

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Covers damaged/
Couverture endommagée

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Cover title missing/
Le titre de couverture manque

Coloured maps/
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Bound with other material/
Relié avec d'autres documents

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:/
Commentaires supplémentaires:

Coloured pages/
Pages de couleur

Pages damaged/
Pages endommagées

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Pages detached/
Pages détachées

Showthrough/
Transparence

Quality of print varies/
Qualité inégale de l'impression

Continuous pagination/
Pagination continue

Includes index(es)/
Comprend un (des) index

Title on header taken from:/
Le titre de l'en-tête provient:

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12X	16X	20X	24X	28X	32X

THE CANADA LUMBERMAN.

VOLUME XI. }
NUMBER 7

TORONTO, ONT., JULY, 1890.

{ TERMS, \$1.00 PER YEAR
{ SINGLE COPIES, 10 CENTS.

THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER.

OFFICE:

RICHMOND CHAMBERS, 11 AND 13 RICHMOND STREET W.
TORONTO, ONTARIO.

TERMS OF SUBSCRIPTION:

One Copy one Year, in Advance, \$1.00
One Copy six months, in Advance, 50

Advertising Rates Furnished on Application.

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

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 upon which it can rely in its operations.

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

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

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

A NUMEROUSLY signed petition has been presented to the city council of Ottawa asking that measures be at once taken to prevent the erection of planing mills or the establishment of lumber yards in the thickly inhabited portion of the city, where they are likely to prove a standing menace to life and property; as it is claimed the piling of lumber in a neighborhood not only increases the danger of fire, but it reduces the value of residential property, and increases the insurance charges upon property.

A BILL to regulate the management of lumber rafts upon the great lakes and connecting waters has been introduced into the House at Washington. It provides that lumber rafts shall be limited in length to 350 feet, and that not less than two tugs shall be employed in handling each. The buoys that have been dragged from their places are to be restored and proper lights are to be carried. Heavy penalties are prescribed for violating the provisions of the bill.

A REPRESENTATIVE of THE LUMBERMAN paid a brief visit to the R. H. Smith Saw Co., of St. Catharines recently, and found that well-known establishment full of work and experiencing some little difficulty in keeping up with orders. A ramble through their important works was made particularly agreeable through the practical and courteous manner by which the junior Mr. Smith explained the various appliances and modes adopted in the manufacture of saws. Suffice it to say that our representative left in the best "temper" possible, and "saw" enough to satisfy himself that the Smith Co. were doing a prosperous trade.

IN support of the statement that the season in the lumber trade is very quiet this year, and promises to remain so, the Ottawa Journal quotes Mr. E. H. Bronson as saying that "the contracts for the season's cut made this year are not nearly as heavy as usual, nor up to last year. The output at the mills will not be as heavy either. Neither Perley's, Pearce's, nor ourselves will run the June night gangs, or work as late in the season. Taking it altogether, the cut will be some seventy millions less than last year."

IT IS by no means certain that the McKinley Tariff Bill will become a law, as the Republicans are not united on the measure, and with the determined opposition manifested to it by the Democrats the indications are that the measure will be defeated. Mr. Blain is reported as having denounced it as the most dangerous, if not the most infamous, measure that was ever concocted by any party, and in doing so he only expresses the President's views as well as his own. Mr. Vincent's resolution in the British House of Commons, to the effect that it is not deemed expedient to admit manufactured goods into the country free of duty, when a foreign nation imposes a prohibitive tariff to keep out the goods from another country, may have had something to do with bringing about this change of front. The imposing of a high tariff in Britain on American productions would be a terrific blow to the manufacturers of many kinds of goods in the United States. The Republicans may ultimately find out that their little tariff game is a game which more than one country can play at, and that there is such a thing as carrying this tariff question a little too far.

A REPORT of Consul E. L. Baker from Buenos Ayres, South America, has recently been made public by the state department at Washington, in which the consul gives figures showing the precise condition of the lumber market, &c. In regard to the lumber trade at that point he says: "Arrivals of lumber at Buenos Ayres from Brunswick, Pensacola, Montreal, Portland, Boston, Quebec, Fernandina, Halifax, St. Mary, Calais, Wilmington, Canada, &c.: in 1888, 108,112,311 feet; in 1889, 136,750,600 feet. Part of these arrivals went up the river. The stock of lumber at present lying in the "barracas" of the Riachuelo is considerable. The cargoes recently sold are as follows, and show the actual state of the market:

White Pine.	Per 100 meters.
No. 2	\$165 to \$175
No. 5	145 to 147
No. 7	115 to 120
No. 8	100 to 102
Salado	90 to 92
Spruce	92 to 94
Pitch-pine	41 to 42

The price of white pine in gold will be found by multiplying the above quotations by 4½ cents, the present value of the Argentine paper dollar.

THERE are good indications of much business activity in Western Canada, and there are signs that the present year will be one of great progress. Lumbering, mining, railway building, and many industries dependent upon them appear to be in a flourishing condition. The prospects for good crops are excellent, and unless signs fail, the season will be a remunerative one for the agriculturist. It is stated on good authority that between five hundred and a thousand miles of rail, and perhaps more, will be laid in the country from Lake Superior to the Pacific, and it is probable that the line to Hudson Bay will be built in the near future. The greater part of the railway building will be through set-

led districts, connecting with roads which are extending their lines, all of which are stretching out for the great Saskatchewan country, which has long been awaiting such improved facilities. The advancement of a country causes a great increase in the timber industry, and it is especially noticeable in the Lake of the Woods district, where immense areas of fine timber have recently been added to the already large supply, and the indications are that the output of the saw mills in the district will be larger than ever before known.

At the annual meeting of the shareholders of the Canadian Bank of Commerce, the general manager, Mr. B. E. Walker, in reviewing the business of the past year made the following remarks in regard to the condition of the timber and lumber trade. "The winter operations in connection with the timber and lumber trade have been carried on without undue cost, but under the disadvantage of unsteady weather and considerable illness among the men in the woods from the prevailing epidemic. As a whole, logs must have cost somewhat more than in ordinary years. There has been no difficulty in driving, and the mills will be plentifully supplied. In fact, notwithstanding the curtailment in production last winter, we must hope there will also be a reduction next winter, as it is clear that in many respects the market is not what it has been the past few years. The market in the United States is fairly satisfactory, but the fears expressed a year ago regarding the South American market have been realized, and, what with strikes and a smaller volume of building operations at home, prices are barely sustained and sales are not so easily made as could be desired. In this connection it is a satisfaction to notice that the production of pine saw logs in the Ottawa district for 1889-90 (including a smaller stock carried over than usual) is slightly below the average of nine years past. The cut in other localities is also considerably reduced as compared with that of two years ago, so that the trade in lumber is still in a healthy condition, if not so positively prosperous as heretofore. We are not interested to any extent in the square timber trade and have no special knowledge concerning it, but it seems clear, that tempted by the high prices of late years, manufacturers have overproduced, the output in the Ottawa district being 60 to 70 per cent. higher than the average of the last nine years."

THE way the timber goes is a caution. The question of forestry is one of wide interest to those who have given the subject thoughtful consideration; but the uninitiated have but little idea of the great destruction of forests on this continent which has been going on for years by lumbermen, and by fires which frequently follow in their wake. Mr. William Little recently addressed a printed letter to the President and Council of the Montreal Board of Trade on the forestry interests of Canada, which is an elaborate and forcible plea against the rapid destruction of our timber which has been going on for many years. The facts presented by the writer of the letter in question, bearing upon the reckless cutting of timber in the United States, are positively astounding. A few of the statistics presented will be sufficient to give the general reader an idea as to the extent which this destruction has been carried on. Land covered with wood growth in the United States, 450,000,000 acres; extent cut over annually, 25,000,000 acres; wood and timber cut of all kinds annually, 24,000,000,000 cubic feet, valued at \$1,000,000,000; timber lands owned by the government, 70,000,000 acres; value of timber stolen within seven years, \$36,719,935; saw mill capacity of the United States,

60,000,000,000 feet. We make the following quotation from Mr. Little's letter: "Less than twenty years ago I visited nearly all the saw mills between here to, and including, Quebec, and nearly all the mills along and on the tributaries of the St. Lawrence were sawing almost exclusively white pine saw logs, while at present the few which still remain are confined almost entirely to cutting spruce and hemlock, much of this even of an inferior grade. And the logs now sawn at the Ottawa mills will not turn out over sixty per cent. of their stock into grades better than culls. And the rafts of superior pine that ran 80 to 150 feet average (about twenty-five years ago I myself took a raft to Quebec of 158 feet average) now run from 50 to 80 cubic feet average. I have already said that the present annual production of sawn lumber in the United States would load a train of cars 25,000 miles long, or long enough to encircle the earth, and I fancy some will be surprised at such figures; but it is figures like these that force all who will reflect on the matter, to use expressive adjectives whenever treating of its importance; but this sawn lumber is only a small part of forest freight, there are still all other forest products; and when we add timber for railway and fencing, mining and export, round and hewn timber, we have our train loaded 72,000 miles; and if to this we then add the firewood, etc., amounting alone to 216,000 miles, we have a total train of 288,000 miles in length, or more than enough to reach from the earth to the moon, still leaving our lumber train encircling the earth with 23,000 miles of a train to spare—its weight alone, if green, over five hundred million tons, or enough to load five hundred thousand (500,000) ships of one thousand (1000) tons each! The whole of these timber products handled annually by the American workman, not only shows what a mighty weapon is the axe in the hands of the skillful chopper, but leaves all other agencies—whether of fire, flood, or tempest—so completely in the rear, that in the race of destruction they may be said to be practically 'nowhere.'"

THE Pine and Hardwood inspections, as published in THE LUMBERMAN last month, have been submitted to the Toronto Board of Trade for approval and finally adopted. It is to be hoped that these rules for the inspection of lumber will not alone be taken advantage of by the members of the lumber section of the Board of Trade of this city, but that they will become generally recognized by the whole lumber fraternity of the country.

THERE can be little if any doubt but the fears of many United States lumbermen that Canada would increase still further the export duty on Canadian logs, and thereby render the timber lands they have secured in the Dominion comparatively valueless, had much to do with the Senate's fixing of the lumber duty at such a moderate figure. In the question of lumber duties Canada at present holds the big trump card, and it is to be hoped that it will be played in the interests of freer trade intercourse on this continent.

HOLDERS of Canadian timber limits appear to have unlimited confidence in the future prospects of a rise in stumpage, which is evidenced by the fact that while many operators, especially in the Georgian Bay district, are making comparatively but little money at the present time in manufacturing lumber, they nevertheless place a value on their limits which but a short time ago would have been considered exorbitant in the extreme. There is no disputing the fact that the holding of our timber lands for future rise in values will bring greater returns than the lumber now cut from them.

THE condition of the lumber trade throughout Canada remains practically unchanged. The local trade in the cities shows no signs of immediate improvement, nor is it likely to until after the harvest. The strikes in Toronto, which materially affected trade in this line, are now fortunately over, but lasted long enough to impede building operations to a considerable extent. The uncertainty regarding the proposed reduction in the lumber duty by the United States Congress is also militating for the time being

against our exports to that country. Until the fate of the McKinley tariff bill is known our shipments of lumber to the United States will be much reduced in volume, as holders of stock naturally desire to benefit by any reduction in duty which may be decided upon. The mills throughout the country are now in full swing, and while the output in the aggregate will not be as large as last year, stocks will be quite equal to the demand. Middlemen have not as yet done much in the way of stocking up for the fall and winter trade, and as a consequence mill men have disposed of but little of this season's cut.

THE crown timber agent for British Columbia in his recent report states that inquiries have been made by both eastern Canadian and American lumbermen, with the view of establishing extensive mills in the province, and that he was pleased to be able to state that as a result of these inquiries James McLaren, of Ottawa, and the Ross family, of Quebec, have erected on the Fraser river the largest mill in the province, being 75x450 feet, with a cutting capacity of 250,000 feet daily. This has stimulated Canadian and American capitalists, many of whom have their advance guards looking after limit and mill sites. In his last report he had mentioned that the Douglas pine and cedar have already found sale at remunerative prices in the markets of China, Japan, Australian colonies and South American states, and he was now enabled to say that since that time several cargoes of these woods have been shipped to Great Britain, by way of Cape Horn, and notwithstanding an excessive rate of freight found ready sale at prices which warranted further shipments. There was every reason to look forward, at a very early day, to an immense expansion of the lumber trade of the province, the timber of the Rocky, Selkirk and Gold ranges of the Rocky mountains finding their way to the great northwest prairies, the wheat fields of the world, while the lumber manufactured from the timber growing nearer the coast will chiefly go to the other markets mentioned above.

The *Northwestern Lumberman*, in its usual lordly style, criticizes the recent utterances of Mr. Little, of Montreal, on the international lumber question, which appeared in the last number of this journal. The language used is characteristic of the journal in which it appeared, and while no point has been made against Mr. Little, the item is a fair index of the one-sided policy adopted by the press of the United States on all questions affecting commercial relations between the two countries. If our contemporary thinks it can pick up the gauntlet and discuss this question with our correspondent it has a perfect right to do so, but Mr. Little is "loaded" on the tariff question and will not easily be ousted from the field.

HENRY M. STANLEY says the late journey of himself and comrades for the relief and rescue of Emin, the Governor of Equatoria, extended over 6,000 miles in length, and occupied them 987 days. Five hundred of these days were passed in the Central African forest, and for 487 days they pursued their journey through grass lands. They travelled 1,670 miles through the great forest of Equatorial Africa, which was 621 English miles in length, and its average breadth was 517 miles, which made a compact area of 321,057 square miles. This enormous tract was overgrown with trees varying from 20 ft. to 200 ft. in height, so close together that the branches interlaced one another, and formed a canopy through which the sunshine could not penetrate. The sun might scorch and dazzle overhead, but a little speck of white light flickering here and there was all that revealed the fact to the traveller in the dark, impenetrable forest.

THE North Tonawanda Lumbermen's Association of Tonawanda, N. Y., held a meeting June 10th, to discuss the McKinley tariff bill so far as it affects lumber. The leading Tonawanda dealers were present, as also the Hon. John Charlton, member of the Canadian parliament. After discussing the matter at great length it was voted that a telegram as follows be sent to

Senator Hiscock at Washington: "A difference of opinion exists as to whether duty on lumber should be reduced to \$1 or \$1.50 per thousand. A majority favors \$1. But we are unanimous on the conditions of adding the entire Canadian export duty on logs to our import duty on sawed lumber. The Canadian government has power to remove the export duty by orders in council, and can act immediately without consulting the parliament." Mr. Charlton said that the Canadian government was willing to make all reasonable concessions in regard to the export duty on logs, and in fact, stood pledged to reduce it if the United States made an equivalent reduction. That, however, is one of the things that goes without saying, as the space writer is prone to remark. This country certainly would make no reductions that would not be met by Canada. Mr. Charlton had been to Washington to feel the popular pulse on the lumber question, and had found that a strong effort was being made to secure absolutely free lumber, and it was his opinion that a compromise would have to be effected, and he thought that \$1 would be the rate finally settled upon. Of course, so far as protecting the interests of American mill men who desire to saw the timber bought in Canada in mills on this side the line, this difference of 50 cents in opinion on what the import lumber duty shall be, cuts a small figure. It is the addition of the log export duty to the lumber import duty which they need to bring about.

SPLINTERS.

A DEMAND of assignment has been made on Smith, Wade & Co., of Quebec, at the instance of the Union Bank of Canada, on a claim of \$25,000, but the assignment has not yet been made.

THE Kirby Carpenter Co., of Menominee, Mich., have just placed their order with B. F. Sturtevant for three Standard Dry-Kilns. These kilns will dry 22,000 feet of 1 inch pine per day.

SEVERAL lumber firms in Tonawanda, N. Y., have recently gone into the business of handling Canadian lumber, and quite a trade is being done at that point in the Canadian product.

THERE is an increased demand in the Eastern States for Canada grey elm. It is rather soft wood and will not warp, and is used for furniture, imitation walnut. It usually sells for from \$18 to \$20 on cars at Buffalo.

THE monthly statement of exports shows the value of the goods exported from Canada during May to be \$6,756,724, of which \$2,041,095 were products of the forest. This is an increase on the total exports of \$200,000 over May last year.

THE Dominion government has approved of the tariff and tolls to be charged by the Sable and Spanish Boom and Slide Company, of Algoma, on saw logs, timber and lumber passing through the booms and other works on the Spanish river.

WE call the attention of our readers to the advertisement of the Scottish Carolina Timber & Land Company in another column, announcing the postponed date of auction sale, giving all purchasers time to examine the properties. Sale to take place Wednesday, Aug. 6th, 1890.

A PROMINENT Ottawa lumberman is authority for saying that the prospects are very black for the lumber trade this summer. Thirteen feet of pine against eight feet last year have been made. Freight will come down and the English market will be glutted, causing a falling off in the prices.

THE Tariff bill has been reported by the Senate Finance Committee to the Senate with the reasons of the committee for recommending its proposed changes in the bill as it passed the House. The committee has changed the tariff on pine lumber from \$1.50 to \$1.00 per M., at which figure it is likely to remain, provided the bill becomes law.

THE arrivals of hewn timber in Britain from Canada during the month of April, were larger by £1,048 than in the same month last year, but those of sawn timber show a reduction of £45,032. The imports for the four months ending April 30th were, hewn £5,803 against £13,176 same period last year, and sawn £67,784 against £136,837 same period in 1889.

FINDING that the quarters allotted the CANADA LUMBERMAN in the Yonge street Arcade were altogether inadequate to the wants of our business we have found it necessary to remove to larger premises. We are now permanently located in the Richmond Chambers, 11 and 13 Richmond street West, where we shall be pleased to welcome all members of the lumber trade and others who can favor us with a call.

THE Skillings, Whitney & Barnes Lumber Company of Boston, Mass., has bought what lumber Messrs Hall & Buell now have in their yard at Tonawanda, N. Y. together with the good-will of said firm, and has assumed their lease of wharf property and piling ground, and will continue the lumber business as heretofore with this addition. The capital stock of this company has been increased to \$1,000,000.

IN the matter of Smith, Wade & Co., Quebec, Mr. Justice Routhier has dismissed their demurrers and pleas in objection to the Bank's answer. Further, the learned judge, with the concurrence of his colleagues on the Bench, stated that he was satisfied that the proceedings taken by the firm were erroneous, and that he was without jurisdiction, thus maintaining the Bank's answer to this effect. The firm will appeal.

IN February last the Menasha Wooden Ware Co., of Menasha, Wis., placed an order with B. F. Sturtevant, of Boston, Mass., for a Steam Hot Blast apparatus for 20 "Tower" dry kilns. These kilns are of novel design, there being only one other plant of the kind in the United States, and are drying their green staves in from 3 to 4 days. They are so well pleased with the results obtained that they have placed a duplicate order for 20 more kilns, doubling their capacity.

NEIL VAN DORMAN, of Fresno, Cal., and ten skilled workmen are now engaged in getting out the World's Fair big tree, a section of a redwood tree. This will be the largest section ever removed from California. The tree is located at the mammoth forest fifty-two miles east of Tulare, at an altitude of 6,325 feet above the sea level. The tree measures 99 feet in circumference, making it 33 feet in diameter. It will require three flat cars for its transportation, as the total weight will not be less than 65,000 pounds.

A CHANGE of advertisement for the Dodge Wood Split Pulley Co. has been received too late for the present issue, a fact which is to be regretted inasmuch as it has especial reference to saw mill men. This company direct particular attention to their patent rope drive system which is now in use in many of the leading mills and factories throughout the country, and is proving an unqualified success. Estimates are given on drives for any power or at any angle. Among the principal users of the rope transmission are: J. R. Booth and Perley & Pattee, Ottawa; The Rathbun Co., Deseronto; and the Brunette Saw Mills Co., New Westminster, B. C.

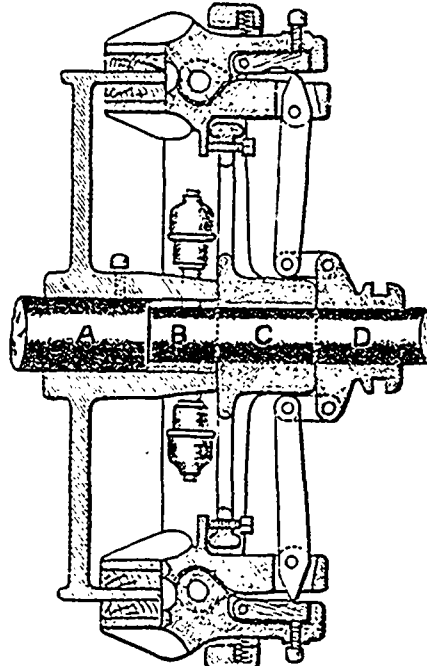
BRITISH COLUMBIA TIMBER.

A New Brunswick gentleman, who has recently been inspecting the timber forests of British Columbia, gives a glowing account of the timber resources of that province. He says that when about 100 yards from the shore he measured two cedars. One was 53 feet in circumference, the other 37 feet. He measured one fir 33 feet, and one spruce 16 feet in circumference, and strange to say, the spruce grew on top of a cedar windfall that was five feet in diameter, and yet sound and firm. These all grew within a radius of 100 feet. He turned over a fir knot that had doubtless lain for years. It measured 33 inches in circumference. He had seen mill men in New Brunswick make merchant-

able deals out of smaller logs than that knot. The trees grow from 250 to 300 feet high, sometimes running 100 feet without a limb. There is a tree within the city limits that was felled two years ago, and part of it still lay on the ground, that was nine feet in diameter at the butt, at 100 feet from the butt five feet in diameter, and at 200 feet 25 inches in diameter. Trees of this kind are common. Three years ago there were shipped from Vancouver four sticks of timber, each 95 feet long squared 48 inches, squared up to a proud edge. They were for the Panama canal. A few weeks ago there was sawed in the Hastings mill one tree that made 27,000 feet—about three car loads. Any carpenter can figure that out, and he will find that one tree made sufficient lumber to build a house 40 by 50 feet square, and two and a half stories high and finish it inside and outside. People ask how it is that timber on the Pacific coast grows so large. He knew of only one reason; it is a simple fact that the trees have twelve months out of every year to grow. Three hundred and fifty thousand superficial feet have been taken off a single acre. A prominent mill man told him that the logs in his boom averaged each 2,000 feet. It takes about 26 New Brunswick logs to average that amount of lumber. He saw three cows lying down, leisurely chewing their cud, all inside a hollow stump, and they were not crowded by any means.

FRICITION GRIP CUT OFF

In this friction grip cut off the shaft that is cut from the driving shaft carries all the mechanism of the cut off, the cut off proper only revolves when brought into contact with the friction pulley, keyed to the driving shaft "A." This cut off coupling is nothing more or less than our friction grip pulley with the one exception that it has no belt rim to it, but this belt rim could be attached at very little advance in price, and would



make the pulley on coupling if desired. The friction grip pulleys have been furnished to the Cookshire Mill Co., of Cookshire, Que.; the Riorden Paper Mills, of Merriton; the Wilson Paper Mills, of Lachute, and Martin, Mitchell Elevator Co., West Lynn, Manitoba, and are all giving the best satisfaction. Manufactured by the Waterous Engine Works Co., (Ltd.) Brantford, Ont., to whom all communications should be addressed.

LEARY COMPLETES ANOTHER RAFT

Considerable interest is being manifested in and around St. John, N. B., in the latest experiment of James D. Leary, of New York, the man who has achieved a considerable amount of notoriety through his efforts to float extensive rafts of lumber from Joggins, N. S., to New York, the last of which was successful.

Mr. Leary has purchased 30 square miles of timber land near the St. John river, in Queens county. It is not heavy timber but such as can be used for piling. It would not be worth cutting for any other purpose, as it consists of a poor quality of pine, with spruce,

hackmatack and fir. Mr. Leary conceived the idea of towing this piling to New York in rafts, and ex-U. S. Consul Murray of St. John, joined him in the enterprise. The lumber was put together in cribs, and 17 of these cribs are now in St. John harbor, having been floated down the river last week. Two ocean tug boats arrived from New York yesterday, and to-morrow the start for New York will be made.

Each of these cribs is from 50 to 80 feet long, 40 feet wide and over 9 feet deep, containing over 500 pieces of piling. The 17 cribs contain nearly 9,000 pieces of piling, or about 17 small schooner loads. It is said there is \$30,000 worth of timber altogether. In the cribs the piling all runs lengthwise, and each one is bound around by six wire cables, which were hauled taut by means of a donkey engine. A chain cable of 1 7/8-inch wire runs through the center of all the cribs and connects them together. About seven feet of sea room being allowed between each two. It is estimated that when the two tugs are fastened to the tow, the distance from the foremost tug to the hindmost crib will be about 3,000 feet. It will, in fact, be a long series of rafts, each slightly oval shape, and will trail along like a huge sea serpent. The trip to New York will take about 10 days. Some persons are of opinion that the rafts will not stand a heavy sea, while others—and these, of course, include Messrs. Leary and Murray—declare their confidence that no trouble will be encountered. Should the trip be made in safety, there will of course be a very large saving in freight, as much, one gentleman well versed in lumber matters declares, as \$8,000 on the amount of timber in these cribs. Should the scheme succeed, other rafts will follow, and in fact other cribs are now being constructed up river. Mr. Leary will use most of his tow in crib work along the water front of the Astor lands on Harlem river, where he has a heavy contract. There is an unlimited supply of that sort of timber to be got in this province if there should be a demand for it. A good deal of piling is shipped hence to United States every year by schooner, and a number of schooners are now either loading or on their way to New York. Naturally these people do not look with favor on Mr. Leary's scheme. Six or seven years ago Mr. Murray had some piling towed to New York, but no such extensive scheme as this has ever been undertaken here or elsewhere.

OUR TIMBER EXPORTS TO BRITAIN.

The following cargoes of Canadian wood have been reported at various United Kingdom ports since May 3rd.

- AYR—Siddartha, Halifax, 16,361 deals.
- BELEFAST—Kate Burrill, St. John 20,868 pcs. sawn fir.
- BEAUMARIS—Svalen, Darien, 171 pcs. hewn fir, 365 pcs. sawn fir, 93 deals.
- BRISTOL—Ontario, Montreal and Quebec, 300 cases splints.
- D. BLIN—Sognadelen, Halifax, 161 pcs. birch, 1,217 birch planks, 16,314 pcs. spruce.
- FLEETWOOD—Southern Queen, St. John, 20,569 deals.
- GLASGOW—Aledes, Halifax and Baltimore, 21 walnut logs, 473 pcs. oak lumber, 4,424 staves, 147 w. o. planks. Warwick, Montreal, 898 pcs. oak lumber. Hibernian, Montreal, 171 pcs. maple, 120 deals. Circe, Montreal, 2,372 oak planks. Canadian, Montreal, 17 logs timber, 2,876 deals. Sarmatian, Montreal, 15,643 deals.
- LIVERPOOL, Catherine, St. John, 21,274 deals and battens, 11 scantlings, 2,323 deal ends. Truro, Halifax, 19,082 spruce deals, 912 spruce deal ends, 4,548 birch deals, 427 birch deal ends. Hama, Halifax, 21,703 spruce deals, 1,050 spruce deal ends, 134 birch deal ends, 1,459 birch deals. Lake Ontario, Montreal, 4,076 deals, 2,411 boards. Lake Nipigon, Montreal, 372 deals, 17,807 boards, 1,859 maple blocks. Sardinian, Montreal, 12,232 deals, 6,780 boards. Oregon, Montreal, 19,320 deals, 1,322 maple blocks. Polynesian, Montreal, 14,182 deals, from Quebec, 320 cases splints. Lake Winnipeg, Montreal, 12,253 boards, 4,072 deals. Earl Burgess, St. John, 51,681 deals, 1,950 scantling, 6,211 ends, 1,009 boards. Bella, Halifax, 15,631 deals, 1,041 ends, 50 boards. Fearnought, St. John, 36,441 deals, 26 scantlings, 5,806 ends. Dominion, Montreal, 8,693 deals, 3,236 boards, 4,622 maple blocks. Lake Superior, Montreal, 8,355 maple blocks, 22,644 pcs. lumber, 271 boards, 234 deals.
- LONDON Damara, St. John's, 100 stds. deals, from Halifax, 7 1/2 stds. birch, 125 etc., 71 bills. mochts, 475 doors. Grecian, Montreal, 8,077 deals. Vedra, Montreal, 48,012 deals, 8,075 ends.
- SLIGO—Frederica, St. J. 17,581 deals and ends.
- WHITEHAVEN—Vidlarne, St. John, 14,522 deals and battens, 1,355 deal ends.

THE NEWS.

ONTARIO.

—All the saw mills at Rat Portage are now running.

—H. A. Patterson & Co., lumber dealers, Chatham, have sold out.

—J. H. Flanagan has started to manufacture shingles at Port Arthur.

—Thomas Robins' shingle mill, Wyebridge, is closed down for repairs.

—Coulon's mill, at Little Current is turning out about 86,000 feet a day.

—Trenouth's shingle mill, at Fawkham, is turning out a large amount of shingles.

—Mr. John Knight, of Douglas, is going to work a saw-mill at the Fourth Chute.

—Mr. J. H. Flanagan, has started the manufacture of shingles at Conmee's mills.

—The total lumber cut on the Gatineau section is about one-third less than last year.

—Messrs. Holden, of Belleville, have purchased the Fee-ney shingle mill at Moira lake.

—A toll of 8 cents per cord is to be imposed on pulp wood coming out of the Gatineau boom.

—Mr. P. Payette, Penetanguishene, has obtained a patent in the United States for a saw mill dow.

—The Rathbun Company's drive of saw logs down the Moria will amount to over 200,000 pieces.

—The logs on the Kippewa are mostly out of the bush, and the drive is being pushed as rapidly as possible.

—Men are being hired already for next winter's work in the woods. The wages are said to be about the same as last year.

—The Minnesota & Ontario Lumber Company's mill at Norman, which was shut down for want of logs, is running again.

—L. Seelack, of Carlingford, is busy cutting, having obtained a fair stock of logs. He is cutting mostly hemlock and spruce.

—Governor's Bay is alive with cribs of timber and the men working on them. Some three hundred cribs are being made into rafts.

—R. H. Smith and J. Clark have secured a five years' lease of the foundry at Tilbury Centre, and will convert it into a planing mill.

—The movement in Shingles at Severn Bridge has been lively during the past spring. There are no stocks on hand worthy of mention.

—The Rainy River is jammed with logs and navigation is for the time being closed, and will remain so until the Boom Company get the logs sorted.

—On the government boom, near Leamy's lake, work is now at its height. Rafts are being made and logs sorted and put in tows, ready for transit.

—Mr. M. L. Russell's drive of 2,000 cedars has arrived at the boom at Renfrew. They are for telephone poles and will be shipped to Wales, Ont., to Croil & McCulloch.

—Messrs. R. Henderson & Co's drive is out of McDonald Creek, and will be into the Ottawa in a few days. A. Lumsden's square timber from Gordon Creek is being run to Des Joachims.

—Messrs. Bronson & Weston are using their new line from the Chaudiere mills to their piling grounds in Stuarton, which is now being exclusively used for lumber to be shipped by rail to American buyers.

—A large raft of white pine, said to be of excellent quality, belonging to Messrs. Bishop & Kemp, recently reached Ottawa. The timber was made in the country around the mouth of the Madawaska river.

—Lumber shipments from the vicinity of Ottawa have been very brisk of late. A large number of American boats are in constant waiting to load at the Chaudiere docks and Bronson's piling grounds at Rockcliffe.

H. W. Petrie, of Brantford, has just put in an engine and boiler in the *Banner* office, Dundas, which is giving every satisfaction. Mr. Petrie has a reputation for putting in first-class machinery, and the sample put in here fills the bill.

—Hurdman's drive is very backward this season, and it is estimated that over one hundred thousand logs have yet to be taken out of the Mississippi for the firm which, however, took out more timber last winter than in the season previous.

—Thistle & Co.'s large raft of one hundred and eighty cribs, which was anchored in the bay near Rockcliffe, started June

16th for Quebec. It was in tow of the steamer Vermont. Hurdman & Co.'s raft left the same day for the Ancient Capital.

—The Rathbun Company, of Deseronto, has received an order for furnishing the frames, sash, storm sash, blinds, doors and inside finish for sixteen dwelling houses to be erected in Quebec city. All this material must be delivered by July 1st.

—H. W. Petrie, of Brantford, has sold and recently shipped two outfits of machinery for cheese factories, one for the Q'Appelle Butter & Cheese M'fg Association, Q'Appelle, N. W. T.; the other for the Palmerston Cheese Co., Palmerston, Ont.

—The mill men and other business men of Burk's Falls are seeking aid to build a spur from the present station to the saw, shingle and planing mills, and other important industries, and to connect the river navigation with the Northern and Pacific junction.

—Mr. J. H. Gordon, of Mutchmor & Gordon, Ottawa, has received a judicial order authorizing him to sell the stock of N. E. Cormier, of Aylmer. This consists of mills, timber limits, horses and carts, etc. The sale will probably take place early in July.

—The Chisholm Timber Limit Company accuse N. M. Campbell and Alexander Fraser of trespassing, cutting and removing timber from their reserves in Northern Ontario. The company took action against the two named for \$2,000 damages for the trespass and acts of the alleged timber poachers.

—Mr. Hugh McDonald, agent for J. R. Booth on the Temiscamingue river, reports a fair winter's work accomplished in the bush and a splendid spring for driving purposes, the water being a most favorable height. Between 70,000 and 80,000 logs were taken out and are now all in the Ottawa river.

—A large amount of timber has been taken out on the Du Moine river during the past winter. A raft belonging to the Hawkesbury Lumber company, containing 106 cribs recently passed down the Ottawa, and another is on the way. MacLaren & Edwards also have a big lot of timber coming down from the Du Moine.

—A raft of 181 cribs, 4,387 pieces, passed Britannia on the 10th ult., having come from the prolific Petewawa, 100 miles from the Lake Farm. The timber is the property of Thistle, Carswell & Francis and is very fine, reaching 50½ feet average. The limit upon which the timber was cut was bought 21 years ago for \$50,000 and since the purchase 16 rafts have been taken therefrom, value probably \$300,000.

—The *Orillia Packet*: Among some of the larger shipments from Midland and Waubushene to the States, during the past week, coming to the notice of the United States Consul at Waubushene, were:—600,000 feet of lumber by one firm; 950,000 feet by another; 650,000 feet by another, and 550,000 feet of lumber and 3,000 tons of ice by another. A lively business is being done all along the line.

—The rise in the Rainy River and its tributaries will enable the lumbermen in the Lake of the Woods district to get all last year's cut out, which were "hung up" owing to low water, and they have also been enabled to get all of this winter's cut, so that a majority of the mills have now a two years' supply of logs which within the next month will be in the booms at the mills. All the mills are preparing for making large cuts.

—The three mills at Byng Inlet cut more lumber than any other town on the Georgian Bay. One of these is operated by Burton Bros., of Barrie, the other two by the Georgian Bay Lumber Company. They cut annually 40,000,000 feet of lumber, which represents a market value of \$450,000, which is quite a large income for a village with a population of 600. Most of the square timber at this point is rafted into a string of 500 feet, which is towed to Waubushere. It is then carried by rail to Belleville, where it is again rafted and floated to Quebec, when it is shipped to England.

—George Clarke, of Dunchurch, while engaged with a number of workmen in breaking a jam of logs by the use of dynamite, lit the fuse connecting with a charge placed in the centre of a log, and not retreating far enough received the whole force of one-half of the charged log in the right side of the body. When the workmen returned after the discharge, they found Clarke lying on the ground and picked him up for dead. He recovered consciousness, however, when he related the cause of the accident, smoked his pipe and died in sixteen hours afterwards.

—The *Ottawa Free Press* says:—Very often when there is an adverse wind the work of collecting the logs that come down through the Chaudiere slides, and rafting them is a very tedious and laborous one. At high water too, it often happens that the swift water carries the logs far beyond the point

at which the rafting goes on. When the cribs have been gathered on the Hull side of the river it is always difficult on account of the current and eddies to bring them across to the opposite side. It is rendered treble so when there is a contrary wind. Mr. W. P. Leit who has often watched the hard work of the raftsmen on the river, suggests that a small steamboat be employed to tow the cribs across. This would he says save a whole day in making up the rafts, besides the saving that would result in the expenditure for food for the men.

QUEBEC.

—J. B. Lafontaine, lumber, Chamborn, has assigned.

—Prosper Lafontaine, lumber, Lake Bouchette, has assigned.

—Herbert & Co., saw millers, of St. Martine, have assigned.

—The lumber business at St. Johns is reported as being very dull this season.

—The manufacture of burial caskets out of wood pulp is a new industry to be started at Pont Rouge.

The E. B. Eddy Manufacturing Co., Hull, are receiving orders for their pulp faster than they can produce it, and it is stated that they are already contemplating doubling the capacity of their pulp mills.

—At a little town called Mille Vaches, about thirty-five miles above the Saguenay, a British company has started the largest saw mill and pulp factory in Canada, and one of the largest in the world. The works are on the edge of a vast forest, and can deliver their product straight from their rooms to the deck of a ship or steamer. Nearly all the wood pulp made is consumed by paper makers, who are enabled by its use to produce paper at less than two-thirds of what it formerly cost. The extent of the business can be easily imagined from the fact that at least ten manufacturers are millionaires, and that each one made his fortune from wood pulp. The best wood for the manufacture is the white birch, which produces the finest grade of paper, but nearly all ordinary trees are more or less available.

NEW BRUNSWICK.

—The lath sawyers employed at Murray's mill, St. John, have struck for \$1.80 a day. They were getting \$1.65.

—The exports from St. John for May were \$316,692, against \$574,000 in May 1889. The falling off in exports is wholly in lumber.

—There were over one hundred millions s. f. of lumber in the Fredericton booms on the 6th ult., the largest quantity ever there before at one time.

—A large raft of piling belonging to J. D. Leary, of New York, was towed out of the harbor at St. John, on June 17th, by two tugs sent there for that purpose. The raft is not built up like those taken from the Joggins, but fastened together and spread over the water like ordinary rafts. The piling was cut up the Salmon river, a tributary of the St. John, and floated to St. John, where it was made up in large rafts. It is said to contain sixteen cribs of 400 to 500 sticks each, and the timber is valued at \$150,000.

—Robert Connors purchased in the spring the right of driving logs to the booms on the St. John river. This season has been an especially favorable one for the work, and Providence almost unassisted by man has already floated logs to the booms estimated at 140 millions. It is estimated that 200 millions will be brought down the St. John river before the season closes, and this will be the largest quantity of logs ever floated in this great lumbering area in any previous year. With trifling labor it is stated that Mr. Connors' net profit in driving the logs this year will be twenty or twenty-five thousand dollars. Look out for a scramble for the driving next year.

NOVA SCOTIA.

—St. John *Sun*: Since the first of April Mr. Buchanan has been superintending the overhauling of Major Roop's rotary rotary and shingle mill at Springfield, and E. Davison & Sons' mill at Alpena, both on the line of the Nova Scotia Central. Davison's mill combines gang, rotary, shingle machine and lath machine. Mr. Buchanan states that there is quite a large traffic over the Nova Scotia Central. From the mills at Alpena, Springfield and Cherryfield about five millions of lumber will go to Bridgewater and Lunenburg, besides ship timber and stock to Mahone Bay. Last year Mr. Buchanan built a mill for Mr. Wagner, and put in a turbine wheel of his own design, made by himself and shipped across the bay when he went this spring. It is now in operation and gives complete satisfaction. Mr. Nichol who is running the mill, informs him that with 11 feet head water it will drive through fifteen thousand feet of lumber in ten hours. The wheel is 40½ inches in diameter, and its designer is confident that it will do better work than any he has seen in use.

—A great deal of lumber is being shipped from Parrsboro.

—G. A. & H. S. Flett, Upper Nelson, have started a sash and door factory.

—The Gold river steam mill has got to work and is well supplied with logs.

—Todd's mill at Margaret's Bay, which generally manufactures from six to eight millions, will not manufacture over five millions this year.

—The drives on the lakes and rivers of the south shore have been successfully driven to the booms, and the sawing has fully commenced for the season.

—The Medway Lumber Co. have been successful in getting their first drive to the boom, some 45,000 logs, and the lumbering industry is quite up to the output.

—The Halifax *Herald* of the 13th ult., says: "Few people realize the amount of business going on at present in Parrsboro. There are 12 square rigged vessels in port loading deals, and about twenty lighters, two steam tugs, and a great number of men are employed handling the deals."

MANITOBA AND THE NORTHWEST.

—Mr. Wade contemplates opening out in the lumber business at Deloraine.

—It is rumored that a sash and door factory will be started at Boissevain this year.

—A saw mill is being built a Sheep Creek, Alberta, south of Calgary, by Mr. Lincham. The mill will have a capacity of 20,000 ft. a day.

—J. A. Christie, of Brandon, is adding a planer to his saw mill with a capacity of 90,000 feet daily, and expects to employ sixty men, turning out over five million feet of lumber this season.

—The Western Lumber Company are building a new tug at Fort Francis for Rainy Lake. About 40,000,000 feet of logs are to come down from Rainy Lake this season and about the same from the American Rivers.

—Capt. J. Johnnasson, one of the most extensive lumber shippers on Lake Winnipeg, says the various companies are taking out a greater number of logs than they first calculated upon. The season has turned out more favorable than was expected.

—From Rupert's House, on James Bay, north to Richmond Gulf, although the soil on the coast is of a sandy nature, it is good for agricultural purposes. It is wooded with good spruce, tamarac, poplar and white birch. At Fort George, on the Big river, good spruce logs are brought down, some measuring two feet and a-half in diameter. Tamarac although not seen on the coast farther north than Richmond Gulf, is said to grow in great quantities inland and much farther north. Black spruce is also found on the Rat river. In fact the most rocky tracts support a growth of trees large enough to be of value for many purposes directly this territory is opened up by civilized man.

BRITISH COLUMBIA.

—L. Riden is building a fine saw mill at Victoria.

—D. F. Adams intends to establish a saw mill near Victoria.

—The saw mill of the Northern Pacific Company, at Burrard Inlet will have a capacity of 100,000 feet daily, and will be ready this summer.

—The Nelson City Improvement Company, Nelson City, are erecting a saw mill at that place, with a capacity to cut 50,000 feet of lumber a day.

—The mills at Port Moody, are running night and day to meet the demand from Manitoba and the Territories for British Columbia lumber and shingles.

—The new sash and door factory being built by Mr. Haslam, Nanaimo, will be 70x36 feet, two stories high. Employment will be given to about sixty hands.

—Vancouver is building a half million dollar sugar refinery, and will draw the raw sugar from Japan, China and the West Indies, and send return cargoes of lumber.

—The Royal City Planing Mills Company have already secured three water lots in Liverpool, just above the railway wharf, and will immediately commence the construction of wharves thereon for their use in shipping lumber.

—The *Colonist* says: Mr. Grant, the well-known logger of Valdez Island, has hit upon a novel plan of having a floating logging camp. With this end in view, he has given Messrs. Clarke & Watson, a contract for two large scows, one of about 100 tons and the other about 50 tons burden. Their construction will be commenced at once. This is a new departure in the logging business, and will greatly facilitate the work of moving from one site to another. The large scow will be used as a stable and place of storage, while the

small one will furnish living and sleeping accommodation for the men. The two will be worth \$2,000.

—The new saw and planing mill and sash and door factory lately erected by Ackerman Bros., at New Westminster, on the water front, is all but complete, and will commence active manufacturing operations next week. The enterprise is controlled by Ackerman Bros. and E. Knight and has been incorporated under the title of Mechanics Mill Company.

W. P. Sayward's saw mill, at Victoria, B. C., which has been closed down for weeks, undergoing repairs and improvements, has been started up and will now turn out 75,000 feet of lumber a day. The present mill was started by Mr. Sayward in 1878, when 20,000 feet was considered a good day's output. The Hastings mill at Vancouver has closed down. Its capacity will be increased to about 150,000 feet a day.

AMERICAN.

—The Langstaff-Orin Manufacturing Company, of Paducah, Ky., are shipping white oak lumber to Montreal.

—Upwards of 500,000,000 feet of timber and 300,000 cords of tan bark will be opened to market this season in western Pennsylvania by a railroad which is now under course of construction.

—It is said the output of shingles in the Muskegon district will be fully 100,000,000 less than last year. Three of the largest companies will undoubtedly stop manufacturing because they find no money in the business.

—The receipts at Tonawanda, N. Y., up to June 1st, 1890, by lake were 125,310,000 feet of lumber, 13,900,000 shingles, 577,000 pieces of lath, 10,180 fence posts, 68,550 railroad ties. Shipments by canal for May, 1890, 53,597,594 feet lumber, 2,722,000 shingles, 61,190 cubic feet timber. Shipments via rail for May, 1890, 2,580 cars.

—The Tittabawassee Boom Company, Mich., has only rafted this season a trifle more than half as many logs as the Muskegon Boom Company, the former tying out 475,000 pieces and the latter about 800,000. The old Tittabawassee, which has rafted more logs than any company in the world since its organization, is rapidly losing prestige, and will be away down in the list inside of the next five years.

—The property of the Randolph Boom & Lumber Co., comprising 36,320 acres of land in Randolph, Pendleton and Tucker counties, W. Va., was sold June 10th at Commissioners sale, by order of the United States District Court, to Levi C. Gordon, of Baltimore, for \$190,100. Millions of feet of timber in the log was also bought by the same purchaser. The tract sold is said to be one the finest timbered districts in the state.

—The Lindsay & Phelps company, of Davenport, Ia., has been incorporated for dealing in logs, lumber, etc., and building and owning saw mills or other mills of this sort in any of the states or territories or in British possessions. The amount of capital stock authorized is \$500,000 in shares of \$100 each but may be increased by the stockholders, but is not to exceed \$2,000,000. The term of incorporation is twenty years, and the incorporators are James E. Lindsay, John B. Phelps, Ralph E. Lindsay, Fred. Wyman and William Potter.

CASUALTIES.

Norbert Marchilder, a wealthy raftsman, was drowned at the Bear Chute, on the Coulonge river a few days ago.

Roleau, a lumberman on the Rainy River, broke his leg and he was five days reaching Rat Portage in a canoe.

Owen Carey had his right arm badly lacerated by being caught in a butting saw at Rathbun's mills, Campbellford, Ont.

A shantyman named Gascon received a fracture of the left arm, while working on the drive above Sudbury, Ont., last month.

Wm. Schoenfurth had two fingers of his left hand accidentally cut off while at work in a saw mill near Lastman Springs, Ont.

Luman Foote, a young man employed in the Cedar Mill, Deseronto, Ont., had two fingers of his left hand cut off by a shingle jointer.

A man named Van Dusen got his leg broken and was otherwise badly injured last week, on Carswell & Hough's drive, on North River.

An employee of Mr. A. W. Hepburn, lumberman, Picton, Ont., was instantly killed a few days ago by being crushed between two sawlogs which he was unloading from a truck.

Two lumbermen, named Nathan Ernest and Gabriel Ernest, were working in a jam of logs at Indian River, St. Margaret's Bay, N. S., when the logs started and both were thrown into the water and drowned.

M. W. Phillips, owner of a saw mill about eight miles from Flesherton, Ont., met with a sudden death on the 10th ult. While edging lumber a splinter struck him on the breast, over the region of the heart, leaving a hole almost through the body. He died in about fifteen minutes.

Last week while Mr. R. Murray, night foreman at Cameron & Kennedy's mills, Norwun, Ont., was attending to some defects on the slash table, a heavy slab fell off the rollers and was driven by the carriage aguns. Mr. Murray's leg, breaking it.

Three men in the employ of Messrs. Booth & Gordon, were drowned at Rugged Chute on the Neppawa last week, and another who escaped, was so badly injured that report says he has since died. The latter is named Ferguson, and is a brother of the foreman.

N. H. Phillips, a saw mill owner at Euphrasia, Ont., lost his life last month. He was working at an edger in his mill, and was in the act of carrying an armful of edgings, when the carriage ran back striking the edgings and driving one through his heart.

FIRE RECORD.

Wm. Gibson & Co's shingle mill, and John Clark's saw mill at Powassen, Ont., were recently destroyed by fire.

W. W. Short & Co's shingle mill, Red Rapids Bridge, N. B., was burned recently, insured for \$1,000.

The Star lumber mill at Ompah, Ont., was totally destroyed by fire on the 10th inst. Loss \$6,000; nearly covered by insurance.

A fire in Mr. J. R. Booth's lumber yards at Rochesterville, Ont., on June 9th, caused the loss of 65,000 feet of lumber. The loss is estimated at \$1,560.

The planing mill belonging to Thackeray & Co., together with a large quantity of lumber, was totally destroyed by fire to Ottawa on the 3rd June. Loss estimated at \$15,000; insurance none.

S. J. Miller's shingle mill, Charlo, N. B., was recently destroyed by fire.

A recent fire at Portage la Prairie destroyed \$4,000 worth of cordwood, owned by the Portage Milling Co.

Wm. Young's saw mill at Warton was recently burned; partially insured.

EXCHANGE ECHOES.

Northwestern Lumberman.

"Michigan men have dipped heavily into Canada pine during the past year," said a well informed pine land man to me the other day. "You may not have heard of it" he continued, "but one of the largest deals made during the year was the purchase late last fall by Gen. Alger, of Detroit, and Congressman Bliss, of Saginaw, of a tract of pine between Winnipeg and Port Arthur, on the north shore of Lake Superior, estimated to cut 1,000,000,000 feet. The price asked was the modest sum of \$1,000,000, but the sellers came down to \$425,000, and the purchase was made at that figure. Alger & Bliss also bought another tract in lower Canada. A. P. Bliss bought something like 300,000,000 feet. Brewer, Rapp & Kerr bought a large tract in lower Canada, and McClure, of Saginaw, also purchased an extensive tract in lower Canada. This looks as if the tariff question has not disturbed these gentlemen from regarding Canada as a good field for investment. A number of Bay City, Oscoda and Alpena lumbermen have also bought a good many hundred million feet of Canada timber.

Mississippi Valley Lumberman

Senator Washburn, of Minnesota, has offered an amendment to the McKinley tariff bill putting lumber on the free list, and it is intimated from Washington that there will not be very serious objection to the change. Senator Washburn undoubtedly represents faithfully the sentiment among his constituents who may be in the lumber trade, however contrary free lumber may be to the views of some of the Michigan lumbermen. It may be remarked parenthetically, that Mr. Washburn has until recently been closely identified with the lumber trade and is thoroughly familiar with all the conditions surrounding it in the northwest. With the duty removed there would be a possibility of the extension of the trade in lumber in the British northwest. With the opening of the Red Lake reservation it is probable that some lumber would be made at points along lines now building in Minnesota, while the manufacturers along the Northern Pacific would enjoy an enlarged field for the distribution of their product. It is a good deal of a question whether there is any serious objection in any quarter, unless it possibly be in the Pacific northwest, against the removal of the duty on lumber. Free lumber would not for any extended period effect the market value of the commodity, and it would undoubtedly contribute to the preservation of our timbered resources.

HOW TO HAMMER CIRCULAR SAWS.

On this subject J. H. Miner, of Baton Rouge, La., speaks as follows: The saw being the life of your mill, keep it in good condition. The chief element of this is in hammering and keeping the saw straight and true. The former we will term tension, which applies to keeping the saw open to accommodate the centrifugal force applied by its speed. The latter, straightening, applies to keeping the plate true and free from lumps. Saw hammering is a peculiar art, and accomplished by but few to any degree of perfection, simply from the many foggy ideas advanced by men, some of whom boast of their 20 years' experience. I have stood for 10 years at the lever, watching closely every so-called peculiarity of the saw.

The first thing is to straighten your saw. This is done on a wooden, firm, end-grain block or leather padded anvil. All mill saws dish more or less from the log, and are full on that side. It is necessary to lean the saw until the center says so that it will appear as straight as possible, then with a 20-inch straight edge mark all the full places, watching closely just outside of the collar. Near the rim apply the straight edge at right angles in several positions; it is best to use, say, a 12-inch straight edge on the rim, as you can get closer to the teeth, mark your saw with chalk or hard soap, on the rim when you find places to show straight one way, but high the other way; make a long mark directly in line with the straightest way. This indicates a twist, and will in all cases on the rim, extend toward the center of the saw. When the 20-inch straight edge is applied on the radius (from center to rim) such a place will not show, but take the 12-inch and apply across this line, and you will find it to be high. If there is a twist it will be higher on the extreme edge. The straight pene hammer must be used on such places, the straight way of the hammer directly on the straightest way of the saw, which is toward the center. As the extreme edge is the highest, nearly all the blows must be applied there, care being taken not to go too far in. A twist showing six inches is often removed by hammering only on the rim. Twisted places are sometimes found at the center when the saw is dished.

Having laid off the saw, go to the block and strike one blow on every mark with the round face of the hammer, using the long face on the long marks. The first operation may dish the saw in the other way, which, if not too much, shows good work. Don't rub out your marks, and when the other side is laid off notice if any of the marks correspond; if so, too heavy a blow was applied; in this way the heft of blows can be determined. Work on both sides of the saw, getting the rim as true as possible and leave it leaning a trifle to the log. This constitutes straightening. If your saw's tension is nearly right it will now run much better, but this is not always the case. I will add here that before attempting to straighten a saw as described, a careful inspection must be made. All saws get long or loose on the rim by use, and it's no common thing among small mills to find saws so loose on the rim as to form a twist or winding position; if not quite so loose it will not be winding, but may appear nearly straight with the rim—very flimsy, while the center will be as stiff as a board. In short, all such saws are stiff in the center and will not give and must be tensioned before straightening.

This tensioning is done by stretching the saw nearer the center on an anvil with firm blows, regardless of the lumps in the saw. First, strike a circle line one-half way the radius, then two lines two inches apart below this, and one above, four lines in all. Hammer the two center lines first on both sides of the saw, but if it is very loose on the rim it will often require four to six lines; in such cases the lines can be closer together. Never go nearer the rim than one-third the radius, and not much closer to the center. Keep this in view. The one-half way part of the saw must be the more open. A saw open too near the center will not run at all in many cases. After giving your saw some tension, nine times out of ten your twisted saw, to your surprise, will show up straight. Sometimes a saw gets twisted through accident; such saws will show the center a little loose, and when they

do, take the twisted saw to the block with a long pene, as stated. High-speeded saws require to be more open in the center, many of them dishing through with a snap. A saw too open, will heat in the center and crowd from the log, while a saw to loose on the rim will snake and assume a complete wind or twist when a little hot on the rim. In such cases the center has to run hot in order to get anything like work out of the saw. A saw too open in the center is stiffened by hammering the rim not nearer than two inches of the teeth; very little work on the rim will change a saw. When the saw has about the right spring straighten it up on the block; then a trial will determine its tension. If the saw will not screw up true the collar should be turned. If a saw is to remain on the mandrel it may be papered if the collars dish it.

It is very essential that unequal tension be corrected in a saw that runs at a high or even moderate speed. Not one man in fifty knows anything about this, to say nothing of how to remove it.

Unequal tension is this: One part of the saw being tighter, or more open than the other. I could write a volume on this important part of the saw's life. Now, to remove it, and in the simplest way, screw the saw up on the mandrel, take hold of the "tail" of the saw with the right hand (if it is a right hand mill) and spring the saw all you can to you, and at the same time apply the long straight edge and notice closely the opening. Apply the straight edge say every six inches, moving the saw and noticing the variation in light. You will find some places spring more, while others, remain nearly to the straight edge; mark these places plainly. Now go on the outside of the saw, having everything free, so you can spring the saw, except the guide pins, which must be close to the saw. On this side mark the variations as before. If your saw has a loose place you will find that it stood off more on both sides at that place. A tight place will stand off less and alike on both sides. In simpler words, loose places appear as though the plate was very thin, while tight places appear thick because they stand closer to the straight edge on both sides of the saw; loose places the farthest away. An open place on one side which shows high on the other indicates a lump; such a saw is not true and must be taken to the block and trued up.

To remove loose places hammer near the rim opposite such a place. Tight places are stretched right where they show it. For practical purposes, the saw should show very nearly the same spring all around. Always test both sides, and when even a slight variation is found it should be removed; then, if the saw is too open or too stiff, treat the center or rim a little on the anvil.

The foggy method is to always hammer a saw on the anvil, striking it as heavily as possible. When a saw requires a little straightening, it is mostly on the rim (the outlet of the saw); if this is done on the anvil what is the result? Lumps partly beaten down, with all the tension gone; then the hammerer goes to the center to overcome just what he ought not to have done. A few blows on the block, and the saw would have retained its tension—been in better shape with 10 times less work. No man can remove a twist in this way, directly on the rim. I have noticed over 50 such men, and they never get right up to the rim of the saw. Why? because it will curl up, every time, on the anvil. Test this with a piece of sheet iron, and be convinced. The tinner, iron and coppersmith are sensible men; they have their copper or mallet hammer and a smooth block to straighten their work on. Why? Because only a blow or two on an anvil would stretch it into a wind, and then they are done. The saw is precisely the same way, and it remains only a question of time that the saw will be unequally tensioned, and then it is done. A man that knows anything about tension in a saw, will take care of that vital part. Take a dished saw that requires only a few light blows near the collar, on the block. What does the foggy do? Stretch the rim, "pulling the dish" out, and a lot of other foolish things. A saw too open requires the rim stretched, but never a dished saw. Another idea is to hammer in lines from the center to the rim, only to result in tight and loose lines, and to buckle the saw. A man of gumption ought to know better than this,

and this is the cause of many fractured saws. Others' theories are, that when a saw is sprung it must be sprung more to get the lump back. My idea is if it is sprung it ought not to be, and should be gotten back without additional stretching, namely:—the block.

Small saws are treated precisely the same as larger ones, but much more mildly. An expert changing from a thick saw to a thin one invariably will strike too heavily; great care must be exercised. They require but little tensioning, and should be stiff. Blue spots are treated on the block, and when they come back the rim should be stretched opposite such a place. Their appearance continually indicates a loose place.

SCALING LUMBER

A correspondent writing to a Quebec exchange has the following to say on the subject of scaling lumber: In these enlightened days of standard measures, standard weights, and even standard time, it does seem incongruous that no one fixed rule has been established by law for the buying and selling of so important an article of commerce as the natural products of our timber lands. In many parts of the eastern townships there are no less than four different log scales in use, all more or less at variance one with another, while the Provincial Government adds still one more to the list, which is used by them for levying timber dues on leased government timber lands. No doubt contracts can be made according to any one rule agreed upon, and where both contracting parties are fully conversant with the way in which this one peculiar rule will hold out in board measure over log scale no injustice will be done to either, but while all other rules, weights and measures are being for the sake of convenience and simplicity reduced to one acknowledged standard, and this usually a decimal one, it does seem as though there was some peculiar design in keeping up this puzzling state of confusion for the purpose of taking advantage of the unfortunate settler, who finds it difficult enough to master sufficiently for his own protection any one table by which he can measure the contents of his own logs before surrendering them to the insatiable man of the presiding demon of the mill yard. Taking for the rate of example logs of twelve feet in length, and of 8, 12, 24 and 36 inches diameter, it would appear that the difference in these five tables is not only remarkably great but also that in varying they do so with no apparent irregularity.

Log Rules	Length of Log. Feet.	Diameter of Log. Inches.	Amount in Feet.
Bangor	12	8	33
Oughtred	12	8	28
Scribner	12	8	22
Quebec Government	12	8	24
Doyle's Rule	12	8	16
Bangor	12	12	78
Oughtred	12	12	68
Scribner	12	12	59
Quebec Government	12	12	50
Doyle's Rule	12	12	48
Bangor	12	24	327
Oughtred	12	24	300
Scribner	12	24	303
Quebec Government	12	24	315
Doyle's Rule	12	24	300
Bangor	12	36	770
Oughtred	12	36	
Scribner	12	36	692
Quebec Government	12	36	710
Doyle's Rule	12	36	786

In following a comparison of the different rules in the above tables, through the various sizes of the logs, it will be seen that in the larger sized logs the discrepancies are not so great as in the small, also that some of those which cut severely on small timber give the best measure on large. This fact is well known to lumber sawyers who use two rules in buying logs, applying whichever suits their purpose best. I have also known those who ship round timber to the United States use the Scribner, or even the Doyle rule for buying logs from the farmers, and sell by and pay the duty on the Bangor scale, by which they gain in actual measure from 250 to 500 feet on every thousand feet bought and sold where the logs are 10, 12 and 14 inches in diameter. Piratical as this undoubtedly is,

the case grows worse when we come to the Doyle rule, now much in vogue, and inserted in the later editions (no date) of Scribner's Log Book. In the preface it says, "Doyle's rule for measuring saw logs has been substituted for Scribner's and the whole book has been carefully examined by Daniel Marsh, a practical civil engineer." Now what does a civil engineer know about how many feet of boards a practical sawyer can cut from a round spruce log? Further on the publisher says: "Hence after repeated correspondence and consultations with large lumber dealers and practical sawyers in various parts of the country, we have become satisfied that the calculations given in this table are universally considered the only fair measurement for both buyer and seller." Mark you this "correspondence and consultation" is always from *lumber dealers and sawyers*, and so also are the favorable testimonials in the book. Could we but hear the expressions of those who of late years have been driven to cutting even their best butt logs into pulp wood in order to avoid the ruinous measurements of log scales of which but few have the opportunities of understating, we should say at heart that the Doyle rule was not "universally" approved. Again, as the Doyle rule is not figured for logs under ten inches in diameter, millers are in the habit of "jumping" the scale of all such as containing 24 feet, (for 16 ft. logs.) Now if we take an 8-inch, a 9-inch and a 10-inch log and measure them by the Doyle rule, the total result will be 84 feet, while the same logs scaled by the Bangor rule, will give 164 feet, or nearly 100 per cent. more! In other words it would take about 18 logs of these three sizes to make 1,000 feet of lumber by the Bangor rule, while the Doyle rule would exact about 36 logs for the same amount. Now the only inference that one can draw from these conclusions is, that if the Government continues to refuse to establish a uniform legal scale they must have some interested motive for doing so.

LUMBERING IN THE NORTHWEST.

The Dominion government agent of the crown timber agency for the province of Manitoba and the district of Assiniboia, has furnished the government with some interesting facts regarding the development of the timber and lumber industry of that agency. He reports that last year was not a favorable one to those engaged in lumbering in his district. The winter was short and the snow fall light. Instead of four months' sleighing, as is usual in Manitoba, there were hardly three, hence the season in which hauling could be done was greatly shortened. Fully one-half of the whole winter's cut was left in the woods or hung up on the streams, in consequence of low water. But if the quantity of timber cut and left in the woods, from the causes just mentioned, be taken into consideration, a larger business by several million feet, was done than in the preceding year. The total quantity of lumber manufactured by the mills operating under government license amounted to 13,826,827 feet, which compared with 1888, shows a falling of 3,582,309 feet. It must be remembered, however, that the amount of lumber manufactured for the preceding year included the output at the mills at Rat Portage and Keewatin, while last year the operations there were carried on under the supervision of the Ontario crown timber agent, who collected the revenue therefrom. No pine lumber is now manufactured within the agency except what is brought down the Red River from Minnesota, of which last season there was about 3,000,000 feet. The only standing pine, excepting jack pine, is in that part of the district of Keewatin to the north of the English river and Lac Seul. Lumbering is almost exclusively confined to spruce. Tamarack is the only other available timber to be found in any quantity, and as it rarely exceeds a diameter of 12 inches at the stump, it is found more profitable to make it into ties and piles for railway purposes. The following is a nearly correct statement of the lumber sold during the year: Canadian manufacture, 37,464,454 feet; United States manufacture, 10,429,017 feet. The above shows a large increase in the importation of United States lumber over that of 1888. This lumber is manufactured at Duluth and other points in Minnesota, with a

view principally of supplying the trade in the American territories to the west but owing to the lightness in the demand, brought about largely by the failure of the grain crops in many districts, notably northern Dakota, the Manitoba market is looked to. Shipping facilities have so improved by the incoming of the Northern Pacific railway that no difficulty is now experienced in placing this lumber upon the market in competition with that from the mills at Rat Portage and Keewatin. No timber or other products of the forest were exported from the agency to the United States during the year. The country lying to the west and northwest of Lake Winnipegosis, as far as the Saskatchewan river, has been pretty generally burned over, including the valuable timber on the berths on the Bird Tail creek, the western slope of the Riding mountains, Shell river and Duck Mountain district. Swan and Etoimami rivers, and the Porcupine hills. The quantity of timber in the districts named, as nearly as can be estimated, is upward of 900,000,000 feet, of which a large part has been damaged by fire. Little damage occurred during the past year through prairie fires to the timber on Dominion lands in the settled districts, the settlers having taken greater precautions than in former years to prevent them. Many are still of the opinion that these fires are frequently started by sparks from locomotives, but since coal has been substituted for wood as fuel on the engines, and an improved spark arrester has come into use, fires from this cause are of comparatively rare occurrence.

LUMBER INDUSTRY IN WESTERN CANADA.

The minister of the interior in his annual report recently issued, supplies some interesting details regarding the lumber industry in the Northwest territories and British Columbia. There was a decrease of \$14,781 in revenue from timber dues during the year 1889, as compared with 1888. The revenue received from the British Columbia crown timber agency during the last year was \$18,044.77, a decrease of \$7,522.74. Of the amount collected the sum of \$4,092.50 was received for bonuses of berths put up to public competition. The total area so acquired was about 45 square miles, averaging a bonus of \$90.32 a mile. The total quantity of lumber manufactured for the year amounted to 23,759,942 feet, as compared with 24,436,895 feet in 1888, and sold at the rate of \$9 and \$10 a thousand. There are 11 mills cutting timber within the agency. The McLaren-Ross Lumber Company has erected the largest saw mill in British Columbia, having a capacity of 250,000 feet in 12 hours.

The total amount of dues collected for timber within the Calgary agency during the year amounted to \$16,811.12, being an increase of \$6,211.73. The total quantity of lumber manufactured was 1,149,248 feet. The price of lumber at Calgary was from \$12 to \$18; at Cochrane, \$12 to \$16; at Fort McLeod, \$15 to \$43; at Lethbridge, \$30, and Cypress Hills, \$13. Six saw mills were cutting lumber within this agency under government license, and several portable mills under permit.

The total amount of dues collected within the Edmonton agency was \$4,041.73, being a decrease of \$2,691.57, as compared with the previous year. The price of lumber at Edmonton during the year was \$20 to \$25 a thousand, and at St. Albert \$23 to \$25. The agent reports two saw mills in operation within this agency. Two mills were burnt last summer; one is being rebuilt, but it is not the intention to rebuild the other.

The total amount of dues collected within the Prince Albert agency was \$4,093.59, being an increase of \$674.57, over the previous year. Lumber sold at Prince Albert from \$20 to \$42 a thousand, and at Battleford from \$30 to \$35. There is only one saw mill in this agency cutting timber under license, the one at Prince Albert, erected by Moore & Macdowall in 1876. There are also several saw mills at Prince Albert and Battleford cutting timber under permit.

Saw mill returns received at the head office give the following quantities of building material as having been manufactured and sold during the year within the five agencies: Lumber manufactured, 39,849,554 feet; sold, 41,071,655 feet; shingles manufactured, 1,621,750; sold, 2,404,750; lath manufactured, 682,400; sold, 675,098.

Sixty licenses to cut timber over a total area of 2,289-

35 square miles were issued during the year. The areas licensed in Manitoba, the three provisional territorial districts, and on Dominion lands in British Columbia, are as follows: Manitoba, 497 miles; Alberta, 1,492; Assiniboia, 59; Saskatchewan, 197; British Columbia, 41. The area under license in British Columbia seems small, seeing that the authority of council has been obtained to issue licenses to cut timber over 70 berths containing, approximately, a total area of 663 square miles. This is caused from the fact that the returns of the surveys of the majority of these berths have not yet been filed. The regulations provide that this must be done before a license issues. In addition to the 2,247.56 square miles in Manitoba and the northwest territories under yearly license, an area of 791 square miles is covered by 21-year leases, which were issued prior to December, 1883. Of this latter area 559 square miles are situated on the shores of Lake Winnipegosis. The leases in question were acquired at public auction. The number of applications received during the year to cut timber was 81, of which 45 were licenses to cut timber in Manitoba and the northwest territories, and the remainder to cut timber upon Dominion lands in British Columbia. The number of applications during the previous year was 107. Within the past year 11 orders in council, which authorized the issue of yearly licenses to applicants to cut timber on lands in Manitoba and the northwest territories upon their complying with certain conditions, were canceled for non-compliance.

The total area of the berths described in these orders in council was, approximately, 506 square miles. The number of berths still under license or authorized to be licensed in the province and territories is 149, but it is probable that the orders in council, which authorized the licensing of some of these berths will soon be canceled for non-fulfillment of the conditions. The regulations governing the granting of yearly licenses to cut timber in Manitoba and the northwest territories, approved March 8, 1883, as amended by orders in council passed since that date, have been superseded by regulations authorized by council on September 17, 1889, which regulations also govern the disposal of licenses to cut timber on Dominion lands in the province of British Columbia, with the exception that the yearly rental of timber berths situated west of Eagle pass, in British Columbia, is 5 cents an acre—the same rental that is charged by the provincial government—instead of \$5 a square mile, the rental charged for berths in Manitoba and the northwest territories. By the same order in council the timber permit regulations for Manitoba and the northwest territories were amended, and were also made applicable to Dominion lands in British Columbia. It will thus be seen that the department has now one set of timber regulations for all Dominion lands, instead of, as formerly, three distinct sets.

Sugar Pines of The Sierras.

An American paper says, the sugar pines of the Sierras is the most superb of all the pines, and the territory it occupies from an elevation of 3,000 feet to 8,000 is, beyond doubt, the most interesting portion of the mountains for campers, tourists or botanists. Specimens have been measured that were forty feet in circumference and 300 feet in height. This pine has a smooth, round and columnar trunk, rising without limbs for two-thirds of its height. It is the most valuable timber tree of the Sierras, is rapidly disappearing, and is not well represented among the younger growth of the forest. A few large trees growing on private estates will remain to be famous generations hence over whole countries. David Douglas, the discover of this species, measured a fallen tree whose circumference at three feet from the base was nearly fifty-eight feet. Trees of 250 feet in height can be found still standing near some of the old towns of the upper Sierra region. In wonderful contrast to these giants of the California forest are the dwarf pines that grow from the limits of the third climatic zone of the Sierras to the very base of the glaciers. James Muir once cut a dwarf pine whose trunk was three and a half inches through, and counted 420 rings. The little tree was tough as a whip cord, as it had need to be in the Alps of California, on the very limits of eternal snow.

TRADE REVIEW.

Toronto, Ont.

TORONTO, June 30, 1890.

CAR OR CARGO LOTS

Table listing lumber prices in Toronto, including items like 1 1/2 and thicker clear picks, American inspection, and various sizes of mill runs and culls.

YARD QUOTATIONS

Table listing yard quotations for various lumber products, including mill cull boards, dressing stocks, and different grades of shingles.

Hamilton, Ont.

HAMILTON, June 30, 1890.

Table listing lumber prices in Hamilton, including mill cull boards, dressing stocks, and various grades of shingles.

Ottawa, Ont.

OTTAWA, June 30, 1890.

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

Montreal, Que.

MONTREAL, June 30, 1890.

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

St. John, N. B.

ST. JOHN, June 30, 1890.

Table listing lumber prices in St. John, including deals, boards, shingles, and various grades of lumber.

Vancouver and New Westminster, B.C.

NEW WESTMINSTER, June 30, 1890.

Table listing lumber prices in Vancouver and New Westminster, including car load and ship rates, wharf plank, and rough lumber.

Albany, N. Y.

ALBANY, N. Y., June 30, 1890.

Table listing lumber prices in Albany, including good, 1x10 in. each, and various grades of shingles.

Buffalo and Tonawanda, N. Y.

BUFFALO, June 30, 1890.

Table listing lumber prices in Buffalo and Tonawanda, including clear, 1 to 2 in. all widths, and various grades of shingles.

Saginaw, Mich.

EAST SAGINAW, June 30, 1890.

Table listing lumber prices in Saginaw, including cargo lots, yard quotations, and various grades of lumber.

New York City

NEW YORK, June 30, 1890.

Table listing lumber prices in New York City, including Black Walnut, Cherry, and various grades of lumber.

Boston, Mass.

BOSTON, June 30, 1890.

Table listing lumber prices in Boston, including Western Pine, Eastern Pine, and various grades of lumber.

Oswego, N. Y.

OSWEGO, June 30th, 1890.

Table listing lumber prices in Oswego, including three uppers, 1 1/2, 1 1/4 & 2 inch, and various grades of lumber.

WANTED AND FOR SALE.

Announcements in this department will be inserted at the uniform rate of two cents a word for first 20 words and one cent for each additional word, payable in advance. For four or more consecutive insertions of the same advertisement a discount of twenty per cent. will be allowed. Each initial and figure counted as one word. Copy must reach this office by the 25th of the month to secure the appearance of the advertisement in the paper of the following month.

NOTICE—Splendid opening for any person wishing to go into the 'Saw-mill business' for sale in the town of Parry Sound, Steam Saw mill. New and good machinery. Also quantity of logs and some timber limits. For full particulars apply to S. & J. ARMSTRONG, McKellar, Ontario.

ASH paid for all kinds of hardwood lumber, give full particulars of car or cargo. Only W. N. McEACHERN & Co., No. 3 Dock, Toronto

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

\$3,000 WILL BUY THE SINCLAIR saw mill, sash and door factory in Paisley—saw mill capacity about 12,000 feet per day, sash and door factory contains the usual machinery; the situation is good for getting in logs, being on the Sauguen river. For further particulars apply to HECTOR COWAN, barrister, Paisley.

WANTED—Elm 1 1/2 and 1 3/4 inch; White and Black Ash, 1 1/2, 1 3/4 and 2 inch; Red, White and Burr Oak, 1 to 4 inch; Cottonwood, 1 inch; Chestnut, 1 and 1 1/2 inch; Balusters and Square Oak, Ash, Birch, Cherry and Walnut. Give full particulars regarding grade, thickness, how long on stock, and price delivered in New York City. C. G. HORTON, 34 West 14th Street, New York City.

FOR SALE—Timber Fortunes—I am sacrificing some estates—tracts 160 to 5,000 acres—perfect titles: oaks, gum, ash, cypress, for \$1 per acre. Great chance for speculators and traders. Sold over 6,000 acres of these small groups within past four weeks. Lands are in Louisiana and above the overflow. Don't lose this opportunity. No options nor plots given out on these groups. W. H. HOWCOTT, New Orleans, La.

AGENTS WANTED—If you want to make money, take hold and sell our choice Nursery stock. Now is the time, write us at once for terms. MAY BROTHERS, Nurserymen, Rochester, N. Y.

A BUSINESS OPPORTUNITY.

For Sale, Rent, or Partnership—sash and door factory and saw mill; adjoining the city; doing a good business and can be largely extended; first-class machinery and 60 horse-power engine, dry kiln, etc.; premises suitable for shipyard. For particulars apply to M. STRACHAN & SON, Kingston, Ont.

RAILS AND CARS FOR SALE.

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

FOR SALE CHEAP—SAW AND STAVE MILL.

In county of Essex—46 acres fine farming lands, good farm buildings—plenty of timber near; only 2 1/2 miles from two different railways—terms easy—splendid bargain—must be sold. JAMES S. LAIRD, P. L. S., Essex, Ont.

A. P. & W. E. KELLEY CO.

WHOLESALE Lumber dealers, Yards at Tonawanda and Chicago. Correspondence invited.

LAYCOCK LUMBER CO.

MANUFACTURERS of Pine, Hemlock and Oak Timber up to 35 feet in length. Saw Mills, Ackley, Pa., Black Rock, N. Y., Gravenhurst, Ont., Office, corner Main and Seneca Sts, Buffalo, N. Y.

WILLARD W. BROWN.

202 Main Street, Buffalo, handles all kinds of Hard Woods.

C. P. HAZARD.

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

WHITE, RIDER & FROST.

WHOLESALE dealers in Michigan, Wisconsin and Canada Pine and other woods. Principal office, Tonawanda, N. Y.; branch office, New York City.

COWPER & GREGORY.

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

A. M. DODGE & CO.

MANUFACTURERS of and Wholesale dealers in all kinds of Lumber, Lath and Shingles. Tonawanda, N. Y.

E. & B. HOLMES.

WHOLESALE dealers in Lumber and Timber. Office, Michigan and Canal Streets, Buffalo, N. Y.

CHEESMAN DODGE

TIMBER and Lumber Merchants. Ship and Boat stock, Railroad Ties, &c. Office, 15 West Seneca Street, Buffalo.

Buffalo Hardwood Lumber Co.

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

EMMET FLEMING

INSPECTOR and Commission dealer in Lumber. Office, 251 Louisiana Street, Buffalo, N. Y.

THE TONAWANDA LUMBER CO.

MILLS at East Tawas, Mich. office 109 Main Street, opposite N. Y. C. and H. R. R. R. Station, North Tonawanda, N. Y.

J. & T. CHARLTON

WHOLESALE dealers in Map and Spars, Canada Round Pine, &c. Tonawanda, N. Y.

L. A. KELSEY LUMBER CO., (Ltd.)

MANUFACTURERS and dealers in Hardwood Lumber of all kinds. Describe stock and write for prices. Office Tonawanda, N. Y.

BOVEE & HOWDEN

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

IMPORTANT AUCTION SALE

Gilmour & Company's Mills and Limits on Gatineau and Trent Rivers.

Messrs Gilmour & Co. will offer for sale by auction at the RUSSEL HOUSE, at the

CITY OF OTTAWA,

the whole of their valuable mills and limits, with plant, real estate, lumber, etc., on the

9th DAY OF APRIL, 1890

at 2 o'clock p.m. The sale will be in parcels. For a full description of the parcels, list of chattels and details apply to either of the undersigned or at the offices of the firm at Ottawa, Chelsea, Trenton and Quebec.

*Dated 20th November, 1889.

ALLAN GILMOUR, Ottawa.
JOHN GILMOUR, Chelsea, Que.
DAVID GILMOUR, Trenton.
J. D. GILMOUR, Quebec

POSTPONEMENT.

GILMOUR MILLS AND LIMITS.

The sale of the above properties, advertised to take place on the 9th April, is postponed until the

31ST JULY, 1890,

when they will be put up without further postponement at the same hour and place.

Dated 5th April, 1890.

ALLAN GILMOUR.
DAVID GILMOUR.
JOHN GILMOUR.
J. D. GILMOUR.

IMPORTANT AUCTION SALE!

The Scottish Carolina Timber and Land Company's Mills, Limits, Real Estate, etc., situated in Western North Carolina and East Tennessee.

The whole of these VALUABLE PROPERTIES, as previously advertised, to be sold by Public Auction on the 21st of May, at Knoxville, Tenn., will be put up for sale at the same hour and place on

Wednesday, 6th Aug., 1890.

Without further postponement and absolutely without reserve if not previously disposed of by private contract. For a full description of the parcels, list of chattels and details, apply to

WILLIAM PAGE,
Knoxville, Tenn.

IMPORTANT SALE

TIMBER * LIMITS.

The estate of the late David Moore will offer for sale at Public Auction at the Russel House, in the City of Ottawa, on

TUESDAY, 28th OCTOBER, 1890

at three o'clock in the afternoon the following valuable timber limits.

PARCEL No. 1.—400 square miles on Kippewa river, in the province of Quebec, and being berths Nos. 57, 56, 47, 46, 65, 64, 62, 63.

PARCEL No. 2.—Berths No. 3 on the north shore of Lake Huron in Ontario, license No. 103 of 1889-90. Area, 36 square miles.

PARCEL No. 3.—Berth No. 1, township of Springer in Ontario, license No. 104 for 1889-90. Area 34 square miles.

PARCEL No. 4.—Berth No. 15 on the north shore of Lake Huron, in Ontario, license 105 of 1889, Area, 36 square miles.

The purchaser will be bound to take the supplies on each limit according to schedule and valuation. For terms and conditions of sale apply to E. D. Moore, Esq., Hull, and to the undersigned.

CHRISTIE & CHRISTIE,

J. R. FLEMING, Advocate, 110 Wellington St., Ottawa.
353 Sparks St., Ottawa.
5th February 1890.

Steam Saw-mill

FOR SALE.

THE subscribers offer for sale their steam saw mill at Deux Rivières, consisting of a complete set of machinery, carriage to saw 50-foot lengths, friction bull wheel, swing butting saw and double edger with shafting, pulleys and belting, rollers and saws. Engine, boiler and pump complete. Cutting capacity 15 to 20,000 feet per day of 11 hrs. Also a shingle machine and planer and matcher, together with waterwheel belting, shafting, pulleys, etc.

The above machinery is in first-class order and will be sold in conjunction with the building in which it is placed or separately as may be desired.

Apply to A. & P. WHITE, Pembroke.

MACHINERY FOR SALE

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

- ONE corn and cob crusher
- FINE grain or feed mills
- ONE Craig wheat scourer.
- ONE mill stone dresser.
- ONE corn husker.
- TWO corn shellers.
- TWO paint mills.
- ONE tile machine.
- ONE clay crusher.
- ONE copper-jacketed kettle.
- TWO copper dye kettles.
- TWO set cracker or biscuit machines, with dies.
- ONE sugar or sorghum mill.
- ONE union leather splitter.

- ONE steam rock drill.
- ONE foot press or canner's use, with dies.
- ONE fruit evaporator.
- ONE Calligraph typewriter.
- ONE clover thrasher and huller.
- ONE ditching machine.
- ONE Ward sulky plow.
- ONE hosery or bobbin winder.
- ONE set scouring rolls.
- ONE Chase flock cutter.
- ONE lot press plates.
- TWO meat choppers.
- ONE large clothes mangle.
- ONE shooting gallery tube.
- ONE small bone mill.
- ONE run 42 inch uhr stones.
- 10 water wheels, different sizes and makes.
- ONE lot spur and bevel gears.
- ONE lot shafting, hangers and pulleys.

- ONE lot balance wheels.
- ONE set cheese box machinery.
- ONE lot Look's patent levels.
- TWO steam fire engines.
- FIVE hand fire engines.
- TWO hose carts.
- EIGHT steam pumps.
- ONE No. 10 centrifugal pump.
- THREE hydraulic rams.
- ONE champion spark arrester.
- ONE lot lifting jacks.
- ONE lot new portable forges

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

VALUABLE MILL PROPERTY FOR SALE.

THE SAW MILL formerly owned by E. Dunstan, better known as the Hickory mill, situated on Maldstone avenue, in the town of Essex. The property consists of one and three-quarter acres of land, frame mill, in good repair, machinery been running until very recently, and all in first-class order. There is also a spoke machine in good running order, good supply of water, favourable location; spur from Michigan Central railroad running into yard; good roads. Small payment, in cash; balance, with approved security, on terms to suit purchaser. For further particulars apply, CLARKE & WISMER, Barristers, etc., Essex.

T. SHORTISS, DEALER IN PINE & MINERAL LANDS

9 Toronto Street, TORONTO, ONT. CORRESPONDENCE SOLICITED.

RUBBER BELTING

MONARCH; RED STRIP AND LION BRANDS

MANUFACTURED BY

THE GUTTA-PERCHA & RUBBER MANUFACTURING CO. OF TORONTO

OFFICE, 43 YONGE ST. TORONTO

FOR DISCOUNTS

FACTORIES AT PARKDALE, ONT.

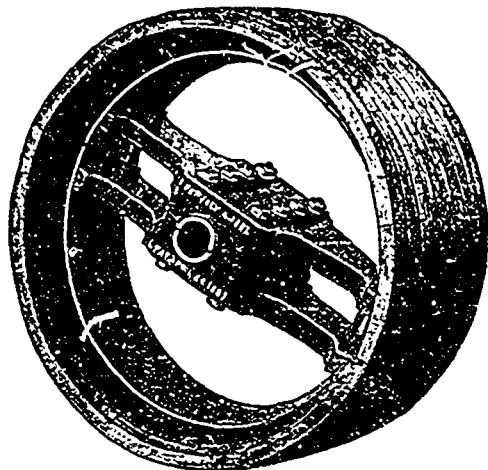
- DODGE PATENT - Wood Separable or Split Pulleys

*Best Belt Surface, Lightest, Strongest, Best Balanced and
Most convenient Pulley in the World.*

In Comparing Prices of Pulleys, please note the following.

1. Our list is lower than most others.
2. Every Pulley is a Split Pulley.
3. Every Pulley is guaranteed to transmit from 25 to 60 per cent. more power than an iron with the same tension of belt.
4. Our Pulleys are 70 per cent. lighter than iron pulleys.
5. The fastening does not mar the shaft.
6. They are perfect in balance.
7. They can be used on many different sizes of shafting.
8. They are the most thoroughly made wooden pulleys in the world.
9. And the handsomest pulley on the shaft.
10. No chances to take. Every pulley as represented or no sale.

Order a Sample Pulley after which you will have no other.



Every Pulley is a Split Pulley.

Made in any size from 9 inches to six ft. diameter with original bores of 3 and 3 1/2 inches, bushings to be used for intermediate sizes; larger bores to order.

WE ALSO MANUFACTURE

Wooden Grooved Pulleys for the Transmission of Power by Manilla Rope.

Under the Dodge Patent System from 5 to 500 H P. State power to be transmitted, speed of shafts, relative position of shafts, distance between shafts, and we can furnish a clear estimate.

With our Patent Bushing System

Every pulley will fit 22 or more different sizes of shafting, therefore, 200 of our Pulleys and an assortment of bushings represent as many as 4,000 iron pulleys, a great advantage to dealers carrying stock.

Apply for particulars to

THE DODGE WOOD SPLIT PULLEY CO., Toronto.

F. J. DRAKE,

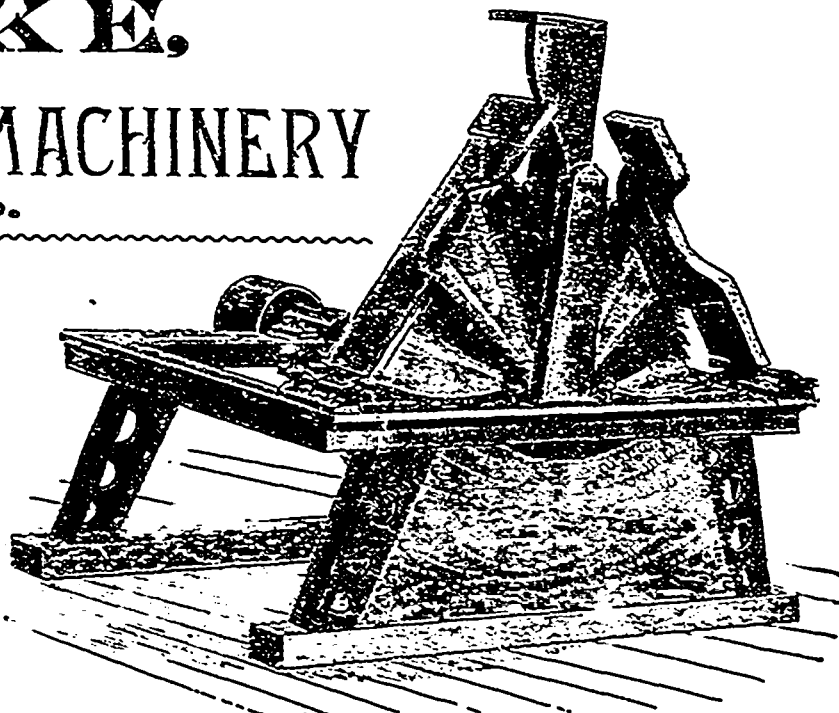
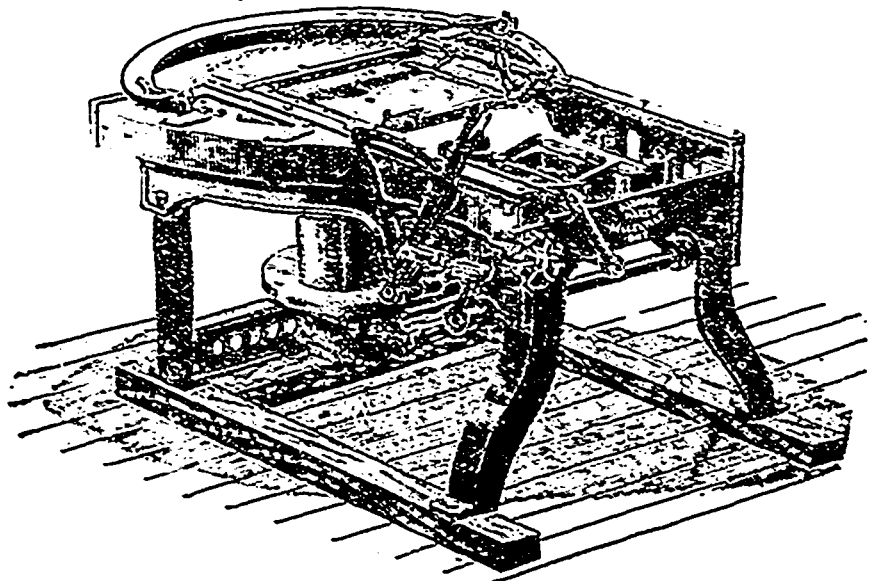
PATENTEE AND MANUFACTURER OF

SAW, SHINGLE & LATH MACHINERY Belleville, Ontario.

DRAKE'S PATENT DAUNTLESS SHINGLE AND HEADING MACHINE

Capacity from 25,000 to 50,000 per day.

The frame of iron throughout, very heavy and rigid, strongly bolted and braced. Carriage very light and strong, made of forged cast steel saw plate, running on steel ways or tracks, will take in a block 18 inches wide and 19 inches long, adjustable for 16 inch or 18 inch shingles.



Drake's Improved Shingle Edger.

With 40 inch saw will make more No. 1 Shingles from the same quantity of timber than any Wheel Jointer in existence.

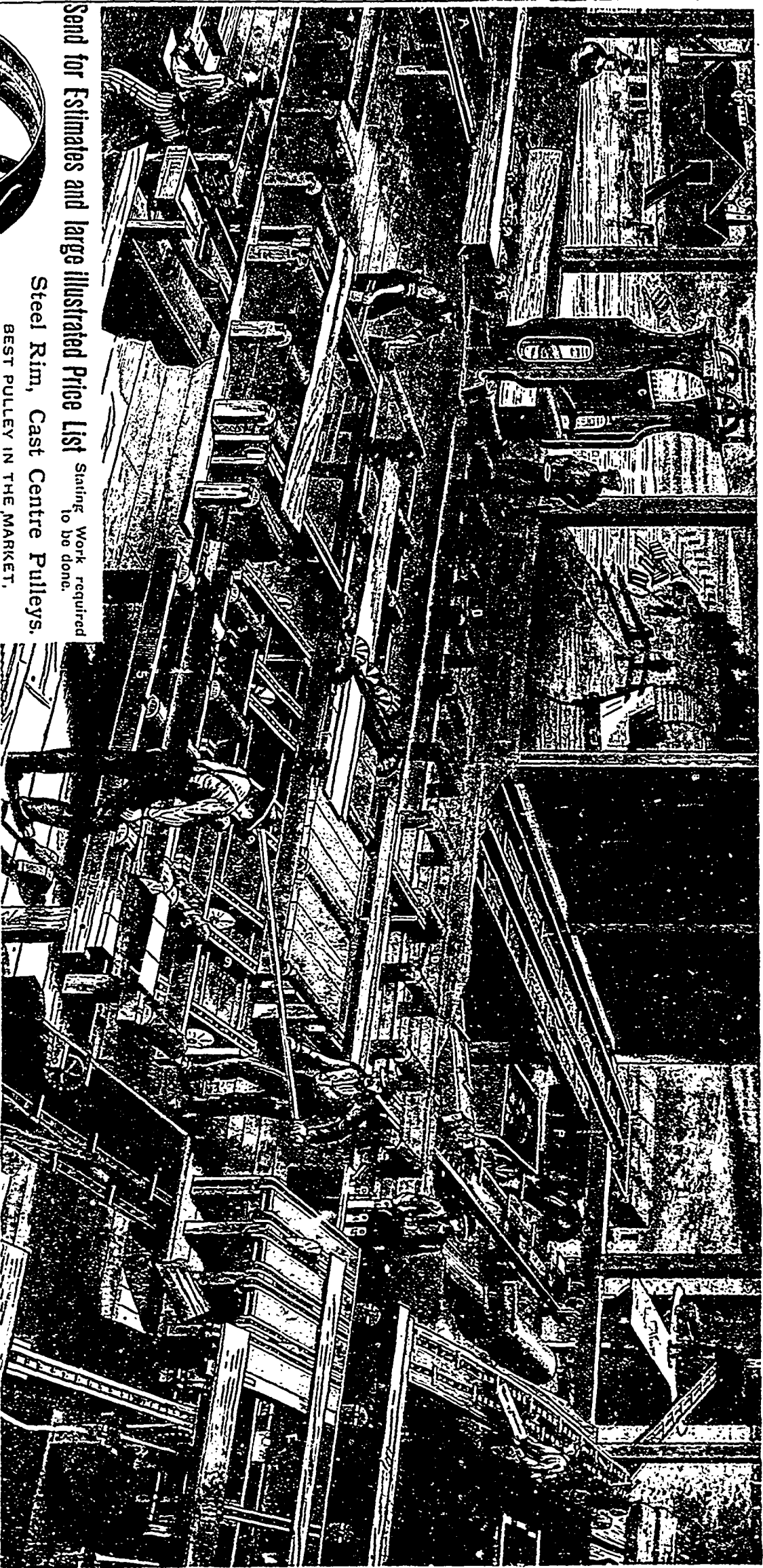
It has a heavy iron frame made for two operators, two inch steel saw arbor, with extra long bearings, driving pulley 8 inches diameter, 7 inch face, saw 40 inches diameter, 16 gauge, speed, 1,600 per minute.

Mill men who have once used this machine will not use any other. For capacity, removing sap-knots, rot or any other imperfections, for making parallel shingles and economy of stock, it is superior to any other.

Also manufacturer of other kinds of Shingle Jointers, both self-acting and hand-act'd Shingle Machines, Packing Boxes, Drag Saw Machines, Bolters, Stationary and Portable Saw Mills, Double Edgers, Single Edgers, Slab Saw Rigs, Bell Wheel Rigs, Lath Machines, Lath Bolters, in fact a general line of Mill Machinery, with Pulleys, Shafting, &c. Satisfaction guaranteed in all cases. Send for estimates on anything required, and the same will receive immediate attention.

EMWART LINK BELTING

For Conveying and Handling all the Products of the Forest, Farm and Mine.



Send for Estimates and large illustrated Price List Stating Work required to be done.

Steel Rim, Cast Centre Pulleys.

BEST PULLEY IN THE MARKET.

Though 25 to 40% lighter than cast pulleys, are stronger, and will transmit more power. Saving of weight is made in rim when it is most desirable. Joints cannot be broken or chipped in transit. The pulleys' smoothness is preserved by the continuous cast iron hub & rim.

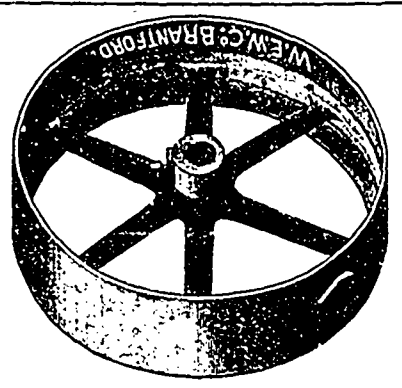
PURSUANT TO ALL SIZES.

24 to 60 inches in diameter any face. Increasing by inches: 60 to 84 inches, increasing by 2 inches; 90 to 144, increasing by 6 inches. All pulleys over 9 feet must be in halves.

MADE SINGLE AND DOUBLE ARK, SPLIT, CLAMP HUB OR SOLID WEB.

W. A. ROSS,

30 St. Paul Street, Quebec.



D. L. BENSON,
718 Craig Street, Montreal.

Steel Rim Patent Friction Grip Pulleys

Furnished for any work and guaranteed to run in action, thoroughly reliable under all circumstances.

- * FRICTION GRIP CUT-OFF COUPLINGS. *
- * * * * *
- * PLAIN SPLIT CAST PULLEYS. *
- * * * * *
- * Adjustable Drop and Post Hangers, *

For wood or iron posts, with bearings adjusted automatically to the motion of the shaft. Send specifications for our best prices.

Waterous Engine Works Co. BRANTFORD, CANADA.

Winnipeg, Manitoba,

COPPERINE

The Millwrights and Engineers Safeguard.

Machinists'



Specialty.

No Hot Boxes. Stands any weight or motion. Best and cheapest metal known for Machinery Journal Bearings. Reliable Machinists use no other. To be had at every enterprising Hardware Store in the Dominion.

ALONZO W. SPOONER, Patentee and Manufacturer, PORT HOPE, ONT

The Casselman Lumber Co.

CASSELMAN, ONT. Successors to FLATT & BRADLEY.

ESPECIAL GOOD FACILITIES FOR SHIPPING. HEMLOCK BILL STUFF OF EXCELLENT QUALITY.

ALSO MANUFACTURERS OF PINE, SPRUCE, ASH, MAPLE AND OTHER HARDWOODS.

CORRESPONDENCE SOLICITED.

THE RATHBUN COMPANY,

DESERONTO, - - ONTARIO,

MANUFACTURERS OF

Doors, Sash, Blinds, Stairs

AND ALL KINDS OF WOODEN HOUSE FINISHING MATERIALS.

CEDAR OIL FOR PURGING BOILERS

CORRESPONDENCE SOLICITED

PETER GERLACH & COMPANY,

MANUFACTURERS OF

Alligator Chisel-Bit Saws.

THE CHAMPION STAVE, HEADING AND SHINGLE MACHINES. ICE TOOLS AND MILL SUPPLIES CLEVELAND, OHIO.

F. PARKIN



Galt File Works

GALT, ONT.



MILL FILES A SPECIALTY.

Write for Price Lists and Mention this Journal.



SCRIBNER'S LUMBER AND LOG BOOK

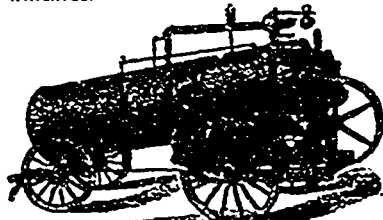
Over One Million Sold.

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

G. W. FISHER, Box 238, Rochester, NY or A. G. MORTIMER, Toronto, Ont.



THE MONARCH BOILER (PATENTED) AND HERCULES ENGINE.



Portable from 6 to 70 horse power. Surpass portable steam power heretofore produced for strength, durability, compactness, and the ease with which they can be moved. The 70 horse power can be taken over the roughest roads, or into the forest, and set up as easily and quickly as an ordinary 20 horse power portable engine, and as firm as a brick-set stationary engine. Engines and boilers of every size and description. Rotary Saw Mills, Shingle and Lath machines, Log Grinders, Planers, etc. Mill machinery and supplies of every description. Every boiler insured against explosion by the Boiler Insurance & Inspection Co. of Canada. Write for circular.

A. ROBB & SONS, Amherst Foundry and Machine works. Amherst, N.S. ESTABLISHED OVER 40 YEARS.

LUMBER TRUCK + WHEELS.



The Montreal *

* Car Wheel Co.

MANUFACTURERS OF

CHARCOAL IRON CHILLED

RAILROAD WHEELS

Offices: New York Life Insurance Building, Montreal.

Works: Lachine, Quebec.



WE make a Specialty of Wheels suitable for the requirements of Lumbermen and Street Car Service, and can supply them Bored, Finished and Balanced.

CORRESPONDENCE SOLICITED

MARK H. IRISH

Broker and

Commission Agent.

Special attention given to buying and selling Saw Mills, Timber Limits and Mineral Lands

In the United States and Canada.

NO SALE NO COMMISSION.

Room 12 Mail Building, Toronto, Ont.

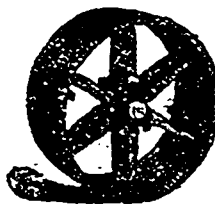
CORRESPONDENCE SOLICITED.

J. J. TURNER, Sail, Tent and Awning Maker.

251 GEORGE AND 154 KING STREETS, PETERBOROUGH.

Canoe, Yacht and Boat Sails made to order. Perfect Fits guaranteed.

Every description of Lumbermen's Supties and Waterproof Clothing.



Menasha Hickory Pulleys

We make the only hardwood bent rim-spoke arm split pulley, only small split pulley, only wooden hangers in the market. Send for discounts & circulars.

Menasha Wood Split Pulley Co. MENASHA, WISCONSIN.



W. J. KRAMER FINE WOOD ENGRAVER

ZIMELINDA ST TORONTO.

ESTABLISHED 1871.

J. W. LANG & CO.

Wholesale Grocers & Importers

33, Front St. East, Toronto.

We shall be pleased to have you write to us for samples and prices of

TEAS, TOBACCOS, SUGARS, SYRUPS, RICE, Etc.

We can and will cut prices fine to large buyers.

We have a

GOOD SOUND, FINE FLAVOURED TEA at 12 1/2 cents.

Write for sample chest. Address,

J. W. LANG & CO. TORONTO.

GEO. BISHOP ENGRAVING

AND PRINTING CO.

LIMITED.

ENGRAVING

On Steel, Copper, Stone and Wood.

LITHOGRAPHING,

PLATE PRINTING,

BOOK and JOB PRINTING.

PHOTO-ENGRAVING,

BOOK-BINDING,

ELECTROTYPING.

Illustrated Catalogues and Reports a Specialty.

ESTIMATES FURNISHED.

169 St. James Street, Montreal.

The D & C TO MACKINAC

SUMMER TOURS.

PALACE STEAMERS. LOW RATES.

Four Trips per Week Between

DETROIT, MACKINAC ISLAND

Petokey, Sault Ste. Marie, and Lake Huron Way Ports.

Every Week Day Between

DETROIT AND CLEVELAND.

Special Sunday Trips during June, July, August and Sept.

Double Daily Lines Between

CHICAGO AND ST. JOSEPH, MICH.

OUR ILLUSTRATED PAMPHLETS

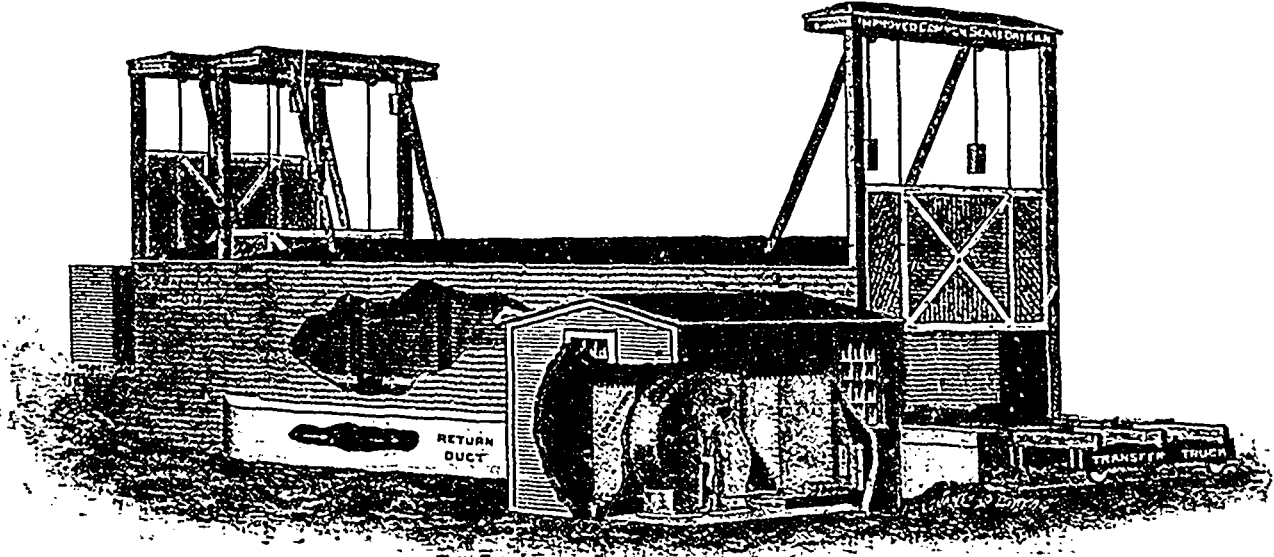
Rates and Excursion Tickets will be furnished by your Ticket Agent, or address

E. B. WHITCOMB, G. P. A., Detroit, Mich.

Detroit and Cleveland Steam Nav. Co.

The Improved Common Sense Dry Kiln

Maintains
its
lead
over all
others.



It is pre-
eminently
the
best process
in use.

It extracts the moisture from the centre; combines active circulation, moderate heat, and condensation of the sap; secures the quickest and best results in the most perfect and economical way known. The process is applicable to old or new kilns. Quickly and repeatedly repays all outlay. For Hardwood Lumber use no other, and avoid all checks, warps and case-hardening. It seasons lumber exactly like, and equal to, air seasoning. More largely used than all others in England and the United States. Address,

St. Albans Mfg. Co., St. Albans, Vt., U. S. A.

C. C. CLEVELAND. G. F. CLEVELAND.
J. L. GOODHUE & CO.,
 MANUFACTURERS OF
Leather Belting
 AND
Lace Leather.
 DANVILLE - - QUEBEC.

GEORGE BRUSH,
 MACHINIST, FOUNDER & BOILER MAKER,
 EAGLE FOUNDRY,
 1 1/2 to 3 1/4 KING STREET,
 MONTREAL, QUE.

RAILROAD, BANK & OFFICE
DESKS
 TEES & CO.,
 300 ST. JAMES STREET, MONTREAL.

F. G. STRICKLAND & CO.
 MACHINERY MANUFACTURERS' AGENTS
 DEALERS IN
Saw Mill Machinery, Engines, Boilers, Etc., Etc.
 NEW WESTMINSTER, B. C.
 CORRESPONDENCE INVITED

GOODDAY, BENSON & CO.
 QUEBEC, P. Q.
General Lumber & Timber Merchants.
 Correspondence is solicited from parties having choice stocks of Hardwood and Pine to offer, either in the log or in sawn lumber.

JOHN BERTRAM & SONS,
 CANADA TOOL WORKS
 DUNDAS, ONTARIO.
 MANUFACTURERS OF
WOOD-WORKING MACHINERY
 MACHINE TOOLS, ETC.
 Write for Prices and Catalogues

F. G. BECKETT ENGINE CO.,
 MANUFACTURERS OF
SAW * MILL * ENGINES * AND * BOILERS
 AND ALL KINDS OF MILL MACHINERY.
 Steam Launches and Tug Boats a Specialty.
 - HAMILTON, ONTARIO -
 SEND FOR CATALOGUE AND MENTION THIS PAPER

GEO. CORMACK
 Wholesale and Retail Dealer in
All kinds of LUMBER.
Lumber Shipped to all parts by Rail or Vessel.
 WHITBY, ONTARIO

B. F. Sturtevant's Patent Progressive Lumber Dry Kiln.

GUARANTEED TO DRY
 -IN-
 Best Manner Possible
 ALL KINDS OF
HARD and SOFT WOOD LUMBER.
 WRITE FOR CATALOGUE.
 91 LIBERTY STREET
 NEW YORK.



NO WARPING CHECKING AND BLUEING
 -WITH THE-
STURTEVANT
 Patent Hot Blast
 Steam Heating
 Apparatus.
 31 N. CANAL STREET
 CHICAGO.

B. F. STURTEVANT, Patentee and Sole Manufacturer, 34 Oliver Street, (corner of Franklin street) BOSTON, Mass., U. S. A.
A. R. Williams, Soho Machine Works, Toronto, General Agent for the Dominion

FRICITION PULLEY BOARD.

The Best Material ever used for Frictions of all kinds.

MANUFACTURED BY

The Dominion Leather Board Company
Montreal, Quebec

Asbestos Mill Board.



Steam Packing

SAMPLES FURNISHED.

PLEASE MENTION THIS PAPER.

CORRESPONDENCE SOLICITED.

TORONTO HARDWOOD LUMBER CO.

Wholesale Dealers in and Shippers of all kinds of

*** HARDWOOD LUMBER ***

83 Front Street West, Cor. Lorne Street,

*** TORONTO, ONT. ***

Correspondence solicited from parties having Hardwood Lumber for sale, giving description of Stock and Prices F. O. B. Cars at Mill. Telephone 2130.

Wanted at once. 300,000 Birch, 1 to 4 in.; Basswood, 1 in.; Hard Maple, 3 in. and Elm. All to be strictly 1sts and 2nds. Prices to be F. O. B. cars shipping point.

ST. CATHARINES SAW WORKS.

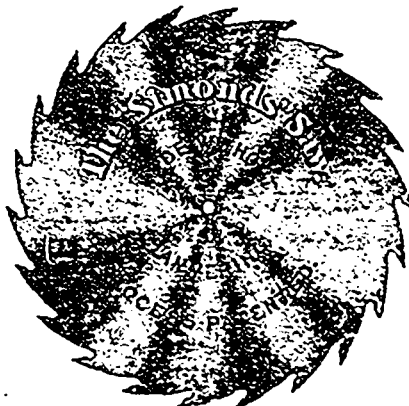
Finest Material, Most Even Temper.

Our Circular Saws are Unequaled.

Our Cross-Cut Saws are Unexcelled.

And our Hand Rip and Butcher Saws

Fully Equal to any on the Continent.



The largest Saw Factory in the Dominion.

OUR SPECIALTIES.

The "Simonds" Circular Saw.

The "Leader" Cross-Cut Saw.

The "Lawson" Butcher Saw.

The "Herling" Hand Saw.

THE BEST IN THE WORLD !

SEND FOR CATALOGUE.

R. H. SMITH COMPANY, LTD., ST. CATHARINES, ONT.

REPRESENTATIVE

TORONTO

LUMBER FIRMS

THOS. H. WILLMOTT.

A. K. McINTOSH.

WILLMOTT & McINTOSH,

Wholesale Dealers in

LUMBER

44 and 46 Front Street East,

TORONTO, - - ONTARIO.

Lumber Shipped to all Parts by Rail or Vessel.

Agents for the Celebrated

Prompt Delivery in all Cases

LUFKIN BOARD AND LOG RULE.

CORRESPONDENCE SOLICITED.

ONTARIO LUMBER CO

Manufacturers and Wholesale Dealers in all kinds of

PINE AND HARDWOOD LUMBER

Lath and Shingles.

HEAD OFFICE:

YONGE STREET ARCADE; - TORONTO.

OFFICES
Hamilton, Toronto
Windsor, Gravenhurst

TELEPHONE
No. 1046

MILLS
Gravenhurst, Huntsville
Katrine, Essex Centre

ROBERT THOMSON & CO.

DEALERS IN

Pine and Hardwood

LUMBER * * * TIMBER

Mills Operating all the year round. Correspondence Solicited.

TORONTO OFFICE
LONDON CANADIAN CHAMBERS 103 BAY STREET,

THOMAS MEANEY,
REPRESENTATIVE.

TORONTO.

DONOGH & OLIVER,

Wholesale Dealers in

LUMBER

OFFICE:

Nos. 16 and 17 Imperial Bank Buildings,

WELLINGTON STREET EAST.

TORONTO, ONT.

DALTON McCARTHY, President.

J. H. EYER, Manager.

Toronto and Midland M'g Co.

(INCORPORATED.)

Wholesale * Lumber * Dealers

AND MANUFACTURERS OF

DRESSED LUMBER, FLOORING

Ceiling, Sheeting, Siding, Shelving, Mouldings of all Descriptions.

Office and Yard:

FOOT OF SPADINA AVE., - TORONTO.

Planing Mills: MIDLAND, ONT.

PORTER, ROBERTSON & CO.

STOCKS
STRIPS
SIDINGS
BILLSTUFF

WHOLESALE

LUMBER

DEALERS

HARDWOODS
HEMLOCK
SHINGLES
LATH, ETC.

Millichamp's Buildings,

35 * Adelaide * Street * East,
TORONTO.

YARD: NORTHERN DOCK, FOOT OF BATHURST STREET.

St. Lawrence Canals.



Rapide Plat Division.

NOTICE TO CONTRACTORS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for the St. Lawrence Canals," will be received at this office, until the arrival of the eastern and western mails on Wednesday, the 23rd day of July next, for the construction of a lift lock, weirs, etc., at Morrisburg and the deepening and enlargement of the Rapide Plat Canal. The work will be divided into three sections, each about a mile in length.

A map of the locality, together with plans and specifications, of the respective works, can be seen on and after Wednesday the 6th day of July next, at this office, and at the Resident Engineer's Office, Morrisburg, where printed forms of tender can be obtained.

In the case of firms there must be attached to the tender, the actual signatures of the full name, the nature of the occupation and residence of each member of the same, and, further, an accepted cheque on a chartered bank in Canada for the sum of \$6,000, must accompany the tender for section No. 1, and an accepted cheque on a chartered bank in Canada, for the sum of \$2,000 for each of the other sections.

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

This department does not, however, bind itself to accept the lowest or any tender.
Department of Railways and Canals,
Ottawa, 13th June, 1890.

By order,
A. P. BARDLEY,
Secretary.

Shingles Wanted.

We would purchase the cut of a few mills making first-class shingles.

WILLMOTT & McINTOSH,
Toronto.

Planing Mill, Lumber Yard
and Sash and Door Factory

FOR SALE.

A rare opportunity is now afforded for acquiring one of the best paying investments in the Town of West Toronto Junction. The Factory is well equipped with the latest and most improved modern machinery, and is in full and successful operation. Railway switch on the premises. Proprietor retiring on account of ill-health. Price moderate and terms to suit. Full particulars can be had on application to

HOOVER & JACKSON,
West Toronto Junction.

TO MILL OWNERS, MANUFACTURERS

AND ALL WHO ARE USING

Leather * Belting

IF YOU WANT BELTING

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

— SEND TO —

F. E. DIXON & CO.

MANUFACTURERS OF

PATENT LAP-JOINT STAR RIVET

* LEATHER * BELTING *

70 King Street East, Toronto.

Sole Agents in Canada for the

CELEBRATED PHOENIX OIL

The Only Perfect Belt Dressing.

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

Galt * Machine * Knife * Works.



MACHINE KNIVES

OF EVERY DESCRIPTION FOR

Planing, Moulding & Stave Cutting.

SEND FOR PRICE LIST

PETER HAY, - - - GALT, ONT.

THE RATHBUN COMPANY,
DESERONTO, ONT.,

MANUFACTURERS OF

* TERRA * COTTA * FIRE-PROOFING *

For Use in Old and New Buildings.

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

NAPANEE CEMENT COMPANY

— MANUFACTURERS OF —

(LIMITED.)

Hydraulic Cement

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

ENDORSED BY LEADING RAILWAYS AND CONTRACTORS.

ROACH * LIME,

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

DOMINION SAW WORKS!

JAS. ROBERTSON & CO.

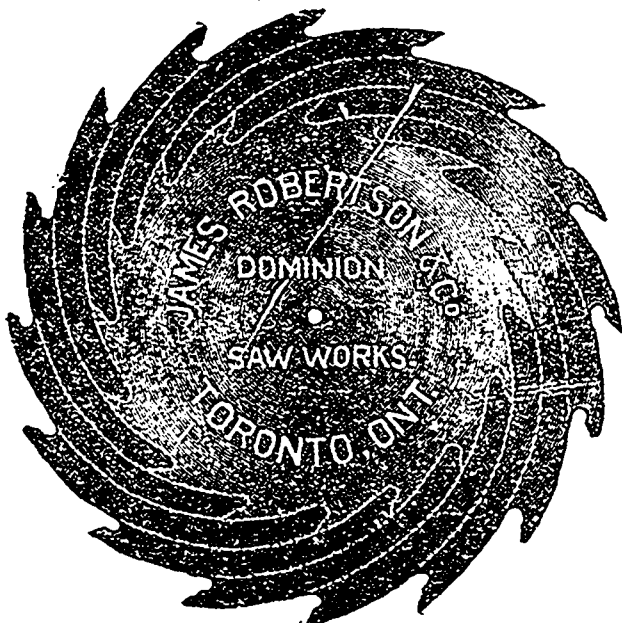
253 to 267 King Street West,

Toronto, - - Ontario.

JAMES ROBERTSON

Dalhousie and William Streets,

Montreal, - - - Que.



MANUFACTURERS OF SAWS

Circular. Shingle. Gang. Cross Cut. Concave. Mulay. Drag. Grooving.

Thuber's Royal
ANTI-FRICTION * BABBIT * METAL.

Importers and Dealers in

- Band Saws, Emery Wheels, Saw Sets,
Saw Swages, Rubber Belting, Iron Pipe,
Saw Gummers, Leather Belting, Files, &c.

EVERY SAW FULLY WARRANTED.
Prices on Application.

