pressed brick; plate glass windows, and the whole is supported by steel girders. Massive timbers separate the flats, and render the upper ones as firm as the concrete floor beneath.

The handling of such extensive and heavy machinery requires special appliances, and these have been supplied in the form of two powerful, steam-propelled hoists, one for light and one for heavy articles. The precautions taken to guard against fire and burglars are thoroughly efficient. Two substantial vaults bid defiance to all unlawful entry. The offices will be models of neatness and beauty; finished in natural woods. The interior will be lighted by the most approved electric system; in short, nothing has been omitted that could add to the convenience and efficiency of the establishment.

To attempt a classification of the varied assortment of machinery and supplies handled by Mr. Petrie would be too endless a job to be undertaken here. His establishment is a veritable Noah's Ark (without the animals, in which can be found everything in the machinery line, from a screw to the largest steam engine and mammoth planer.

Mr. Petrie is especially to be congratulated on securing such an admirable location for his works, being within about one hundred yards of the Union Station—from which a special entrance has been secured—and directly in the business center of the city.

THE LUMBERMAN extends its best wishes for Mr. Petrie's future success, and hopes that his most sanguine expectations may be realized.

SHINGLE SAWS.

BY KERP.

Shingle-sawing machines usually employ circular saws, and these are more often flat or on vertical arbors than otherwise. Some have reciprocating carriages for the spalt or block, and otherwise have a rotary motion; some employ but one saw and other two or more.

A drag saw is first used to saw logs up into lengths required for shingles, 16 inches and 18 inches, sometimes 20 inches, for heading from 10 inches to 22 inches long. There are also bolters having two saws which cut faster, as the saws are set the distance apart the bolt is wanted and driven together, as both being connected to the sword piece. The bolter is then used to cut rots and bad places out of bolts, also to split them and sometimes to sap or take off the bark or sap from the outside.

The shingle machine takes the bolts and makes them into shingles, the block or bolt being placed on the tilt table. The slides are planed into the tilt table top, so as to allow them to be moved ahead toward the saw as the latter wears up. This table hangs on trunnions, and oscillates as a tilt lever is moved from side to side. The butts and points of the shingles are regulated by four hand wheels, which are also used to set the table top parallel with the track of the machines. The tilt leaves do not have to be removed every time a shingle is cut, but only as required to throw knots, etc., in the point of the shingle, when possible; also so as not to saw the wrong way of the grain. This handle is moved by the arm of the operator between the elbow and wrist. The stops are set so as to give the lever the same throw each side of the centre. The rock shaft to which this lever is attached is cast with a crank on one end, which oscillates the table. A one-screw device is arranged in the side of the tilt table to raise or lower the table after being once adjusted. The carriage is adjusted to different lengths of blocks. On the standard sized machine the saw is fastened by saw screws to a 22-inch cast iron collar. The collars are faced to make the saw hang somewhat low in the center. The saw is 38-inch diameter, nine gauge in the eye, fifteen to seventeen gauge at rim, and has about ninety teeth. It is ranged or made to lead as required by swinging the lower part of the yoke (in which are cast the arbor boxes, entirely independent of the frame), one way or the other, thus raising or lowering the saw rim at the cutting point. This ranging is done by loosening two nuts on bolts on the back side of the frame and turning the hand wheel, and then retightening the nuts. The upper part of the yoke has a groove planed in, and the frame has a rib cast on and planed off to correspond. A spring lock to the tilt lever holds the lever against the stop so that it will not rebound. When heading is being cut the stops are turned down so as to hold the table level. As heading is the same thickness from one end to the other, and does not require a tilt frame shingle machine, the shingle goes to the joiner, who joins them on the edges, either on a wheel carrying knives or on knot saws; also throwing knotty ones to be sawed out on the knot saw.

In one variety of flat saw shingling machines, the ways on which the block rests are changed to any thickness or any taper by four hand-screws. The first changes the shingle to thick or fine; the second regulates the butt; the third regulates the top and is held by jam nuts; the fourth changes the rake in the saw on the top. On such a machine, if a block is four inches thick on one end and ten on the other, all the butts may be sawed upon one end and all the tops on the other, bringing the block even at each end, and making the entire block into shingles except a thin slab. The saw strikes the block on the side, which is considered to make a smoother shingle.

Evert's shingle machine also employs a flat saw, that is, one having a vertical arbor, and the bolt is entered on the side by the saw.

Then the packers bunch them up, which work is always done by hand. Aside from these machines a "jack works" is used for hauling logs into the mill and up to the drag saw, which is an endless chain generally carrying dogs. There is also a sawdust carrier to take sawdust, edgings, saps, etc., to where they are burned.

Sometimes the bolts are sawed in the woods and bolted with an axe, in this way not needing a drag saw or bolter. Such a mill is called a bolt mill.

A new type of shingle dresser is a planer with an endless wooden carriage bed, in which are made beds in which the sawed joint shingle is put and held in place by pressure rolls held down by springs, so that they are sprung into a dished board transversely across the shingle bed while being planed. When they come out they have a convex upper face, thinned down at the left edge, so that, in driving, the thick side overlaps the thin edge, and thus the shingles when on the roof rest on their two edges, leaving an air space between. It is claimed for them that as soon as the rain is over they dry at once, while joint shingles, lying flat together, become water-logged and rot in the lap. A twenty-four inch shingle of this kind is put eleven inches to the weather, while a joint would be only seven and one-half inches, thus covering more surface, saving one-third inch lath, and being claimed to make a roof last longer.

A UNIQUE CIRCULAR SAW.

Among recent important inventions which have been brought under the editor's notice none is more worthy the attention of the wood-worker than the B. M. T. Circular Saw, which is now being introduced by the Montreal Saw Works Co., Ltd., Montreal, Que.

In company with Mr. Chas. M. Whitlaw, manager for the above company, a representative of THE LUMBERMAN visited a number of wood-working establishments in this city for the purpose of testing the ability of this saw to do all that is claimed for it. The neatness and thoroughness with which it did its work on all classes of woods was a surprise even to the oldest sawyers, and was generally acknowledged to stand ahead of any other saw yet introduced for the finer classes of wood-work.

A brief description will give the reader an idea of how this saw is constructed and the class of work it turns out: The teeth are arranged in sets of three, each, and after each set is a recess or gullet for the reception of the saw-dust liberated. There are two distinct kinds of teeth in each saw, two side cutting teeth, and one centre cutter and cleaner combined. On each pair of side cutters the cutting edges are on opposite sides, so that the bevels face each other, thus making two parallel gashes in the wood. The clearing tooth is slightly below the points of the side cutting teeth, and formed like a common mortising chisel, with its cutting edge at a right angle to the gash, and its purpose is to cut away the wood which has been side gashed, and remove it into the recess or gullet before it, thus leaving the next group of teeth free from obstruction to their work.

The sharp chisel edge of the side cutting teeth leaves the sides of the wood as smooth as though planed, and as no set is required the saving of material is very great, while the absence of roughness and fibres lessens the friction, enabling the saw to work successfully with much less power than the V tooth.

With this construction, the same saw will cross-cut, rip or cut a mitre faster and better than any one saw now made specially for any one of these purposes. Each tooth acts like a chisel and cuts perfectly smooth.

The planing mill, sash, door and blind factory, pattern shop, furniture factory, and, in fact, any establishment where fine work in wood sawing is required, is working at a disadvantage where this saw is not used.

HAMMERING SAWS.

Take a piece of round saw plate about two and one-half inches in diameter, place it on an anvil, and strike it a blow with a hammer in the middle. The blow will spread the steel under the place struck, the elasticity of the surrounding steel will give, and it will not be any longer in diameter than before struck. But cut it in from the edge to the spread plate, this will relieve the outside strain, and it will then expand and will be more in diameter.

A sawmaker, in hammering a saw, hammers all over the plate, the hammer marks some little distance apart. Imagine a finished saw cut into pieces, one for each

hammer mark, and each piece cut in from the outside of each piece to the expanded place, and then try to fit these pieces in place exactly as before cut. This will give an idea of the shape or condition of a saw plate when it is put to work in a saw mill.

It is expanded all over in spots, and surrounded by pieces that want to expand inward; the equilibrium of the two expansions is a tight saw. The saw is put to use in the saw mill and commences wearing. In keeping it in order the plate is cut down in diameter. The first cut of the file weakens the outside rim around a hammer mark, and it will expand a corresponding amount. By filing it down it increases the expansion, and the result is a saw that is too loose on the outside. If cut down by an emery wheel and heated it relieves the tension to an increased depth in the plate, and gives a greater chance for expansion. If filed down and the corners left square, the bottom of the teeth may come near one of the hammer marks. The result is the steel is already strained by hammering nearly to its breaking strength, and when the tooth strikes a knot or other hard substance it makes it more than its breaking strength, and the result is a crack in the saw, and the square corner gets the blame when not one-one-thousandth part of the strain was caused by the cutting of the saw, and the other nine hundred and ninety-nine one-thousandths were caused by bad hammering. This gives a reason why a saw should not be hammered by an inexperienced person, the result is likely to be an unequal strain on the saw, and cracks in saw, and it will have to be thrown away before it is half worn out.

England's Favorite Hardwoods.

[Timberman.]

Owing to the fact of the extended commerce of Great Britain, and that her trade relations bring her into intimate connection with every nook and corner of the uncivilized as well as the civilized world, the varied products of every clime are familiar in all her great markets. This fact is quite as true of the department of forest products as any other, and many woods are quite familiar to cabinet makers and other woodworkers of Great Britain, which are almost unknown in this country. The list of hardwoods embraces the partridge, the zebra wood, the mola, snake wood, the cocus wood, the teak, the jarah and many others, whose names even, are unfamiliar in this country.

Notwithstanding this fact, however, that the list of woods used is much larger there than here, the principal varieties, furnishing the great bulk of the consumption of Great Britain, are there as here, but few. First among them comes the oak, and following in the order named are ash, elm, alder, box, basswood, mahogany, teak and greenheart. Of all these woods, in value and variety of uses, comes first the oak. It is used by the cabinet maker for his work, its beauty of grain and enduring qualities recommending it highly for this purpose. No timber can stand as many changes as this, and it is extensively used in railway work, such as frame work for passenger and freight cars; it is used in the country for carts and waggons; for the frames and spokes of wheels; for all classes of agricultural implements, and is regarded with high favor by the building trades.

The tough and elastic ash is also in great demand by our English cousins. The cabinet maker and the ship joiner use it extensively, as it makes splendid fittings, and takes a good polish. Manufacturers of street cars and carriage makers also buy large quantities of it. American ash is highly esteemed, but the Hungarian ash with its rich and beautiful figure, has the preference for ornamental purposes. Elm is much used for a variety of purposes, but it is preferred for indoor work, as it will not stand the weather, the alternate wet and dry, soon rotting it. Teak is a valuable timber, somewhat resembling oak, coming from India and Burmah, and is sometimes called Indian oak. It is very heavy, and highly esteemed for ship work, such as deck houses, sash, sky lights, combings for companion ways, etc. Some of the better qualities of this wood resemble rosewood, and it has a very strong smell, preventing insects from attacking it. Sycamore which in this country is coming to be valued highly by furniture makers and for

interior finish by reason of the beautiful polish of which it is susceptible, is used in England chiefly by the coach builder, but will, in the course of time, become a favorite with cabinet makers when they come to understand its true value.

The treatment of woods, particularly furniture woods, in finishing them, is somewhat different from that in use in this country. The English woods are finished in dark colors mostly. They do not do much with light woods, like birch or maple, but when once the British public comes to understand the exceeding beauty of these woods when manufactured into furniture, they will, without doubt, quickly become popular. A movement is now on foot by furniture manufacturers of Grand Rapids, for establishing a distributing centre for their goods in some large city of Great Britain, probably Glasgow, and notwithstanding the well known conservatism of the English people, it is thought that these products will meet with ready sale, for sound sense and ability to recognize a good thing when they see it, is quite as prominent a British characteristic, as is their proverbial conservatism.

The William Hamilton Manufacturing Company's Works.

The Wm. Hamilton Manufacturing Co's. works, at Peterborough, Ont., may be justly classed amongst the thriving industries of the country. The firm is well known all over the Dominion and their works are among the largest and most complete in Canada. The firm supplies Canadian mills and factories with the best and finest machinery that can be manufactured, making a specialty of mill machinery. From time to time additions and improvements have been made to the buildings, and from a comparatively small beginning the business has grown until it has assumed immense proportions. Since the fire last summer a general reconstruction of the premises has been going on, and now that they are finished the works have resumed their wonted activity.

The plant is the very best that could be procured. The shops are supplied with all the latest improved labor-saving appliances known to the mechanical world, and as a consequence the class of work turned out is unexcelled. This is evidenced by the fact that the company ship their manufactures from the Atlantic to the Pacific coasts, and as fast as they can be supplied. About 125 men are at present employed, but this number is expected to be increased during the winter.

A new brick chimney has been built one hundred feet in height, which is no small triumph of the builder's art. The base of the stack is ten feet square, which gradually tapers off to 6 feet 6 inches at the top. The chimney flue has a uniform width of 48 inches from top to bottom. The burned buildings have been restored, and an unbroken front of 300 feet of two story brick buildings fronts on Reid street.

The pattern shop has been remodelled and the patterns arranged and classed more conveniently than before. The old moulding shop will be the erecting room. The erecting room is supplied with the largest planer in Canada, a pulley lathe for turning pulleys 10 and 12 feet in diameter, and a horizontal drill.

The engine and boiler room have been about doubled in size. Two mammoth boilers, 14x56 feet, will furnish steam for the three engines which are necessary to run the machinery. Two of the engines are situated close to the boilers; the third is in the new moulding shop across the way. A big 80-horse Corliss engine gives power to the machine shops, while a smaller Leonard Ball automatic engine will run the forty-light dynamo.

On the east side of Reid street are the new moulding shops and the pattern store house. The building is 150 feet long, with a truss roof 40 feet high, and wings 18 feet wide, the central portion being 32 feet in width. There is a fifteen ton power crane driven by a wire rope, and capable of lifting the heaviest weights, and also three hand cranes swinging on the support columns. A narrow-gauge railway runs the length of the shop for conveying the castings to the front. In the north-west corner of the building is the brass-moulding shop; next on the same side are the core benches and two large core ovens with a 32-inch cupola. On the other side of the shop, in the west end, is a 15-

horse engine, which is driven by steam conveyed from the boilers in the main building through pipes stretched underneath the street to the moulding shop. This engine runs the travelling crane and drives the rattle mill, and the hoist which carries up the metal to the cupola platform. The other departments in the main building, the boiler and machine shops, have not been altered. Every shop is heated by steam, and the different sections are separated by fire proof walls. The whole premises are now lighted by electricity, for which purpose some fifty lamps are required.

The LUMBERMAN extends to the Wm. Hamilton Manufacturing Co. its best wishes for continued prosperity.

HARDWOOD LOG INSPECTION

(Northwestern Lumberman.)

Log buyers who have handled white pine exclusively can have but a faint conception of the trouble buyers who handle all kinds of timber in the hardwood sections have in regard to log inspection. Owners of timber who have little or no experience in the saw mill or lumber business have the most exaggerated and erroneous ideas as to the relative value of the different grades of logs. Two white pine logs of the same size and length approximate each other very closely in value, but there is a wide difference in hardwoods. There are but a few defects in pine, and, as a rule, they are apparent at a glance, but every kind of hardwood is subject to numerous defects, some of them peculiar to each kind of timber, and many of them can only be detected by an eye trained by long experience. A Tennessee red cedar log may show perfectly sound at both ends and free from hollow knots, and yet, if an expert can find anywhere along its length a "cat face," or a little hard fungoid protuberance, which is peculiar to this class of timber, as large as the end of his little finger, he knows the log is hollow and fit only for square stuff the full size the log will make. A poplar log may look to be all right to an inexperienced individual, and still be "pecky" or full of black streaks. Oak and ash logs may have defects that appear slight, but which reduce them one or two grades, and make a very serious difference in the total value of a large lot; more especially is this true in walnut, cherry and other high-priced timber. An inexperienced seller is apt to think all his logs are good, and naturally expects the highest quoted prices for that class of timber, and is amazed at the result when the logs are measured up. If he goes to other buyers in the market, and they figure his logs out about the same value, he is ready to conclude there is a combination to beat him.

The following instance is reported from Nashville, Tenn., very recently, and is a fair illustration: A gentleman living in north Alabama wrote for prices on a carload of walnut logs represented to be No. 1 in all respects, and all black. He received a bid for all grades, from cull to No. 1, which was accepted, and the logs shipped, with a statement that they contained 5,280 feet, board measure. The logs proved to be what is culled "hickory" walnut—little tight bark fellows almost as hard as ebony, 6 to 10 feet in length, 10 to 26 inches in diameter, knotty, some more than half sap and some with double hearts—altogether about as hard a lot as can be imagined. The mill man declined to receive them, and the shipper visited the city to sell them to some one else, but failed, and finally sold them to the original consignee. The logs measured 1,450 feet, and came to \$32. The freight bill was \$36, and the shipper's fare and hotel bill about half as much more. The shipper is largely interested in iron and coal production, and without experience in the timber or lumber trade.

Economy in A Saw Mill.

J. H. MINER.

How much time is lost from belts would surprise mill men who would take pains to investigate it. The loss in this way is as great to the mill, owner as his belting bill at the end of the year. What is first essential to economy is the best belting; second, a competent foreman. One mill man is entirely satisfied with his foreman, who in reality is incompetent. Others are not satisfied with a better man.

A prominent lumberman on the Mississippi river has

had over a dozen foremen in the last ten years, and so far has not procured the right man. In this case I think the mill man was too rigorous. Good belting well cared for need not be duplicated in years of use. True, there are machines overtaxed, and many not so proportioned in size and width of pulleys to justify the proper care of belting. All this a competent foreman in purchasing or in changing of machinery will overcome. Short, high-taxed belts should be obviated, as they require much attention. Improper fastenings have much to do with the life of the belt and of the mill man's pocket. Every foreman thinks there is no better plan than his. The result in many cases is that the belt is put on too slack or entirely too tight. In both cases the mill or machine has to shut down. If not a broken belt it is a hot bearing. In the former, than a part of the end of the belt or holes are pulled out. The life of that belt is short. A new belt should be put on with clamps overnight which will help to stretch it. Such a belt will go until the next night or noon hour, when it can be taken up. Belts are often run too loose, and when the machine is at work runs over to one edge, thus chafing the edge. This is particularly the case in gang edgers. The pulley is so closely housed that a little variation will soon ruin the edge of a rubber belt. Leather belting does not suffer so much from chafing, but has its edges elongated allowing it to run farther over. Dust in saw mills is a great enemy to the belt. It removes the adhesive surface that any belt should have, which soon chafes the rubber from the surface which virtually destroys a rubber belt. The leather belt in this respect suffers less. Ample provision should be made to keep belts clean by good, close sawdust conveyors. The main saw belt should be housed. The sawyer does not want to see its operation if it is cared for properly. The adjusting is the life of the belt. Endless belts should be used where it is practicable. A long belt may have a good, well-balanced tightener. Machines in some cases can be moved as belt slackens. It is not always convenient to put on an endless belt and if care and good judgment is not used, it will have to be cut in a short while because of stretching. I advocate the very best "Extra" rubber belting for saw mill work, with Covel's belt fasteners. If used as directed an endless belt is had all the time. They are condemned by many from reckless application, and from using cheap, worthless belting, soft and flimsy separating between the plys. The best belting is firm, with a light coated metallic surface, which it will retain, provided "grips" in the shape of belt grease is not used. A little castor oil may be used very sparingly. No belt should be allowed to slip when sufficiently tight. If it does it will soon be ruined. In lacing there are two reliable methods, viz.: The "hinge" and "zigzag." Two rows of small holes are punched half an inch from the end of the belt and half an inch apart, the second row having one hole less. The former lacing is begun in the center, the lacing passing between the ends of the belt and coming through at opposite sides, thus forming a complete hinge, which is not only a relief in passing over small pulleys but in addition to the strength of the holes the ends of the belt are clamped, thus preventing any raveling or the pulling out of the holes, as is frequent with the straight and crossed lace. Another advantage of this lace is that one or more strands may wear in two and the lace will not give immediately away as there is no long ends to be whipping the lacing loose. The foreman examining this lace can depend on it with certainty. The zigzag lace does not cross on either side of the belt, both sides being precisely alike when rightly laced. It is begun in the center, lacing from the outside row to the inside row on the other side of the belt, not taking opposite holes, but to the one side or the other. This being completed, the other row of holes is laced from the other side of the belt, forming an X from opposite sides. This lace, as well as the hinge lace, should be neatly hammered down, and when a good, thin whang is used a smooth running belt is had. Thick lacing drawn twice through large holes can not be relied on. The thump in passing over the pulley will soon wear or pull the holes out. Rivets can only be used on very slow belts. They require a lap which throws the belt out of balance, and can not be run but a short time at high speed. Good belting, well cared for, need not detain a mill a minute at any time, adding greatly to the output of the mill, and saving the owner hundreds of dollars annually.

HOME AND FOREIGN TRADE REVIEW.

Office of CANADA LUMBERMAN,
Nov. 29th, 1890.

Local trade, from what can be learned from interviews with the principal handlers of lumber, remains in the same dormant condition as has characterised this market for some months past. There is no disguising the fact that the year 1890 has been by far the most unsatisfactory period experienced by the Toronto dealers. The local demand has been virtually dead, and what with the temporary loss of the South American trade, and the uncertainty which so long prevailed regarding the results of the McKinley tariff bill, the movement of lumber from this section has been slower than for years past.

Now that the winter season has set in, lumbermen have made up their minds that no trade of any importance can be done until the opening of navigation next spring, so they have practically gone into winter quarters.

The McKinley Bill has not yet been sufficiently tested for Canadian dealers to determine the ultimate result, but it is generally conceded that it will result in a much more extensive movement of lumber to the United States in the near future. As to who will benefit by the recent reduction in the import duty on Canadian stocks, yet remains to be seen, but those who ought to know give it as their opinion that the Americans will realize the major portion of the amount heretofore deposited in the U. S. treasury.

The recent failure of Messrs. Willmott & McIntosh is still the subject of considerable talk among the dealers here, and especially the creditors of the bankrupt firm. The newly appointed assignee has received a new offer from the insolvent's of 15 cents on the dollar in cash and 10 per cent in notes, covering a period of two years. Notwithstanding the fact that it was generally conceded by experts that the final winding up of this estate will not realize more than 5 per cent. to the creditors, the latter do not seem to favor the proposition as above referred to. It is probable, therefore, that the estate will immediately be wound up, and that the insolvents will be refused their discharge. The business of Willmott & McIntosh has, from evidence shown on close inspection of the books, been a financial failure for some years past, and in justice to all concerned, an assignment should have been made at least four years ago.

There is nothing new to report regarding the old-time grievance of scarcity of cars, the lumbermen at the present time having settled down to await the decision of the freight agents of the G. T. R. to whom the matter has been referred for adjustment.

The shipping of lumber by water from Ottawa has closed for the season, the last tow having left the Chaudiere docks two weeks ago. This will have a tendency to increase the heavy demand for cars which has existed for the past two months. The winter rates, which are 15 per cent. over the summer, have gone into effect. The increased rates to American points made by the railway companies, will be disadvantageous to the lumber trade, as they will in a measure be an offset to the reduction of \$ per thousand duty. Coarse lumber does not appear to have found an outlet in the United States under the \$2 per thousand duty to the extent anticipated. It was hoped that with the reduction to one dollar, there might be a large movement for that grade to the American markets; but with the increased tariff in railway rates this is not likely to be realized.

At Montreal a fair business is reported locally, a considerable quantity having been jobbed out at the yards, but no very large transactions have taken place, otherwise there has not been much doing.

The business of the season is over at Quebec, and nothing but a local trade may be looked for until next spring. Following is a comparative statement of timber, masts, bowsprits, spars, staves, etc., measured and culled at Quebec to date:

	1888	1889.	1890.
Waney White Pine...	2,029,043	3,770,782	5,082,772
White Pine.....	1,791,113	4,224,295	3,694,742
Red Pine.....	582,305	739,435	324,702
Oak.....	1,139,252	1,359,600	1,227,982
Elm.....	171,388	750,526	611,592

Ash.....	150,361	250,558	146,450
Basswood.....	770	2,635	456
Butternut.....	419	1,573	2,112
Tamarac.....	3,245	16,233	8,246
Birch & Maple.....	171,949	365,980	246,594
Masts & Bowsprits.....
Spars.....	5 pieces	33 pieces
Std. Staves.....	78.9.2. 6	78.9.2. 6	10.6.1.22
W. I. Staves.....	386.3.1. 9	124.8.0.98	7.7.0.19
Brl. Staves.....	16.0.1.22	1.5.2.14

FOREIGN.

The timber trade at London is still on the quiet order, which at this period of the year is not unexpected. The rise in the Bank of England rate to six per cent will no doubt be detrimental to the timber trade, as it will insure an immense strain on the money market throughout the country, from which the timber trade cannot expect to escape.

The hardwood market has been very uneventful, and generally speaking has undergone no change. American black walnut lumber is in fair demand. Quartered oak is going better, but oak squares are very slow to move.

Messrs. Farnworth & Jardine, in their wood circular of a recent date report: The arrivals from British North America during the past month have been forty-four vessels, 35,181 tons, against forty-five vessels, 38,273 tons during the corresponding month last year, and the aggregate tonnage to this date from all places during the years 1888, 1889 and 1890 has been 347,565,464,515, and 393,997 tons respectively. The import during the month has been moderate and the deliveries fair; values, however, show no improvement, and stocks generally are too large.

CANADIAN WOODS.—Waney has again been imported too freely; the deliveries from the quay have also been on a large scale, but the stock is still too heavy, and recent sales show a further decline in value. Square pine has been imported very moderately; there is rather more enquiry for first-class deckwood, but the commoner qualities are quite neglected, and the stock fully ample. Red pine has not been imported; and it is seldom enquired for. Elm has not been enquired for; prices are steady, and stock fully ample. Oak has been imported in excess of the demand; the deliveries have been disappointing, and prices have still a downward tendency; the stock is too heavy. Pine deals have come forward freely, and the deliveries, although less than last year, have been fair; there has been a little more enquiry, and prices are firmer; the stock, however, is quite sufficient. Quebec spruce have moved off slowly, and the stock is very excessive.

A decidedly more cheerful feeling is reported at Liverpool, due, perhaps, to the fact that there are some fair enquiries in the market, and that the import trade is over. The season is now so far advanced, says the correspondent of London *Timber*, that we are able to compare with last year, as the difference at the end of December will probably not vary greatly. The total, up to date, are as follows:—

	1890.	1889.
Timber.....lds.	144,781	144,386
Deals, &c	339,516	415,750
	484,297	560,136

The decrease in 1890 is, therefore, 75,839 lds., which deficiency, it will be observed, is entirely in sawn wood.

The general tone of trade at Glasgow is good, the import being maintained on a moderate scale. There are more inquiries for lumber and deals. The hardwood trade continues very active, and the demand for the near future is likely to continue good. The cabinet making, as well as the shipbuilding industry, both of which are large consumers, are very busy at present, and the prospective demands from these sources is assuring.

The Board of Trade Returns for the month of October show that there have been exceptionally large decreases in the imports from all the whitewood ports. The importation of sawn goods from Sweden and Norway, during the month, amounted to 228,328 lds., as against 275,533 lds. imported during the corresponding period of last year, a decrease of 47,205 lds. From Russia the decrease of these goods is still greater,

139,745 lds. as against 254,244 lds., decrease 114,499 lds., whilst from Canadian ports the decrease is 3,663 lds.—133,966 lds., as compared with 137,628 lds.

The only increases that are shown either in the importation of sawn or hewn wood goods, are from hardwood ports. Of hewn timber the falling off compared with last year for the month of October is 71,711 loads valued at £146,975, and of sawn or split £172,835 loads, valued at £516,896. For ten months the decrease on hewn is 84,431 loads, valued at £365,740; and on sawn and split, 602,831 loads, represented in value by £1,733,277. The export of foreign timber shows a decrease also, but the total amount of the business done is comparatively insignificant.

EXCHANGE ECHOES.

Southern Lumbermen.

The attention of European buyers has gradually been drawn to the South for oak, owing to the increasing scarcity and high cost of Quebec oak, which, among American oaks, has hitherto taken the lead in the markets of Europe. During the last year there has been a fair amount shipped from Mobile that included long lengths, large dimensions and heavy cubic average. As there has been constant improvement in the manufacture, selection and inspection of timber shipped from this port, the prejudice of European buyers against the Southern oak is gradually dying out.

Mississippi-Valley Lumbermen.

The car famine still continues to a certain extent throughout the South. Not only is it experienced by the lumber shippers but also in other general lines, creating a general clog of business. At many mills lumber has been held for weeks, awaiting cars, and the only satisfaction to be obtained is an occasional car now and then. Even when scattering cars are obtained they are often of unsuitable size, short cars being furnished for long stock, and shippers are thus compelled to pay freight for full estimated weights on partially loaded cars. Less complaint is made at St. Louis as to the lack of cars than elsewhere, most of the Southern lumber coming by the Iron Mountain road, which seems to be able to furnish a fair supply of cars on the main line, but mills on the branch lines are experiencing considerable difficulty. In answer to correspondents railroad officials are saying that the cars cannot possibly be obtained, as the car manufacturers are clogged with orders for new rolling stock. However this may be, it would seem that the annual fall shortage has been a well established fact for so many years that it should be anticipated and supplied.

Chicago Lumber Trade Journal.

When the Canadian government removed the export duty on logs it was believed to be a big thing for eastern Michigan mills; but the sober, second thought among some manufacturers has induced considerable doubt about the correctness of that opinion, and some of the most practical lumbermen now incline to the opinion that the Canadians have got the big end of the bargain by the lumber schedule in the McKinley bill. They say that the Canadian timber, tributary to Eastern Michigan mills, is nearer to the Eastern markets than the Michigan mills, and as it costs 75 cents more to tow the logs than it does to pay the duty on the lumber, it will pay better to cut the logs in Canada and pay the duty than it will to tow the logs to Michigan; and that some of the mills will be moved across the border, where labor is cheaper, and where there are other advantages in favor of the producer. Whatever may be the result, there seems to be considerable reason in their logic. It would be bad for the Saginaw River if their theory should prove correct.

Trade Notes.

Messrs. Robin & Sadler, manufacturers of leather belting, Montreal and Toronto, have just put in for the Royal Electric Light Co., of Montreal, at their East End Station, a three ply leather belt, 112 feet long and 32 inches wide.

The Waterous Engine Works Co., of Brantford, Ont., are furnishing the machinery for the new saw mill erected by the North Pacific Lumber Co., at Port Moody, on Burrard Inlet, B. C. The boilers and engines, comprising six carloads, have already been shipped, and they are now ready to ship the burner, that will make about four carloads. They have also near completion a pair of oscillating engines, 14x20, for driving the carriage, a six block carriage suitable for handling logs 6 to 7 feet in diameter, 80 feet long; also a very large and heavy husk frame with top saw rig, and a six-saw Champion edger. This machinery will be shipped the latter part of this year.

BRITISH COLUMBIA LETTER.

NEW WESTMINSTER, Nov. 25th. 1890.

Dixon & Purdy will likely add shingle mill machinery to their new saw mill near the Mission Station.

A Vancouver lumber firm have just opened a lumber yard at the junction of the Mission-Seattle branch with the C. P. R., and expect to furnish most of the building material which will likely be employed in constructing the new town which is springing up at this point.

Mr. George Munro, of the William Hamilton Manufacturing Co., Peterboro', paid this city a visit during the past week.

Several readers of the LUMBERMAN have been very much amused at the article "Running Circular Saws," by J. W. W., in the October issue, and do not place much reliance on the opinions there expressed.

Capt. George Cooper proposes to make Westminister a salt water port in winter and prevent the formation of ice in the Fraser anywhere near the city. As is well known, a bridge is going to be built from the head of Lulu Island across the north arm to the Westminister side. Capt. Cooper proposes to lay a sill across the river and parallel with the bridge, at low water height, and give it solidity by filling it in with gravel at the base. From a beam slightly above high water mark will depend, on hinges, in the form of valves, a continuous line of stout doors—flood gates, in fact—which will swing open up river, but will close when the tide sets down stream. The salt water from the gulf, flowing in up the North Arm, will be allowed easy ingress to the harbor through the valve gates; the harbor must then fill with the warm, briny water, and when the tide begins to ebb it will be prevented from going back by way of the North Arm and will be detained in the harbor, slowly escaping, if at all, by way of the South Arm. In two or three tides the harbor will become thoroughly salt, and the possibility of ice forming when the water is well impregnated is nil. It is true that some of the water may percolate through the barriers at the North Arm, but in too insignificant a quantity to affect the general result. The harbor through this means, says Capt. Cooper, will be kept perfectly free of ice all winter, and the South Arm and the river as far up as the McLaren-Ross mills. The doors, by means of which this grand result is to be achieved, can be taken down in summer and piled out of the way for use during the ensuing winter. The fact of the Japan current flowing continually along the coast and the tidal fluctuations of the river bringing it right up to the city every day during the winter, are the scientific facts upon which Capt. Cooper bases his ingenious scheme. The device, being simple and inexpensive, is worthy of a good trial, but very few have any confidence in carrying it out.

At the last session of the Provincial Legislature the following amendment was passed to the "Land Act": "Notwithstanding anything in any Act contained, no person shall be entitled to record or pre-empt any land included in any timber lease, if the land which it is proposed to record has on each eighty acres thereof milling timber to the extent of ten thousand feet per acre."

Timber leases are granted for a term of thirty years, subject to the provision, however, prior to the above amendment, that any person might at any time acquire a pre-emption claim to or upon any part of such leased land, by complying with the requirements of the Act; which requirements among other things, prohibited the pre-emptor from cutting any timber for sale, or for any other purpose than for his own use and for the clearing of the same. Both this prohibition and the amendment seem to have been designed for the especial protection and encouragement of the lumber industry, at the expense of the agriculturist. The lumber industry must be protected, but certainly not at the expense of the agriculturist to such an extent as this Act calls for. For example, only three trees the size of a flour barrel (which is very moderate) per acre would come under this Act, and prevent any quantity of land being taken up for farming, and on which, in many cases, the scattered timber would never be cut for the saw mills.

James McL. has returned to Ottawa after fully inspecting his company's property.

There is nothing of note since my last *re* other mills. They have all the orders on hand they can execute, and are running full time.

H. G. R.

THE FORESTS OF CANADA.

The general interest attaching to forestry in Canada is opportune and hopeful. As the denudation of the forests goes on the necessity for vigorous measures looking to restoration and replacement becomes pressing. The Government has this matter in hand, and under the immediate direction of Mr. John Craig, the experienced and intelligent horticulturist of the experimental farm system, an important work is being carried on. In conversation with *The Empire* recently, Mr. Craig spoke about the work in hand as follows:

The climatic conditions in the interior of and above a forest area are different from those of a large open space in the same locality. This difference is due to the protection of the soil from direct sunshine, and to the increase of the area which radiates heat, to the evaporation of the water from the leaves, and the mechanical obstacles presented to the circulation of the atmosphere—the winds. In consequence, we find in forests a reduced range of temperature—warmer in winter and cooler in summer. It also increases the humidity of the air, especially during the dry months, and gives a more uniform degree of moisture in the atmosphere. Where soil is exposed to the direct effect of the sun's rays and unobstructed sweep of the winds, it loses from six to ten times more water by evaporation than when covered by forest growth. One of the most beneficial effects of forests is that of breaking the force and violence of the winds, which are the great evaporators. The greater the velocity, the greater the evaporating power the wind exerts, and the mere mechanical action of the forest in breaking the velocity of the wind exerts a powerful influence in preserving humidity. When we think of the chinook of the Rocky mountains and the almost unceasing winds of the Northwest with the constant evaporation attending, the question of re-foresting the plains becomes one of vital importance. Again, the effect on springs and the general water supply is important, as the character of the forest floor and obstructions to evaporation from the soil are such that the larger portions of the snow water and rainfall filter into greater or lesser depths, and assist in gradually feeding springs and rivulets. In mountainous districts the forest is of the utmost importance in protecting the soil from being washed away by spring and summer torrents, which often do so much damage to low, as well as high lands.

Forestry differs from other kinds of industrial enterprise from its requiring an accumulation of capital, exposed for a long time to great risks, and from slow returns of the interest on the capital invested in the forest. Therefore, forestry offers but little encouragement to private owners of land. The permanent administration and continuity of action of a government is needed to bring this form of enterprise to a successful issue. It is with this principle in mind that the Dominion Government, under direction of the Minister of Agriculture, has undertaken certain lines of experimental work with a view: First, to induce and encourage a desire on the part of the settler in the colder and more exposed portions of Canada, for tree planting and shelter belts; second, to ascertain by carefully conducted tests in different sections which varieties are most desirable, and third, to plant those varieties of trees best adapted in such as will tend to bring about the more favorable forest conditions as above noted. Of course, this last proposition is one that can only be taken up after the satisfactory solution of the second.

Belts of forest trees, 150 feet wide, have been planted on the north and west sides of the Central Experimental farm, comprising about 10,000 trees. The one on the west side is made up of forty or fifty different species of deciduous and coniferous trees. They have been planted in irregular groups, overlapping each other in different forms, which detracts from the stiff effect that square blocks present. The other on the north side has the same varieties, with the addition of certain hardy shrubs indiscriminately mingled at regular distances—somewhat approaching natural forest

conditions. This, when compared with the other, will in time give accurate data in regard to the relative benefits of what might be called mixed and individual planting. Also in relation to hardiness, rapidity of growth, freedom from insect pests, timber value, which may be expected to add much to our present knowledge of timber culture. Thus far, none of the catalpas, honey locust, Russian mulberry and American sycamore have proved entirely satisfactory, suffering from the cold each winter. Black walnut, when grown from northern seed, promises to do well. Trees grown from seed, three years ago and undisturbed, are now six to seven feet high. Box elder, Russian mulberry, black cherry, yellow locust and soft maple (*Acer dasycarpum*) are the most rapid growing varieties in the belt; although for economic purposes white ash is one of the most valuable trees to plant.

One of the first things undertaken in connection with this department of horticulture was to obtain a large collection of the seeds of the hardiest Rocky mountain and East European conifers, including the beautiful blue spruces and magnificent firs of the former region, and the hardy forms of Riga and stone pines of the latter. As a product from these collections, about 175,000 seedlings were transplanted from the seed beds last spring and will be reserved, when of proper size, for distribution to points where their usefulness has not been tested. The branch farms, of course, will receive liberal consignments of these, as well as other experimenters who can be depended upon to give careful returns.

For the past two years distribution of trees has been made to the C. P. R. gardens, 25 in number, and situated at different points along the line. The Indian and mounted police stations have also been the recipients of liberal collections during the same period. All these stations, covering a variety of soil and climatic conditions, will very speedily bring such light to bear upon the forestry question in the Northwest as will enable the settler to select with greater certainty the trees likely to be adapted to his locality.

The above work was supplemented last spring by a distribution of 100,000 small forest tree seedlings, of the hardiest varieties obtained from northern sources. These were sent to voluntary applicants in bundles, each containing 100, and were carried through the mails free of charge. Very satisfactory reports have been received as to their condition on arrival and the growth made after planting. The reports to be sent in after wintering will, however, be much more valuable. Arrangements have been completed to continue this line of experiments on a larger scale, and double the number will be sent out the coming spring.

From present experience, the varieties most promising for Manitoba and the Northwest are as follows: Box elder, variously known as Manitoba maple, ash-leaved maple and negundo maple when grown from northern seed. These lead in hardiness and general adaptability. American elm and white ash also do well when grown from Manitoba seed, and show in a marked degree greater hardiness than those raised from eastern seed. Yellow canoe and white birch, as well as the cut-leaved varieties, are promising. American and European mountain ash are showing adaptability to soil and climate in a surprising degree. Of the maples (*Acer dasycarpum*) the soft maple and Norway maple are partially successful at Indian Head. The Russian poplars, remarkable for their hardiness and rapidity of growth, are destined to be of great value to the settlers in the western prairie region, where they form shelter belts for tenderer varieties in incredibly short periods. Experiments on the branch farms at Brandon and Indian Head thus far have demonstrated that in the line of shrubs, *oleagnus argentea* and *oleagnus angustifolia*—this last commonly called Russian wild olive—Siberian pea tree (*caragana arborescens*) and several varieties of the lilac, the Japanese rose (*rosa rugosa*) will also be useful.

—Heathorn & McIntosh have secured the Victoria agency for one of the largest lumber mills in British Columbia, and will carry a large quantity of building lumber.

THE NEWS.

ONTARIO.

—Mr. Smith, of Frank's Bay, is building a large saw mill.

—Gilmour's big mill at Trenton closed down Nov. 12th.

—Wells & Burnie, lumber dealers, Dresden, have assigned.

—Gillies Bros' saw mill at Braeside has been closed for the season.

—Incorporation is sought next session for the Pembroke Lumber Co.

—J. R. Booth's mill, at the Chaudiere, closed down for the season Nov. 10th.

—Wm. Laking's mill, at Fesserton, is closed for the season having cut 3,000,000 feet.

—Large shipments of lumber, timber, bark, etc., are being made from Burk's Falls.

—Graham & Horne intend moving their saw mill from Vermillion Bay to Rat Portage.

—The C. P. & M. Railway is daily taking 140,000 feet of lumber from Harwood to Cobourg.

—The large mill at Longford has closed for the season. The small one is going yet but will soon stop.

—Mr. Howitt, of Sturgeon Bay, intends taking out a large quantity of cordwood during the winter.

—Mr. Wm. Higginson, of Inlerman, has just finished the largest cut of logs he ever had in one season.

—Messrs. W. W. Carter and M. Dean are building a saw mill at Crookston for cutting logs, ties and custom lumber.

—The large mill at Longford closed for the season on Nov. 14th. Many of the Longford men have gone to the woods.

—Mr. J. O. Revell, who has mills at Cobocook, echoes the general complaint of scarcity of cars for shipping lumber.

—The saw mill being built at Edgar's Mills, by George F. Mitchell, for McKae & Granger, is nearing completion and will be running soon.

—A shantyman down from Gordon Creek, on the Kippewa, reports the weather as being intensely cold up there, but no snow has fallen as yet.

—Mr. Archie Stewart, of Ottawa, recently sold a 10,000 acre timber limit in British Columbia to Messrs. Ross, McLaren & Co. for \$20,000.

—McLachlin Bros' mills, at Arnprior, have closed down for the season, and they are now making arrangements to send up men for the winter's work.

—Mr. Sherk, of Hamilton, who recently purchased the saw mill at Capetown, has got in quite a large number of logs and has the mill in full running order.

—The Dickson Company, of Peterboro', will put in a large number of men on the Scott limits, and it is said they will take out twenty million feet this winter.

—Mr. Ferdinand Ahrens has secured the factory in Orillia recently occupied by the Acme Manufacturing Company, and will engage in the manufacture of veneering.

—There is quite a demand for men in the Nipissing district to work in the shanties. Good choppers are getting from \$20 to \$22 per month, general hands \$18 per month.

—Wages for the woods are ruling low, \$16 a month being the highest. Wages in the Ottawa and North Shore districts are from \$6 to \$8 a month lower than last year.

—Mr. R. M. Cox, a well-known English lumberman, has purchased Messrs. Perley & Pattee's next year's cut of deals. The cut is said to amount to about 20,000,000 feet.

—Jacob A. Shaver, Ancaster, has had a good season's run. The mill has been kept running since the first of January and he expects to keep it running until the end of the year.

—The lumbering operations in the rear of Peterboro' and Haliburton for the winter promise to be light, with the exception of those by the Hazlett Co'y on the old Scott limit.

—Mr. J. Rolston, who recently purchased the whole interest of the Rolston Bros' stock and plant, at Metcalf, is now refitting the saw mill and will have it in running order by January 1st.

—Lumber shipments have been particularly brisk on the Canada Atlantic Railway. About 400 cars have been despatched each week from Ottawa for American points, chiefly to New York.

—Orillia Packet: On Thursday evening the employees of the Longford Lumber Company, to the number of one hundred and twenty, were entertained at a banquet given by their president, Mr. Wm. Thomson, in the honor of the birth of an heir. Mr. Maxwell Hall, Secretary of the company, pre-

sided, and the vice-chairs were occupied by the two foremen and Mr. John Adams.

—The Rathbun Co. shipped from their sash and door factory, Deseronto, last week, two carloads of material to London, England, and one carload each to Leeds, Bristol and Liverpool.

—Mr. James Dollar has started a camp in Brunel, in order to get out stock for his shingle mill. Mr. Dollar manufactured over 8,000,000 shingles this season, all of which he has shipped.

—Mr. W. H. Sparling has leased the west end planing mill at Pembroke. In addition to all kinds of work done in a mill of that kind, he will give special attention to the manufacture of shingles.

—The Wm. Hamilton Manufacturing Company, Peterboro', will establish a branch of their works at Nanaimo, B. C., where they will go largely into the manufacturing of mining machinery.

—Lumbering around Emsdale has been done on a small scale this season. Mr. R. V. Fish, the owner of the Emsdale mill is having about one-half million each of pine, hemlock and birch taken out the coming winter.

—The Ottawa Syndicate that purchased about two months ago the E. B. Eddy limits on the Clyde and Madawaska have a force of about 80 men at work on the former. The Madawaska limit it is expected will not be worked this year.

—Some 200 employees of the lumber mills met November 26th in Labor Hall, Ottawa, to discuss the question of wages and long hours, and to consider the advisability of organizing. Nothing definite was done, but another meeting will be held.

—The cold weather having set in, all lumber mills in Norman and neighboring towns of Rat Portage and Keewatin have been closed for the season. On the whole the mill-owners have had a successful season and a large quantity of lumber has been cut. Several parties have left for the camps in the woods.

—Messrs. Young & Leslie Bros. have about completed their mill at Owen Sound and will soon have it in running order. McGregor, Gourley & Co., of Gait, furnished all the factory machinery, and the saw mill machinery was furnished by Kennedy & Sons, Owen Sound. The saws were from the R. H. Smith Co., St. Catharines.

—During the week ending November 15th the Rathbun Co., at their yards in Deseronto, handled 2,776,000 feet of lumber, 203,000 shingles, 68,000 moulding strips, 2,700 posts, and a large quantity of bush wood, etc., all of which were loaded for shipment. This may be considered a very good showing for an off week.

—About two months ago a crowd of 78 men left Ottawa for British Columbia to work in McKenzie's shanties in the Blueberry district. They were hired for \$1.50 a day each, but were recently discharged through operations being suspended. Thirty-seven of the gang, who had just money enough to bring them back, arrived in Ottawa the other day. The others, it is said, have no means whatever.

—Alex. Kidd and James Reilly, of Sarnia, have formed a partnership and gone into the lumber business. They have purchased a large tract of timbered land in the township of St. Edmunds, in the Indian peninsula, near Tobermora, and will go into extensive operations in getting out telegraph poles, railway ties, paving blocks and similar material, which they will ship in their own vessels to Detroit and other markets. They will put a large force of men to work in the woods as soon as the snow falls.

—The Renfrew Journal says: On Sunday a shantyman arrived in town on his way to Ottawa. He had been employed above Combermere and was discharged. He was refused his pay at the depot, and having no money, had to walk to Dacre from where he got a ride to Renfrew and with sore and blistered feet started to walk to Ottawa. On Monday night another man reached here on his way to Ottawa. He was employed at the Spanish river and was discharged. He walked to Sudbury, 75 miles, and had enough money to pay his way to Mattawa. From there he had to finish his journey on foot if fortune did not favor him.

—The Deseronto Tribune says: The Cedar Mill has discontinued cutting at night, having caught up in cedar. A few more cribs of cedar are expected from Trenton. Vast quantities of lumber continue to come in over the K. N. & W. Railway. The Resolute carried a large quantity of ties to Oswego during the past week. The floating raft at the pond went adrift in the bay, and Ed. Lewis, S. Woodcock and Ed. Breault went out after it in a skiff. These hardy mariners had an exciting experience in the stormy waters of the bay before they regained land. R. Woodcock climbed to the top of the smokestack to fix the guy wires, a task requiring a

cool head. Mr. R. E. Northmore, foreman of the cutting department, has been on the sick list. There has not been a breakdown of a character so serious as to stop this mill running over half an hour this season. This speaks well for the skillful management of Supt. Roach and his staff.

QUEBEC.

—The Calumet slides at Bryson are being rebuilt.

—D. Bedard, a lumber dealer at Lachute Mills, has assigned, owing \$8,000.

—The mills in Hull are all closed down for the season. Work has been more plentiful than expected, and the sudden though late boom in sawn lumber had a good effect.

—W. Somerville, Shawville, has signed a contract for the taking out and sawing of one million feet of hardwood timber for the Rathbun Company.

—The Buckingham Planing Mill Company, of Buckingham, will put in a new steel boiler. Messrs. Bannerman & Powell, of Ottawa, are to build it.

—The province of Quebec will exhibit a handsome wood trophy of castellated design at the Jamaica exhibition. It is 62 feet long and 32 feet high, and will contain specimens of all the woods grown in this province.

—A meeting of the forest rangers of the province of Quebec was held Nov. 19th in Hull, when Mr. J. B. Charleson, chief forest ranger, despatched seven rangers into the Gatineau, Rouge river and other districts. They are Messrs. Schnobh, Jonesse and Donovan, Gatineau; Poupore and Smith, Pontiac; Philion, Greenville; Andrew Grant, Shawville.

—Pontiac Advance:—At Rock Lake, on the upper waters of the Madawaska, the Messrs. McLachlin Bros. have a gang camped making saw logs, the men have several times seen two very large moose, a male and female, the buck being an enormous fellow, he evidently considers that he has proprietary rights in that section and objects to any intrusion on his domain, as he has several times chased men when singly by themselves in the bush. On Sunday one of the men started out partridge hunting but after a short absence returned full speed, nearly exhausted and shouting for help, to the camp, the moose in full chase. When the moose came in sight of the camp he turned and trotted off.

NEW BRUNSWICK.

—Mr. Gibson's mill, at Blackwell, has closed down for the season. A fine lot of deal has been manufactured and put out in good condition.

—F. Moore & Sons, whose shingle mill at Woodstock was burned, are rebuilding.

—The International railway is calling for tenders for 300,000 railway ties and 100,000 cedar fence posts.

—Vaughan's mill at Point Wolfe, Albert county, has finished a successful season's cutting of 6,000,000 feet, an average of 1,000,000 feet a month.

—Charles Case, of Kingsclear, is rebuilding his steam saw mill, recently destroyed by fire.

—The Douglas Boom Company has sent down stream about 150,000,000 feet of lumber this season. Navigation on the St. John river is now practically closed.

—The St. John mills at the head of the bay have finished cutting for the season. Probably 3,000,000 feet of deals will be carried over by those mills in the hope of better prices in the spring.

—Shingle machines have been put into Gibson's lath mills at Marysville, and the cut of cedar shingles there this coming winter will be large. The quantities of cedar lying above the dam will be floated to the mill at once.

—Judging from proposed operations in New Brunswick, the aggregate cut will be considerable less this winter than last. The American firms that operate on the Aroostook will probably cut more freely than settlers on English account. Robert Connors will operate extensively on the St. John. He has gone in with men and teams. Men are also at work on the Miramichi. Wages range from \$15 to \$20 a month.

—Harlow & Kempton, Milton, Queen's county, have built a new gang and rotary water mill. The work was done by Duncan Buchanan, of Apohoqui, N. B. Several months ago Mr. Buchanan put in a turbine wheel of his own invention at Nichol's mill on the La Have river. It will cut 15,000 feet of boards in 10 hours with a 10 foot head. Mr. Buchanan put in one of these also for Harlow & Kempton, and has orders for two more. Their work surpasses his expectations. Harlow & Kempton's is one of the neatest mills in Nova Scotia. That firm proposes to cut extensively this winter. It will cut for the South American and West-India market chiefly.

—The export of deals this season from the ports of Bay Verte, Northport and Tidnish, near the isthmus which connects New Brunswick and Nova Scotia, have been larger this season than in any previous year. The total shipment of deals from the ports named have been about 15,000,000 feet. Large quantities of these deals are carried by rail to the shipping point, which, it is claimed, can be loaded in the Bay of Fundy after the completion of the ship railway, and forwarded more cheaply over that line.

—The tug boats engaged in hauling rafts to the St. John have been remarkably fortunate this year. One tug boat firm, which last year lost 14 or 15 rafts and sunk about \$12,000, has this year wiped out that debt and cleared from \$15,000 to \$18,000 besides, having lost this year only one raft. Other owners report like success, and the year has been for the most successful, probably, in the history of the trade. The river was high a good portion of the season, which made navigation much more easy and rapid.

NOVA SCOTIA.

Extensive improvements and repairs are being made on Mr. Gibson's saw mill at Marysville.

—C. W. Johnson, a storekeeper of Greenfield, who also did a lumbering business, has assigned. His failure is attributed to losses on log contracts.

—The prosperous condition of the lumber business in Nova Scotia last year led to the establishment of a lot of "jack knife" mills in the vicinity of the Cobequid hills. Farmers who had never been known to do anything extraordinary suddenly blossomed out as mill owners. There was a boom for a while. Then the crash came, and there have been of late several assignments in that region.

—The Amherst *Sentinel* says: Mr. Angus McPherson, of Conn's Mills, has built 1 1/2 miles of railway into his lumber woods this summer and is now running a train on it. He has already taken out about 100 cords of hemlock bark, and is now ready to begin to carry out logs. The rails he uses are round spruce poles, probably six inches in diameter at the large end, tapering down to half that size, and neatly joined at the ends. The sleepers are small round poles to which the rails are spiked. The rolling stock consists of a small upright engine, 8 h. p., and two flat cars, manufactured by A. McPherson & Co., Oxford. The tires of the wheels on both engine and cars are made with a flange on both sides to prevent them from leaving or spreading the rails, and the wheels have play enough on the axles to accommodate themselves to any inequality in the width of the rails caused by the difference in size of the poles used. Mr. McPherson has gone to no unnecessary expense in grading his track. He has followed around the hills, and says he has a comparatively level track. The engine is placed between the two cars he uses, so he has no trouble in making up his train. He expects this engine to do the work of eight horses, and he can carry on his work all winter even if there should be no more snow than there was during the last two or three seasons. It was the scarcity of snow in late winters that prompted Mr. McPherson to adopt this means of getting his logs out to the river. It cost about \$300 to lay the track, and the engine cost \$400. What has already been done shows that the plan is feasible.

—A correspondent writing from Chatham says: The sawing and shipping season is now closed, all the mills on the river being down, and no vessels in port or to arrive, although the indications are that we will have open water for some days yet. There is every prospect of a dull season in the woods, and with that in view a great many men have left for Maine and New Hampshire, although wages are not ruling as high as last year.

—The St. John, N. B., *Sun* says that the lumber cut of Stetson, Cutler & Co. this season will be in the vicinity of 30,000,000 feet of spruce and pine lumber and 30,000,000 shingles. In their two mills and ten lime kilns this firm employs about 450 hands.

BRITISH COLUMBIA.

—The Canadian Pacific Timber and Lumber Company is being organized at New Westminster, with a capital stock of \$500,000 to engage in the saw mill business. Andrew McLaughlin and Alexander Fraser, of New Westminster, John J. Moore, John R. McHugh, and John Ward, of Vancouver, are the principals in the enterprise.

—The H. R. Morse Lumber Mills, of Vancouver, has contracted for the lumber to be used in laying the sidewalks and planking the streets at the new town of Mission, the terminus of the Seattle, Lake Shore and Eastern Railway, where they are erecting extensive wharves, warehouses, and lumber yards to facilitate the trade at that point.

—Until recently the Brunette Saw Mill Co., at New Westminster, have been running double time. They have been

shipping large quantities of lumber to Eastern points, and a large number of foreign orders are on hand to be filled.

—The new saw mill to be built by N. Slaughter & Co., at Stereston, near the mouth of the Fraser river, will have a capacity of 200,000 feet per day.

—The monthly circular of Robert Ward & Co., dated Victoria, B. C., 1st November, gives the arrivals and departures of sailing vessels at and from that port, and others on Puget Sound for October last. Quotations for coal: Departure Bay or Nanaimo to San Francisco, \$2.75 per ton; lumber from Burrard Inlet or Puget Sound to Sydney, N. S. W., 52s. to 52s. 6d.; Melbourne, 65s. to 65s. 6d.; Shanghai, same; United Kingdom, 75s.; West Coast South America, 52s. 6d. to 55s.; East Coast ditto, \$15.50.

—Lumber charters effected during the month amounted in the aggregate to 10,694 tons, and tonnage is scarce. One steamer, the "Algonia," of 2,892 tons, is named for a cargo to Melbourne. Three American schooners charter for Honolulu: a ship and a barque for Melbourne, a barque and a schooner to Sydney, various ships and barques to Chefoo, Shanghai, Kahului and Iquique. There are arrivals of shipping at Burrard Inlet from Hong Kong and Yokohama, and clearances thence for Valparaiso (lumber and salmon), Callao, Melbourne and Adelaide with lumber. The twenty-eight departures of the month carried 46,444 tons of coal from Nanaimo and Departure Bay to San Francisco, Port Townsend, Honolulu, Sitka, Alaska, and San Pedro.

MANITOBA AND NORTHWEST.

—Mr. S. McTraine is negotiating for the purchase of the lumber yard of Messrs. Dick, Lanning & Co. at Portage la Prairie.

—There is going to be a good deal of activity in the camps in the mountains this winter, says the *Calgary Tribune*. Arrangements are being made not only for ties for the Calgary and Edmonton Railway, but also for other purposes.

—Mr. Neilson, of Selkirk, is opening a lumber yard at Carberry.

—Six million feet of lumber have been cut on Lake Winnipeg this season.

—J. D. McArthur & Co. have succeeded in getting 110,000 of their ties, which have been stuck up in the Little Saskatchewan all summer, to Brandon. About 150,000 have been frozen in.

AMERICAN.

—Shingles are scarce at Oswego, N. Y., and prices are advancing.

—Lumbering operations in the vicinity of Baraga, Mich., will be more extensive this season than in any other previous year.

—Wages in the woods in the northwest are reported considerably higher this winter than last.

—Word comes from Maine that the cut on the Kennebec this winter will be at least 10,000,000 feet more than last year. Work has also vigorously begun on the east and west Penobscot.

—The lumber cut in Minnesota will exceed that of last year by several million feet. The estimates placed it at 325,000,000 feet and not more than 350,000,000 feet.

—The Onelette-Curphy Lumber Company has just been organized in Vicksburg, with a capital of \$50,000. Several members of the new company are Canadians.

—In Honolulu the market for Pacific coast lumber is good.

—The shipments of lumber from Saginaw, Mich., for the season will slightly exceed those of last year, and only about one-half of the output of the mills for the season will be represented in the lake movement.

—David Whitney, of Detroit, Mich., recently bought 20,000 acres of timber land in a body. The price is understood to be about \$10 an acre. The land is situated on the banks of the Miami and Kelshe rivers, in Tillamook county, Oregon. Competent cruisers say it will cut better than 100,000 feet to the acre, of fine yellow fir timber.

—It is discovered that somebody has stolen \$1,000,000 worth of timber from the government swamp and railroad indemnity lands around Eau Claire, Wis. Uncle Sam is said to suspect a railroad or two of the robbery.

—The British steamer Suffolk, has sailed from Port Gamble, Puget Sound, Wash., for England. She takes 2,500,000 feet of lumber, the largest cargo ever loaded on the Sound.

—The destruction of saw mills by fire has alarmed fire insurance companies, and a number of them have instructed their agents in the Saginaw Valley to accept no more risks on mills or lumber. It is estimated that the losses by fire during the past five years aggregate \$1,000,000.

The largest sale of land ever made in New England was perfected a short time ago, Messrs. Geo. Van Dyke and C. E. Henry, of New Hampshire, purchasing of Mr. George B. James and the New Hampshire Land Company 90,000 acres of timber land in Carroll county, N. H. It is reported that 1,000,000,000 feet of spruce are standing on the lot. Several large mills will at once be constructed for sawing the timber into lumber.

—The large Wahnapitae, in tow of the propeller Nicol, lumber laden, from Washburn, Lake Superior, with a cargo of 1,800,000 feet of lumber consigned to Fairport, Ohio, was completely wrecked against the Cleveland breakwater while trying to make harbor during a severe gale on the night of Oct. 26th. Her cargo was strewn into the lake or dashed in pieces against the breakwater or shore. It will prove almost a total loss. Insurance \$17,500. The Wahnapitae was the largest lumber boat on the lakes, having been built to carry logs from Canada to the mills in Michigan. The export duty levied by the Canadian government practically took her out of commission, and she was transformed into a lumber barge.

CASUALTIES.

James Polley was caught in the machinery of McKee's mill at Wellsford, N. B., and received fatal injuries.

While conveying some logs from the dam to the mill of J. Woodworth at West Branch, Gray's river, N. S., the other day, E. Woodworth, son of the proprietor, stepped on a rolling log, fell in, and was drowned.

Mr. Thomas Callaghan, superintendent of lumber operations on the Trent waters for the Rathbun Company, while engaged with a party of men exploring some timber limits in the township of Eppingham, was accidentally cut in the neck by an axe, severing several veins, which came near causing him to lose his life.

While John Evans, foreman at Ross, Hall & Brown's saw mill, Rat Portage, Ont., was engaged fixing some machinery, his foot slipped and he was caught between two cog wheels and his leg was instantly drawn in and crushed up to the knees.

Delbert Haines, aged twenty years, working for the Canada Lumber Company at Crotch Lake, Ont., was killed a few days ago by a tree falling upon him.

A man named Simon Tremblay had one finger of his left hand accidentally cut off by a circular saw at L. B. Eddy's saw mill, Hull, Que., a few days ago.

A young man named Ferrault had both of his legs cut off by falling in front of a circular saw at Ross, Richie & Co.'s saw mill, Three Rivers, Que., Oct. 22nd. He died shortly afterwards.

The dome of the boiler in connection with Hugh McDonald's saw factory at Belwood, Ont., was blown off, on Oct. 31st. The roof of the engine and boiler house got a complete scattering, and the smokestack was blown down.

E. S. Crossfield, son of Mr. S. B. Crossfield, owner of a shingle mill at Sturgeon Falls, Ont., lost his life by being caught by the circular saw. In some manner the teeth of the saw caught his coat, and in an instant he was thrown up against the framework of the machine, the saw cutting him in the abdomen in a most frightful manner.

One of the large boilers in Peters & Cain's mill at Midland, Ont., exploded November 19th, and went through the roof of the boiler house, moving the other two boilers about 20 feet. One of the corners was knocked out of the mill. Several men were injured, but not fatally.

FIRE RECORD.

Mr. J. A. Ellis' saw mill at Fenelon Falls was burned November 21st. The fire was caused by the explosion of a lamp.

Jesse A. Gilbert's saw mill at Brookbury, Que., was entirely destroyed by fire October 7th. Loss from \$2,500 to \$3,000. No insurance.

The saw mill owned and occupied by C. J. Smith, situated on Burnt River, about two miles from Kimmount, Ont., was burned October 27th, together with the store house, boarding house, supply store, 2,000 cords of wood and 20,000 ties. The estimated loss is about \$12,000.

The steam saw mill and lumber yard of J. & A. Carson, Pictou, N. S., were burned November 8th. Loss \$10,000; insurance \$1,600.

W. H. Leonard's saw mill at Hope Bay, Ont., was burned November 4th. Insured for \$1,000.

The planing mill at Pembroke, Ont., owned by R. F. Beamish, and operated by Mr. Sparling, was burned November 20th. Mr. Beamish loses \$2,500 on factory, and W. S. Sparling, lessee, \$600 on stock.

LATEST NEWS NOTES.

—The last raft of the season recently passed down the St. John river, N. B.

—Mr. S. D. Shier is erecting a new mill at the first bend of the South Branch, Ont. It is intended to manufacture shingles only.

—Mr. Rainey, Severn Bridge, Ont., has had to cancel several large orders for shingles for want of cars. He has four millions roofed in for the winter.

—During the year ending Nov 1st, 1890, over half a million feet of dressed lumber have been disposed of to farmers around Gladstone, Manitoba, by Knox Bros., lumber dealers, at that place.

—Christy's saw mill, at Brandon, Man., has had a good season. Forbes & Stirrett are busy at their planing mill. They still have work to keep them busy for two months ahead.

—Canada's forest wealth is to be well illustrated at the forthcoming exhibition at Jamaica, West Indies. Adam Brown, the commissioner appointed by the Dominion Government, is arranging with Canadian lumbermen to make a magnificent display there.

—A. Robb & Sons, Amherst, N. S., have their new building, which is to be used for a machine shop and pattern shop, about ready to be occupied, and they have now concluded to erect at once sales rooms and offices on the old site, which is directly in front and adjoining the building already referred to.

—A party of Tacoma capitalists are now in Victoria with a view of establishing an extensive lumber business on Vancouver Island. There is some difficulty in the way of their obtaining timber lands, but if this can be got over they will commence operations at once.

—Since writing the editorial on the financial difficulties of the Potts Salt and Lumber Company, of Michigan, which appears in another column, the Company has made a voluntary assignment for the benefit of creditors. Last January, according to the annual statement, there was over \$850,000 on the right side of the ledger. A statement of assets is expected to show a large excess over their liabilities.

—Victoria Times:—"The estimated cost of the cable to connect British Columbia is nine million dollars. Its total length will be eight thousand nine hundred miles, Sidney being the terminus. The project seems stupendous, but it is really less than the first project of laying the cable under the Atlantic. The great point, however, is that such a system would make England independent of European lines and place the Government at London in direct communication with the most distant colonies. The projectors of the cable only ask for a guarantee of two hundred and seventy thousand dollars per annum, at three per cent. on the cost.

—Application will be made on December 19th next, to the Lieutenant Governor of Ontario in Council, for an act to incorporate the Capital Lumber Company, of Ottawa (limited). The objects for which incorporation is sought are to manufacture and sell timber and lumber of all descriptions; also to carry on the business of a planing mill, sash, door and furniture factory. The operations of the Company are to be carried on in Ottawa. The applicants are Messrs. P. N. Mason, Wm. Lamb, jr., J. C. Edwards and A. J. Edgar, of Ottawa City; G. C. Edwards of Carleton Place, and A. I. Schryer, of North Nation Mills. The above named will be the first directors.

—Reports from Ottawa go to show that a better feeling exists among the lumbermen of that city and vicinity. Confidence is expressed that next season will more than make up for the dullness of 1890, and that business will be brisk in the spring. The feeling is general that a much brighter opening of trade in the coming than last spring may be looked for as regards the United States trade. As regards the English trade, it will certainly not be any worse than it was this season, and there are chances that it may be better, stocks having run pretty low. With respect to the South American trade, though matters are more settled, it is generally admitted that the present low value of gold will prevent an early revival.

—Mr. H. Pann, Inspector of engines, writing from Hamburg, Germany, to the Magnolia Anti-Friction Metal Co., of New York, has the following to say: In reply to your inquiry regarding my experience gained by using your Magnolia Anti-Friction Metal, readily I state to you that I have used it for longer than a year in many of the steamers belonging to this Company, with the most satisfactory results. It has never cut, has never become warm or melted, and has invariably put a splendid surface on the journals. The lasting quality of the metal is very great; the saving of oil very considerable. The Magnolia Metal is particularly useful in re-lining worn out brasses. I consider it to be the best of all Anti-Friction Metals in the market, and shall continue to use it in our steamers.

OUR TIMBER EXPORTS TO BRITAIN.

The following cargoes of Canadian wood have been reported at various United Kingdom ports since our last issue.

ABERDEEN—Dracona, Montreal, 509 pcs sawn oak. BEAUMARIS—Triton, Bathurst, 17,297 spruce deals. BELFAST—Donald Ferguson, Quebec, 60 pcs hewn elm, 15 pcs hewn birch, 370 pcs hewn fir, 7,678 fir deals. Agnes Lincke, Miramichi, 21,568 deals and ends, 8,250 palings. Greenock, West Bay, 35,023 deals, scantlings and ends. Sheffield, Miramichi, 18,436 deals and ends, 14 lds palings.

BRISTOL—Harold, St. John, 22,928 deals and battens, 2,464 scantlings, 5,243 deal ends, 3,488 boards. Arathusa, Richibucto, 10,994 deals and battens, 1,116 deal ends. Texas, Quebec, 300 cs splints, 1,832 deals. Curler, St. John, 38,296 deals, battens, scantlings, ends and boards. Anna Casper, Miramichi, 22,622 deals, scantlings, boards and ends. Strathsay, St. John, 34,973 deals, scantlings and ends. Knight Companion, Montreal, 12,631 pcs deals, 103 pcs birch timber, 3,400 pcs boards.

CARDIFF—Antillia, St. John, 17,221 deals. Italo, Miramichi, 21,049 deals, boards, scantlings and ends. Tuskar, St. John, 57,015 deals. Armonia, Miramichi, 25,761 deals and ends. Primus, St. John, 32,787 deals. Miramichi, St. John, 30,100 deals.

COLERAINE—Urd, Chicoutimi, 6,591 deals. Falken Miramichi, 8,553 fir deals.

CORK—George Peake, Quebec, 10 pcs hewn oak, 10 pcs hewn elm, 8 pcs ash, 5 pcs white fir, 401 pcs red fir, 8,144 deals, 100 deal ends. Titania, St. John, 13,021 pcs sawn fir.

DUNDEE—Udsire, Quebec, 109 pcs timber, 5,158 deals. Fremona, Montreal, 9,672 deals.

DUBLIN—Henry, Quebec, 19,496 deals.

DUNDALK—H. W. Palmer, St. John, 15,152 deals, battens and deal ends.

DROGHEDA—Buda, St. John, 12,562 deals.

FLEETWOOD—Cathines, Shediac, 13,673 fir deals. Southern Queen, Quebec, 728 pcs hewn fir, 3,359 fir deals. Gwico, Grand Pabos, 23,781, deals, boards and ends.

GLASGOW—Pomeranian, Montreal, 14,055 deals, Scandinavian, Halifax, 2,462 staves, 16 logs whitewood. Norwegian, Montreal, 4,610 deals, from Quebec, 6,706 deals. Warwick, Montreal, 2 cars oak lumber, 79 logs walnut, 4,506 deals, 1,263 pcs oak lumber, 37 maple logs. Borghese, Montreal, 41,462 spruce deals, 6,146 spruce ends. Sarmatian, Quebec and Montreal, 10,235 deals, 21,918 staves. Amarynthia, Montreal, 818 pcs oak lumber. Canadian, Halifax, 2,285 hhd staves. Alcides, Montreal, 11,827 pcs oak lumber. Siberian, Quebec and Montreal, 65 pcs timber, 8,391 deals.

GREENOCK—Prince Eugene, Quebec, 111 pcs elm, 132 pcs birch, 66 pcs red pine, 353 pcs white pine, 1,433 pine deals, 1037 pine deal ends, 2,262 spruce deals, 200 spruce deal ends, 180 pcs oak, 439 pcs waney white pine, 39 pcs square white pine. Frinds copold, Quebec, 102 pcs oak, 164 pcs birch, 47 pcs elm, 151 pcs red pine, 162 pcs square white pine, 759 pcs waney white pine, 4,340 spruce deals, 1,549 spruce deal ends, 440 pine deals, 10,800 West India staves. Australia, Quebec, 650 pcs birch, 937 pcs white waney pine, 434 pcs square waney pine, 2,582 pine and spruce deals, 883 pine and spruce deal ends, 1,683 pine staves, 172 pcs oak.

GLOUCESTER—St. Petersburg, Miramichi, 33,147 deals. Florida, Bay Verte, 24,723 deals. Peteropolis, Shediac, 20,259 deals and battens. Alert, Alma, 24,721 deals. Calliope, St. John, 39,976 deals and battens. Vanloo, St. John, 47,352 deals and ends. Emma Parker, Pqwash, 18,029 deal, Nightingale, Bay Verte, 24,786 fir deals, 50 pcs birch. Hanna, Richibucto, 14,469 deals and boards. Britannia, Halifax, 19,210 deals.

HULL—Ripon City, Montreal, 21,379 pcs wood.

LANCASTER—Marcelo, Peterboro', 10,462 deals and ends.

LEITH—Saga, Quebec, 39 pcs hewn oak, 39 pcs hewn elm, 33 pcs hewn ash, 32 pcs hewn birch, 10 pcs hewn cherry, 6 pcs hewn maple, 393 pcs hewn fir, 6,744 deals and ends.

LIMERICK—Nimrod, Quebec, 20,315 fir deals and ends.

LIVERPOOL—W. H. Corcar, St. John, 20,556 deals battens, 8,773 deal ends, 362 pcs white pine, 1,103 scantlings, 3,042 boards, 693 pcs birch. Prince Charlie, Quebec, 454 pine, 24,355 spruce deals, 3,489 spruce deal ends, 165 pcs oak, 111 pcs elm, and 57 pcs birch timber, 757 pcs white pine. Monarch, Bay Verte, 22,094 deals and battens, 1,301 scantlings, 1,637 deal ends. Parisian,

Montreal, 13, 653 boards, 5,633 deals; 806 bbls hickory. Prince Arthur, Ship Island, 840 pcs hewn timber, 567 pcs sawn timber, 1,014 deals. Lake Superior, Montreal, 24,338 boards, 13, 327 deals. Neopoyte, Quebec, 912 pcs w v pine, 3,872 pine deals, 2,020 pine deal ends. Dominion (s), Montreal, 225 bbls broom-handles, 4,384 pcs, 80 stds deals, 3,340 pcs and 30 stls boards, 116 stds and ends. Gerona, Montreal, 6 logs walnut. Bede, West Point, 1900 staves, 260 pcs shuttle blocks. Lucio Radmann, Shediac, 12,050 deals and battens, 1,294 scantlings, 1,135 deal ends, 1,449 boards. Rossignol, St. John, 9,352 spruce deal ends, 4 pcs birch, 215 birch deals, 35,220 deals and battens, 3,912 scantlings, 5,581 boards. Lako Huron, Montreal, 17,119 deals, 3,563 bbls, qty lumber. Vancouver, Montreal, qty deals and boards: from Quebec, 45 cs spools. Corean, Montreal, 6,463 deals, 4,885 boards, 522 ash scantlings; from Quebec, 3,132 deals, 2,046 deals, 775 boxes splints. Thyra, Bay Verte, 19,662 deals, 3,730 scantlings, 1,568 deal ends. Edith, St. John, 1,032 pcs birch timber, 1,015 birch planks, 23 birch ends, 8,670 deals and battens, 870 scantlings, 1,356 deal ends, 4,766 ends. Beaconsfield, Quebec, 220 oak, 90 elm, 399 waney pine logs, 365 pine deals, 1,319 ends, 8,390 spruce deals, 341 ends. Homewood, Quebec, 41 oak, 50 elm, 174 birch, 164 red pine, 522 waney, 222 square pine logs, 4,372 spruce deals, 778 ends, 700 pine ends. Primula, Dalhousie, 1,700 birch planks, 1,521 pine, 4,546 spruce deals, 723 battens, 622 ends. Star of India, Campbellton, 22,029 deals, 2,827 ends. Abana, Quebec, 185 oak, 26 elm, 47 walnut, 223 square pine, 781 waney pine logs, 2,669 deals, 1,980 ends. Verwatts, Halifax, 12,403 deals, 336 ends, 1,486 birch deals, 155 ends. Ashburne, 60,281 deals and battens, 76 fms firewood. Vandura, St. John, 41,620 deals and battens. Sagona, Richibucto, 29,413 deals. Lake Nepigon, Montreal, 115 stds pine deals, &c. Toronto, Montreal, 350 stds pine deals, &c. Prince Patrick, Campbellton, 24,157 deals, 2,101 ends. Lennie, St. John, 21,365 deals, 2,005 scantling, 7,520 ends, 2,879 boards, 234 birch deals. Lima, Halifax, 199,912 deals and ends. Satana, Newcastle, 6,863 deals, 6,689 scantling, 1,846 ends, 13,945 boards. Oxenholme, Montreal, 34,851 pine deals, boards, &c. Vaini, St. John, 22,439 deals and battens, 2,198 scantlings, 3,226 ends, 3,383 boards. Sarnia, Montreal, 172 stds deals, &c. Lake Ontario, 4,518 deals, 9,642 boards. Christian, Bathurst, 16,092 deals, 1,204 scantlings, 707 ends. Ore, Miramichi, 40,650 deals, 2,732 birch deals, 123,325 palings. Hilda, Bay Verte, 18,215 deals, 2,681 scantlings, 2,007 ends.

LONDON—Marie, Quebec, 19,922 deals, 3,838 deal ends. Albion, Quebec, 1,098 deal ends 15,176 deals. Bellona, Pictou, 1,046 pcs timber, 255 planks, 465 deal ends. George, Saguenay, 21,185 pcs fir, sawn deals and ends. Urania, Quebec, 41,375 deals, 1,266 ends. Erl King, Montreal, 3,183 deals, 99 pcs timber. President Von Blumenthal, Chatham, 1,568 deals, 13,921 deals and ends. Orion, Tatamagouche, 851 pcs timber, 3,003 deals, 360 deal ends. Ilmar, Chatham, 39,181 spruce deals and ends, 2,211 birch ends. Srea, Miramichi, 13,048 deals and ends. Hedeveg, Miramichi, 15,808 deals. Censio, Halifax, 1,812 deals, 219 bbls mouldings, 48 doors, 83 pcs maple, 917 pcs ash, 50 cs pegwood. Ariadne, Chatham, 21,611 deals. Invermay, Montreal, 1,951 boards, 22,312 deals, 2,239 deals. Jarlen, Quebec, 27,455 deals, 400 pcs timber, 4,293 deals. Hovding, Quebec, 32,480 deals, 3,359 deal ends. George Clarkson, Montreal, 16,903 deals, 22,333 deals, 4,366 deal ends. Ocean King, Montreal, 8,992 deals. Assyrian, Montreal, 9,826 deals.

LONDONDERRY—Maori, Miramichi, 19,634 deals and ends.

MARYPORT—Norma, Dalhousie, 12,240 deals and battens.

MILFORD—Anna Dorothea, Quebec, 38 pcs ork, 86 elm and birch, 503 pcs hewn fir, 2,056 pcs sawn fir, 1,329 deals.

NEWPORT—Muriel, Halifax, 19,413 deals and ends. Manin Cichero, Newcastle, 18,888 deals, battens, boards, &c. Frederick Stong, Miramichi, 36,536 deals, battens, boards, &c. Dunvegin, Miramichi, 34,195 deals, ends, battens and ends.

NEWRY—Endrick, St. John, 12,523 deals and ends. Lydia, Quebec, 13,368 deals and ends.

PLYMOUTH—Kate Crosbie, Miramichi, 22,775 pcs sawn fir. Concordia, Miramichi, 10,167 pcs sawn fir.

SUNDERLAND—Satisfaction, Quebec, 360 pcs hewn fir, 125 pcs hewn elm, 1696 deals and ends. Alma, Quebec, 748 pcs hewn fir, 2,653 fir deals and ends.

SWANSEA—Cambain, Campbellton, 11,068 pcs sawn fir, 3,195 pcs sawn birch.

TYNE—Siliustria, Quebec, 77 pcs oak, 63 pcs elm, 41 pcs ash, 149 pcs birch, 258 pcs square white pine, 81 pcs waney pine, 3,774 pine deals, 724 deal ends. Ocean, Quebec, 1,926 pcs timber and deals. Falcon, Quebec, 102 pcs elm, 291 pcs square white pine, 151 pcs waney white pine, 1,564 pine deals, 462 pine deal ends. Otto Linch, Quebec, 43 pcs oak, 57 pcs birch, 756 pcs white pine, 1105 pine deals, 1,974 pine deal ends, 67 pcs elm.

YARMOUTH—Froya, Quebec, 17,077 deals and ends.

The boilers in E. D. Jewett's saw mill at South Bay, a few miles from St. John, N. B., exploded on November 25th, killing six men and seriously injuring several others. The mill had been idle for some time, but had recently been set in order by Adams & Gregory for Mr. Dunn, whose mill was destroyed by fire last summer. Over 60 persons were employed in this mill at the time of the explosion, most of them being in the main building, which was not injured. Of the six boilers two were blown out of the building in different directions, and the other four were wrenched from their positions in the solid masonry. After the explosion the mill caught fire and was destroyed. The mill was insured for \$15,500 in a large number of companies.

TRADE REVIEW.

Toronto, Ont.

TORONTO, Nov. 29, 1890.

CAR OR CARGO LOTS.

Table listing lumber prices for Toronto, Ontario, including items like 2x4 and thicker clear picks, American inspection, and various mill runs.

YARD QUOTATIONS.

Table listing yard quotations for Toronto, Ontario, including mill cull boards, shipping cull boards, and various sizes of lumber.

Hamilton, Ont.

HAMILTON, Nov. 29, 1890.

Table listing lumber prices for Hamilton, Ontario, including mill cull boards, shipping cull boards, and various sizes of lumber.

Ottawa, Ont.

OTTAWA, Nov. 29, 1890.

Table listing lumber prices for Ottawa, Ontario, including pine, spruce, hemlock, and ash.

Montreal, Que.

MONTREAL, Nov. 29, 1890.

Table listing lumber prices for Montreal, Quebec, including pine, spruce, hemlock, and ash.

St. John, N. B.

ST. JOHN, N. B., 29, 1890.

Table listing lumber prices for St. John, New Brunswick, including spruce, pine, and hemlock.

Vancouver and New Westminster, B.C.

NEW WESTMINSTER, Nov. 29, 1890.

Carload and ship rates according to assortment. Bridge and

Table listing lumber prices for Vancouver and New Westminster, British Columbia, including wharf plank and rough lumber.

Table listing lumber prices for Vancouver and New Westminster, British Columbia, including T. & G. Edge Grain and Dry.

Table listing lumber prices for Vancouver and New Westminster, British Columbia, including No. 1, Dry and No. 1, Green.

Table listing lumber prices for Vancouver and New Westminster, British Columbia, including S. S. Planks for scows and D. D. cedar.

Table listing lumber prices for Vancouver and New Westminster, British Columbia, including Shingles and Lath.

Albany, N. Y.

ALBANY, N. Y., Nov. 29, 1890.

Table listing lumber prices for Albany, New York, including Boards and Joist.

Table listing lumber prices for Albany, New York, including 2x4 in. and up, good, and 4ths.

Table listing lumber prices for Albany, New York, including 1x2 in. good, 4ths, and 2x4 in. good.

Table listing lumber prices for Albany, New York, including Shingles, shaved pine, and Sawed, extra.

Buffalo and Tonawanda, N. Y.

BUFFALO, Nov. 29, 1890.

Table listing lumber prices for Buffalo and Tonawanda, New York, including Clear, 1 in. & clear, and Dressing, 1 to 2 in.

Table listing lumber prices for Buffalo and Tonawanda, New York, including Up's, 2x4 in., and 2x4 in. and thicker.

Table listing lumber prices for Buffalo and Tonawanda, New York, including XXX, 18 in., and XX, 18 in.

Saginaw, Mich.

EAST SAGINAW, Nov. 29, 1890.

Table listing lumber prices for Saginaw, Michigan, including Uppers, Common, and Shipping Culls.

Table listing lumber prices for Saginaw, Michigan, including Clear, 2x4 in., and Select, 2x4 in.

Table listing lumber prices for Saginaw, Michigan, including Three uppers, 1 in., and Selects, 1 in.

Table listing lumber prices for Saginaw, Michigan, including XXX 18 in. Climax, and XXX Saginaw.

New York City

NEW YORK, Nov. 29, 1890.

Table listing lumber prices for New York City, including Black Walnut, 3/4 in. clear, and 2 and 1/4 inches.

Table listing lumber prices for New York City, including 3/4 in. 10 inches and over, and 1 in. coffin boards.

Table listing lumber prices for New York City, including 1 in. plain sawed, 1 1/2 to 2 inch, and Quarter-sawed, white.

Table listing lumber prices for New York City, including Chestnut, clear, Chestnut common, and Basswood white.

Boston, Mass.

BOSTON, Nov. 29, 1890.

Table listing lumber prices for Boston, Massachusetts, including Uppers, 1 in., 1 1/2 & 2 in., and 3 & 4 in.

Table listing lumber prices for Boston, Massachusetts, including Selects, 1 in., 1 1/2 & 2 in., and 3 & 4 in.

Table listing lumber prices for Boston, Massachusetts, including Moulding boards, 7 to 11 inch clear, and 60 per cent clear.

Table listing lumber prices for Boston, Massachusetts, including Nos. 1, 2 & 3, 4, 5, and 6.

Table listing lumber prices for Boston, Massachusetts, including Spruce by cargo, Scantling and plank, and Yard orders.

Oswego, N. Y.

OSWEGO, Nov. 29, 1890.

Table listing lumber prices for Oswego, New York, including Three uppers, 1 1/2, 2 & 2 inch, and Pickings.

Table listing lumber prices for Oswego, New York, including No. 1 cutting up, No. 2 cutting up, and 1 in strips.

Table listing lumber prices for Oswego, New York, including 12 & 16 ft. mill run, 12 & 16 ft. No. 1 & 2, and 12 & 16 ft. No. 2 culls.

Table listing lumber prices for Oswego, New York, including 12 & 13 ft. mill run, mill culls out, and 12 & 13 ft. No 1 culls.

Table listing lumber prices for Oswego, New York, including Mill run mill culls out, Dressing and better, and Mill run mill culls out.

Table listing lumber prices for Oswego, New York, including 67 or 8. mill run, mill culls out, and 6, 7 or 8. drsg & better.

Table listing lumber prices for Oswego, New York, including XXX, 18 in. pine, Clear butts, pine, 18 in., and XXX, 16 in. pine.

OUR ALBANY LETTER.

ALBANY, N. Y., Nov. 26th, 1890.

This month will close the season's work in the Albany market, and from this out nothing but a limited car trade will be carried on until spring, when navigation opens again. We have had only a touch of cold weather so far with a few flurries of snow, but the majority of the boats on the canals have gone into winter quarters, as the canals close officially on Sunday night the 30th instant, unless closed sooner by ice. Shipments on the Hudson from this point will continue as long as the river keeps open, as there are yet many orders to be filled, notwithstanding this has been a very busy month with heavy shipments daily. The coarser grades of pine have experienced the most demand, with a liberal sprinkling of good lumber.

1x12 inch shippers have been in good sale. One firm in the district shipped this week nearly two million feet of Canada stocks alone for the South American trade, while some others have done nearly as well.

The stock of Canada pine wintered over here will be large, as the lumber has been coming forward rapidly ever since the duty was reduced to \$1.00 a thousand; but there are two things the market is short on—thick uppers and 1½ inch of all grades—both of which have been in constant demand all summer.

1½ inch pine is practically cleaned out of the market, especially 1½x10x13 ft. plank, of which there is scarcely a boat load to be had, although only a few years ago there were millions of feet of them piled up here with a good demand from all sources.

Everybody now wants 16 foot lumber, and dealers find it almost impossible to dispose of 13 foot stocks, which are slow sale, and as you cannot make ten inch 13 foot plank without making 13 foot siding, which nobody wants, the plank trade has to suffer. Other dimensions have taken its place, but notwithstanding there are daily inquiries for plank from old time consumers who have used them for years, and would yet if they could be obtained.

1x10 13 ft. pine boards have also fallen off in the quantity consumed of late years, although there has apparently been a sort of revival in the demand for them this fall, considerable quantities of them having been shipped by boat and rail from the Ottawa district to the Albany and New York market.

Prices on Michigan pine stiffened up in the west, and also in the Tonawanda market, and its influence has been felt here, as some grades have been advanced a dollar or two in the last month. The trade has been exceptionally good, but as some concerns have larger stock than usual to carry over the winter, there is little probability of the higher rates holding, as the temptation to undersell the market in order to dispose of surplus stock is great.

In a few days now the dealers will have moved into their winter quarters in the city and for the next month will be busy figuring up accounts, after which there is practically nothing to do until navigation opens again in the spring.

There is always something of a demand, however from the New York market throughout the winter for odds and ends, which have to be shipped by rail; but the car trade from this point, taken all together, is scarcely a drop in the bucket when compared with the shipments by water during the summer season.

The Spruce and Hemlock men are anxiously looking for an old-time winter, with lots of snow and plenty of logs, so there will be no danger of a shortage of stock another year, as there has been this. Dealers say the stock on hand here now is the highest carried over in years and the outlook for the spring trade is not very promising, especially if there is much demand during the winter months.

The supply of marketable spruce in the Adirondac region is growing smaller every year, and already dealers and manufacturers are looking to Canada to supply their wants. It is an actual fact that better prices can be obtained for spruce in Northern New York for pulp manufacture than to bring it into the market in the regular way, and the consumption of spruce for that purpose is increasing rapidly and the business is as-

suming enormous proportions. One big concern in Albany, we understand, has already contracted for two large spruce commission accounts with parties in Canada, to supply their next year's trade.

The Outlook for Next Year.

[Southern Lumberman.]

As things are shaping themselves, 1891 will be a good year for general business. The basis of all prosperity is in a prosperous condition of the tillers of the soil. Farmers and, as far as our information goes, cotton planters will plant large areas for the coming season, having had satisfactory results this year. American and foreign markets have taken every thing offered them at good prices. Should crops be good next year, or rather should they be promising from the start, business channels will feel the effect in an enlarging demand. Preparations are being made among manufacturers, miners, railroads, jobbers, and all producing and exchanging interests to do a heavier business. There is a possibility that enterprise may overreach itself, but that result is not immediate. Business men feel safe; money lenders exhibit confidence in the future, and they are generally the first to smell danger to the general business interests. Railroad men are fixing up a basis on which they can get more out of traffic, and live without fighting. Ship builders have a year's work ahead, and car builders have as much work assured as they can get through this winter. Hardware manufacturers have been busy twelve hours per day for two months in many branches. Iron and steel makers have never had such a season, and new and cheapening processes are coming into practical use. Carriage and waggon makers are busy. Engine builders are enlarging their plants, and many new ones are going up. Miners of coal, ore, copper, silver, and gold have requirements placed for additional machinery and cars. Electricians are loaded up with an indefinite amount of work. With all this activity, prices are low—that is, they are as low as the individual, or firm, or corporation can make them. Competition is doing its work. Vast fortunes are not being made as they once were. If one channel offers exceptionally high rewards, it is at once filled by anxious competitors, and a general level is soon reached. An honest living is about all there is in business at present. The country is critically watching the effects of recent legislation, and stands prepared to approve or condemn the legislation as it is tested by experience. Too vast interests are at stake to tolerate errors of legislation, and the masses of the people comprehend economic and commercial questions in their entirety and in their relations to the best interests of the whole community better than they ever have. Business and manufacturing interests are organizing themselves for easier and smoother operations. Gigantic combinations are visible on all sides, but there are keen eyes watching them that they keep within safe limits. The moneyed interests once so powerful are now facing a country well informed on the probable outcome of any new policy. Hundreds of millions of capital are invested on the presumption that wisdom and foresight shall prevail at the helm of public affairs. British capitalists are finding this country under its conservative management a profitable field for heavy investments. The outflow of foreign capital will continue doubtless until a sort of equalization is effected.

The Compass in the Watch.

A correspondent of the London *Truth* sends the following: "A few days ago I was standing by an American gentleman, when I expressed a wish to know which point was the north. He at once pulled out his watch, looked at it, and pointed to the north. I asked him whether he had a compass attached to his watch. 'All watches,' he replied, 'are compasses.' Then he explained to me how this was. Point the hour hand to the sun, and the south is exactly half way between the hour and the figure XII. on the watch. For instance, suppose that it is 4 o'clock, point the hand indicating 4 to the sun and 11 on the watch is exactly south. Suppose that it is 5 o'clock, point the hand indicating 5 to the sun, and the figure X on the watch is due south. My American friend was quite surprised that I did not

know this. Thinking that very possibly I was ignorant of a thing that everyone else knew and happening to meet Mr. Stanley, I asked that eminent traveler whether he was aware of this simple mode of discovering the points of the compass. He said that he had never heard of it. I presume, therefore, that the world is in the same state of ignorance. Amalfi is proud of having been the home of the compass. I do not know what town boasts of my American friend as a citizen."

FELLING FIR TREES IN OREGON.

A correspondent of the *Southern Lumberman*, writing from Oregon, tells how they fell large trees in that State. He says: "Some of our tall timber will measure from six to twelve feet in diameter, and run up three hundred feet. The way to get them down perhaps will be interesting to some of your readers. When a tree is too large to saw down we bore an inch augur hole straight into the body of the tree about two feet from the ground, from eighteen to twenty-four inches deep, and then we bore another hole about twenty inches in a line above and let the augur range down so as to strike the inner end of the first hole bored. The points where they join must be near to the center of the tree. Then we put in some maple coals that are aglow with heat, and they fall down to the junction of the two holes. Then we blow them into a blaze with a hand bellows, and your work is done. They will come down themselves, and once down the fire goes out. The upper hole forms a stove pipe and the lower hole forms the draught. Trees up to six feet in diameter we saw down. We cut a small notch, say from eight to ten inches deep, so it will be square, then we take a seven-foot cross-cut saw and go on the opposite side and saw straight into the notch; we follow up with iron wedges to keep the tree from going back until we saw clear through, lacking three or four inches. Then it comes down and does not spoil your timber."

TIE TIMBER IN LATIN AMERICA.

The following data about the use of tie timber in Mexico and South America is interesting.

Argentine Republic.—East Argentine railway, hand-rail; Western of Buenos Ayres, quehacho and urunday.

Uruguay.—Uruguay North-Western railway, creosoted pine.

Brazil.—Herecobo and native hardwoods.

Chili.—Antofagasta railway, Chili oak; Copiapo railway, Chili oak; Coquimbo railway, cypress; Talca railway, white oak.

Peru.—Pisco and Yca railway, California redwood.

Venezuela.—La Guaira and Caracas railway, lignum vitae.

United States of Columbia.—Lignum vitae.

Mexico.—Merida and Prefeso railway, ironwood; other roads, yellow pine.

Hawaii.—California redwood.

Railroad Ties.

According to a government report on the consumption of forest supplies by railroads, about 73,000,000 ties are annually needed for new construction and renewals by the roads of the United States, which is equivalent to about 365,000,000 cubic feet of raw material. The various woods are estimated to be used in about the following proportions: Oak, 45,000,000; chestnut, 3,500,000; pine, 12,500,000; red, white and California cedar, 5,000,000; hemlock and tamarac, 2,500,000; cypress, 1,500,000; redwood, 2,500,000; other kinds, 500,000. Thus oak furnishes about 60 per cent. of the supply, and not only from choice trees mainly, but from the young growth which may make one tie to the tree or one to the cut.

The Canadian Pacific Railway have constructed large lumber docks at Owen Sound, which accommodate over 7,000,000 feet. Since their completion large quantities of lumber are being shipped over this road. The company, it is stated, will make a direct bid for all the lumber shipment of the north shore next summer.

WANTED AND FOR SALE.

Advertisements will be inserted in this department at the rate of 15 cents per line each insertion. When four or more consecutive insertions are ordered a discount of 25 per cent. will be allowed. This notice shows the width of the line, and is set in Nonpareil type. Advertisements must be received not later than the 27th of each month to ensure insertion in the following issue.

HARDWOOD lumber, bought, sold or received on consignment, TUCKER DAVID, lumber commission merchant, 313 Eleventh Ave., N.Y.

LUMBER YARD AND FACTORY FOR SALE. One of the oldest established in Brandon, doing good profitable business of about forty thousand dollars per year, an exceptionally good opportunity for any one wishing to commence business in the most thriving City in Manitoba. Box 97 Brandon, Man.

WANTED—TO BUY.

GOOD Canadian Traber Linits and Georgian Bay saw logs. Address, BEN HUDSALL, Whitby Building, Detroit, Mich.

CAPITAL WANTED.

WANTED A partner with about \$12,000 capital, to take half interest in a well established lumber and shingle business in British Columbia. Timber limits now secured to run mill 5 to 7 years. For particulars address, H. H. S., BOX 297, Vancouver, B. C.

WANTED SITUATION, by a thorough office man, 8 years experience with a large lumbering concern; can furnish best of references, address "BOOKKEEPER" care of "CANADA LUMBERMAN."

WANTED—PARTNER

WITH \$50,000 to \$75,000 capital to invest in timber limit and saw mills on line of C.P.R. in British Columbia, with three practical men. Best thing on line of C.P.R. Address BOX 276, Trenton, Ont., Canada.

TAMARACK TIMBER.

THE UNDERSIGNED wishes to purchase a large quantity of Tamarack Logs, from 8 to 20 feet long, the smallest to be not less than 13 in. at the top. A good price will be paid, delivered at Shelburne, Melancthon, Corbetton and Riverview mills. A. F. SPEARING, Shelburne or Riverview.

FOR SALE in the village of South River, a first-class saw and shingle mill, in good running order; situated on the bank of South river, Perry Sound district. For particulars apply to G. W. Burns, Jr., South River, Ont.

FOR SALE—Steam saw mill and bush lot in the township of Egremont. Apply to Adam Watson, Durham.

STEAM MILL—for sale, in the village of Cromore, with a good lumber and log yard; cutting capacity good; terms reasonable. For particulars apply to J. D. Greenleaf, Alliston, Ontario.

MUST BE SOLD at any sacrifice, heavy saw-mill machinery; first-class site; good stock of logs, and 200 acres of land; at junction of G.T.R. with C.P.R. Apply R. Gannow, Nipissing Junction P.O., Ont.

WANTED—Competent man to run saw mill in British Columbia, at a rate per M. Must be proficient in all branches of the lumber business. Man with family preferred. Address A. JONES, LUMBERMAN Office, Toronto.

WANTED—FOR CASH—HARDWOOD

HARDWOOD LUMBER Squares and Dimension Stock, principally walnut squares, 14 to 7 in. thick, 12 in. and upward long. Apply for specifications and prices. State full particulars of stock on hand. P. O. BOX 1,144, New York.

UNDERSIGNED wants to buy or lease saw mill where good business can be done. Addresser, Leith, Ont.

RAILS AND CARS FOR SALE.

Light Steel Rails for Tramways; good order. Cars for lumber, cheap. JOHN J. GARTSHORE, 49 Front St. West, Toronto.

WANTED.

QUEBEC BIRCH—Those who can furnish choice lumber are invited to correspond with JOHN S. MASON & CO., 240 Eleventh Avenue, New York City.

FOR SALE

TWO BOILERS, 54 inches in diameter, 16 feet; 30 4-inch Tubes, Fronts and Safety Valve, also one Engine, 2022, with heavy bed; large Iron Driving Pulley and heavy Balance Wheel. Apply to MICKLE, DYMENT & SON, Gravenhurst.

FOR SALE.

PLANING FACTORY, only 2 years built, with one hundred and fifty Horse Power Engine and Boilers and Modern Machines, with railway siding and street car at door. Terms easy. WILLIAM LEAK & CO., Lumber, Coal and Wood, Dundas Street, Toronto.



Sealed tenders addressed to the undersigned and endorsed "Tender for Dormitory, Royal Military College, Kingston, Ont.," will be received at this office until FRIDAY, 12TH DECEMBER, 1890, for the several works required in the erection of Dormitory Building, Royal Military College, Kingston, Ont.

Specifications can be seen at the Department of Public Works, Ottawa, and at the office of Messrs. Power & Son, architects, Kingston, on and after Friday, 21st November, 1890, and tenders will not be considered unless made on the form supplied, and signed with the actual signature of tenderers.

Each tender must be accompanied by an accepted bank cheque made payable to the order of the Honorable the Minister of Public Works equal to five per cent. of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The department will not be bound to accept the lowest or any tender.

By order, A. GOBEIL, Secretary.

Department of Public Works, Ottawa 19th November, 1890.

JUDICIAL SALE

—OF AN—

ISLAND IN LAKE HURON.

Pursuant to the Judgment of the High Court of Justice made in the action of Rae v. Rankin, there will be offered for sale by Public Auction, with the approbation of Neil McLean, Esquire, Official Referee, by Messrs. Oliver Coate & Co. at the Mart, King Street, Toronto, on

SATURDAY THE 27TH DAY OF DECEMBER, 1890

at 12 o'clock, noon

THE ISLAND CALLED FITZWILLIAM OR HORSE ISLAND,

South East of Manitoulin Island, Lake Huron, Ontario.

This island contains over 15,000 acres covered with an unusually heavy growth of cedar. There is also tamarack, maple, birch, red oak, poplar, spruce, balsam, etc., on the island; the pine has been sold. About one third is good farming land, and there is an immense quantity of good building stone, there is a harbor perfectly land-locked, with sufficient depth of water to float the largest class of shipping on the lakes. The island is about 20 miles from Owen Sound.

Ten per cent of the purchase money will be required to be paid at the time of sale to the vendors or their solicitors, and the balance within thirty days thereafter without interest into Court to the credit of the action.

The other conditions of sale are the standing conditions of the court.

For further particulars apply to JOSEPH COZENS, Esq., Sault Ste. Marie, COLONEL ARTHUR RANKIN, Windsor, and SMITH, RAE & GREER, Vendors' Solicitors, Toronto. Dated the 25th day of November, 1890.

NEIL McLEAN, Official Referee.



Sealed tenders addressed to the undersigned and endorsed "Tender for Caisson," will be received at this office until Friday, the 5th day of December next, inclusively, for supplying, erecting and completing in place, a Wrought Iron Caisson for the Dry Dock now in course of construction at Kingston, Ont., in accordance with the plans on exhibition at this office, and at the Engineer's office 30 Union street, Kingston, and with the conditions and stipulations contained in Form of Tender, copies of which can be obtained on application to the undersigned and W. O. Strong, Esq., resident engineer, 30 Union street, Kingston, Ont.

Tenders will not be considered unless made on forms supplied and signed with the actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works equal to 5 per cent. of amount of tender, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail 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. GOBEIL, Secretary.

Department of Public Works, Ottawa, Nov. 19, 1890.

TIMBER * LANDS FOR SALE

5000 Acres of Timber Lands on the Manitoulin Island,

Patented and unpatented, are offered at the Low Price of

\$5.00 PER ACRE.

Some of the lots have timber on them worth \$20 per acre, and the land is of fair quality for farming when cleared.

The Dominion Government having recently taken off the Export Duty on Telegraph Poles, Railway Ties, Shingle Bolts and Saw Logs, the value of the timber on the island is doubled, owing to its great facilities for shipment to Detroit, Chicago, Toledo, Buffalo, Cleveland and all Lake ports.

The late owners, Messrs. Wm and Robert Henry, are both deceased, and there being no one to carry on their business, these lands will be sold low, in Block to close out the estate. Tenders solicited and purchases liberally dealt with. All necessary information can be obtained from the trustee and Solicitors.

Messrs. FRANCIS & WARDROP, Barristers, &c., Toronto.

AMES MCGEE, Trustee, Toronto.

MACHINERY FOR SALE

LIST of miscellaneous machines, etc., for sale by H. W. PETRIE, Brantford and Toronto.

- ONE corn and cob crusher. FINE grain or feed mills. ONE Craig wheat scourer. ONE mill stone dresser. ONE corn husker. TWO corn shellers. TWO paint mills. ONE tile machine. ONE clay crusher. ONE copper-jacketed kettle. TWO copper dye kettles. TWO set crazer or biscuit machines, with dies. ONE sugar or sorgum mill. ONE union leather splitter. ONE steam rock drill. ONE foot press for canner's use, with dies. ONE fruit evaporator. ONE Caligraph typewriter. ONE clover thrasher and huller. ONE ditching machine. ONE Ward sulky plow. ONE hosiery or bobbin winder. ONE set scouring rolls. ONE Chase flock cutter. ONE lot press plates. TWO meat choppers. ONE large clothes mangle. ONE shooting gallery tube. ONE small bone mill. ONE run 42 inch buhr stones. 10 water wheels, different sizes and makes. ONE lot spur and bevel gears. ONE lot shafting, hangers and pulleys. ONE lot balance wheels. ONE set cheese box machinery. ONE lot Cook's patent levels. TWO steam fire engines. FIVE hand fire engines. TWO hose carts. EIGHT steam pumps. ONE No. 10 centrifugal pump. THREE hydraulic rams. ONE champion spark arrester. ONE lot lifting jacks. ONE lot new portable forges.

I also have Engines, Boilers of all sizes, Iron and Wood Wood Machinery. Send for descriptive list. H. W. PETRIE, Toronto.



ST. LAWRENCE CANALS.

RAPIDE PLAT DIVISION.

NOTICE TO CONTRACTORS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for the St. Lawrence Canals," will be received at this office, until the arrival of the eastern and western mails on Wednesday, the 3rd day of December next for the construction of a lift lock, weirs, etc., Morrisburg, and the deepening and enlargement of the Rapide Plat Canal. The work will be divided into three sections, each about a mile in length.

A map of the locality, together with plans and specifications of the respective works, can be seen on and after Wednesday the 10th day of November next, at this office, and at the Resident Engineer's Office, Morrisburg, where printed forms of tender can be obtained.

In the case of firms there must be attached to the tender, the actual signatures of the full name, the nature of the occupation and residence of each member of the same, and further, an accepted cheque on a chartered bank in Canada, for the sum of \$5,000, must accompany the tender for Section No. 1, and an accepted cheque on a chartered bank in Canada, for the sum of \$2,000 for each of the other sections.

The respective accepted cheques must be endorsed over to the Minister of Railways and Canals, and will be forfeited if the party tendering declines entering into contract for the works at the rates and on the terms stated in the offer submitted. The cheques thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender.

By order, A. P. BRADLEY, Secretary.

Department of Railways and Canals, Ottawa, 7th November, 1890.



W. J. KRAMER FINE WOOD ENGRAVER 21 MELINDA ST TORONTO

ESTABLISHED 1888.

THE INDUSTRIAL REVIEW

Thos. E. Powell & Co., Publishers,

MEMPHIS, TENN.

The Most Widely Circulated Commercial, Financial and Industrial Journal in the South.

THE INDUSTRIAL REVIEW

is a Monthly Journal devoted to Trades and Manufacturers.

IT GIVES SPECIAL ATTENTION

To the mining interest, the milling interest, the railroad interest, the steel and iron interest, the textile manufacturing interest, the lumber and wood manufacturing interest, the hardware and machinery trade, and is an authority on

Southern Industrial Development.

TERMS OF SUBSCRIPTION:

One copy, one year, \$1. Advertising rates on application.

WILLARD W. BROWN.
202 Main Street, Buffalo, handles all kinds of Hardwoods.

COWPER & GREGORY.
RECEIVERS and Forwarders of Lumber, Lath, Shingles, &c. Unexcelled facilities for shipping by canal or rail. Tonawanda, N. Y.

A. M. DODGE & CO.
MANUFACTURERS of and Wholesale dealers in all kinds of Lumber, Lath and Shingles. Tonawanda, N. Y.

E. & B. HOLMES.
WHOLESALE dealers in Lumber and Timber Office, Michigan and Canal Streets, Buffalo, N. Y.

CHEESMAN DODGE
TIMBER and Lumber Merchants. Ship and Boat stock, Railroad Ties, &c. Office, 16 West Seneca Street, Buffalo.

Buffalo Hardwood Lumber Co.
OFFICE and yard, 175 Louisiana Street, Buffalo. Holders of Hardwood stocks are invited to correspond.

EMMET FLEMING
INSPECTOR and Commission dealer in Lumber. Office, 257 Louisiana Street, Buffalo, N. Y.

THE TONAWANDA LUMBER CO.
MILLS at East Tawas, Mich.; office, 106 Main Street, opposite N. Y. C. and H. R. R. R. Station, North Tonawanda, N. Y.

J. & T. CHARLTON
WHOLESALE dealers in Masts and Spars, Canada Round Pine, &c. Tonawanda, N. Y.

A. P. & W. E. KELLEY CO.
WHOLESALE Lumber dealers. Yards at Tonawanda and Chicago. Correspondence invited.

LAYCOCK LUMBER CO.
MANUFACTURERS of Pine, Hemlock and Oak Timber up to 85 feet in length. Saw Mills: Ackley, Pa., Black Rock, N. Y., Gravenhurst, Ont. Office, corner Main and Seneca Sts., Buffalo, N. Y.

C. P. HAZARD.
WHOLESALE dealer in Lumber, Shingles, Lath and Fence Posts. Correspondence invited from the Canadian trade. No 92 River Street, Buffalo, N. Y.

L. A. KELSEY LUMBER CO., (Ltd.)
MANUFACTURERS and dealers in Hardwood Lumber of all kinds. Describe stock and write for prices. Office Tonawanda, N. Y.

BOVEE & HOWDEN
MANUFACTURERS and Wholesale dealers in Hard and Soft Wood Lumber. Holders of Canadian stocks are invited to write for quotations. Offices at Tonawanda and Le Roy, N. Y.



Sealed tenders addressed to the undersigned, and endorsed "Tender for Iron Superstructure, York Bridge," will be received until Tuesday, the 9th day of December next, inclusively, for the construction and erection in place of the Iron Superstructure of the bridge now in course of construction across the Grand River, at the Village of York, Haldimand County, Ontario, according to plans and a specification to be seen at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, for the sum of eight hundred dollars (\$800.00), must accompany each tender. This cheque will be forfeited if the party decline the contract or fail 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. GOBEL**, Secretary.

Department of Public Works,
Ottawa, 18th Nov., 1890.

NOTICE Re Ontario Crown Lands

CROWN LANDS DEPARTMENT.

TORONTO, NOVEMBER, 29th, 1890

Notice is hereby given, that the lands lying between the east limit of the Township of Awrey, in the District of Nipissing, produced north and south, and the west limit of the Townships of Esten and Sprague, in the District of Algoma, produced north, are withdrawn from sale, or location from and including the first day of December, now next, and no further sales or locations will be made of lands within said limits until further notice, except in cases:

(1) Where application has been duly made and the purchase money has heretofore been paid into the Department, or

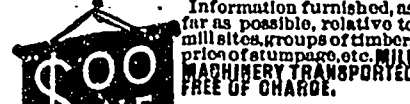
(2) Where application has been made and a large proportion of the purchase money has heretofore been paid, and where a substantial expenditure of money has been heretofore made in developing or in completing a survey of the location.

No application heretofore made unaccompanied by the purchase money for lands in the said limits, except as aforesaid, will be considered.

ARTHUR S. HARDY,
Commissioner of Crown Lands.

SAW MILLS ON THE "SOO."

The large forests of Pine, Hemlock and hard wood on the line of the Minneapolis, St. Paul and Sault Ste. Marie Railway ("SOO LINE") offer excellent opportunities for enterprising Saw Mill Men to locate in Wisconsin and the Upper Peninsula of Michigan.



Information furnished, as far as possible, relative to mill sites, groups of timber, price of stumpage, etc. MILL MACHINERY TRANSPORTED FREE OF CHARGE.

Low Rates,
Good Facilities,
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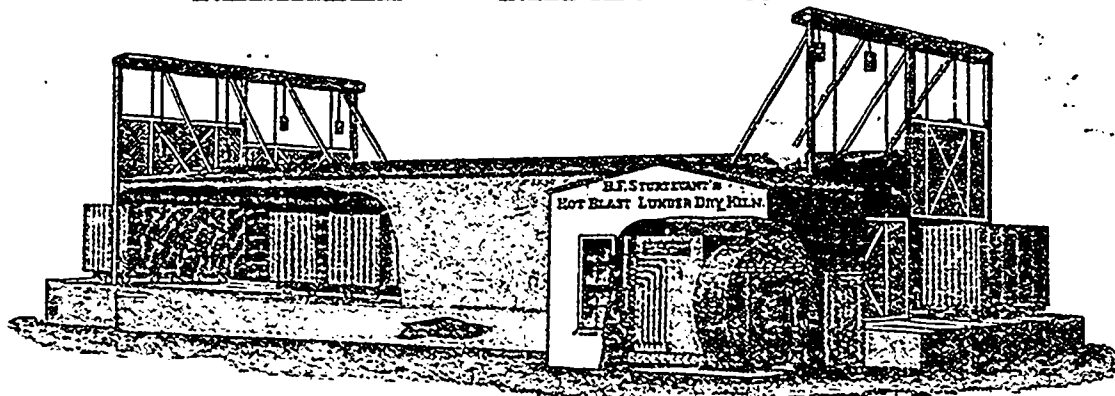
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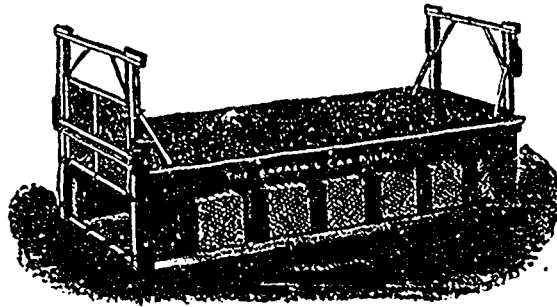
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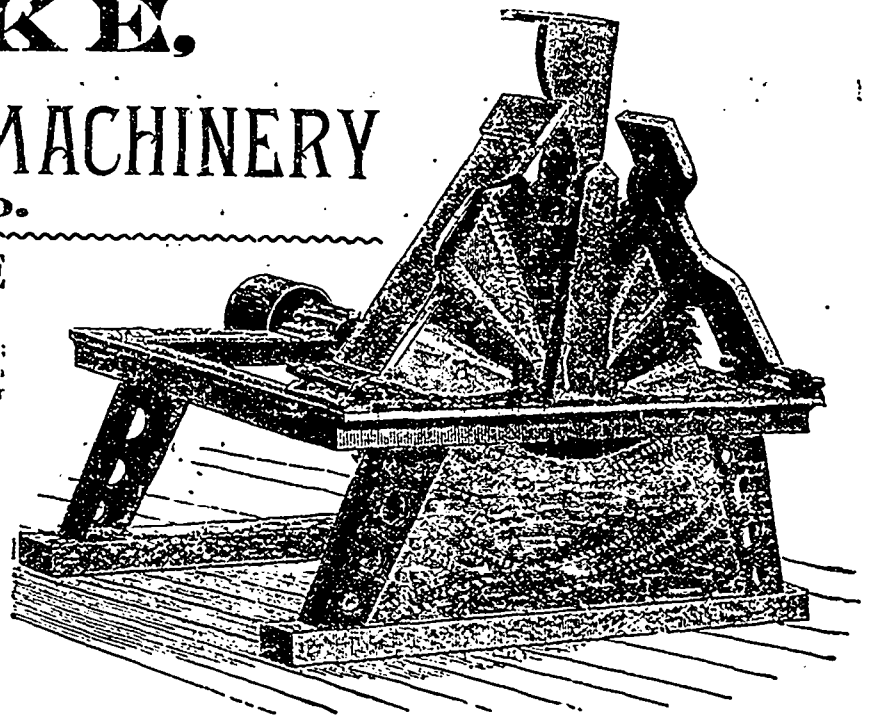
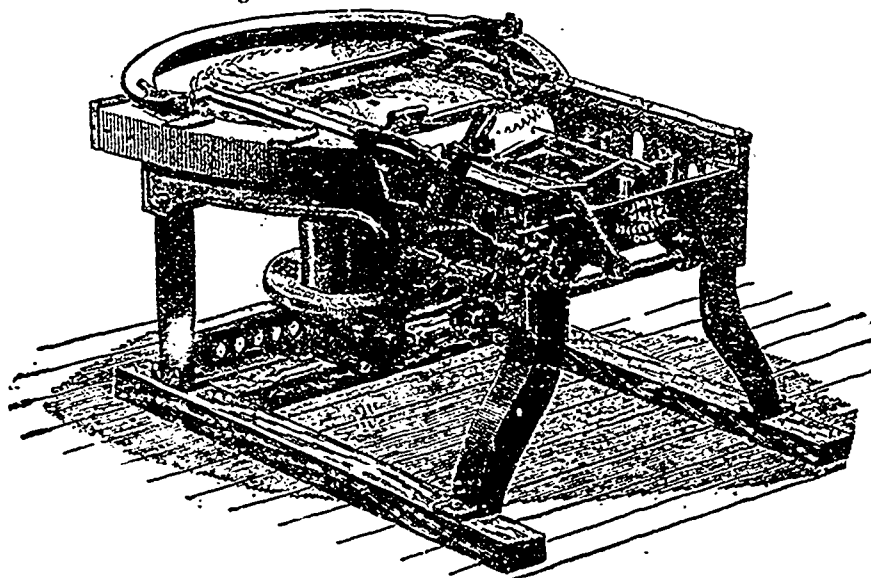
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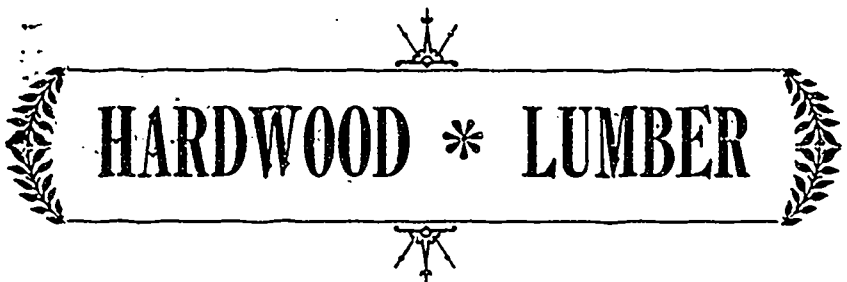
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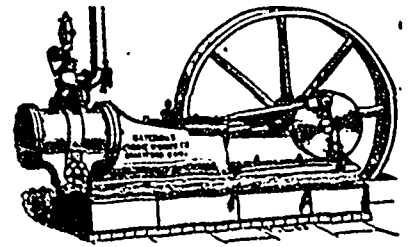
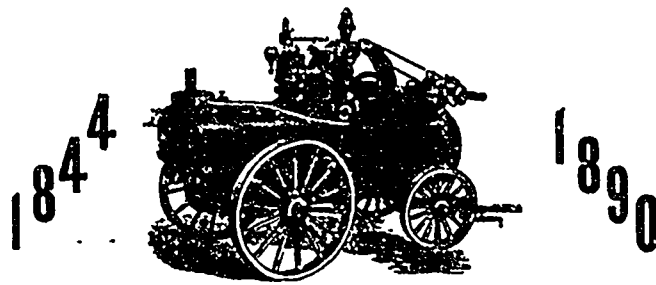
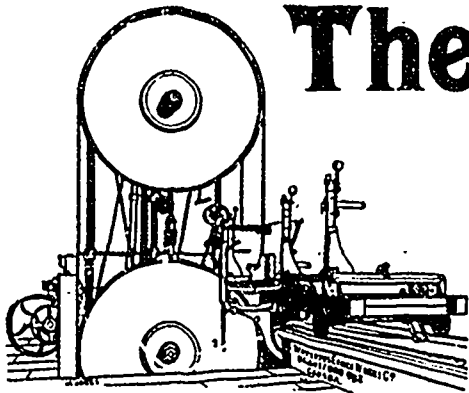
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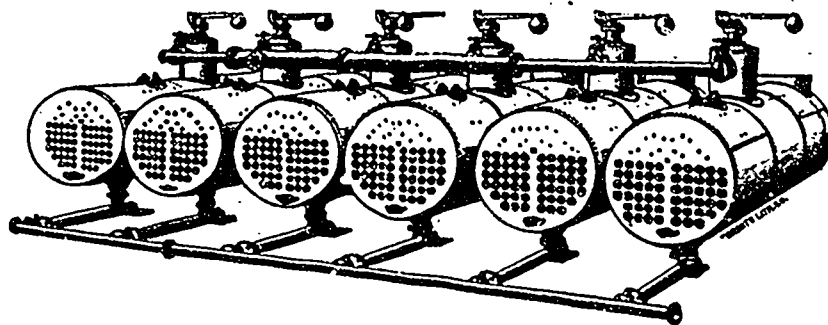
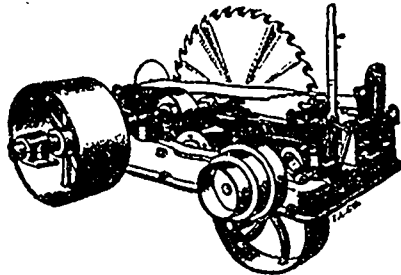
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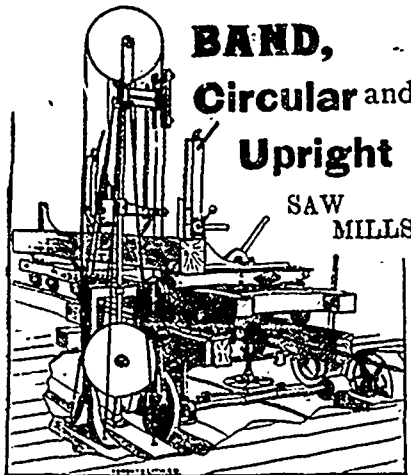


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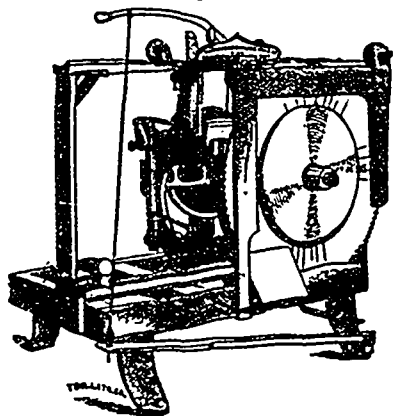
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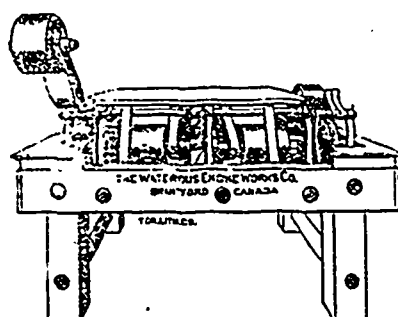


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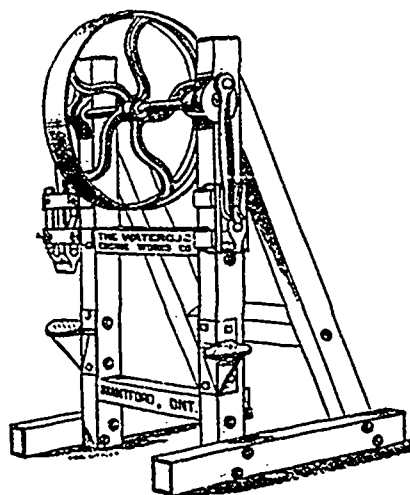
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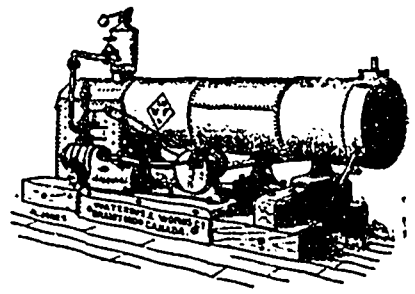
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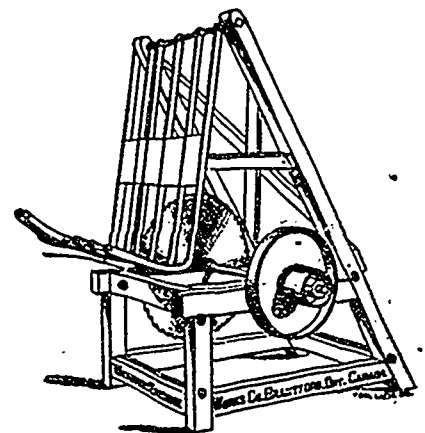
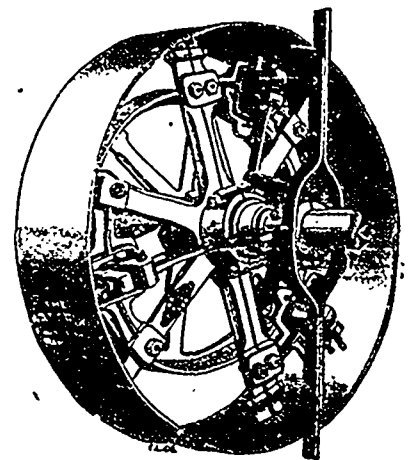
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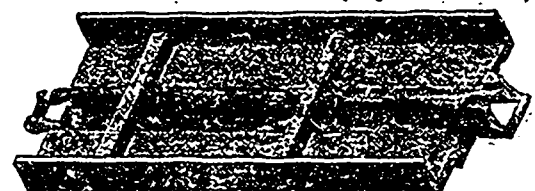
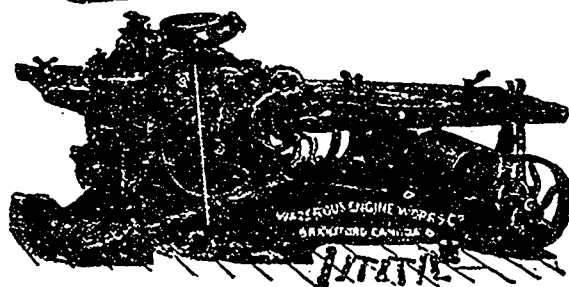
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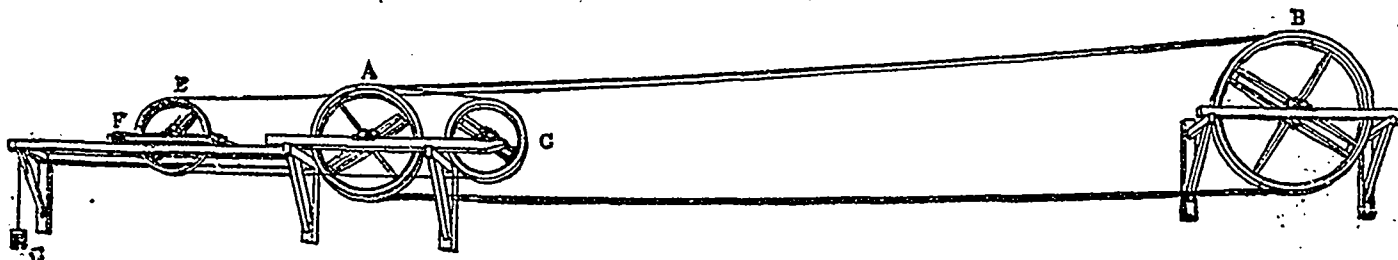


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