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THE CANADA LUMBERMAN

WOODWORKERS' MANUFACTURERS AND MILLERS' GAZETTE

TORONTO, CANADA, MARCH, 1899

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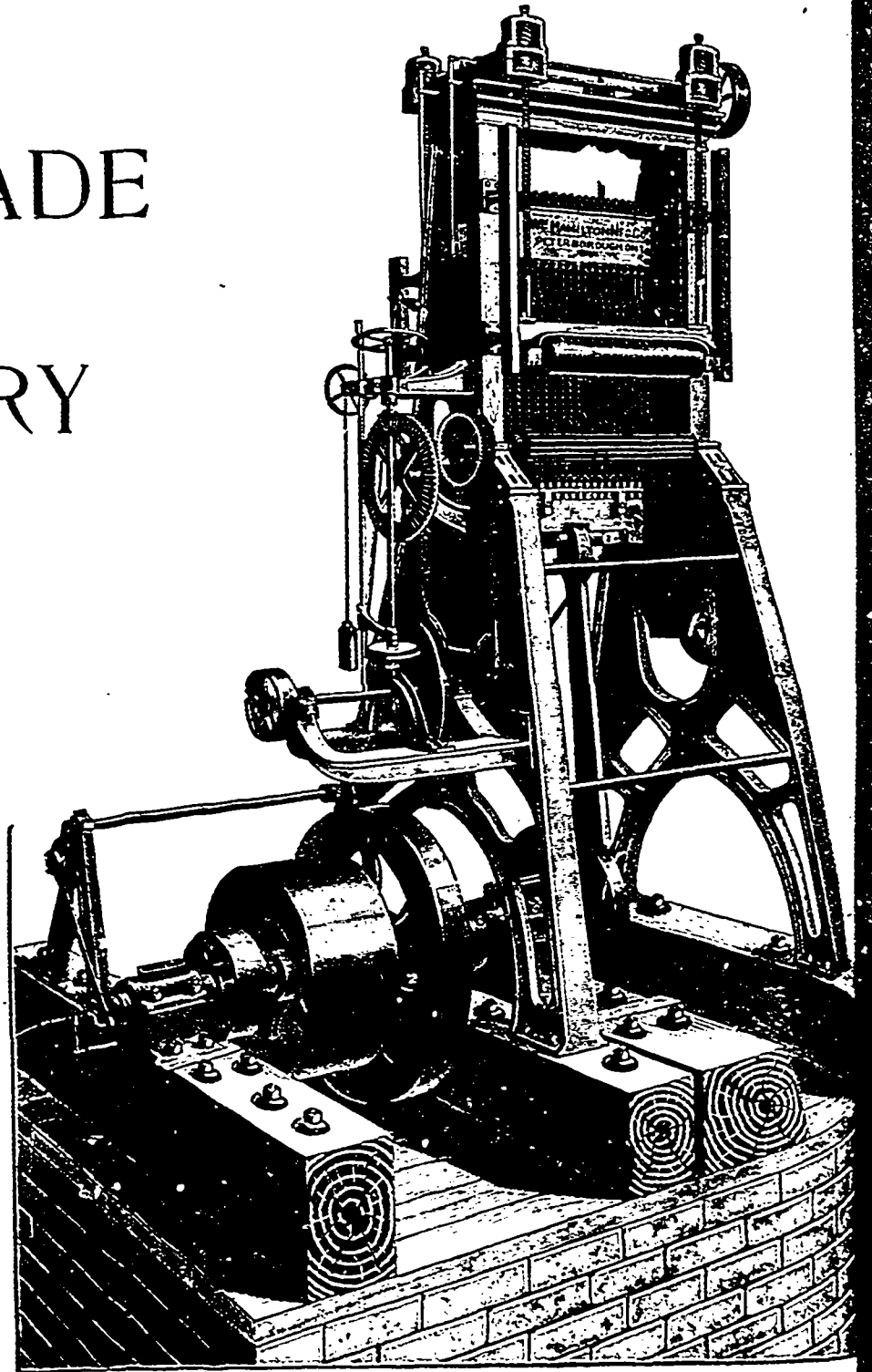
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THE CANADA LUMBERMAN

TORONTO, CANADA, MARCH, 1899

TERMS, \$1.00 PER YEAR.
Single Copies, 10 Cents.

AN ENTERPRISING LUMBERING FIRM.

In the fall of 1878 the firm of Kelley Bros. commenced lumbering operations in the province of Nova Scotia, establishing themselves at River Hebert. The partners in the concern are Messrs. B. Kelley and C. L. Kelley, originally of Calais, Maine, the former being the resident manager, while the senior member, Mr. C. L. Kelley, still resides in Calais.

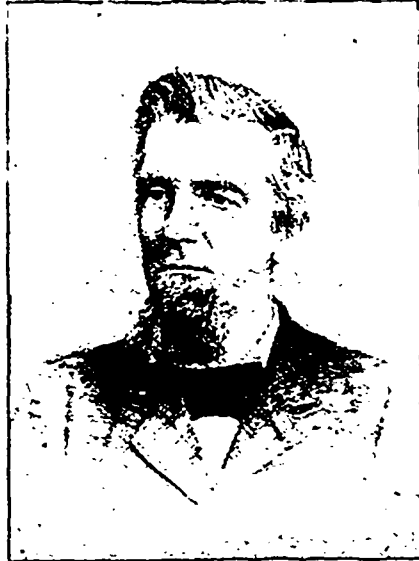
During the twenty years of their operations at River Hebert, the firm have encountered two serious losses. In the spring of 1881 a huge sheet carried away two driving dams, one hundred and fifty thousand feet of deals, one and one-half million feet of logs, and the saw mill, which had just been equipped with steam power, at a cost of \$3,000. These were carried out to the Bay of Fundy, and became a total loss. This left the firm in a bad condition, there being in the stream one jam of logs of one million feet, and no way to get them out or manufacture them. The following summer Messrs. Kelley Bros. erected another mill, which they operated until August of 1892, when it was entirely destroyed by fire. In this instance, however, their season's logs had been manufactured into lumber. Not easily discouraged, the firm decided to again rebuild, and the result is the mill shown in the accompanying illustration. This mill is 70 x 90 feet, covered with sheet iron, and contains gang, gang edger, and bath machine. It is operated by two engines, 14 x 20 feet, fed by two tubular boilers. The annual output of lumber is about three million feet, the bulk of which is disposed of in the British market, being handled by St. John shippers. Boards, scantling, and lath are manufactured for the United States market. The timber in the woods is felled by a cross-cut saw, the firm claiming that a large saving is effected thereby. A portrait of the manager of the business, Mr. S. B. Kelley, is presented herewith.

THE LUMBER SLUICE.

Persons manufacturing lumber at River Hebert have been somewhat handicapped in getting their lumber from the mills to the shipping point. Scows carrying thirty thousand feet were formerly used, but these did not prove entirely satisfactory. In the summer of 1897 the firm of Kelley Bros., in conjunction with Pugsley Bros., concluded to build a sluice from their mills to the loading ground, a distance of five miles. The sluice at the mill is built at an elevation of thirty feet from high water, which gives a fall of one and one-quarter inches to the hundred feet, which is sufficient to float the lumber. When

the construction of the sluice was decided upon, a competent engineer was engaged to lay out the route, so as to have a true grade from beginning to end.

Properly speaking, there are two sluices, the width over all being thirty inches, with a board in the centre, the object being to keep the



MR. S. B. KELLEY.

lumber of each firm separate, and also to utilize the full capacity of the water. The bottom is made of two inch spruce plank, planed on one side, and jointed and chamfered, so that as soon as the water was let in, the dirt and sawdust filled into the chamfer, making it perfectly tight. The sides are of pine boards, ten inches wide, and with a base board five inches wide, are nailed to the plant and the joint strengthened

sluice by an endless chain, and is then fastened together with short chains and stout nails to prevent jamming in going around short curves where the sluice had to be made wider. The sluice has a capacity of carrying from one hundred to one hundred and twenty-five thousand feet of deals per day; it cost \$1,000 per mile, and consumed 450,000 feet of lumber in its construction. This system of conveying lumber has given perfect satisfaction, and is regarded as an inexpensive method.

TREES WHICH DRAW LIGHTNING.

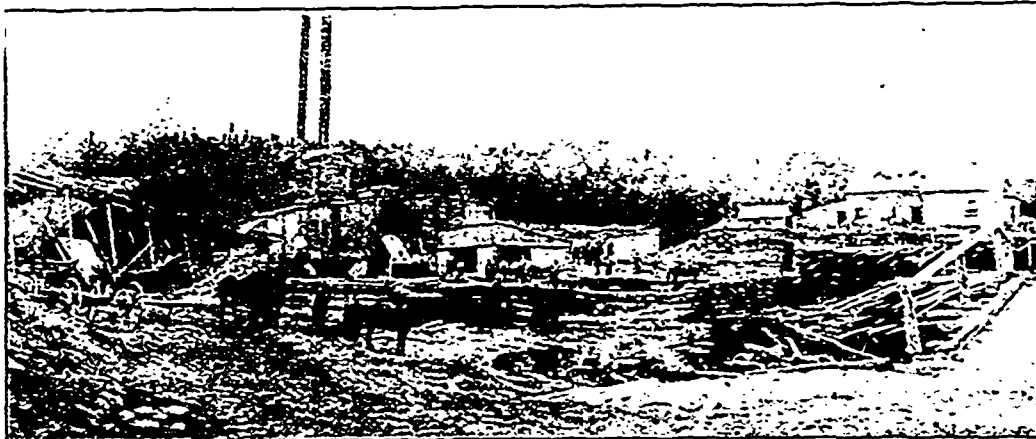
ALEX. McADIE has asked the Weather Bureau to investigate the question why some kinds of trees are more frequently struck by lightning than others. Apart from the importance of this subject from other points of view, it demands attention primarily as a matter of saving human life. As Mr. McADIE shows, many people, particularly farmers and those who work in the fields exposed to thunder storms, will work until the storm is almost upon them and then run to the nearest tree for shelter.

If the tree is an oak, and the charged thunder-clouds are moving toward it with high electrical potential, the person or persons under the tree are in the line of strain and all unconsciously are contributing to the establishment of a path for the lightning discharge through themselves. On the other hand, if the tree selected for shelter happens to be a beech tree, there is some reason to believe that it will afford safety as well as protection, though the reason why is not at present made clear. It is known that the oak is relatively the most frequently and the beech the least frequently struck.

Based on the somewhat loose figures on the subject heretofore available, it is estimated in the matter of relative attraction of lightning, if the beech is represented by 1, the pine tree stands at 15; trees, collectively, rank about 40, and oaks 54. The trees struck are not necessarily the highest or most prominent. Oak trees have been struck twice in the same place on successive days. Trees have been struck before

rain and split, and some have been struck during rain and only scorched.

It is suggested that the division of forestry and the division of vegetable pathology shall combine with the Weather Bureau in an exhaustive investigation of this subject, and those familiar with the forests in their respective neighborhoods will tender their experience as to the relative frequency of lightning strokes on different kinds of trees. - St. Louis Globe-Democrat.



SAW MILL OF KELLEY BROS., AT RIVER HEBERT, N. S.

with a short piece of board on the outside, making all tight. There is a piece of 2 x 4, of the proper length, nailed across the bottom at every joint.

The bents are 3 x 6 with cap, all spiked solid. The sluice merely lays on the caps and is not spiked thereto. The water is fed to the sluice from a pond made by damming the brook, and in case of severe drought the water is elevated by a pump. The lumber is raised from mill to

THE CANADIAN TIMBER SUPPLY AND THE BRITISH DEMAND.

ALTHOUGH for many years Canadian timber products have been exported to Great Britain quite extensively, it is acknowledged that much ignorance yet prevails in the mother country regarding the timber resources of Canada and her ability to supply wood goods in competition with other countries. One reason, and perhaps the chief one, why Canada is not better known in foreign countries, is that a considerable portion of her exports, particularly of lumber, have passed through United States houses, and our neighbors to the south have taken every precaution to conceal the identity of the goods.

Recently, Great Britain has shown a growing disposition to trade with her colonies in preference to other countries, and as a result enquiries are frequently made regarding Canadian timber products. This sentiment has been favorably received by Canadian lumbermen, who, wearied of the tariff changes and other interruptions incident to trading with the United States, are looking to other countries for a market for their output.

The CANADA LUMBERMAN has earnestly endeavored in the past to promote trade in timber products between this country and Great Britain, the largest consumer of wood goods in the world. Henceforth it is the intention to give still greater attention to the British market, by distributing copies of the journal to the timber importers and wood consumers in that country. In addition to our regular mailing list, five hundred copies of this issue will be sent into the British market, and will pass into the hands of persons directly interested in the importation of Canadian timber. Some of these may have but a meagre knowledge of the timber resources and manufacturing facilities of this country, and may be interested in the following brief particulars:

The bulk of the forests of North America are to be found in Canada, her timber area being estimated at 130 million acres. At one time the United States had vast forest areas, but these have become well nigh exhausted excepting in the Southern States, where there is to be found a considerable quantity of what is known as southern or pitch pine. Of late the United States government has adopted the policy of establishing forest reserves, but this precaution was not taken early enough, and in a few years that country will be dependent upon Canada for her timber supply.

It is estimated that the annual production of lumber in Canada is about two and one-half billion feet. Of this quantity, perhaps upwards of one billion feet is white pine and one-half billion spruce, the balance being made up of other woods, such as basswood, ash, maple, birch, elm, oak, beech, cedar, hemlock, Douglas fir, etc. To show the geographical position of these woods, we will commence with the most easterly province of Nova Scotia. Spruce is the chief timber there, although a considerable quantity of hardwood lumber is manufactured also. The total area of good timber lands is given as 2,600,000 acres, and there are a large number of saw mills, many of which manufacture for the British trade. Owing to the number of open ports, shipping can be carried on the year round from almost all parts of the province.

New Brunswick is also a spruce-producing

province, and on a more extensive scale than Nova Scotia. In addition to spruce, there exists an abundance of cedar, birch, maple, beech, and hemlock, with some ash and poplar. Spruce and birch comprise the chief export to Great Britain, but more attention is being paid to the hardwoods, and a greater quantity will likely be manufactured in the future. There is probably over 10,000,000 acres of timber lands in the province, much of which is covered with the finest of spruce. There are numerous rivers and streams to facilitate the getting of logs to the mills, and also providing excellent sites for saw mills, pulp mills and wood-working factories.

Quebec must also be classed as a spruce province, with very little hardwood timber. The spruce found in the province, however, is of excellent quality, and practically inexhaustible, there being large tracts in the north yet untouched. White pine is also native to Quebec, being contiguous to the Ottawa river. The saw mills are equipped with modern machinery, and have an average capacity of 50,000 feet per day.

In the province of Ontario are found the white pine forests of the Dominion. Of a total area of timber lands of about 120,000 square miles, about 23,000 square miles are under lease by lumbermen. The Ottawa valley is the seat of the pine trade, there being manufactured there annually on an average 650,000,000 superficial feet. Extensive pine limits also exist in the Georgian Bay district, in the western part of the province, from which section the Michigan lumbermen have of late years derived their log supply. Red, or Norway pine, is also manufactured in Ontario. This lumber has, within the past two years, met with favor in the British market, and the quantity available has been unequal to the demand. From being almost a drug upon the market, it has become a readily marketable product, and no doubt a greater quantity will be manufactured in the future by the Canadian lumbermen, who realize the vast extent of the requirements of British consumers. Ontario is famous not only on account of its pine forests, but also because of large tracts of hardwood timber, including oak, ash, elm, maple, birch, basswood, beech and hickory. Some of these woods are already known in the British market, but it is only during late years that Canadian hardwoods have been exported to any extent. What has been done, however, is looked upon as but the beginning of the development of the hardwood industry. Lumbermen who have heretofore given no attention to the hardwood timber on their limits, confining their operations exclusively to pine, are becoming convinced of the wisdom of cutting the hardwoods also. With the expansion of the demand they hope to profit by this policy, while it is also desirable from a forestry standpoint to remove the hardwood trees in order that a regrowth of pine may be assured.

Nowhere in the world are more extensive or better equipped saw mills to be found than in Ontario. The machinery is modern, well designed, and in charge of skilled workmen, and the lumber manufactured is of the best quality.

The province of British Columbia has vast timber limits. Of an area of 382,000 square miles, it is estimated that 285,000 miles are timber lands. The Douglas fir is the chief commercial timber, it being found in great quantities

and of exceedingly large dimensions. It is of wonderful strength and elasticity, and is particularly adapted for ship-building purposes. The woods of the province are red and yellow cedar, spruce, white pine, maple, and alder, and a number of others of minor importance.

To the lumber trade of Canada the present may be called a transition period. Within the earlier years only lumber in rough form was marketed in Great Britain, conditions have changed, and there is now a steady and increasing demand for the more finished product, such as doors, sashes, chair stock, box shooks, and many lines of wood-working material. To meet this demand some extensive factories have been established in Canada, and many saw mill owners are, at the present time, establishing wood-working plants with a view to exporting the output to the British and other foreign markets. The importer who prefers to trade with Canada will find it possible to obtain goods equal in quality to those produced in the United States, Norway, Sweden, Germany, or any other country. Inadequate shipping facilities have, in the past, operated against Canadian timber exporters, but this obstacle is being gradually overcome by the establishment of new steamship services.

Closely allied to the lumbering industry is the manufacture of pulp, in which Canada bids to become famous throughout the world. Possessing an almost inexhaustible supply of spruce, the best raw material yet discovered for making pulp, and with almost illimitable water power, this country is certain to witness, in the near future, a wonderful expansion of the pulp industry. The large mills that have been established have successfully encountered competition, which fact has given an impetus to other projects of a like nature. Arrangements are about completed for the erection of several new mills in Quebec, New Brunswick and Nova Scotia, and ere long a much greater quantity of Canadian pulp will be purchased by British paper-makers.

TRADE NOTES.

The Robb Engineering Company, of Amherst, N.S., have furnished a 100 h.p. engine and boiler and other machinery for a new saw mill being built at Springhill, N.S., by John Campbell, jr.

Mr. D. K. McLaren, of Montreal, announces that he has lately introduced an excellent method of stretching leather used in the manufacture of his English oak-tanned leather belting, and is prepared to guarantee entire satisfaction to users. Mr. J. T. Craig, 69 Bay street, is in charge of the Toronto agency.

We learn that the protracted law cases which have been pursued in England by the Magnolia Anti-Friction Metal Company, Limited—the London branch of the Magnolia Metal Company, of New York—in defense of their right to their celebrated brand, and their business, have been decided in their favor against John Sugden, W. E. Watson, A. B. Brown, the Atlas Bronze Company, Limited, the Atlas Metal Company, Limited, and others, who were enjoined respecting patents, trade-marks, and for engaging in any anti-friction metal business, with costs and damages. The text of the decision, as appearing in English papers at hand, is very severe and sweeping. We congratulate the Magnolia Metal Company at the result. The cases have been prosecuted with great vigor and no doubt large expense, but it is of value to American registrars under and appealing to English law to know that they do and will protect them when properly appealed to.

The McDougall Lumber Company, of which J. M. G. of Orillia, is a member, will build a saw mill and sash and door factory on the old Beatty site at Parry Sound, Ont.

THE LATE WILLIAM BEATTY.

We publish herewith a portrait of the late William Beatty, of Parry Sound, Ont., to whose death reference was made in our January issue, and are pleased to give some additional particulars bearing upon his connection with the lumber business. In the year 1863, James and William Beatty, of Thorold, purchased from J. & W. Gibson, of Willowdale, their saw mill and timber limits, and immediately commenced active operations. In 1872 they sold their limits and mill to H. B. Rathbun & Son, who in turn disposed of them to A. G. P. Dodge & Co., who organized the Parry Sound Lumber Company. At this time James Beatty withdrew from the firm, and William Beatty continued as the sole partner. In 1877 he erected the Seguin mill, having a capacity of about six million feet per season. This mill was subsequently sold to J. C. Miller, and in late years Mr. Beatty manufactured but a small quantity of lumber. At the time of his death he owned about 17,000 acres of timber lands in the immediate vicinity of the town of Parry Sound. We are advised by Mr. J. Farrer that his business as lumberman and general merchant at that place is being continued under the old name.

THE NEW STEAMSHIP SERVICE.

The establishment of the new Canadian steamship line from Pasbebiac, Que., to Milford Haven, England, is likely to be of much benefit to the lumbermen of Quebec as a means of shipping their lumber in the winter season. The Gaspesia, from Paspebiac, which sailed on her second voyage on the 4th of February, carried a trial shipment of about 45 car loads of spruce deals, shipped by Messrs. Price Bros. Despite the lack of wharf accommodation, the lumber was handled quickly, almost as well as it could be in summer with the same facilities. Besides the Price Bros.' shipment, the Rathbun Company, of Deseronto, shipped two car loads of doors, and J. & P. Nadeau, of Grand Cascapedia, Que., a quantity of kiln-dried birch flooring.

The Gaspesia also loaded a large amount of other freight, and although the weather from the time of her entry into the bay till her departure was very severe, little difficulty was experienced in loading. Some floating ice was in the bay, but it was not sufficient to make the vessel slacken speed. Upon her return voyage she was less fortunate, becoming ice-bound, but coming out uninjured.

With proper wharf accommodation at Paspebiac, which the company will build at once, means will be afforded of shipping lumber in small or large lots the year round. We understand that the freight rates are very reasonable.

The opening up of this new line will develop the hardwood and pulp business on the Baie de Chaleurs and in the counties of Bonaventure to a great extent. By it another link is added to our steadily increasing trade with Great Britain and the more of these the better. The lumber interests cannot look too favorably on the development and success of this new line.

Charles Hannan, of Essex, Ont., is looking for a site for a factory to manufacture butter dishes, using hard maple and black birch as raw material.

CORRESPONDENCE

Letters are invited from our readers on matters of practical and timely interest to the lumber trades. To secure insertion all communications must be accompanied with name and address of writer, not necessarily for publication. The publisher will not hold himself responsible for opinion of correspondents.

THE BRITISH COLUMBIA TIMBER REGULATIONS.

The statement having been published that the government contemplated making some changes in the method of disposing of timber in British Columbia, enquiries were made by the CANADA LUMBERMAN from a few of the lumbermen. The answers received are as follows:

NANAIMO, B. C., Jan. 18th, 1899.

DEAR SIR, -In reply to your card of the 5th inst., re proposed changes in the B. C. timber regulations, I believe there are no immediate changes contemplated by the Government. I do not know of any changes that could be made that would be more advantageous to the province than the existing regulations. The land is leased to the mill owner at an annual rental of ten cents per acre on a term of from ten to twenty years, and the mill owner pays a royalty of fifty cents per thousand feet on each



THE LATE WILLIAM BEATTY.

thousand cut for local consumption, and twenty-five cents per thousand feet on all lumber exported to foreign markets. This royalty is paid as the lumber is cut on the claim. The amount of timber land is limited to four hundred acres for each thousand feet of lumber a mill can cut in twelve hours. The object is to prevent large companies from locking up large bodies of timber land at one time.

Faithfully yours,
A. HASLAM

KASLO, B. C., Jan. 20th, 1899.

GENTLEMEN, -I am unable to give you the information re timber regulations, as I am not aware that anything has yet been published as to the nature of the changes proposed. The government for the last three months has refused to entertain any applications for timber rights. From this fact we infer that some regulations less advantageous to lumbermen than the present ones are contemplated.

We now pay a royalty of 50 cents per 1,000 feet upon all logs cut upon any land held by the government or granted subsequent to 1887. We pay also 10 cents per acre per annua upon timber land held under lease, besides cost of survey, and such areas are only to be obtained now by tender of a cash bonus in a public com-

petition. Licenses may also be obtained by loggers for areas not exceeding 1,000 acres for the sum of \$50, good for one year.

A great deal of the timber lands in the interior is now held by railway companies, to whom it has been granted by way of subsidy. Destructive fires follow the trail of the prospector everywhere in the mountain regions, and the railways will therefore be compelled to market their stumpage with all practicable speed. In the face of their competition, it is difficult to see how the government can increase appreciably the levies they are now exacting.

On Kootenay Lake, we fortunately have two strings to our bow, as the Kootenay river comes to us through Idaho and Montana, and there is a considerable amount of timber tributary to it.

Yours faithfully,
G. O. BUCHANAN.

FROM AN EASTERN MANUFACTURER.

Editor CANADA LUMBERMAN

DEAR SIR, -We are in receipt of your paper for the last three months, and are pleased to note the progress you are making.

Markets seem to have improved all round this winter, and we have had inquiries for much more than we could supply, but have only contracted for a small portion of next year's product, and that has yielded us ten per cent. more than last season. While prices seem tending upward, we are in no hurry to take the risk of advanced vessel freights and extra cost of winter work from lack of snow in our forests.

In your last we again meet J. B. Snowball's report of the Nova Scotia export of lumber, with its usual omissions. While the south shore of Nova Scotia sent their stocks to other markets, his report of the Atlantic deal trade was not very far astray, but the export of 1897 and 1898 from St. Margaret's Bay around to Annapolis has always been a respectable proportion of the Nova Scotia export, and has never been reported in his list. Gold River, Labave, Port Medway, Liverpool, Jordan, Tusket, Yarmouth, Digby and Annapolis, we think, sent deals to England or rather Great Britain and the continent in 1897 and 1898; and anyone PRETENDING to report the whole province should have secured returns from the Customs before falsely sending a part and calling it the full export. Such a large omission only excites suspicion as to the value of the rest of the figures.

This section of the country sympathizes with your version of the lumber tariff question, and unless we get some substantial advantage, we can allow the United States to keep up their protection wall as high as they like. As we met Maine products in England and Scotland last season, it proves their home market is not very profitable to us; and, like other American products, that prices are regulated across the Atlantic. Since we buy two dollars from them for every one dollar they take from us, we prove ourselves the best customers they have, but if this trading is not worth encouraging we can go elsewhere with our products, and perhaps exchange them to quite as good profit to ourselves.

Yours truly,
"MARITIME MANUFACTURER."

William A. Kribs, M.P.P., will probably build a box and wood-working factory at Hespler, Ont.

The lumber firm of Kernohan, Webster & Ferguson, London, Ont., has been succeeded by Kernohan & Ferguson.

The Columbia Lumber Co., of Golden, B. C., have erected a new saw mill about two miles east of Notch Hill.

Kerr & Harcourt, spool and bobbin manufacturers, of Parry Sound, Ont., have built another dry kiln, to enable them to keep up with the increasing orders.

John Carew, of Lindsay, Ont., has purchased a new engine for his mill. It is his intention to rearrange the machinery in the mill, and to add several labor-saving devices. Mr. Carew has made arrangements for a much larger quantity of logs than was taken out last year, and will also cut between 40,000 and 50,000 ties for McCormick & McLeod, of Bracebridge.

THE LUMBERMEN'S ASSOCIATION OF ONTARIO.

ANNUAL MEETING IN TORONTO. RESOLUTION PASSED IN FAVOR OF AN IMPORT DUTY ON UNITED STATES LUMBER.—OFFICERS ELECTED.

THE annual meeting of the Lumbermen's Association of Ontario took place in the Board of Trade building, Toronto, on Friday, February 17th. Among the members present were the following :

John Bertram, Collins Inlet Lumber Company, president of the association ; James Scott, Georgian Bay Lumber Company, vice-president ; W. B. Tindall, secretary ; John Waldie, Victoria Harbor Lumber Company, Toronto ; J. T. Conlon, Thorold ; J. B. Miller, Parry Sound Lumber Company, Toronto ; D. C. Cameron, Rat Portage Lumber Company ; C. Beck, Penetanguishene ; Robert Watt, Wiarton ; R. Laidlaw, Toronto ; R. A. Mathers, Rat Portage ; A. H. Campbell, jr., Muskoka Mill & Lumber Company, Toronto ; George Chew, Midland ; J. E. Murphy, Hepworth Station ; C. A. McCool, Geneva Lake ; W. Cargill, Cargill ; J. P. Newman, Wiarton ; William Laking, Hamilton ; George Thompson, Goderich Lumber Company, Goderich ; and F. Potter, of Saginaw, representing Michigan interests.

The chair was occupied by the president, Mr. Bertram, who, after the financial report and the minutes of the previous meetings had been confirmed, delivered the following address, reviewing the work done by the association during the past year :

PRESIDENT'S ADDRESS.

The year 1898 was a very eventful one in many ways to those engaged in the lumber business. It was the first year that there was a real change for the better since the depression commenced in 1893, and I congratulate the members upon the improved prospects. The beginning of 1898 marked a change in the policy of the Ontario Government with regard to the cutting of pine on Crown lands, enacting what has been called the manufacturing condition, and now all pine cut on Crown lands must be sawn or otherwise manufactured in Canada. This did not take effect as to logs cut under existing licenses, and before another season's work could commence in the bush.

The Joint High Commissioners met at Quebec for the purpose of trying to adjust all disputes and differences of opinion existing between this country and the United States. The lumber and log question was bound to form a very prominent feature in this discussion, and as was fitting, the association met and formulated their opinions and views, which were duly forwarded to Lord Herschell and each of the Canadian Commissioners. No member of the association appeared personally before the commission, no lobby was formed, nor any attempt made to influence the commissioners on personal grounds. In view of the near closing of the conference at Washington, it is a question for the meeting to deal with whether any further action shall be taken to reaffirm their opinions, which I am safe in saying have only been strengthened by time. Last spring a deputation waited on the Premier at Ottawa with the request that a duty of \$2 per 1,000 feet be placed on lumber, 30 cents on shingles and 25 cents on lath. The views of the association have so far been accepted by the Government, and it is for the meeting to say whether any further action should be taken.

The Reciprocity Committee of the association met a delegate from the Merchants Association of New York, who expected to find a very strong feeling for reciprocity in this country, and desired the help of the association in educating the people of the United States to a more reasonable attitude on reciprocal relations. It was pointed out to him that it was really their own business, and that the association did not feel justified in interfering

one way or the other. It was further pointed out that the feeling for reciprocity in Canada was weakening even among the lumbermen.

The Committee of Management also conferred with the officials of the Grand Trunk and Canadian Pacific Railways, pointing out the desirability and necessity of having local rates of freight on pine and hardwood. The main difference in rates is on hardwood to Montreal, which are 2½ cents per 100 pounds higher than pine. The export of lumber by way of Montreal is an increasing trade, and exporters in Montreal are exceedingly anxious to obtain as much lumber as possible to load with their grain vessels. The transportation question will be greatly changed when the deepening of the St. Lawrence canals is finished, and the Georgian Bay mills will then be in a position to ship cheaply by water to either Montreal or Quebec.

The president also stated that the Committee of Management had taken up with the Customs authorities at Ottawa the question of the injustice done to Canadian lumbermen by permitting British and American tugs towing logs from Canada to American mills to bring in large loads of coal in bond and dump it on the Canadian shore, and then come back and get this coal again, no duty being charged, whereas the Canadian tugs, towing to Canadian mills, had to pay a duty of 60 cents a ton on coal brought in from the United States. A reply had been received, he said, from the Department stating that no change in the law could be made. The matter had been fully considered some time ago, and new regulations were issued, which were as follows :

To Collector of Customs,
Port of.....
SPECIAL FRONTIER PORT REGULATIONS FOR DELIVERY OF COAL AS SHIPS' STORES ON INLAND WATERS.

Under the provisions of Section 103 of the Customs Act (as amended) coal sufficient for fifteen days' use (or less) on board steamers of 50 tons and upwards, bound for a foreign port or not, may be delivered ex-warehouse, free of duty, at one time, at the port above mentioned, if the steamer be engaged in trade on inland waters along the international boundary between the United States and Canada, and if traversing foreign waters during part of the proposed voyage on which the coal shall be used.

Provided, that the master or owner of the steamer, or his agent, first makes affidavit to the satisfaction of the Customs officer that the coal is necessary and intended for the purpose aforesaid :

And provided further, that this privilege shall be limited to coal for delivery at such ports on inland waters along the international boundary above Montreal as shall be designated by the Minister of Customs ; and if coal thus delivered as ship's stores is re-landed, sold or disposed of in Canada, the coal and the vessels for and from which it is delivered shall be subject to seizure and forfeiture under the Customs laws, and further delivery of coal as ship's stores to the steamer, so offending may be withheld.

Upon motion of Mr. Scott, seconded by Mr. Conlin, the address of the president and the accompanying documents were received and adopted.

THE EXPORT LUMBER TRADE FROM MONTREAL.

The president read an article from the Montreal Herald bearing upon the relation of the lumber business to the shipping trade of Montreal, from which the following is extracted :

"Upon the increase of lumber shipments, probably more than upon any other factor in the situation, has depended and will depend the increase of shipping at Montreal, and therefore the increase of grain shipments through this port. The noteworthy increase in tonnage, and, what is of even more importance, the calling of the latest class of freight ships to Montreal in the last three or four years, has been made possible principally by the great increase in the export of lumber to Europe, principally to Great

Britain. Shipments of lumber in 1895 were 175,371,000 feet. In 1898 they had nearly doubled, increasing to 335,429,290 feet. In the same time the tonnage at Montreal increased from 1,069,386 to 1,584,072, an increase in three years greater than had taken place in the preceding fifteen years. This increase in the lumber shipments goes far to explain the great corresponding increase in grain shipments from the port, an increase which was indeed even more extraordinary, the total 15,771,364 bushels in 1895 being trebled in 1898, when the total was 46,135,205 bushels.

"The explanation of this apparent interdependence is simple enough. Every ship must have both "heavy" and "light" cargoes. No ship, or practically none of the modern Atlantic freighters, will take a cargo of grain "heavy" freight only. Nor will any ship willingly take a full load of lumber or other "light" freight. A ton of grain occupies about forty cubic feet, and the grain crew stiffens the sides of the ship below water, and helps materially to sink the ship to the safe water line. A ton of lumber occupies about eighty cubic feet of a vessel's space. The inter-relation of the the two classes of cargo will perhaps be adequately indicated by the details of a cargo of four ships of a leading Montreal line in the month of August, 1898, which shows that in a total of 2,434 tons of freight carried, there were included 7,210 tons of grain, 8,219 tons of lumber, and 617 tons of cheese. The grain at \$2.40 a ton would yield the ship-owners \$17,304. The lumber at \$3.84 a ton would yield \$31,361, and the cheese at \$4.80 a ton would yield \$2,962. The importance of the lumber cargo is at once evident. On the last two boats of the season, when the freight on grain had risen five shillings a ton, the freight on lumber had risen on an average only one shilling a ton. In a total of 9,926 tons for the two ships there were 4,650 tons of grain, worth to the ship-owners \$16,740, and 2,369 tons of lumber, worth to the ship-owners \$10,482. There was also 351 tons of cheese, worth to the ship-owners \$2,106.

"Apparently the ability of our expensive system of canals to do enough business to repay the country for its vast outlay is to be greatly influenced for some time to come by the ability of Canadian lumbermen to increase the output of their products through Montreal to Europe. Will the Parry Sound Railway and the Grand Trunk and Midland be able to add the Georgian Bay lumber direct to the Ottawa district in the development of its business?"

LETTER FROM MR. WALDIE.

In respect to the above article, Mr. Waldie sent the following letter to the Montreal Herald :

SIR,—I was well pleased indeed at reading an article in your issue of the 4th instant on the bearing of a lumber trade on the harbour situation at Montreal. You are right in saying that lumber must form a portion of the exports of Montreal if the business of the port is to be conducted on a profitable basis.

I am not certain that the deepening of the St. Lawrence canals will materially assist in increasing the quantity of lumber going from Western Ontario to Montreal, but it will increase your receipts of all kinds of grain. Lumber being such a bulky article, and covering so much space it cannot, when moved in vessel loads, be jostled at Montreal so as to be available for steamers as they require it for mixed cargoes, without heavy terminal expense.

The transportation of lumber from western districts must continue to be largely by rail, while from the Ottawa district it will continue to go in canal boats which are cheap, and can remain in port, if need be, without any very great expense, to suit the convenience of the steamer.

Taking the whole cut of sawn lumber for the year 1898 the output of the mills of Ottawa and Western Ontario will aggregate 1,000,000,000 feet b.m. Of this six-tenths or 600,000,000 feet, was the cut of the Ottawa mills, discharging Ottawa river. Of this quantity, one-half, say 300,000,000 feet, went to Montreal for export ; 100,000,000 feet would represent the local trade of the Montreal district, and possibly shipments for export elsewhere than Montreal ; 50,000,000 feet would be taken by the Ottawa trade, including the consumption of Ottawa city, leaving only 150,000,000 feet for the American trade out of 600,000,000 feet, and consular returns show less.

This shows the lessened quantity that is finding its way to the American market, and is fully borne out by the

MARCH, 1899

showing of the American consular reports from Ottawa district for the year ending December 31st, 1898

Lath	\$ 21,789
Lumber	1,379,725
Logs	75
Match blocks	32,947
Pickets	18,623
Posts and poles	1,057
Pulp sulphite	3,318
Pulp wood	5,500
Railroad ties	222
Wood board	1,701
Timber	4,772
Shingles	28,434
Total	\$1,508,981

Now, when we come to deal with the remaining 400,000,000 feet which is manufactured west of Ottawa city (including the mills at Rat Portage), we find that it is distributed in about the following proportions, viz.:-

The local Ontario trade taking fully one-half, 200,000,000 feet.

Manitoba trade, about \$5,000,000 feet.

The American trade about 80,000,000 feet.

White Montreal and eastern points would take the remaining 35,000,000 feet. Thus we distribute the whole product of the mills cutting one billion feet in the Ottawa river and west.

When you carefully examine these figures you can understand how the Western Ontario men are all indifferent to the American market, which takes little over 250,000,000 feet, and the quantity of American lumber thrown back into Manitoba and Ontario approximates nearly 50,000,000 feet, thus reducing the net consumption of Canadian lumber by the United States to about 200,000,000 feet, and this would be still further reduced if the quantities which go to Portland, Boston and New York for export were deducted.

What we require is cheaper rail transportation. Rail charges on lumber from Western Ontario to Montreal are quite too high, but the Ottawa Valley having the advantage of water transportation, secure a fixed rate of equal to \$1 per thousand feet from the mill to the vessel's side, while the rail rate from the Georgian Bay to the vessel's side in Montreal is equivalent to \$3 per thousand feet.

What is devoutly desired by every Canadian is that a larger portion than ever before of the wood product of Canada should find market in Europe and, as far as possible, be shipped through Montreal.

I am, dear sir,

Yours truly,

JOHN WALDIE.

P.S.—The quantity of logs towed from Georgian Bay to Michigan mills was as follows:

In 1897	219,026,825 ft. B.M.
In 1898	238,843,624 ft. B.M.

which is greater than the net shipment of lumber to the United States, as shown above.

Referring to the figures given, Mr. Waldie said that he was surprised to find that such a small quantity of lumber was marketed in the United States. He pointed out that while the American market was falling off, the British market was rapidly becoming of greater importance, and presented some calculations of the export of lumber to the United States from the consular district of Ottawa, as follows: In 1896, under free lumber, the value was \$1,767,278, which, on a basis of \$10.50 per thousand, represented 168 1/3 million feet; in 1897, with free lumber for seven months and a \$2 duty for five months, the value was \$2,357,120, representing 224 6-10 million feet; in 1898, with a two dollar duty, the value was \$1,379,120, representing 131 3-10 million feet.

Mr. Scott did not think the outlook was such as to cause the Canadian lumbermen any uneasiness. The English market was practically unlimited, and in late years had taken all classes of lumber and dimension stuff, while previously only deals could be marketed there. That market was also free from the annoyance of customs duties, and the exporter could trade on favorable terms. So far as he was concerned, he would be

just as well pleased if the Commissioners at Washington were to return without accomplishing anything in respect to the lumber duties. He was in favor of placing an import duty on the United States lumber coming into Canada, as it was manifestly unfair that the United States should have free access to the Canadian market while Canada was debarred from theirs.

Mr. Beck agreed with the remarks of the previous speaker. The United States, he said, must have our white pine, and would pay the two dollar duty. The southern pine would, of course, regulate prices to some extent, but it was only adapted for certain purposes.

The president of the Rat Portage Lumber Company, Mr. D. C. Cameron, was next heard. He was much impressed, he said, by the figures submitted by Mr. Waldie in his letter, as he had been under the impression that we were sending lumber to the United States by hundreds of million feet. Manitoba was each year importing a greater quantity of lumber from Minnesota. In 1894 the importation was 4,000,000 feet; in 1895, 8,000,000 feet; in 1896, 12,000,000 feet; in 1897, 17,000,000 feet; and in 1898, 38,000,000 feet. In the years 1892 and 1893 there were manufactured about 60,000,000 feet west of Lake Superior for Manitoba and the Northwest. Last year, one of the best yet experienced, the quantity manufactured was under 50,000,000 feet, while nearly 40,000,000 feet were imported from the United States. He thought that the retail lumbermen in Manitoba would offer little opposition to a duty on United States lumber. Regarding the argument that the placing of a duty on American lumber might create a monopoly, he said that there was sufficient competition in the lumber business to prevent any body of men from getting fancy prices for their lumber.

Mr. Mathers, of Rat Portage, endorsed the remarks of Mr. Cameron.

As a representative of the hardwood industry, Mr. Newman took occasion to refer to the present discrimination in freight rates against hardwood lumber. Personally, he was not affected to the same extent as some others, as he could get his lumber into Detroit by boat on a \$1.50 rate. Neither had he been affected by the lumber duty, as prices for hardwoods were higher to-day than when there was free lumber; but, to show the injustice of the present rate, he cited an instance when he sold a car of maple lumber at \$4 per thousand feet at the mill. The buyer had to pay a higher rate on this than on a car load of pine valued at \$25 per thousand.

Mr. Scott then moved, seconded by Mr. Newman, that the association reiterate its opinion, formerly expressed, that in the absence of reciprocity in lumber between the United States and this country, the government should impose an import duty on lumber corresponding to that of the United States, and thereby remove an injustice that exists to Canada and its lumbermen, and that the Committee of Management be instructed to press this view on the government at Ottawa in the event of the failure of the reciprocity negotiations at Washington. Carried.

ELECTION OF OFFICERS.

The only change resulting from the election of officers was the substitution of the name of Mr. J. E. Murphy as second vice-president for that of Mr. W. C. Edwards, M.P. The officers for the year, therefore, are as follows: President, John

Bertram, Toronto; 1st vice-president, James Scott, Toronto; 2nd vice-president, J. E. Murphy, Hepworth; secretary-treasurer, W. B. Tindall, Toronto. Board of Management (including Messrs. Bertram, Scott and Murphy): John Waldie, Toronto; N. Dymont, Barrie; W. A. Charlton, Lynedoch; T. Conlon, Thorold; J. B. Miller, Toronto; R. Cook, South River; C. Beck, Penetanguishene.

Upon the invitation of the president, Mr. Potter, representing Canadian-Michigan interests, gave his views regarding the lumber duties and the embargo on the exportation of pine logs. He did not think there was any justice in placing restrictions upon the timber after it had been purchased, and compared the action to that of selling a man a horse and requiring him to pasture it on the vendor's farm until it died, or to sell corn and insist on its being ground in the vendor's mill. There was one thing to be done, and that was for the Michigan lumbermen to quit the business. Touching upon the import duty on United States lumber, he thought it was well understood that the consumer paid the tax, and it was safe to say that the Manitoba consumer would pay \$1.90 out of the \$2 duty which it was proposed to put on.

Mr. Waldie replied to Mr. Potter. He said that Canadian lumbermen were in sympathy with Michigan lumbermen until Congress placed on the statute book the clause providing that in case any country should place an export duty on logs the amount of that duty should be added to the lumber duty. Several members entered into this discussion, each upholding the Ontario government in its present action.

Mr. Bertram spoke briefly on the forestry question. There was much timber other than pine that was practically unmarketable, and he looked forward to the time when we could cut spruce, poplar, balsam, etc., and eliminate them from the forest. We would then have a good growth of pine for generations to come. Pine seeds, he said, would carry two miles, and the only thing that kept them from growing was that the ground was already covered. His advice was that where you have a mixed growth, leave the young trees, and if you have to cut all, leave some trees to seed the land. He advocated the employment of fire rangers.

Mr. Cargill introduced himself by saying that he was a small lumberman, cutting about 4,000,000 feet per year, and preferring to restrict his production and make a fair profit on what he manufactured. He sympathized with the Michigan lumbermen, but believed that if they left their timber standing on the Georgian Bay, they would be better off in twenty years than if they had manufactured it into lumber.

Mr. Scott, who visited France, Germany and Austria last year, volunteered some information regarding tree-planting by artificial means. In Austria a person cutting timber is obliged to plant as much as he cuts down. He saw thousands of acres re-forested with trees from six to eight inches high to full growth. They were planted in fields with great regularity. The authorities demanded that only one kind of timber be planted together. Persons wishing to cut timber had first to get permission from the government and had to cut the trees under government supervision. He did not think, however, that this system of forestry was practical in Canada.

Mr. Murphy spoke in the interest of the hardwood trade. He thought that in addition to better freight rates the lumbermen were also entitled to more liberal travelling rates. The best they could now obtain was 2 1/2 cents per mile, and to get this it was necessary to become a member of the Commercial Travellers' Association.

Mr. Bertram replied that the Association did not intend to give up the fight, and that every effort would be made to secure from the railway companies some redress for the hardwood trade.

After tendering a vote of thanks to the officers for their services during the past year, the meeting adjourned.



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

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

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

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN, with its special class of readers, is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements, which will be inserted in a conspicuous position at the uniform price of 15 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

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

CANADIAN LUMBER AND THE UNITED STATES MARKET.

The Commissioners at Washington have parted without accomplishing anything in the nature of a treaty. They are to meet again, it is true, in August next, but little significance is attached to this. We are not certain that there is any cause for regret at this fruitless ending of the negotiations. While a treaty satisfactory to both countries, if such were possible, is to be desired, Canada is not prepared to give to the United States more than a fair equivalent for what she receives.

No branch of commerce was likely to be more affected by the conditions of a treaty than the lumber trade, and yet it is remarkable how unconcerned are the Canadian lumbermen at the outcome of the negotiations. The reason for this is the bright outlook for Canadian lumber. Not for many years have stocks been reduced to such a low basis, and the number of enquiries received gives promise of a prosperous season.

Reciprocity in timber products was the motto adopted by the lumbermen of Canada. To this they have firmly adhered, and in the absence of such an arrangement, have secured the prohibition of the export of saw-logs from Ontario. Now the Michigan lumbermen have become indignant that no treaty was consummated by means of which they might secure timber for their saw mills. Mills, box factories, sash and

door and other wood working factories in Michigan will be compelled to close down for lack of raw material. While the United States is thus affected, Canada is comparatively indifferent.

Mr. John Waldie has compiled some interesting figures showing the exports of lumber from Ontario to the United States. Last year the total export was only about 250,000,000 feet, while over 50,000,000 feet were imported into Canada from the United States. The quantity of logs rafted from the Georgian Bay to Michigan mills in 1898 was 238,000,000 feet, about equal to the lumber exported. It will thus be seen that the United States market is of less importance to the Canadian manufacturer of lumber than is generally supposed.

In the absence of reciprocity, the Ontario Lumbermen's Association has reiterated its views in favor of an import duty on United States lumber. The Dominion Government will again be strongly memorialized to impose the duty. That the request will be granted is reasonably certain; but in the meantime lumbermen in all parts of the Dominion should give every assistance to the movement. As the home market extends, more lumber is being imported from the United States each year, to the displacement of the Canadian product. Take the statistics of Manitoba. In 1894 only 4,000,000 feet were imported, while last year the quantity is given as 38,000,000 feet. In addition, large quantities of Puget Sound shingles are imported into Manitoba and the Northwest, particularly at points reached only by the Northern Pacific Railroad. United States lumbermen thus have two markets, while the Canadians are compelled to divide their home market with their neighbors to the south. Surely no government will allow this anomalous condition to continue.

The Dominion Parliament will convene on March 15th, and one of the first questions to receive attention should be the enactment of a law placing an import duty on United States lumber. In view of the experience of the past six months, such a measure would doubtless be heartily supported by a majority of the members of both political parties.

THE VALUE OF ASSOCIATED EFFORT.

The trade in Ontario have reason to be grateful for peculiar conditions which led to the resuscitation of the Lumbermen's Association of Ontario, the usefulness of which is sufficiently manifest. Its revival has exemplified the fact that there is at all times ample work for an association representing every branch of the industry. The meeting held in Toronto last month, of which a report appears elsewhere, was not regarded as likely to be an important one, inasmuch as it was expected that any action regarding the lumber trade relations with the United States would be a repetition, to some extent, of that taken at previous meetings. In consequence the attendance was not as large as could have been desired, yet the discussion on matters bearing directly upon the lumber trade was of such a nature as to be of interest to every lumberman in the province, and was deserving of a better audience. The influence of the Ontario Lumbermen's Association during the past year can scarcely be over-estimated; it has accomplished more than appears on the surface, and well merits

the support and co-operation of the trade in general. Now that its usefulness has become apparent, it should continue to grow in strength.

While due support has been accorded the association by each member, much of its success during the past year was due to the enthusiastic and untiring efforts of the president, Mr. John Bertram. At a time when international and parliamentary questions were involved, when special knowledge of the lumber situation was required, when the exercise of sound judgment was called for, it was fortunate that the chief executive office was held by one equal to the occasion. The re-election of Mr. Bertram is an indication that his ability is appreciated at its true value.

The appointment of Mr. J. E. Murphy as second vice-president of the association is particularly appropriate. Mr. Murphy stands as a representative of the hardwood trade, a branch of the lumbering industry which is not without its grievances. As one of the three executive officers of the association, Mr. Murphy will be in a position to bring greater influence to bear to secure the removal of the disabilities which now attend the manufacture of hardwood lumber. The question of current interest is the equalization of the freight rates, to which reference has previously been made in this journal. The representations made to the railway authorities by the association and by hardwood lumbermen have not yet borne fruit, but it is thought that ultimately the rate on hardwoods will be reduced to an equality with those on pine. A striking illustration of the injustice of the present rates was related by Mr. Newman, who pointed out that on a car load of maple which he sold at four dollars per thousand at his mill, the buyer had to pay a higher freight rate than if the car had been loaded with pine valued at twenty-five dollars per thousand.

The argument which would seem to appeal most forcibly to the railway companies is that relating to the utilization of the coal lumber and waste material. The railways are surely interested in securing additional business—likewise in developing the country. Under present arrangements much hardwood lumber finds its way to the wood-pile and the railways receive nothing from it in the way of freight. If this class of stock were carried for a moderate charge, it would be taken to some central point and manufactured into a more finished product. Much of this finished product would be exported to foreign countries, and a second freight rate would be paid—probably to the railways—to the ocean port. It is said that the railway companies have not advanced one good reason why the rate on hardwoods should be higher than on pine, the contention that the former were more valuable having been shown to be erroneous. Hardwood lumber manufacturers, one and all, are interested in the movement to secure a reduction in freights, some have become members of the Lumbermen's Association, but many have preferred to stand aside and allow a few to fight the battle. If success is attained, all will share the benefit. Therefore everyone should lend a helping hand and strengthen the association by becoming members.

THE LUMBERMAN is issued fifty-two times a year for \$1.00. Can you afford to do without it?

CONVENTION OF WESTERN RETAIL LUMBERMEN.

The eighth annual convention of the Western Retail Lumbermen's Association was held in Winnipeg on February 8th, at which there was a large and representative attendance of both active and honorary members. The president, Mr. James B. Mathers, of Glenboro, was absent on a trip to British Columbia, therefore the chair was taken by the vice-president, Mr. Henry Byrnes, of Winnipeg. After the reading and adoption of the minutes of the last meeting, the president's address was read, as follows:

TO THE MEMBERS OF THE WESTERN RETAIL LUMBERMEN'S ASSOCIATION:

GENTLEMEN:—It affords me much pleasure to welcome so many members to this our eighth annual meeting. I am pleased to congratulate you upon the successful and prosperous year just closed in all branches of business, and specially in the lumber trade. Our province and adjoining territory has been blessed with a bountiful harvest, which has enabled the public in general to settle their liabilities as promptly as usual, thus placing trade on a firm and substantial basis. There appears to be a favorable prospect for a good immigration to our land next season, which will certainly have a beneficial influence on the lumber trade.

Your directors, as requested at the last annual meeting, looked into the matter of fire insurance, also a telegraphic code. Your secretary communicated with the secretary of the Northwestern Lumbermen's Association of Minneapolis, and from information received your directors deemed it not advisable to attempt forming a fire insurance company at the present time, as our membership is not large enough to ensure its success, and considerable expense would be incurred in procuring a charter, etc.

Two telegraphic codes were purchased, and after looking into the matter we came to the conclusion that they would be seldom used, and would, in all probability, lead to confusion and mistakes, as they are complicated, there being so many different grades, sizes and length of lumber, and few manufacturers use the same terms.

We wish to express our thanks to the Rat Portage Lumber Co. and other honorary members who so kindly entertained us last summer, by a lumber excursion through the pictures of Lake of the Woods and up Rainy river to Fort Francis, which was one of the most enjoyable excursions on record, and was duly appreciated by all who were able to attend. Our thanks are also due the officials of the Canadian Pacific Railway Company, who so generously granted free transportation to all members attending.

We regret very much the removal, by death, of three of our esteemed brother members, Mr. Gibbard, of Wapella, Mr. Wyatt, of Virden, and Mr. Nichol, of Boissevain, during the past year.

At our last annual meeting our membership stood at 164; during the year four honorary and 45 active members were accepted by your directors and secretary, 21 have withdrawn or sold out to others who belong now in their stead, leaving our membership at the present time 28 larger than last year. This is, indeed, gratifying, as our increase for 1897 was only four over the year previous. During the year a great many applications were refused, as they were from points where there are sufficient yards to supply the trade, and in fact in many cases one member less at these points would be an improvement instead of one extra. If all these applicants were able to get stock the competition would be so great and the business of each so much less, that it would have a very depressing influence on the financial ability of a great many, which would soon result in failure, and our honorary members would eventually have to shoulder a large portion of the losses.

Before closing, I wish to thank my fellow officers for their very able assistance and faithful work performed during the past year. All matters brought before them received their most careful attention and consideration.

We are glad to see so many members present at this meeting. A pleasant and profitable feature of this convention is the bringing together of members, active and honorary, renewing old acquaintances and forming new ones, and leading to free and full discussion on all matters relating to the trade.

Many subjects, no doubt, will come up at this meeting, which I trust will receive your most careful consideration. Yours truly,

JAS. B. MATHERS, President.

Mr. Byrnes added to the address a few words concerning the status of the trade. He said that the past year had been an exceedingly prosperous one; and the prospects for the coming year were excellent.

Mr. John Dick, secretary-treasurer, presented the financial statement, which showed total receipts of \$2,618, of which \$784 was carried forward from the previous year, the remainder being made up of fees and dues collected during the year. The disbursements were \$1,889, leaving a balance of \$729 to the credit of the Association.

After reports of regular committees, the election of officers was proceeded with, the result being as follows:

President H. Byrnes, Winnipeg.

Vice-president—R. H. O'Hara, Brandon.

Directors—A. M. Stewart, of Morden; A. J. Hughes, of Souris; Wm. Armstrong, of Portage la Prairie; G. M. Miller, of Virden; T. A. Cuddy, of Minnedosa; D. Sprague, of Winnipeg.

An animated discussion was started by Mr. D. E. Sprague, of Winnipeg, who declared that the rules of the Association were not being adhered to by some of the members, and expressed the opinion that if this condition of things continued the Association might as well be dissolved. The specific charge was that over thirty million feet of lumber had been purchased from manufact-

competition from points on the Northern Pacific branch lines where American lumber was handled almost exclusively. The members were almost unanimous in agreeing that as things were it was impossible to live up to the rules of the Association.

Mr. Cameron said that the honorary members had agreed, at a meeting some time ago, on a tariff of prices. If it were necessary to revise this price list, they were prepared to do so, but so long as they had a published price list, any American competitor could come in and offer lumber at fifty cents or one dollar a thousand cheaper.

Mr. Beecher said that his company were willing to meet the competition from the south by adjusting prices, but the by-laws would have to be carried out by the active members. The discussion continued for several hours without practical results, and finally it was agreed that the directors of the Association should meet the honorary members the following morning and endeavor to come to some arrangement.

On the following evening the meeting was resumed to hear the report of the directors as to the result of their conference with the honorary members. The chairman announced that nothing definite had been done except that an agreement was reached that the honorary and active members would support each other in carrying out the objects of the Association. It was arranged that the directors and honorary members should hold a meeting at an early date to arrange a new price list. When this is done, the result will be made known to all the active members, and the revised price list will be sent to them.

Further discussion on the subject was opened by Mr. T. G. Robinson, of Winnipeg, who maintained that the only way to solve the difficulty was for the honorary members to control the supply of all kinds of lumber. He argued that at competitive points such as Winnipeg it was impossible to keep out a certain amount of American lumber. He confessed to selling one million feet of American lumber for one building last year. This he was able to supply at a less cost than he could have supplied Canadian lumber.

Mr. Cameron contended that in reality the American lumber was no cheaper than the Canadian, as in the case of the former the thicknesses were less than in the latter. He asserted that lumber that was sold as two inch stuff was cut in United States about an inch and three-quarters, and therefore Canadian lumber cut the full two inches, at \$16 a thousand, was just as cheap as American lumber cut an inch and three-quarters, at \$14 a thousand. He said that if the Canadian retailers were satisfied with 1 3/4 inch lumber for 2 inch, they were prepared to cut it that way and give them the proportionate reduction in price, but he had found that the retailers always demanded the full thickness. The meeting adjourned to attend the Hoo-Hoo banquet.

In the evening the lumbermen attended a grand Hoo-Hoo initiation and banquet. The following lumbermen were initiated into the mysteries of the Hoo-Hoo order: J. S. Lochhead, Deloraine; W. A. Morkill, Dominion City; W. Armstrong, Portage la Prairie; E. E. Greenshaw, Shoal Lake; J. L. Campbell, Melita; J. E. Campbell, Carman; W. R. Stevens, Cypress River; W. Robinson, Rat Portage; A. J. Hughes, Souris; S. Caswell, Rathwell; C. W. Plummer, Boissevain; J. W. McCutcheon, Glenboro; W. Cranston, Clearwater.

The banquet was held in Rose's dining parlors, Livingstone block, and was attended by a large number of representative lumbermen from all parts of the province. The dining hall was prettily decorated, and an elaborate menu had been provided. The chair was occupied by vice-gerent J. C. Graham. A number of able speeches, interspersed with witticisms, entertained the assembly until after midnight, when the jolly lumbermen and their friends dispersed.



MR. HENRY BYRNES, President elect Western Retail Lumbermen's Association

urers in the United States. This was in controversy of the by-laws; clause 3 stating that honorary members are not to sell stock to any men not active members of the Association, while clause 32 says that active members are to buy from honorary members only. It was claimed that the former clause was strictly carried out, while the latter was not. Mr. D. C. Cameron, of the Rat Portage Lumber Company, and Mr. C. M. Beacher, of the British Columbia Mills, Timber and Trading Company, said that if the retailers did not refrain in the future from breaking the by-laws of the Association they would withdraw from honorary membership. They pointed out that the Canadian manufacturers were able to supply the demand, and there was no reason for buying American lumber. A suggestion was made by one of the members that some changes be made in the by-laws to make them more workable.

Several retail dealers spoke in defence of their position. All confessed to have purchased American lumber, some giving as their reason that they could not get it from the Canadian manufacturers. The chief reason for buying American lumber seemed to be that it was cheaper than the Canadian production, and the members were compelled to buy it in self protection against

NOVA SCOTIA LUMBER OPERATORS.

(Correspondence of the CANADA LUMBERMAN.)

Residents of the town of Amherst and county of Cumberland without doubt own and operate more timber properties than those of any town and county in the maritime provinces. In the past few years they have been acquiring limits wherever they were to be obtained, with the result that they are now operating in every part of northern and eastern Nova Scotia and Newfoundland. Prominent among these are Dr. Hewson, of the Nova Scotia Lumber Company, Sherbrooke; Hon. A. R. Dickie, part owner of the Sheet Harbor Lumber Company, and sole owner of the East River Lumber Company and Moser's river mill limits, twenty miles east of Sheet Harbor; N. Curry, N. A. Rhodes, W. W. Black, D. W. Douglas, and Messrs. Lusby, some of whom own interests in the Newville Lumber Company, Newville; Sheet Harbor Lumber Company, Sheet Harbor; River Hebert Lumber Company, River Hebert, and others.

The gentlemen above named, with Charles Hillson, B. B. Barnhill, of Two Rivers, Thompson Smith, of Parrsboro, and George A. Fowler, of Newville, purchased one year ago the Exploits Wood Company's property at Exploits Bay, Newfoundland, and operated to the extent of four million feet the past season. These limits comprise about eight hundred square miles, timbered chiefly with a fine growth of pine. There is also a spruce growth on the limits that is valuable. The mill on the property was built by the former owners without regard to cost, and is strictly modern, with a capacity of twelve million feet per year. The logging, driving, sawing and shipping facilities are excellent; and with the experience the proprietors have in lumbering operations, the venture cannot but prove successful. Mr. George A. Fowler is outside manager, and Mr. Charles Hillson attends to the office work.

Rhodes, Curry & Co., Limited, also have large timber limits and mill at Athol, where they manufacture about three million feet of deals and timber per year. The mill is steam-power, with rotary saw, edger, trimmers, shingle machine and planers. The company utilize a large quantity of the timber, planks and boards sawn in the mill in their large house building and car building business, which is taken to their works at Amherst to dress for the purposes required.

THE NEWVILLE LUMBER COMPANY.

The Newville Lumber Company operate at Halfway lake. Their large steam saw mill is about nine miles from Parrsboro, on the Cumberland Railway and Coal Company's railroad, and all their lumber is shipped to Parrsboro on it, the deals being lightered to West Bay for shipment, while the boards and laths are shipped in small vessels direct from wharf. This company purchased the property from Young Bros. & Company, Limited, in 1896, and have sawn about fourteen million feet there since purchasing. The mill was thoroughly repaired during the winters of 1896-7, and has done some good sawing since, over eighty thousand feet having been sawn in one day. The mill contains a live gang, patent edger, trimming and butting machines, lath and picket machines and planers, and is situated on the edge of the lake, which gives splendid storage room for logs. The limits are not far distant: the logs are hauled two to three miles; the stream driving is not more than six miles; spruce timber is the principal wood, but some hemlock and hardwood is also sawn. The owners are Amherst men. Mr. W. W. Black is the manager.

CHARLES T. WHITE.

Mr. Charles T. White operates a large lumber business at Apple River. His stock of logs last spring was about five million feet. Early in the season his splendid steam-power gang mill was destroyed by fire, so he put two portable saw mills at work sawing up his stock. Mr. White intends rebuilding this winter, in order to be in readiness for next year's work, and will cut about the usual quantity of logs. He uses the saw instead of the axe for felling and cutting up, and says he gets from 5 to 10 per cent. more lumber by so doing; besides, when the woodmen get use to the saw, they can do more work.

The burned mill was situated about two miles from the Bay of Fundy, but schooners could go up near the mill at high water. Most of the deals for export were lightered to Grindstone Island for shipment, as Mr. White has a mill at Point Wolfe, in New Brunswick, the deals from

which are also sent to Grindstone. In both mills Mr. White ships from ten to 12 million feet, besides the boards and laths which he sends to the United States markets. He also ships a large quantity of piling to New York and other United States ports. In addition to the two gang mills, Mr. White keeps one or two portable mills running on logs that he cannot profitably get to the gang mills. In this way he gives employment to men and teams cutting, sawing and hauling to place of shipment. He is always open to buy timber lands, without regard to their situation, as he believes he can find a market for the lumber and make some profit out of it.

The settlement at Apple River has profited very much by Mr. White's energy and example. One result was the opening of a road through to Sand river and procuring a mail route through to connect into the Intercolonial railway at Maccan. Formerly the mails had to go by way of Parrsboro over a longer and very hilly road, so that it took two days hard travelling to reach Amherst, the county town, whereas now one can leave Apple River in the morning and take dinner the same day in Amherst. Hence the people are more enlightened and in touch with the outside world. Mr. White built a private telephone line from Advocate to Apple River, but the people of Apple River find it a great convenience and would be lost without it.

Mr. White and family resided at Apple River for a few years, but since acquiring the Point Wolfe property in New Brunswick, he removed to Sussex—his old home—where he has a splendid residence and is within easy reach of both of his mills, and also of St. John, where he procures his supplies and keeps in touch with the larger lumber merchants. With his facilities for manufacturing lumber, and the large quantity he handles, he can supply cargoes more promptly than manufacturers who operate on a smaller scale. Last year he made considerable shipments to the east coast of England. He is operating to about the usual extent this winter.

PRESCOTT & GILLESPIE.

Prescott & Gillespie, of Shulee, on the Bay of Fundy, have a splendid timber property and mill. The mill is steam-power, and has a capacity of fifty thousand feet per day. A live gang, patent edger and butting machinery, with lath machines and planer, is the machinery used. The firm get some of their logs along the shore and tow them to the mill, where they have an endless chain derrick to elevate them into the pond. Mr. John Gillespie is the manager, and resides in the village. They saw about four million feet of English deals per year.

YOUNG BROS. & COMPANY.

The above firm purchased timber property at St. Margaret's Bay from the old firm of N. L. Todd & Co. some three years ago, and have since added to it by purchasing a considerable tract of land, with mill and houses, at Ingram river, and also some timber land on East river. This gives the company the control of all the principal rivers between the head of St. Margaret's Bay and Gold river. Their limits extend northerly to the St. Croix waters, which discharge into the Bay of Fundy, via Minas basin. A considerable portion of the timber on the height of land—which they own—can be put into the Bay of Fundy waters or the Atlantic on the opposite side of the province at an equal cost.

The company got out last winter about eight million feet, which was sawn in their large gang and circular mill at head of St. Margaret's Bay. The bulk of the logs were cut on the river which discharges into St. Margaret's Bay, a short distance from the mill; the remainder were cut on Ingram river, driven to tide water, then boomed and towed about eight miles to the mill. The situation of the mill is unique, being on an island in the bay and connected with the main land by a long bridge on one side, while the channel is on the opposite side—the water above the island forming a larger pond, where their whole stock of logs can be safely and easily boomed. Schooners of 150 to 200 tons can take cargo from the mill wharf, while large vessels, ships and steamers can lay at anchor and load at the lower end of the island, a mile or so from the mill.

The mill consists of a fast cutting "live" gang, a modern rotary, lath, picket box and shingle machines, also, apart from the main mill, but driven by same power, there are planing and matching machines. The lumber to be planed is taken from the trimmer table in the saw mill and delivered direct to the man in charge of the planer,

being elevated one story while in transit. The power furnished by four large boilers to a double cylinder angle engine of 250 h.p., which drives the machinery easily. The gang averages sixty thousand square feet per day.

Mr. B. F. Young, the president, resides at St. Margaret's Bay, and has the milling and shipping operations under his view.

Mr. D. P. Young resides at Ingram River, where he has built a fine residence. He attends more particularly to the logging operations. Mr. C. W. Young, of St. Stephen, N. B., is also one of the company. In addition to their stock of saw logs, last winter they got several thousand pieces of piling and also some crops of pulp wood. The company has in view the building another large mill at either Ingram or East river, as being excellent facilities at both places and ample supply of logs.

The members of the company are thoroughly practical lumbermen, and were successors to B. Young, Newell and River Hebert, in Cumberland county, where properties they sold prior to purchasing the St. Margaret's Bay mills and timber lands. St. Margaret's Bay is miles west of Halifax, the intervening country being rather uninteresting except for several lakes.

UNSOLICITED PRAISE.

For the following complimentary remarks we are indebted to the Southern Lumberman, of Nashville, Tennessee:

"Among our most valued exchanges is the CANADA LUMBERMAN, which is published at Toronto, the capital of the greatest lumber-producing province in the Dominion, by the C. H. Mortimer Publishing Company, with a branch office at Montreal. The weekly edition is issued every Wednesday, and the monthly on the first day of every month. While devoted strictly to the lumber and allied interests of the Dominion, the CANADA LUMBERMAN is one of the fairest, most reliable, and conservative lumber trade journals. In all our long acquaintance with it we have never known it to 'fly off the handle' in any of the many sharp commercial controversies that have occurred between its country and the States; but it always treated every question in a high-toned and dignified manner that commands respect if it fails to carry conviction. It is a clean and high-toned journal, and both its weekly and monthly issues are sent post paid to readers of Canada for \$1 a year, and for \$2 to any foreign country.

PREVENTION OF SCALE IN BOILERS.

In an article in the November issue of the Home Magazine, in answer to the question, 'Will carbonate soda or plain soda remove hard sulphate of lime scale?' the expert replies, 'I have never found it to be so good for that purpose. I can tell you, however, that it will remove it pretty effectually—very cheaply too—that is ordinary kerosene. If this is fed to the boiler the rate of about one quart per day per 100 h.p. will benefit the boiler will soon be apparent. It has been found to prevent, to quite an appreciable extent, the formation of hard scale. Its action upon the sulphate of lime does not seem to be a chemical one, however, but rather a mechanical action. In my opinion, the small particles of sulphate of lime precipitated by the waste heat, are first carried to the surface of the water by the boiling and bubbling of the water. There they become coated over with the kerosene, which prevents them from uniting in solid mass when deposited on the plates.

"WANTED AND FOR SALE"

Persons having for sale or wishing to purchase a particular lot of lumber, a mill property, timber limits, saw hand machinery, etc., in fact, anything pertaining to lumbering operations, will find a buyer or seller, as the case may be, by placing an advertisement in the "Wanted and For Sale Department" of the CANADA LUMBERMAN Weekly Edition. Testimonials to the value of this department by those who have given it a trial state that the results of advertisements were frequently better than anticipated. The cost is comparatively small, and owners might, with profit to themselves, make use of this method of advertising their stock to a great extent.

THE NEWS.

—Arthur Miller has established a shingle mill at Seagrave, Ont.

—L. A. DeLaplante, of East Toronto, has leased a lumber yard in Hamilton.

William Mitchell has registered proprietor of the Barrill Lumber Company, Shawenegan, Que.

—Mr. Arbutnot has started a retail lumber yard at Minto, Man. G. B. Hughes has opened a yard at Teulon, in the same province.

—It is the intention of Messrs. Ranesbottom & Spencer to build a saw mill at Little Current, Ont. They are taking out a large quantity of logs this winter.

—The McGregor-Gourlay Co., of Galt, Ont., report a steadily increasing export trade. They recently shipped a large wood-working machine to Glasgow.

—Messrs. H. J. & R. M. Currie, of Eel River, N.B., have purchased the Restigouche sash and door factory at Campbellton. It is understood that they will continue the business as before.

—R. Konkle's saw mill at Beamsville, Ont., was badly wrecked by a boiler explosion on the 20th ultimo. The mill building was demolished and parts of the boiler carried a distance of five hundred yards.

—The Bronson & Weston Lumber Co., of Ottawa, have elected directors for 1899 as follows: President, E. H. Bronson; vice-president, S. T. Bronson; secretary-treasurer, Levi Crannell; W. G. Bronson.

—Mr. Thos. Southworth, Chief of the Ontario Forestry Department, recently read an interesting paper on "The Forestry Interests of Ontario," before the Engineering Society of the School of Practical Science, Toronto.

—It is reported that Theodore Ludgate, of Peterboro, has secured a lease from the Dominion government of part of the Stanley Park Naval Reserve at Vancouver, B. C., and that he will build an extensive sawmill thereon.

—J. & P. Nadeau, of Cascapedia, Que., have recently added to their saw mill a factory for the manufacture of house furnishings, chairs, mouldings, doors, etc. They are now manufacturing 300 doors for the British market.

—A circular from N. Janes & Son, of the Acme Veneer Works, Orillia, Ont., announces that they have added several new machines for turning out all kinds of veneer. They manufacture perforated chair seats and backs, butter plates, cheese boxes, pails, etc.

—Mr. James W. Woods, who for years has conducted a lumbermen's supply business in Ottawa, purposes erecting a large factory and warehouse and removing his factory to that city from Montreal. His business extends from coast to coast, and is steadily growing.

—The report of the Crown Lands Department shows that Nova Scotia has still a public domain of one and one-half million acres. Last year \$20,000 were realized from the sale of Crown lands. It is said that efforts will be made to reduce grants of these lands to lumbermen.

—The Brunette Saw Mill Co., of New Westminster, B.C., has erected a new smoke stack, seven feet in diameter and 75 feet high, to be used instead of the large refuse burner, which gave too much draft to the furnaces. Other improvements have also been made to the mill.

—A party of Ontario lumbermen, including Angus McLeod, of Bracebridge; W. J. Sheppard, Waubaushene; John Brennan, J. Jolliffe and Henry Anderson, Orillia; and William and D. C. Irwin, of Peterboro, have gone to British Columbia, in connection with lumber interests in that province.

—A number of Toronto gentlemen, including Senator Geo. A. Cox, J. W. Flavelle, and others, want permission from the Ontario Government to build a railway from Haliburton through Whitney to Mattawa. This road would open up an important but at present inaccessible lumbering district.

—The Sheppard Lumber Company, composed of W. J. Sheppard, of Waubaushene, T. H. Sheppard, of Orillia, F. Gray and A. R. C. Smith, have erected a large steam saw mill at Brule Lake, in Algonquin Park, at which pine lumber will be manufactured, and a large hardwood mill and stave factory at Maple Lake Station, Parry Sound district.

—The report of Messrs. Niven and Carter, who recently

explored along a line of meridian from Stroudfoot's Lake west to Night Hawk Lake, states that they discovered a large extent of valuable mining lands, well timbered with spruce, tamarac, poplar and fir. There is in the section a good field for the manufacture of pulp wood, 150 miles from north to south, extending to Hudson Bay.

—Mr. J. A. Williams has recently returned to Ottawa from Dawson City, where he was engaged in the lumber business. Mr. Williams states that there are six saw mills in operation at Dawson, and that the demand for lumber at present is more than supplied. Lumber sells at \$90 to \$150 per thousand feet, and men working in the mills have been paid as high as one dollar an hour. The labor supply is, however, becoming more abundant.

—It is reported that the Rat Portage Lumber Company, of Rat Portage, Ont., will keep a gang of men in the woods throughout the coming summer, in order to secure a sufficient supply of logs. The new mill which the company purpose building in Winnipeg will obtain its log supply from the Rainy River district, the timber to be shipped over the new Ontario & Rainy River Railway, which it is expected will be completed from Winnipeg to Rainy River this fall.

—A dispatch from Hamilton, Ont., dated Feb. 3rd, stated that one Johnston had been arrested at the instance of Richard Rusk, a lumber dealer from Muskoka Falls, charged with fraud. Johnston, it seems, wrote to the plaintiff stating that he was doing an extensive business in lumber, and asking for prices. Later on he ordered several carloads of pine, which were shipped. No remittances being received, Mr. Rusk visited Hamilton, and found that the business of B. F. Johnston was unknown. He, however, succeeded in tracing up the author of the order, who, it is said, has been implicated in similar transactions previously.

—The High Commissioner at London has sent a communication to the Department of Trade and Commerce at Ottawa, pointing out that a good market can be found in England for wood-meal or wood-flour. This is a commodity which is used as an absorbent for nitro-glycerine in the manufacture of various explosives. A finer grade is also required for the manufacture of the kind of linoleum known as "inlaid." The consumption of wood-meal in the British explosive trade is about 700 tons per annum, and the price paid for it runs from \$20 to \$24 delivered. It must be quite free from grit, dry, and packed in canvas bags of about 2 cwts. each. For the linoleum trade about 1,200 tons are used yearly, and the price runs from \$14 to \$17 per ton. It must be fully ground, white in color and light in weight. The Department of Trade will furnish to Canadian manufacturers the names of British firms using the material.

PERSONAL.

Mr. Narcisse Gagnon, formerly manager of J. A. Parr's planing mills at Hull, Que., has accepted a position in Marinette, Wis.

Mr. David Elliott, head bookkeeper for the Gilmour Co., of Trenton, Ont., died in Ottawa last month. Deceased was 56 years of age, and had been in the employ of the company for some time.

Mr. Guy Buell, who for four years has been the Ottawa representative of D. L. White & Co., of Albany, N.Y., has gone to Burlington, Vt., having accepted an appointment with the Horatio Hickok Lumber Company, of that city.

One of the oldest and most respected residents of Brockville passed away on February 7th, in the person of Mr. Stephen J. Southworth, at the ripe age of 87 years. Deceased was the father of Mr. Thomas Southworth, Clerk of Forestry for Ontario.

Mr. A. P. Ebert, of Bay City, Mich., representing Hale & Booth, was a recent visitor at the office of the CANADA LUMBERMAN. Mr. Ebert informed us that the firm of Hale & Booth had, on account of the prohibition of the export of saw logs, closed down their mill in Michigan which they have been operating for the past two years. He stated that this winter they were getting out about 30,000,000 feet of pine, some 24,000,000 feet of which will come out of the Spanish river. These logs will either be sold or a contract placed with mills in the vicinity for sawing them.

Mr. C. E. Newton, lumberman, of Victoria Harbor,

Ont., returned a fortnight ago from England. Speaking of the lumber trade he remarked that in England the sales and enquiries for Canadian pine, oak and butternut were phenomenal. He found Canadian pine bringing prices at least fifteen per cent. higher than the Norwegian production. The Scandinavian lumber, he said, was too narrow, and in a number of cases the contract for English houses expressly specified Canadian pine. Mr. Newton studied the question thoroughly, and is very hopeful of an extensive trade in lumber with Great Britain.

PUBLICATIONS.

The American Monthly Review of Reviews for March contains a sketch of the late President Faure, of France, illustrated with portraits and other interesting pictures.

Messrs. I. Matheson & Co., Limited, New Glasgow, N.S., have issued their 1899 catalogue of the "Matheson" vertical engine and boiler. The booklet is neatly printed, with illustrations and complete description.

Messrs. Darling Bros., of Montreal, have issued a new catalogue, descriptive of some of the special machines which they manufacture, and for which they are sole agents in Canada. These include the Moore steam pump for stationary and marine boilers, the Morse valve reseating machine, the Webster vacuum feed water heater and purifier, the Nordberg governor, and many others. A copy of this catalogue will be forwarded to readers of this journal upon request.

A journal weighing several pounds reached our desk a few days ago, it being the annual special issue of Timber, of London, Eng. Among the articles in this number, which is profusely illustrated, are the following: "The Export Lumber Trade of the Pacific Coast of North America," by Frank B. Cole; "American Hardwoods and the Hardwood Export Trade," by D. W. Baird; "The American Joinery Trade," by an English importer. The issue reflects much credit upon the editor, Mr. W. L. Bird.

As has been announced in the advertising pages of the CANADA LUMBERMAN, Messrs. Baldwin, Tutill & Bolton, of Grand Rapids, Mich., have issued their 1899 edition of "Saw Fitting Machinery and Tools," it being an exhaustive treatise on the care of saws and knives. From a perusal of the book we believe it to be one of the most complete works of the kind yet published. It contains 290 pages, weighs about 20 ounces, costs ten cents per copy for postage, and is mailed free by the publishers, on request, to saw mill and factory operators, superintendents, foremen and saw filers. In the book appear illustrations and descriptions of one hundred and fifty or more machines and tools for the care of saws or knives, many of which are new appliances, catalogued for the first time by Messrs. Baldwin, Tutill & Bolton. This gives the book a distinct and permanent value to all practical men, while in addition there are carefully prepared articles on the practical side of saw and knife fitting.

CANADA'S COMMERCIAL AGENTS.

FOLLOWING is the correct official list of Canada's Commercial Agents in Great Britain, British possessions and foreign countries:

J. S. Larke, Sydney, N.S.W., agent for Australasia.

G. Eustace Burke, Kingston, Jamaica, agent for Jamaica.

Robert Bryson, St. John, Antigua, agent for Antigua, Montserrat and Dominica.

S. L. Horsford, St. Kitts, agent for St. Kitts, Nevis and Virgin Islands.

Edgar Tripp, Port of Spain, Trinidad, agent for Trinidad and Tobago.

C. E. Sontum, Christiania, Norway, agent for Sweden and Denmark.

D. M. Rennie, Buenos Ayres, Argentine Republic, agent for Argentine Republic and Uruguay.

In addition to their other duties, the undermentioned will answer inquiries relative to trade matters, and their services are available in furthering the interests of Canadian traders:

J. G. Colmer, 17 Victoria street, London, S.W., England.

Thomas Moffat, 16 Church street, Cape Town, South Africa.

G. H. Mitchell, 15 Water street, Liverpool, England.

H. M. Murray, 40 St. Enoch Square, Glasgow, Scotland.

Harrison Watson, Curator, Imperial Institute, London, England.

WOOD PULP DEPARTMENT

THE PROCESS OF MANUFACTURING MECHANICAL WOOD PULP.*

By W. A. HARE.

(Continued from February issue.)

PART III. DESCRIPTION OF THE MACHINERY AND THE PROCESS.

DEVELOPMENT OF THE WATER POWER.—Before describing the process, a few words may be said with regard to the water power. The installation of turbines, for the purpose of driving wood pulp grinders, presents more difficulties to the designer of the mill than would be found were the power required for ordinary uses. The process of grinding wood for pulp requires a great deal of power. One grinder which would have a capacity of five tons of dry pulp per day would require about 340 horse power, and for a daily output from the mill of 25 tons dry, which

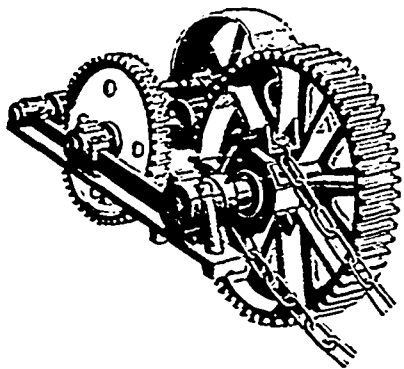


FIG. 1—LOG JACK AND CONVEYOR CHAIN.

is only a moderate sized mill, a supply of 1,700 h.p. for grinding alone will be necessary. About 5 h.p. will be required per ton of output to drive the lighter machinery, or a total for the above mentioned output of over 1,500 h.p. Steam power cannot be used for this service, as the variations in the load are so great that no steam engine could stand it. We must, therefore, use water power, which is eminently suited for the purpose. When such large powers are necessary, it is very important, when a site is decided upon, that the head should be fully developed. If the full head is utilized at first, taking sufficient water to develop the required power, it is comparatively easy to

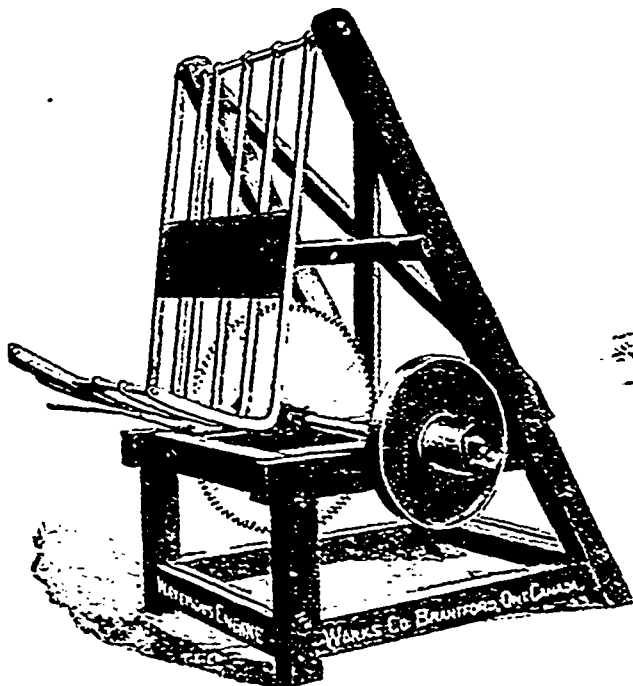


FIG. 2—SWING-FRAME PULP WOOD SAW.

add to the plant in the future by laying another pipe or otherwise increasing the quantity of water passed per minute, and installing more wheels. To increase the power developed by an increase in the running head will be found in most cases to be a costly remedy. This latter method is very unsatisfactory from the standpoint of a pulp mill owner. If a turbine is installed to run at a certain head, with full gate, and the head is afterwards increased, the wheel will develop more power certainly, but the speed will be higher also. As the turbines

are directly connected to the shaft of the grinder, this means that its speed is also increased, which cannot be allowed if the correct speed were given to it at the first installation. If the speed of the grinder is not increased above 200 r.p.m., there is no harm done, but if it is above this to any extent, the wheels will have to run with partial gate, and it is doubtful if, in this case, you will get the efficiency of the wheels.

In almost any other industry the speed of the turbine is of no consequence, as the machinery can be run at any desired speed by means of belts or gearing; but where direct driving is necessary the wheels will have to run at the speed required by the machine. When the head is high, and to get the speed low enough you are forced to put in a large wheel which will give more power than will be required for one grinder, the difficulty may be overcome by coupling another grinder to the shaft of the first, which will, in all probability, take the surplus power. Even three grinders are sometimes connected up in this manner.

LOG HANDLING AND SAWING.

LOG HANDLING. It is important that the logs, when being handled in the yard, should be kept out of contact with the ground as much as possible, as grit and dirt in the bark will cause trouble when the stick is sawn and barked. If the logs are taken direct from the pond to the saw, it is easy to keep the wood clean by handling the logs with a chain conveyor, driven by a log jack. In Fig. 1 is shown a jack and chain made for this purpose by the Waterous Engine Works Co., of Brantford, Ont. By means of this machinery two men can handle from 60 to 90 cords of wood in a day. In some mills, where the logs have to be piled in the yard, a useful expedient to keep them clear of the ground is made use of. A strong staging is built of logs to a height of a foot or so, on top of which the logs are piled. Skids are sometimes used, but a log staging is better, as the space between the skids soon gets filled up with dirt and refuse. A conveyor can be run at one side of the staging, and when logs are wanted in the mill they are simply rolled off the staging into the conveyor, which carries them in to the saws.

SAWING.—On arriving in the mill, the log is automatically dumped by the conveyor on to the skids. It is next rolled onto the saw bed rollers, which enable it to be easily fed to the saw. In most mills the wood is ground from bolts 24 inches long, though some use wood 16 inches in length. If the wood is supplied to the mill in sticks 4 feet long, it only requires cutting in the middle to make 24-inch bolts. For such work as this, the Waterous Engine Works, of Brantford, make a very good saw, a view of which is shown in Fig. 2. The log is placed in the cradle, which is suspended from the top of the frame. A

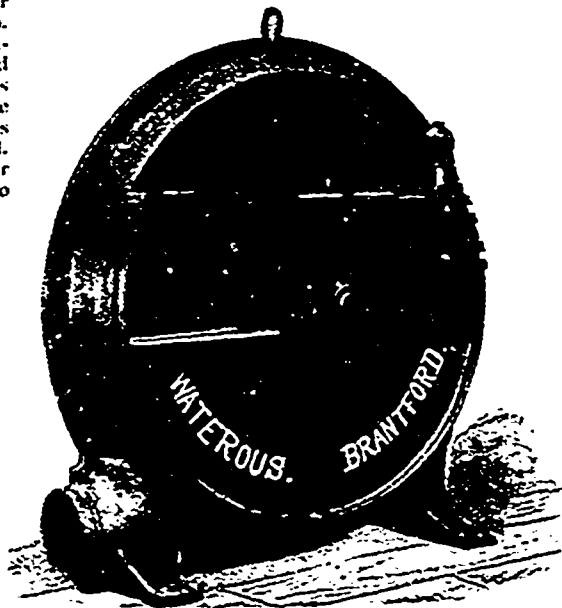


FIG. 3—PULP WOOD BARKER.

handle is provided on the cradle, by means of which the wood is swung against the saw. When the logs are supplied in long lengths this saw will not do, and another method has to be used. A swing saw can be used, the frame of the saw swinging on the counter shaft. In this way the saw is brought to the log. The capacity of a 38-inch saw, mounted in this way, would be about one cord per hour. Jump saws are used in some mills. These are run by a steam cylinder and piston. The piston is secured to the saw frame, which slides vertically in guides. On pressing the treadle, steam is admitted into the cylinder, driving up the piston and saw, which cuts through the log from the underneath. One of the mills in the Maritime provinces has installed a very satisfactory system. It consists of 6 or 8 saws, mounted in pairs, and so situated that only two saws can cut at a time. Between each pair of saws is a conveyor chain, running the full length of the saw bed. A log is rolled onto the upper end of the bed, and is caught up by all the conveyor chains at once, and carried to the saws. On passing each pair of saws, two cuts are made in the log, and when past them all the log has been entirely cut up into bolts, each 2 feet long. At the end of the saw table or bed is a chain conveyor which carries the bolts to the barkers. It is tended by one man, and has a large capacity. The saws run at about 500 r.p.m., and are usually 36 and 38 inches in diameter.

BARKING AND SPLITTING.

BARKING. To procure clean pulp, all bark and colored parts must be removed from the stick, leaving sound clean wood. The bark is cut off by means of a barker, a cut of which is shown in Fig. 3. This machine is also built by the Waterous Engine Works, of Brantford, Ont. It consists in a cast iron disc mounted on a shaft and carrying on its face knives placed at regular intervals in a circle. On the reverse side of the revolving disc are bolted cast iron wings or fans of suitable size. The disc, etc., is surrounded by a cast iron frame, which carries the bearings for the shaft. Part of the frame in front of the face is cut away, giving access to the knives, a suitable rest is provided to support the wood while being barked. The frame is of large size, and is made in two pieces, fitted with planed edges. The knife disc is 24 inches in diameter, made of cast iron, with a steel bevel shank on its edge, turned perfectly true, and backed with a steel plate. The knives are four in number, and are 11 1/2 inches long. The shaft is fitted with fast and loose pulleys, or with belt tightener, which is considered by some to be better. The capacity of this machine, when running at 600 r.p.m., will be from 7 to 10 cords per day, though it can be run up to 14 cords in 24 hours. In operation this machine works very well. The bolt or log is placed on the rest and pressed against the knives, the end thrust of the cutting action being taken by a roller and stud, mounted on the frame as shown. Each knife, as it passes, cuts

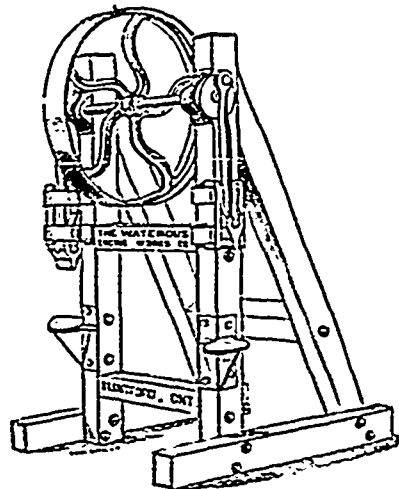


FIG. 4—PULP WOOD SPLITTER.

strip of bark off the log throughout its whole length. By revolving the wood slowly by the hands, the knives cut the bark completely off. The chips pass through the frame by means of a hole provided in front of the knives, and are caught up by the fans and blown out through the outlet shown in the frame. A pipe is usually connected to this orifice, which carries the chips to a distance. By means of the fans the chips are prevented from lodging in the frame, so that the disc is always running freely. This also serves to automatically remove the shavings to the desired locality.

When the revolving of the wood is done by hand, it is not done regularly, and the output of the barker will vary considerably, according to the skill and industry of the operator. It would be advisable to revolve the wood automatically, and thereby maintain a constant feed to the knives, which will be independent, to a certain extent, of the operator. Various attachments have been invented for this purpose, all of more or less usefulness. One of the best is Butterfield's, which can be applied to about any standard barker. By the constant relation of speed between the knives and the surface of the wood, each knife cuts, approximately, the same amount of bark, and in this way the quantity of clear wood removed by the barking is materially reduced. It is claimed by the makers of this attachment that from 5 to 8 per cent. more clear wood can be obtained from the same quantity of unbarked logs by using this device than by the ordinary method. The great point of its usefulness, however, lies in its increased speed and regularity of cutting. By the regularity in rate of cutting no time is lost, as the knives are prevented from cutting over the same space, as is frequently the case in hand feeding. The output is thereby increased, it is claimed, by from 80 to 100 per cent. By this means the price of a barker, as well as the operator's wages, can be saved. The power to drive the barker, however, will be increased in almost the same ratio as the output. When the wood is barked, it is thrown into the conveyor running to the grinder room; but if it requires splitting, it is thrown near the splitter. The knives require repeated grinding, especially if the wood has been in contact with the earth. When dull they should be ground on a special stone, used for this purpose and no other.

SPLITTING.—Where large wood is used, it is necessary to have it split if it is too large to enter the grinder pockets. This operation is done after the wood is barked, and before it is sent to the grinder room. The machine shown in Fig. 4 is a double wood splitter manufactured by the Waterous Engine Works Co. The frame is made of well seasoned wood and strongly bolted together. A shaft carrying a pulley and two disc cranks is mounted on the frame, as shown. From each of these cranks is driven a block, sliding vertically and connected

* Paper read before the Engineering Society of the School of Practical Science, Toronto, and published by permission.

with a piston rod. A step is also provided upon which to place the wood to be split. It is made of cast iron, and is bolted to the frame. The wedge or axe is fitted to the sliding block, and rises and falls with it. Two cranks are placed 180° apart on the shaft, to prevent two blocks being split at the same time, which would cause a sudden strain on the driving gear. Splitters do not demand much power for their operation, and consequently can be run with light machinery. The wood in most cases is small enough to enter the grinder

furnishes the pressure required to force the wood against the stone. Doors are fitted in one of these side plates, through which the wood is passed in filling the pocket. The sides of the pocket are cast iron plates, which can be raised or lowered to suit the wear of the stone, and are adjusted with screws and clamp bolts passing through the main frame. These pockets are made to take 24 inch wood and are 13 inches wide. The cylinders are made either 8 or 10 inches in diameter, and each is independent of the others, being controlled by its own lever and valve.

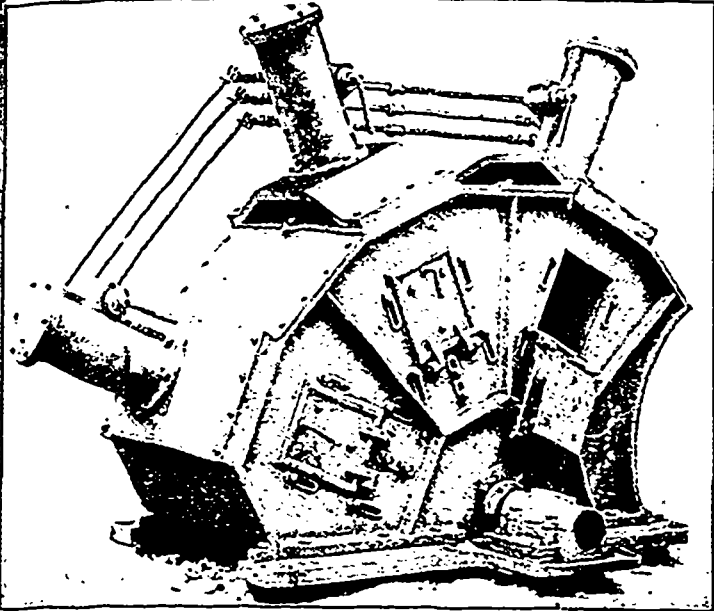


FIG. 5. WOOD PULP GRINDER (made by Robb Engineering Company.)

without previous splitting, and when an occasional log occurs that is too large, it is split with an axe.

GRINDING.

DESCRIPTION OF GRINDING.—The wood is conveyed from the wood room to the grinder room. Here it is ground on revolving stones by hydraulic pressure, being thereby reduced to pulp. Fig. 5 is a cut of a grinder manufactured by the Robb Engineering Company, of

port disadvantage, depending on the material to be ground, pressure, and other considerations.

Fig. 6 is the standard open frame type of grinder manufactured by the Jenckes Machine Company, of Sherbrooke, Que. This machine is constructed in a substantial manner and has given good satisfaction. The cylinders are cast iron, lined with brass, and fitted with cast iron heads. The lower heads are bolted direct to the top of the pocket, and are hollow castings fitted with doors on each side, which can be removed should the lower glands require packing or adjusting. The piston rods are made of steel, 3 1/2 inches in diameter, and are connected to the followers by shrinking, and also secured by two brass nuts, one being a lock nut. The piston

thickness, and can be adjusted sufficiently close to the stone so as to prevent the formation of splinters to any great extent. The middle pocket is made larger than the other two, it being 16 inches wide, while the others are 14 inches. The pockets are raised and lowered by two 2-inch screws each. The doors are made of steel plate, and slide in a groove cast in the frame. The main boxes for the shaft are self-adjusting, and conform to any variation in the shaft. They are 18 inches long and wood lined, the bearings running in water. The flanges for the stone are made of steel 38 inches in diameter, faced up true and threaded right and left hand on the shaft. The shaft is made of hammered steel, keyed for coupling, or can be made for a shrink coupling if required. The grinder case can be tipped up, allowing access to the stone when necessary. The stone is 54 inches in diameter by 26 inch face, in the larger size, and 18 inch face in the smaller.

Operation of the piping system of the Port Henry grinder. — In Fig. 7 is shown a side view of the Port Henry grinder, described above. This gives a good illustration of their manner of piping, which is claimed by the makers to possess many advantages. In the operation of any pulp grinder, one pocket at least must be idle all the time. This is necessary, for when a pocket has finished grinding, another must be thrown on to take up the load while the first is being refilled. Suppose, in this case, the two side pockets are grinding, and one of them requires refilling, the centre pocket being idle. By changing the three-way valve A, the high pressure is thrown on the centre pocket, and causes it to grind under high pressure. The empty side pocket being now relieved, the low pressure water automatically opens its check valve, and acts upon the piston from the under side, lifting it and its follower from the stone. The pocket is then refilled. Valve B is shifted, allowing the low pressure to bring the piston down until the wood is pressed firmly against the stone. At this point the three-way valve is turned, so that the high pressure water is diverted from the centre pocket, and enters on the top of the piston of the side pocket, at the same time automatically closing the low pressure check valve. The centre pocket is now idle, and should the other side pocket require refilling, the process of doing so is similar to that described. If the centre pocket requires refilling, the follower is lifted from the stone by means of valve B, which is always connected to the low pressure. The pocket is then refilled, and the low pressure let into the cylinder above the piston. In this manner, as above stated, the cylinders are always filled with water at either high or low pressure, consequently when the three-way valves are shifted there is no loss of time before the pockets begin to grind. By this method of piping the grinder is always taking the same amount of power with comparatively small variations, and this enables the speed to be kept fairly constant. This is important, as when the speed is allowed to vary considerably, the pulp is not of uniform quality, and if the off pump is driven

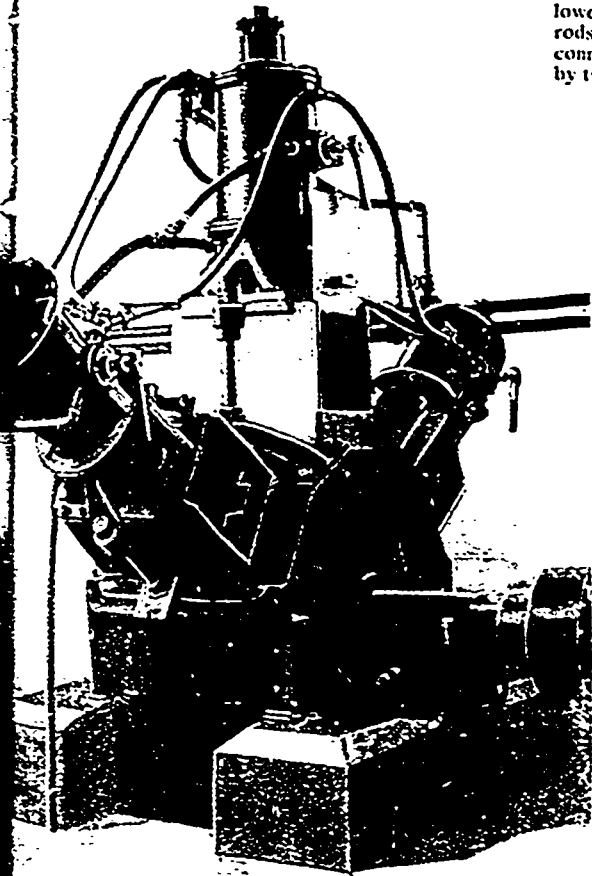


FIG. 6.—PORT HENRY WOOD PULP GRINDER.

Robb, N.S. This grinder is very strongly built, and is a good example of the closed frame type. As will be seen from the illustration, the grinder consists of a heavy cast iron bed plate which carries the bearings of the shaft, and two cast iron side plates, between which the stones revolve, and where the pockets are situated. Above each pocket is fixed an hydraulic cylinder, which

head is packed with four square rings 3/8 inch wide. Glands for piston rod are made of brass, secured by 3 stud bolts and brass hexagonal nuts. The pocket followers are made with strips cast on the face, which prevents the rolling of the wood in the pockets. This is quite an advantage, as rolling may cause a serious break. The pockets are constructed in one piece, two inches in

off the grinder shaft, the regulation of the stock is not an easy matter.

Mr. William Craddock, of Huntsville, Ont., has recently been given a contract for twelve car loads of broom handles to be shipped to Liverpool, Eng.

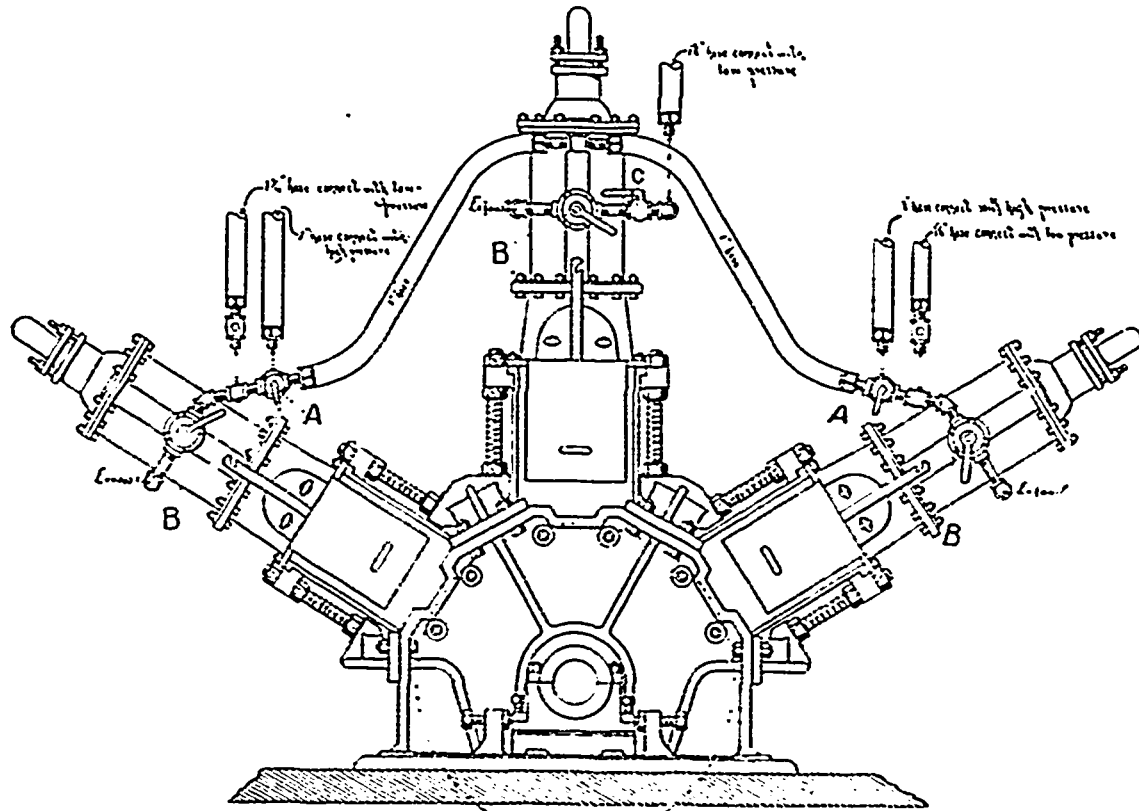


FIG. 7.—PORT HENRY WOOD PULP GRINDER (SIDE VIEW).

PULP NOTES.

It is rumored that a pulp mill is to be erected at Bathurst, N.B. T. D. Adams, of the firm of Adams, Flannigan & Co., New York, is said to be the promoter.

The Thunder Bay Pulp and Manufacturing Company is applying for an Ontario charter, with a capital stock of \$1,000,000. Mr. Hugh Blain, of Toronto, is one of the promoters.

Captain Partington, of Liverpool, Eng., has agreed to take two-thirds of the stock in the proposed pulp mill at Umon Point, near St. John, N.B. This assures the building and operation of the mill.

D. S. Maxwell, C.E., has secured, for a company of New York capitalists, options on several water powers on the St. Croix river, in New Brunswick. It is understood that the intention is to erect a pulp mill.

The following is from the pen of the West Hartlepool correspondent of Timber, of London, Eng: "Pulpwood is in good demand; the competition of Canadian wood with the Baltic production is very strong in this district just now, and the Swedes will have to look sharply after this trade or it will be leaving them."

Statistics to hand show that the consumption of wood pulp by British papermakers continues to increase. During the year 1897 there were imported 404,827 tons, against 388,000 tons in 1896. The respective values were £1,939,761 and £1,894,328. It will therefore be noted that whilst the quantity imported last year was larger than in 1897, the value shows a depreciation. Norway supplied, in 1897, 239,132 tons; Sweden 93,620 tons; and Canada, the third in importance, 25,873 tons.

ESSENTIAL TO THE LUMBER BUSINESS.

Mr. John Nichol, jr., of Queensboro, Ont., in renewing his subscription to the CANADA LUMBERMAN, writes: "Anyone interested in the lumber business cannot afford to be without it."

VALUABLE TO MILLMEN.

Mr. J. R. Gettler, Fullarton, Ont., in renewing his subscription to the CANADA LUMBERMAN, writes: "I would not wish to be without it, as I consider it a very valuable journal for millmen."

The John Sykes Mining & Milling Co., of Toronto, have purchased from the Jenckes Machine Co., Sherbrooke, a ten-stamp mill, engine, boiler, and saw and shingle mill, to be erected immediately on their property near Dinorwic, Ont.

The High Commissioner at London has received a communication from a firm wishing to correspond with Canadian manufacturers of elm, basswood, and oak mouldings. Mr. Harrison Watson, of the Imperial Institute, in a letter to the Department of Trade and Commerce, states that there is an increasing demand in

Great Britain for boot and shoe pegs. These have heretofore been obtained from the United States, being put up in barrels containing 3 1/2 bushels each. The large dealers purchase about one hundred barrels at a time.

The Hammond Reef Gold Mining Co., Toronto, have decided to install at once thirty additional stamps, a new crusher, aerial tramway and water power plant, to operate their new mill. It is expected that the whole of the machinery will be delivered early in April. The Jenckes Machine Co., Sherbrooke, have been awarded the contract.

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CROWN LANDS OF QUEBEC.

THE report of the Commissioner of Lands, Forests and Fisheries of the province of Quebec for the year ending June 30th, 1898, is one of the most valuable which has yet been issued by that department, containing much special information regarding the timber lands, water powers and natural resources of the province. The total receipts of the department for the year were \$1,087,042.52. There were collected on account of woods and forests \$911,088.30, which included the proceeds of the sale of 1,215 miles of timber limits, which was held on March 22nd, and which realized \$30,110.48.

Some interesting comparisons relating to the woods and forests branch are made by the Commissioner. On June 30th, 1868, the number of superficial miles under license for the cutting of timber was 17,997. On June 30th, 1898, it was about 46,864 miles. The ground rents in 1868 yielded \$22,401 and in 1898 \$148,935. The lumber dues in 1868 was \$65,381 and in 1898 \$713,435. The total collections for the two years named were \$195,115 and \$911,099.30 respectively.

The proceeds of an important public sale held in 1868, covering an area of 5,664 miles of timber lands of the Upper and Lower Ottawa and the St. Maurice rivers, amounted to \$72,685, or an average of \$12.84 per mile. At the sale in March last there were realized, for 1,216 miles of timber lands situated to the north and south of Lake St. John, and in the county of Saguenay, the sum of \$30,110, or an average of \$24.77 per mile.

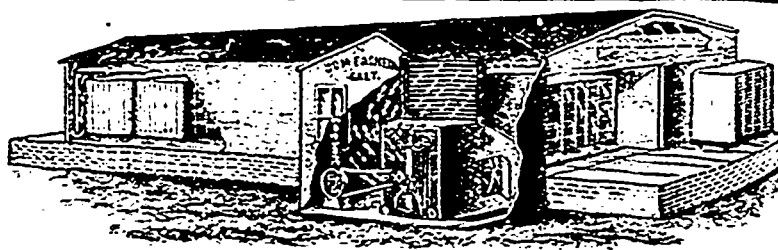
It is pointed out that new fields have been opened up, and that the demand created by the manufacture of pulp and paper gives value to woods that were formerly regarded as of secondary worth. A report by Mr. J. C. Lang, superintendent of forest rangers, gives a good idea of the value of wood lands in the Lake St. John region suited to the manufacture of pulp. In a future issue we hope to publish extracts from this report.

The following statement shows the quantities of the various kinds of timber cut in the province during the year ending June 30th, 1898:

Pine, at dues of \$1.30 per M feet..	268,419,035 feet
Small pine logs and red pine, at 80 cents per M feet.....	77,451,682
Spruce, at 65 cents per M feet.....	371,028,571
Boom timber.....	139,450
White pine timber.....	1,235,064 cords
Red pine timber.....	39,039
Birch timber.....	74,514
Cedar.....	166,267 cords
Pulpwood.....	4,452 cords
Small logs.....	1,475
Railway ties.....	204,847 pieces
Spruce culls.....	609,359 feet
Pickets.....	10,680 pieces
Telegraph poles.....	7,634

In addition to the above, there were manufactured small quantities of shingles, fence posts and rails. The timber dues collected amounted to \$713,435.86, the ground rents to \$148,935.25 and the bonuses to \$30,110.48.

Mr. W. J. Cummings, Spencerville, Ont., writes regarding the CANADA LUMBERMAN: "I am well pleased with it; it keeps me posted."



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J. & P. NADEAU

MANUFACTURERS OF LUMBER

Grand Cascapedia and Paspeblac
Baie de Chateaus, Canada

Special attention given to re-
quirements for West Coast
of England via Canadian
S. S. line from Paspeblac to
Milford Haven.

Sashes, Doors,
Mouldings,
Clear Birch
Flooring,
Sheathing,
Boxes

And all kinds of Dimen-
sioned Spruce, Birch and
Planed Lumber.

J. Whiteside

DEALER IN

WANEY BOARD TIMBER, PINE,
BIRCH, ASH, LUMBER AND SHINGLES

Bill Timber

HUNTSVILLE, ONTARIO

Maple and Birch in round logs—waney or square hewn—
square or octagon.

Maple Print and Mangle Rolls, bored or unbored

Birch and Ash, balluster or other squares.

Basswood and Spruce Broom Handles or handle stock.

ORDERS FOR SMALL CUT UP DIMENSION WOODS PREFERRED. CORRESPONDENCE INVITED.

MACPHERSON & SCHELL - ALEXANDRIA, ONT., CANADA

The Wm. Cane & Sons Mfg. Co.

LIMITED, OF NEWMARKET

Manufacturers of



Lumber, Lath,
Shingles and
Dressed Lumber,
Doors, Sash,
Blinds, Mouldings and
Inside Furnishing of
All Designs.

Also
Pails, Tubs,
Washboards,
Clothes Pins and
Woodenware of
Every Description

FACTORY AND OFFICE—

NEWMARKET, - ONTARIO, - CANADA

WHAT AN ADVERTISEMENT SHOULD BE.

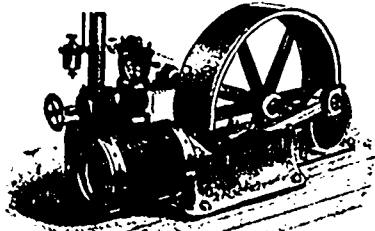
Mt. Frank A. Munsey, in an address before the Sphinx Club of New York on "Advertising in Some of its Phases," says: There are just two things to be kept in mind in the preparation of an advertisement—first, something to fix the reader's attention upon your particular advertisement, and second, the talk to the reader. What you say, your argument,

your talk to the reader, should be attractively set, plain, neat, simple, short sentences and short paragraphs, and large clear type, well leaded. Cramped space does not give scope for well-set advertisements containing any considerable argument. Fine type closely packed together is unattractive, forbidding, and suggestive of hard work. The reader does not want hard work; he wants good easy reading—reading so easy, so attractive, so

alluring, that he slides down a page without having intended to read it at all; but once having read it, it matters not what his intention was, the advertiser has got in his deadly work. He has begun to make himself known to that particular reader, and has laid the foundation for future intercourse.

Advertise in the CANADA LUMBERMAN.

Wm. M. Dunlop
Accountant and Auditor
14 Hamilton Chambers, St. John St east, Montreal, Q.
LUMBER ACCOUNTS A SPECIALTY
.... CORRESPONDENCE SOLICITED



LEONARD-TANGYE ENGINE.

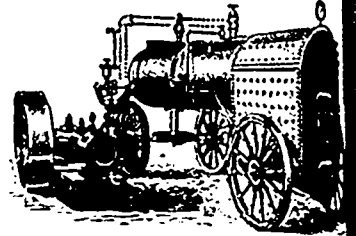
E. LEONARD & SONS. LONDON, ONT.

... Makers of ...

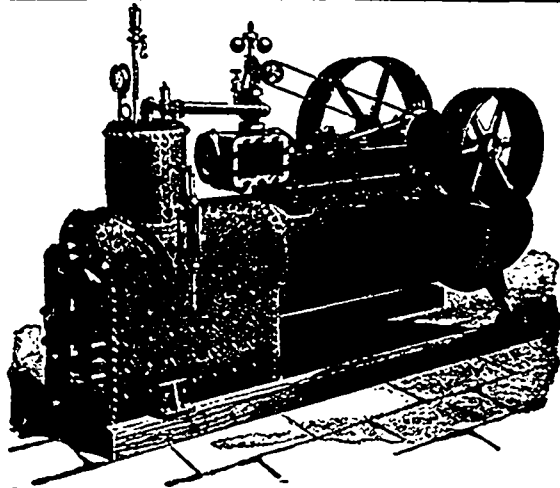
ENGINES and BOILERS

For Lumbermen and Others. For any Purpose, and of any Power.
We make Several Styles, but only One Grade—THE BEST.

If you need Steam Power, write to us, stating your requirements, and we will quote you prices.
Write for Catalogue No. 35a.



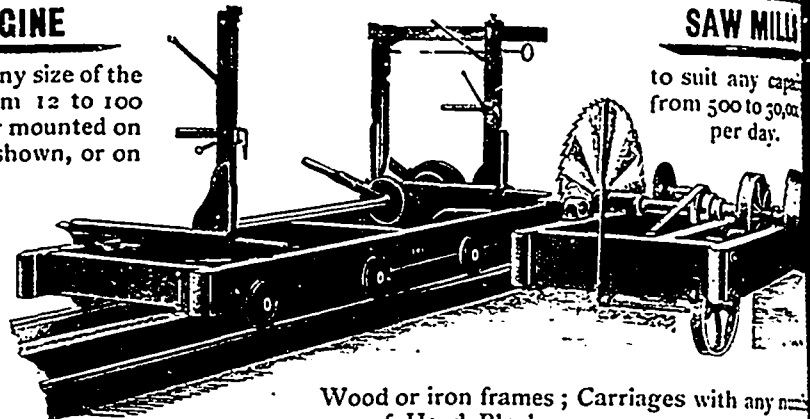
LEONARD CLIPPER ENGINE AND LOCOMOTIVE



PORTABLE ENGINE

We can furnish you any size of the above style Engine from 12 to 100 H.P., either on Skids or mounted on wheels with Engine as shown, or on separate Frame.

Also Engines, Boilers, Double Edgers, Trimmers, Top Saw Rigs, Log Jacks, Niggers, Shafting, Pulleys, Gears, Saws, etc. We can save you money. Let us quote you prices. Catalogues free.



SAW MILLS

to suit any capacity from 500 to 50,000 per day.

Wood or iron frames; Carriages with any number of Head Blocks.

ROBT. BELL, JR., Box 35, HENSALL, ONT.

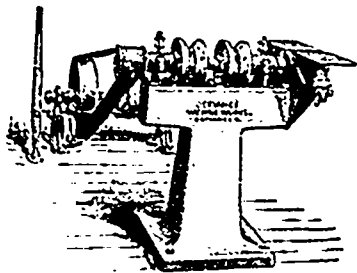
ESTABLISHED 1850

THE DEFIANCE MACHINE WORKS

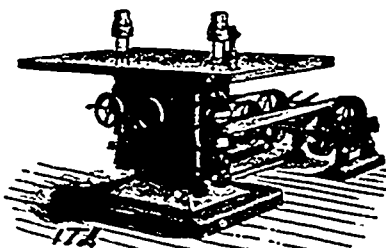
Designers and Builders of

DEFIANCE, OHIO, U.S.A.

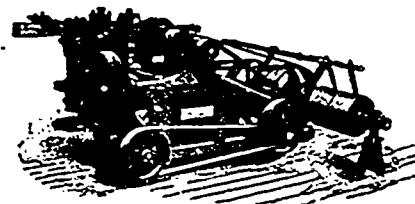
PATENT HUB, SPOKE, WHEEL, WAGON, CARRIAGE, BENDING, HANDLE AND BARREL HOOP MACHINERY



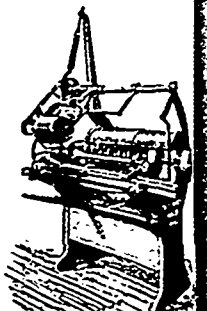
PATENT NO. 0 ROUNDING AND CORNERING MACHINE, WITH 6 INCH BUZZ PLANER ATTACHMENT.



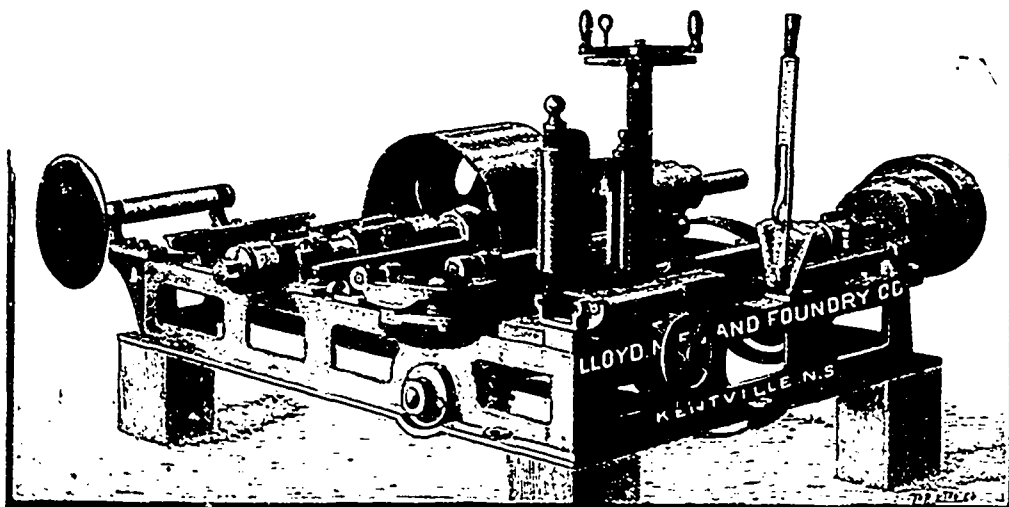
DOUBLE SPINDLE SHAPING MACHINE



AUTOMATIC SAWED HOOP PLANER.



COMBINED SPOKE TREE AND SQUARING MACHINE Capacity, 2,500 Spokes per hr.



Lloyd Manufacturing Co'y JOHN I. LLOYD, Proprietor

SAW MILL OUTFITS

Pulp Machinery, Belting, Etc.

OUR SPECIALTIES:

- Band Saw Mill Machinery,
- Improved Rotary Saw Mills,
- Also Screw Post Dogs,
- Turbine Water Wheels,
- Power Feed Gang Edgers,
- Buzz and Surface Planers,
- Heading Rounders,
- Stave Machines, Stave Jointers,
- Stave Planers.

KENTVILLE, N.S.

FRiction PULLEY BOARD

The BEST Article Known for the Purpose

MANUFACTURED BY THE DOMINION LEATHER BOARD CO'Y. - MONTREAL, QUE.

CANADIAN OFFICE & SCHOOL FURNITURE CO. LIMITED
PRESTON ONT.

OFFICE, SCHOOL, CHURCH, HALLS, RESTAURANTS, HOTELS, AND STORE FITTINGS.

SEND FOR CATALOGUE

THE CANADIAN PHOTO ENGRAVING BUREAU

ADelaide St. TORONTO

REPRODUCTION OF ALL KINDS OF PHOTOGRAPHS, DRAWINGS, AND ILLUSTRATIONS.

REGISTERED TRADE MARK

GANDY'S WATER BELTING

AMERICAN COTTON

GUARANTEED

Canadian Agents: WATERLOO, BRANTFORD, CANADA. Prices Reduced.

WEST AND SOUTH

run the lines of the Great Central Railroad and the Yazoo & Mississippi Valley Railroad reaching into the eleven States of

- South Dakota
- Minnesota
- Iowa
- Wisconsin
- Illinois
- Kentucky
- Tennessee
- Arkansas
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- Indiana
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presenting an unequalled territory for diversified industries, and possessing

- Fine Sites for New Mills
- Best of Freight Facilities--Coal Fields
- Close Proximity to Distributing Centers
- Intelligent Help of all Kinds
- Many Kinds of Raw Material

To 10,000 industries, substantial inducements will be given by many of the places concisely described in the pamphlet "100 Cities and Towns Wanting Industries." Write for a copy. Nearly all kinds of Industries are wanted. Very liberal inducements are offered. TEXTILE INDUSTRIES in the South by a number of good cases. GEORGE C. POWER, Industrial Commissioner I. C. R. Co., Chicago

CHARLES F. CLARK, President. JARED CHITTENDEN, Treasurer. ESTABLISHED 1849.

THE BRADSTREET MERCANTILE AGENCY

THE BRADSTREET COMPANY, Proprietors. 348 & 348 Broadway, NEW YORK. Offices in the principal cities of the United States, Canada, the European Continent, Australia, and in London, England.

The Bradstreet Company is the oldest, and, financially, the strongest organization of its kind--working in one interest and under one management--with wider ramifications, with more capital invested in the business, and it expends more money every year for the collection and dissemination of information than any similar institution in the world.

TORONTO OFFICES: McKinnon Bldg., Cor. Jordan & Melinda Sts. THOS. C. IRVING, Superintendent.



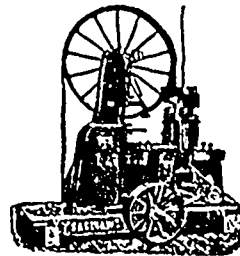
OUR EXTRA HAND-MADE AXE

This Axe stands better in frosty weather than any axe made. Send for sample. Can supply any pattern.

CAMPBELL BROS. Mfrs. St. John, N. B.

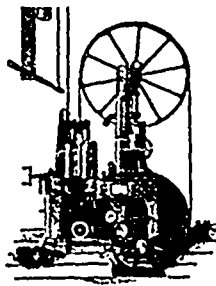
WRITE TO US

For a List of the Canadian Saw-Mills using our Band Re-Saws. A number of them are also in use in Canadian Planing Mills and Box Factories.



THIRTY-TWO MERSHON BAND RE-SAWS

are Running in the Mills in the Saginaw Valley.



W. B. MERSHON & CO.

SAGINAW - MICH.

THE ROYAL ELECTRIC COMPANY

MONTREAL, QUE. Western Office: TORONTO, ONT. Cable and Telegraph Address, "Roylelectric."

MANUFACTURERS OF

Electrical Machinery and Apparatus

... FOR ... LIGHT and POWER

SPECIAL ATTENTION GIVEN TO LONG DISTANCE TRANSMISSION OF ELECTRICITY FOR LIGHT AND POWER

ELECTRIC PLANTS FOR MILLS

Distant water powers utilized and Mills lighted and operated safely. CORRESPONDENCE SOLICITED.

WHY?

Pay for four or five tons of unnecessary iron in buying a Saw Mill when less than one ton will do the work; save you in original cost; give you better lumber; save wear and tear in your shafting, &c. (pulling the heavy load), and save the power of your engine.

Our Mills will accomplish this.

LANCASTER MACHINE WORKS

16-17 Oak Street - Lancaster, Ont.

The Leading European Lumber Paper

The Timber Trades Journal

Published Weekly by WILLIAM RIDER & SON, Ltd., 14 Bartholomew Close, LONDON, E. C.

— SUBSCRIPTION: \$5.00 PER ANNUM, POST FREE —

The "TIMBER TRADES JOURNAL" circulates in all European countries, the British Colonies, United States, &c., &c., and is a very reliable medium of publicity for all buyers and sellers of hardwoods.

THE PARK, BLACKWELL CO. LIMITED

Pork and Beef Packers Wholesale Provisions

TORONTO

Orders solicited for Pork and Beef Products, Butter, Cheese, Lard, Dried and Evaporated Apples, White Beans, etc., at close quotations.



TO BELT USERS:

Try Our . . .

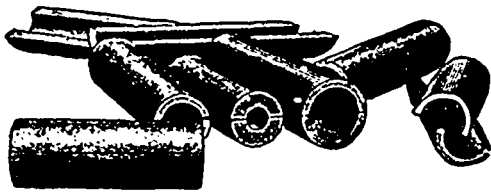
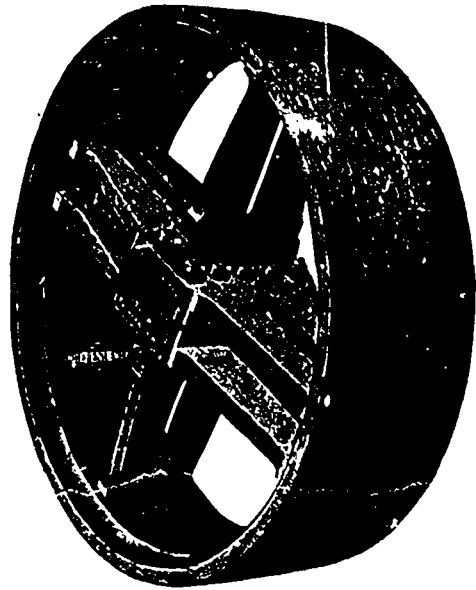
GENUINE ENGLISH OAK-TANNED BELTING

Lancashire Hair Belting

D. K. McLAREN, Victoria Square, MONTREAL

BRANCHES: TORONTO, 69 Bay St. Phone 374. OTTAWA, Spark St. GALT, Imperial Bk. Phone 134.

Dodge Patent Independence Wood Split Pulley with Patent Standardized Bushing System.



... SOLE MANUFACTURERS. ...

DODGE MANUFACTURING CO.
of Toronto, Limited

WORKS: Toronto Junction. OFFICES: 74 York Street, Toronto, Ont.

Dodge Pulleys

are now the recognized 'STANDARD' the world over.



We make them for Saw Mill Work



Much handier, can be got quicker, and Cost Less than any other Pulley made.



Every Pulley Guaranteed.

SEND FOR CATALOGUE.

MAKING AXES

For 55 Years

has given us a knowledge of the trade unequalled by any other makers. We also manufacture

Cant-Hooks,
Peavies,
Skidding Tongues

and all other tools required in the LUMBERING TRADE.

Write for Catalogues and Quotations.



James Warnock & Co.
GALT, ONTARIO.

To Readers of the "Canada Lumberman" for March, 1899:

I have much pleasure in announcing the near readiness of a complete new Illuminated Catalogue of

"LEFFEL"
"VULCAN"
"PERFECTION" } TURBINES

"LANE IMPROVED"
LEVER-SET CIRCULAR
SAW MILLS, &c., &c.

to secure a copy of which exacts only a moment of your time and the price of a post card.

Pending the arrival of the Catalogue it may interest you to know that those goods maintain an envied reputation with users of water power and lumber manufacturers; that there are more of them in use than of any other kind; that notwithstanding the increasing demand and the tendency to increased cost in all manufactured goods, the prices of these products have not been advanced; and that there is enough material in Canada and other countries to fill all orders taken during the present month at present prices.

Yours truly,

MINOR SPECIALTIES:

Hand-Fed and Automatic Shingle and Heading Machines, Gears, Pulleys, Shafting, &c.

Madison Williams

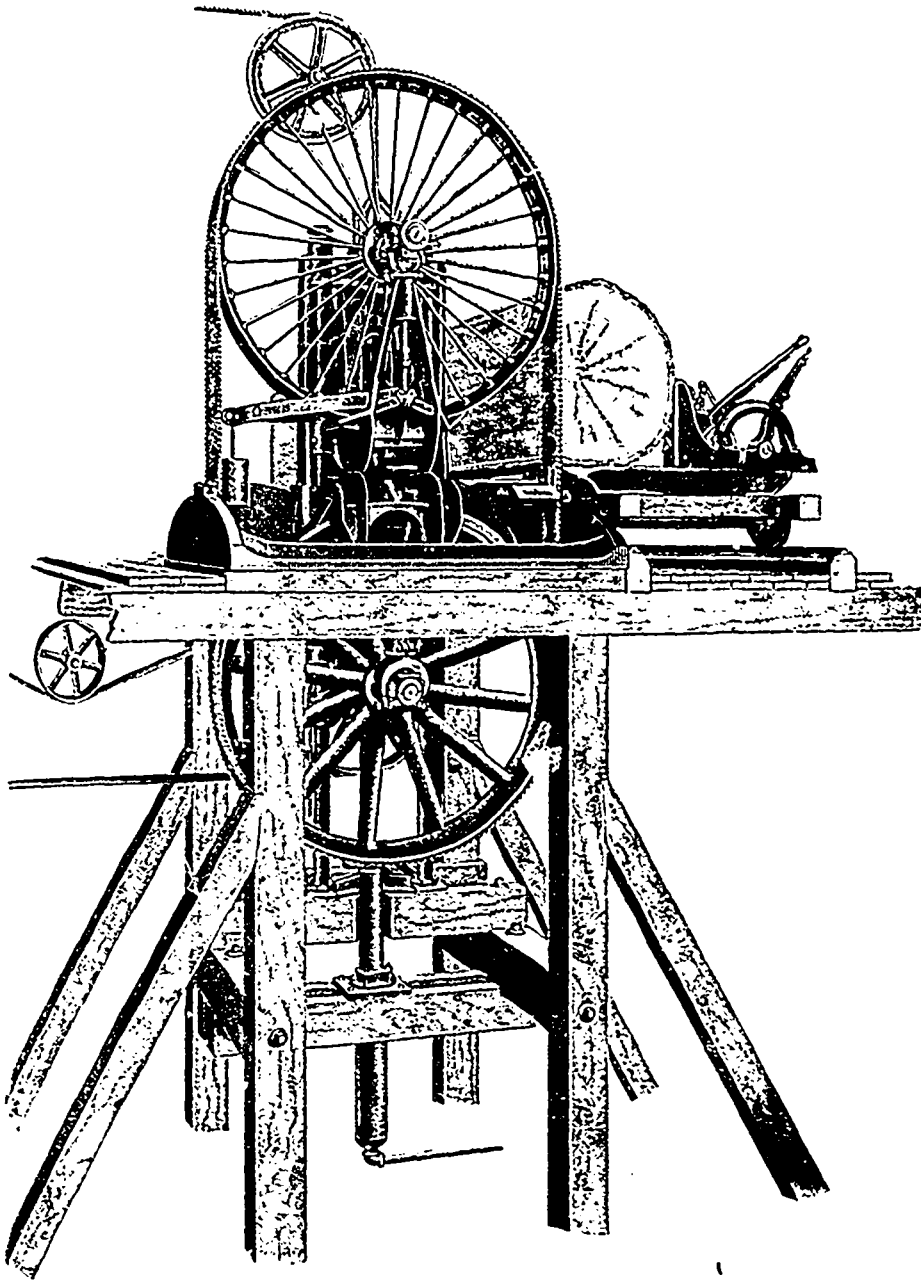
Successor to PANTON, TATE & Co.

PORT PERRY, ONT.

LAURIE ENGINE CO., Agents, 321 St. James St., Montreal.

Double Cutting Band Mill

PATENTED IN CANADA



THE New Allis Telescopic Band Mill has passed the experimental stage, and after running day and night for six months, is pronounced by competent saw mill men to be a perfect success as to the quality of its work and practicability as a machine. By the use of our **Double Cutting Band Mill** a gain of 50 per cent. in the amount of lumber cut is made by the addition of two men to the regular crew.

We are now building Telescopic Band Mills for
J. D. Shier, Bracebridge, Ont.;
Rat Portage Lumber Co., Rat Portage, Ont.;
 And the **E. P. Allis Company** are building Telescopic Band Mills for the
Bodcaw Lumber Co. of Stamps, Ark.;
Jeanerette Lumber and Shingle Co., Jeanerette, Louisiana;

Arizona Lumber and Timber Co., Flagstaff, Ariz.;
G. J. & B. F. Camp, of White Springs, Fla.

The advent of the New Allis Telescopic Band Mill, which is creating such a revolution in the manufacture of lumber, is the cause of considerable discussion among saw mill men as to the practicability of the band saw cutting on both edges and making lumber of a uniform thickness.

In regard to this, we wish to announce that six months of constant use have demonstrated the fact that the double toothed band saw will cut equally as well with one edge as with the other. It has also been proven that with the

adjustments provided on the Telescopic Band Mill, lumber can be cut of a uniform thickness in both directions and taken care of without loss of time or at any disadvantage. It has also been shown that the double toothed band saw is a safer saw to operate than the single toothed saw, on account of its ability to cut its own clearance in either direction through slivers or other projections on the logs that catch the ordinary saw and back same off the wheels. It has also been demonstrated that advantages are to be gained by avoiding the use of an offset on the carriage.

The use of the **Double Toothed Band Saw** and all the advantages to be gained therefrom have been made possible by the invention of the **New Allis Telescopic Band Mill**, which is fully described and illustrated in our circular, which we will gladly mail on application.

Orders for Band Mills and Saw Mill Machinery should be placed at once if early shipments are desired.

Waterous Engine Works Co., Limited

BRANTFORD, - CANADA.

R. H. SMITH CO., LIMITED

St. Catharines, Ont.

We are the Sole Manufacturers of Saws under the

Simonds' Process

in the Dominion of Canada.

There is no process its equal for tempering circular saws. Other makers recognize this fact, as seen from their claims, in order to sell their goods, claim to have the same process. All such Claims are FALSE, as we are the patentee in the U. S. and ourselves are the only firms in the world who use it.

MILL STREAM, QUE., on I. C. R'y, December 17th, 1894.

R. H. SMITH CO., LTD., St. Catharines, Ont.

DEAR SIR,—Driving a 20 in. 13 gauge saw into frozen hardwood, using a 9 in. 4-ply belt, if it can be done satisfactorily, is a very severe test. Your saws have stood that test better than any I have tried. I have been experimenting with different makes—both home and imported—during the last five years, and give yours the preference. Last order is just to hand and will report on them by and bye.

Yours very truly, JAMES MCKINLAY.

CAMPBELLTON, N.B., Nov. 17th, 1894.

R. H. SMITH CO., LTD., St. Catharines, Ont.

DEAR SIR,—In regard to your Shingle Saws, you can say that I have been using Shingle Saws of your make (Simonds) for the past four years, and they have given good satisfaction. I am running nine machines and use a good many saws, but have never had a saw yet that did not work satisfactorily. Before using your saws I used saws of American make, which worked well, but after giving your saw a trial have continued to use yours, as they are cheaper, and in regard to working qualities are all that is needed.

Yours truly, KILGOUR SHIVES.

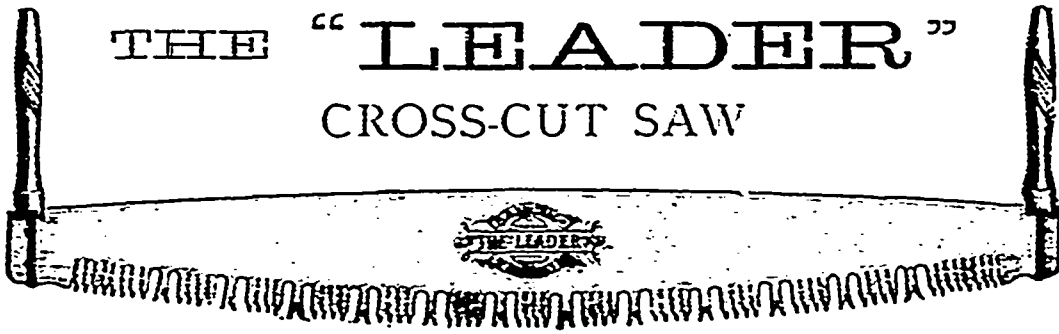
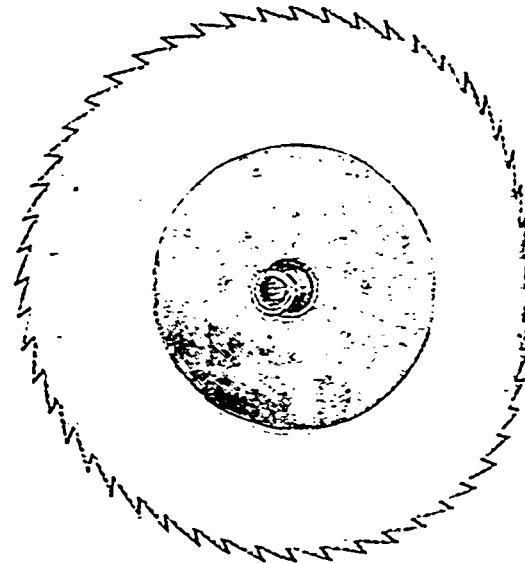
CLAWERING, ONT., May 3rd, 1897.

R. H. SMITH CO., LTD., St. Catharines, Ont.

GENTS. In reply to your letter asking me how I liked the 62" SIMONDS Saw, I must say in all my experience I never had a saw stand up to its work like the one purchased from you last month. Having used saws for the last 22 years, and tried different makes, I can fully say it is the best saw I have ever had in my mill, and would recommend the SIMONDS Process Saws to all mill men in need of circular saws.

Yours truly, W. G. SIMMIE.

P.S. I am sending you my old saw to be repaired; please hammer to same speed as new one. W.G.S.



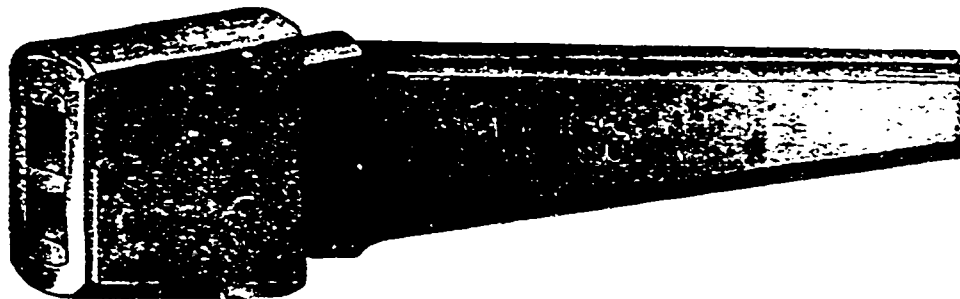
THE "LEADER" CROSS-CUT SAW

These Saws are made from the best REFINED SILVER STEEL, warranted four gauges thinner on back than front, and the only Saws on market that are a perfect taper from the points of teeth to the back, and require less Set than any Cross-Cut Saw.

They are tempered by the Simonds' Patent Process insuring a perfectly uniform temper throughout the plate, and stand without a rival as the BEST, FASTEST AND EASIEST-CUTTING SAW KNOWN. A gauge to regulate the clearing teeth is furnished with each set.

Directions for Setting and Filing are plainly Etched on every Saw. None genuine without our Registered Trade Mark as shown in cut.

THE "LEADER" SAW SWAGE



Made in 3 Sizes—\$2.00, \$2.50, \$3.00 Net.

OUR PRICES ARE RIGHT. KINDLY ALLOW US TO QUOTE YOU BEFORE PURCHASING.

R. H. SMITH CO., Limited, St. Catharines, Ont.

WRITE FOR A COPY TO-DAY

Our 1899 Edition - 8 Tons of Books

"Saw-Fitting Machinery and Tools" A Treatise on the Care of Saws

For Mill and Factory Managers, Superintendents, Foremen and Saw Filers.

Contents—290 Pages. Weight—1 1-4 Pounds.
Illustrations—Between 100 and 200 Saw-Fitting Appliances for Bands, Gangs, Circulars and Re-Saws.
Postage—For the Edition, \$1,200.

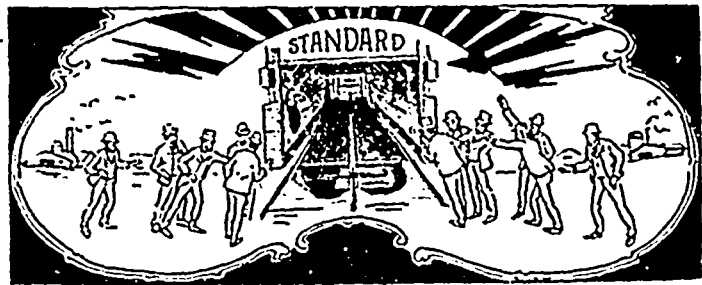
If you see this Ad. tell us where you saw it when you write us, and write us when you see it. Always—

BALDWIN, TUTHILL & BOLTON

GRAND RAPIDS, MICH., U.S.A.

For Saw-Fitting Equipment

Please mention the CANADA LUMBERMAN when answering Advertisements.



TAKE A PEEP INSIDE

of the Standard Kiln, and it will be easy for you to understand why it is the Most Perfect Lumber Drier in the World. There are other "good looking" kilns. Yes, and other "good" kilns, too; but no other kiln ever made will dry so much lumber, do it so quickly and so thoroughly, and use so little steam as

The Standard Improved Compression Dry Kiln

We can prove that—by demonstration or by evidence. We will mail you the evidence of many users, if you want it. It will give you a good idea of the range and the quality of its work. Here is one firm's opinion:

OTTAWA, ONT., June 25, 1898.

THE STANDARD DRY KILN CO., Indianapolis, Ind.

GENTLEMEN,—In reply to yours of the 21st of June, I have to say that the "Compression" Kiln put in for us is "all right." It worked very nicely during the winter months, and seems to suit our Canadian climate.

Yours truly, R. THACKRAY,
Per James Davidson.

Our illustrated catalog sets forth in a very clear manner the detail of construction, and shows plainly the application of the Standard "Moist Air" theory of drying. You can have one for the asking.

THE STANDARD DRY KILN CO.

195 South Meridian Street,

INDIANAPOLIS, IND.



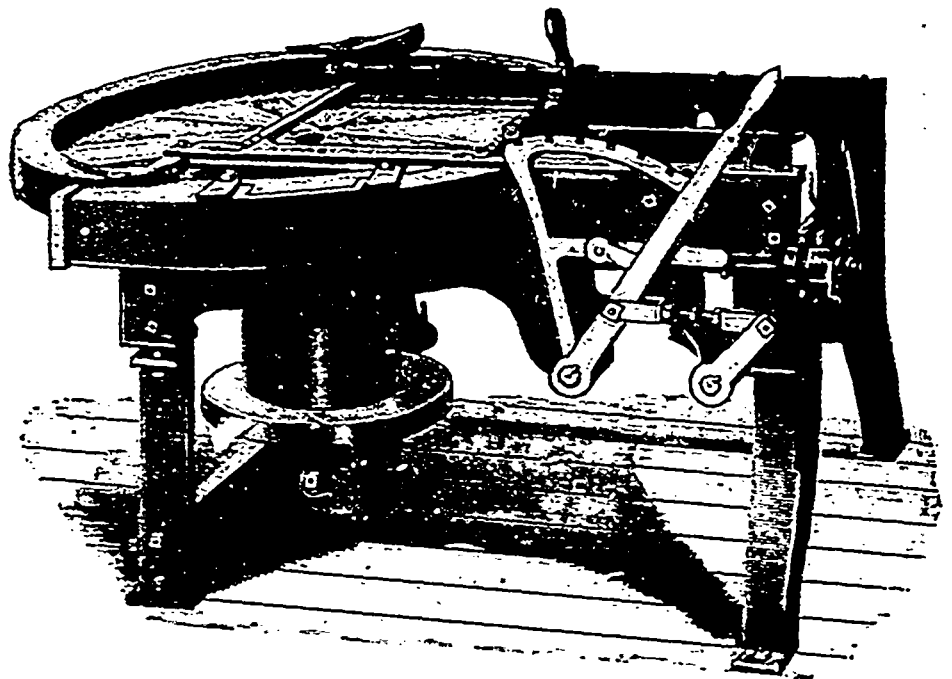
THE CANADIAN LOCOMOTIVE & ENGINE CO.

KINGSTON

ONTARIO

Manufacture

- Band Saw Mills
- Gang Saw Mills
- Circular Saw Mills
- Portable Saw Mills
- Shingle Mills
- Lath Mills
- Saw Filers, and all of
- F. J. Drake's Patents



DAUNTLESS SHINGLE AND HEADING MACHINE.

Size No. 1 takes Saws up to 42" diameter. Size No. 2 takes Saws up to 48" diameter. Capacity 25,000 to 50,000 per day.

Our Patterns are New and of Modern Design. We can give you a Complete Outfit and guarantee results. No trouble to quote prices.

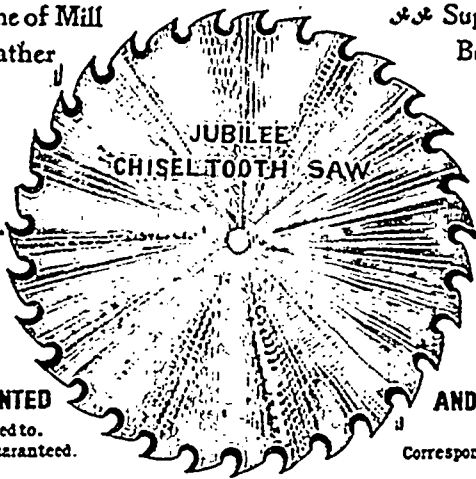
CORRESPONDENCE SOLICITED

THE JAMES ROBERTSON CO., Limited.

Manufacturers of..... Saws of All Description

A Full Line of Mill
Rubber and Leather
Metal, &c., always

Supplies, including
Belting, Babbit
carried in stock.



Head Office:
144 William St.
MONTREAL

ALL OUR SAWS
FULLY WARRANTED
Orders promptly attended to.
Satisfaction Guaranteed.

Factories at
MONTREAL,
TORONTO,
and
ST. JOHN, N.B.

CIRCULAR, GANG
AND MILL SAWS A
SPECIALTY
Correspondence Solicited.

SUPPLIES

OF ALL KINDS

Chains, Ropes, Axes, Files,
Bar Iron, Horse Shoes,
Peavy Cant Dogs.

RICE LEWIS & SON

(LIMITED)

Cor. King and Victoria Sts. - TORONTO.

Galt Machine Knife Works



MACHINE KNIVES

OF EVERY DESCRIPTION

FOR **Woodworking Machines**

... Send for Price List ...

PETER HAY - - - - - Galt, Ont.

Every Lumberman wants it **35 cents buys**

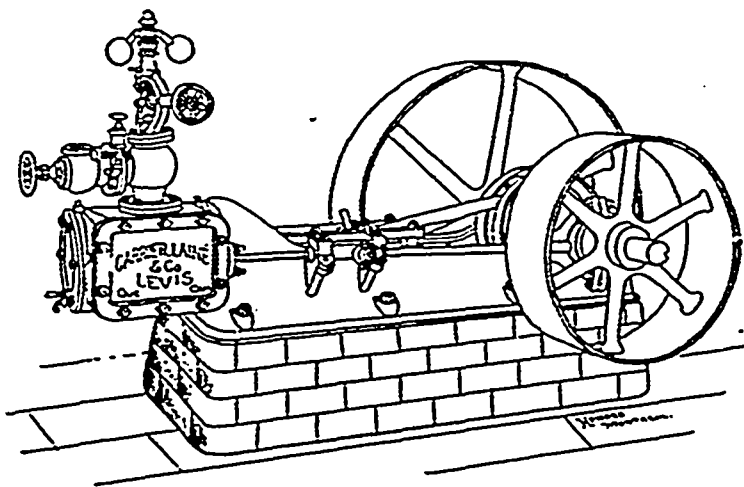
Scribner's Lumber and Log Book

BRIMFUL OF EVERY-DAY, Address:
PRACTICAL INFORMATION THE CANADA LUMBERMAN, Toronto
SAVES TIME SAVES MISTAKES SAVES MONEY

7 "DEAD 3 10 EASY"

But if that "3" represents Middlemen's commission on the Machinery you buy, you had better make a change and deal at headquarters.

No better Mill Machinery is made in Canada or elsewhere than that supplied "DIRECT" from our Machine Shops.



Portable and Stationary Engines and Boilers

CIRCULAR SAW MILL PLANTS
GANG AND BAND SAW MILLS
SHINGLE MILLS, LATH MILLS

EDGERS,
PLANERS and
BUTTERS

Modern Patterns in Every Line.

Tools, Belting and Supplies.

We are equipped to build any special machine you may require.

IF YOU HAVE PLANT TO EXCHANGE GET OUR ESTIMATES

CARRIER, LAINE & CO., LEVIS, QUE.

USE THE FAMOUS . . . PINK LUMBERING TOOLS

Duck Bill Peavies, Round Bill Peavies, Finest Duck Bill Winter Cant Hooks



Cant Hook Handles | By Car Load or Dozen
Peavy Handles

Pike Poles, Skidding Tongs, Boom Chains

Lowest Prices

© THOMAS PINK

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