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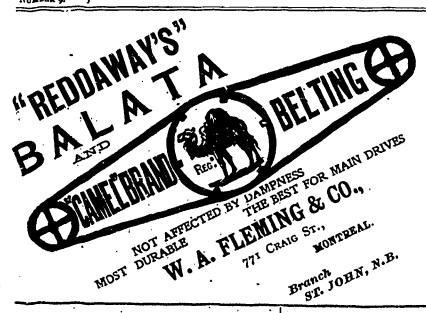
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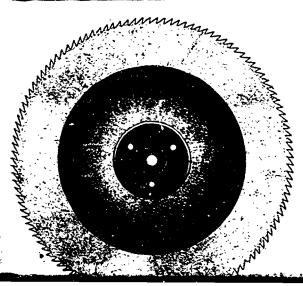
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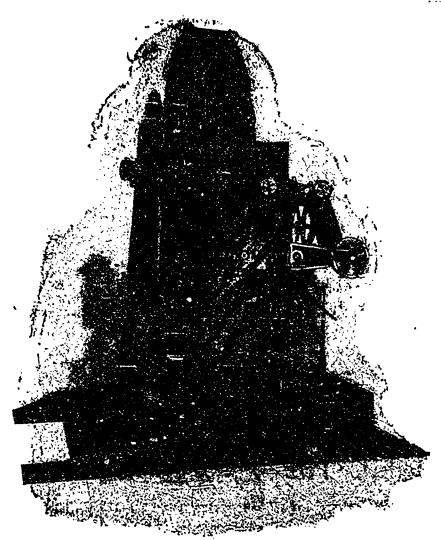
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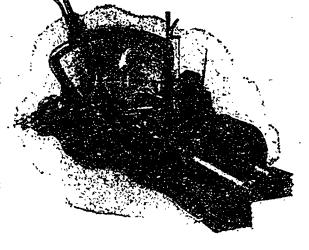
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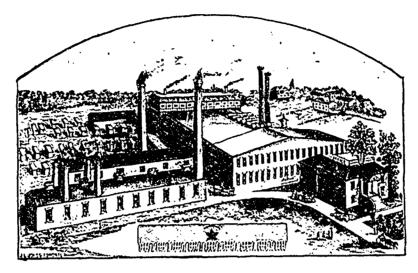
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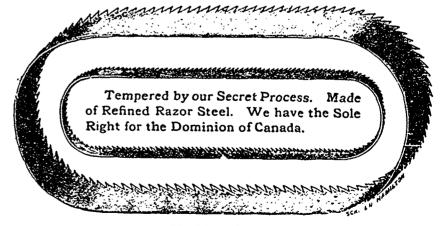
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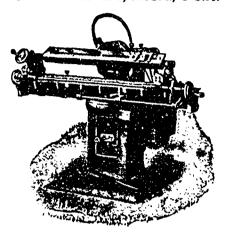
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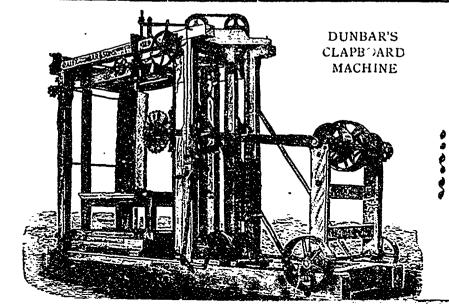
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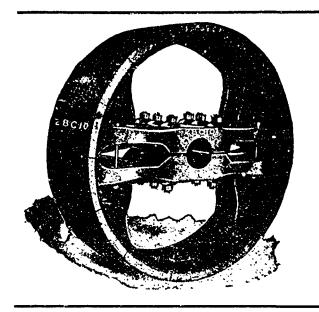
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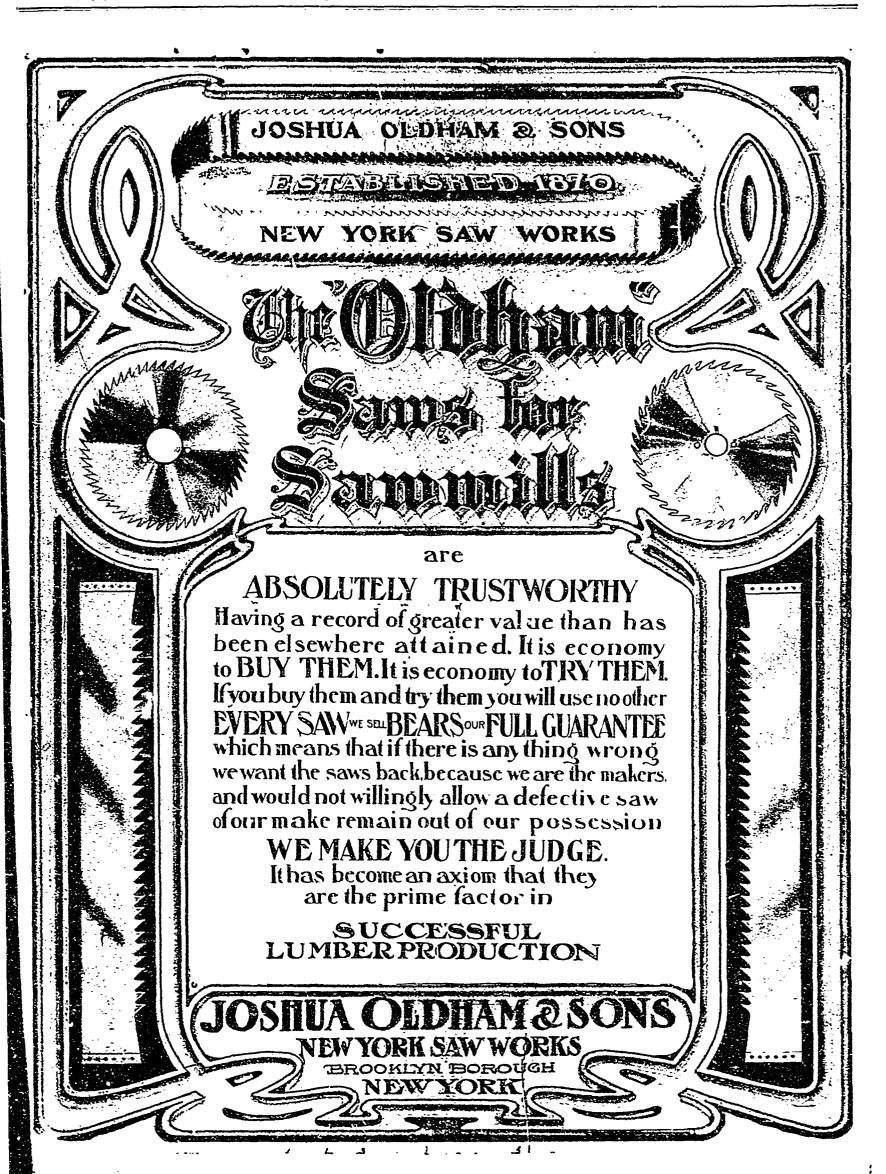
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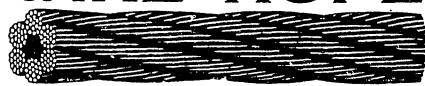
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THE CANADA LUMBERMAN

VOLUME XXIV. }

TORONTO AND MONTREAL, CANADA, SEPTEMBER, 1904

{TERRIS, \$1 00 PRR YEAR { Single Copies, 10 Cents

THE RAINY RIVER LUMBER COMPANY.

The Rainy River Lumber Company, Limited, composed of American capitalists, have recently completed what is doubtless one of the most modern saw and planing mill plants in America. The location is at Rainy River, Ont., a divisional point on the Canadian Northern Railway, 155 miles east of Winnipeg. The construction of the mill was commenced in October, 1903, and finished May 1st last, operations being commenced ten days later.

The main saw mill building, shown on following page, is 220×62 feet; the lath and shingle mill 120×32 feet; the filing room 46 $\times 32$ feet. The main equipment of the saw mill consists of two large double cutting band mills, one 52-inch gang and two mammoth edgers, each fed by two men.

The saw mill power house is 76 x 54 feet,

saw; 54 inch band resaw; one cut-off saw; one timber planer, capable of handling timber 24 inches square.

The power house for the planing mill is 54 x 46 feet, and is equipped with a 20 x 42 Corliss engine and a battery of two boilers 72 inches by 18 feet, with automatic feeds. The smoke stack is 172 feet high, and the burner 22 feet by 120 feet.

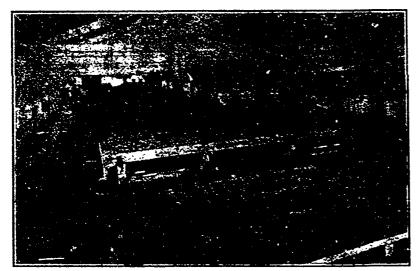
The capacity of the saw mill is 500,000 feet in twenty-four hours, and of the planing mill and shipping department 400,000 feet.

The company have a very complete lighting system, the saw mill being lighted by a 50 k.w. direct connected generator driven by a 12 x 12 Ideal engine, and the planing mill by r 30 k.w. belted generator and a 10 x 12 Ideal engine.

Shipping facilities are provided by two spare tracks leading from the main line of the Cana-

FROM TREE TO CAR.

From the tree to the car loaded with lumber is not a very far cry generally, if measured in miles and compared with the distance the car of lumber travels in getting to the consumer, but there is plenty of room between the tree and the car, says the St. Louis Lumberman, to make or mar the success of the mill man, especia.', when lumber prices get close enough to make the margin of profit small. When that time comes it is a question of who can cover the distance from tree to car at the smallest cost per thousand feet. Did you ever go over the ground carefully, step by step, as it is covered by mill men in every-day practice, and try to figure out where and how a saving in cost 'could be effected? If you have you have probably noticed that the average mill man puts most of his saving grace, so far as





VIEWS OF THE RAINY RIVER LUMBER COMPANY'S MILL AND DOCK, RAINY RIVER, ONT.

equipped with one 32 x 48 Corliss engine and a battery of six boilers 72 inches by 18 feet, complete with Dutch ovens and automatic feeders. The smoke stack is 90 inches in diameter and 172 feet high; the refuse burner 32 feet in diameter and 120 feet high. At the rear of the mill there is a timber dock 100 feet long.

The sorting shed is 320 feet long, with accommodation for 162 lumber cars along its sides, and 500 cars are used in the transportation of lumber from the sorting shed to the yard and from the yard to the planing mill. The yard is equipped with a complete trackage system, covering 17.4 track miles. There are two tracks in each piling alley, and one track in the rear of each alley for the purpose of hauling dry lumber to the planing mills

The planing mill is 140 x 72 feet and is equipped with the following machines: 32 inch double sizer; 30 inch double sizer and surfacer; 5 matchers; 2 moulding machines; one circular rip saw; one circular siding re-

dian Northern Railway, one to the timber loading dock and the other to the dry-shed, loading platform and planing mill. A new drying shed 62 x 270 feet is now nearing completion.

The piling ground is of sufficient area to accommodate a vast quantity of lumber and is most conveniently laid out.

The company own a sufficient quantity of standing timber to keep their mill in operation for twenty years. The officers of the company are: President, Thomas H. Shevlin, Minneapolis; vice-president, W. F. Brooks, Minneapolis; secretary, E. L. Carpenter, Minneapolis; assistant secretary, George S. Eddy, Minneapolis; treasurer, George S. Parker, Rainy River, Ont.; managing director, James A. Mathieu, Rainy River, Ont.

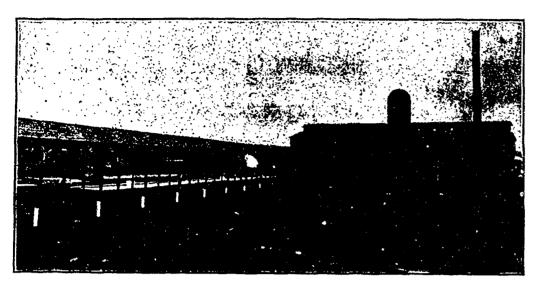
The saw mill and veneer plant of the Lake Superior Company at Sault Ste. Marie, Ont., are again to resume operations. One thousand men are advertised for to get out saw logs and pulp wood.

reducing cost is concerned, on some particular step in the process.

One will make a specialty of good cross-cut saws and good men to use them, and follow it up so thoroughly and persistently that he will reduce the cost of converting a tree into logs to a point far below the average. Another man will give special attention to teams, and the team class of economical mill men is both large and important, some of the most successful mill men having worked out their success almost entirely from being thorough teamsters, pastmasters in the art of keeping up teams and getting the most work out of them. Others take to the railway and mechanical appliances for handling logs, and then there is another, and a large class at that, of mill men who devote by far the larger portion of their economical energy to the manufacturing end, letting nothing pass by that gives promise of reducing the cost of converting logs into lumber. Of course, there are those who combine all of these to an extent, men who look closely

after every step in the process from tree to car, but generally the men who concentrate their attention on some one step in the process make the most rapid strides in that one line. They are specialists in a way, and it is to the specialists in different lines that we naturally look for new ideas, so to get at the ideal all along the line there is probably no better way than

log wagon instead of a heavy engine that is quite a load in itself. It would at least be interesting to know if any experiments have been tried along this line, for from a theoretical standpoint it looks like there are some possibilities in it, and maybe if we get started to talking and thinking about it something will be developed.



VIEW OF MILL AND SORTING SHED, RAINY RIVER LUMBER COMPANY, RAINY RIVER, ONT.

to garner ideas from the leading specialists in the different steps and combine them.

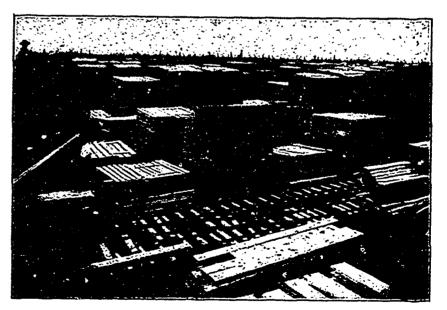
An idea that has had a more or less checkered career in connection with logging operations and still refuses to stay out of the game entirely is the traction engine. A case in point is furnished by A. P. Wylie, a cooperage stock manufacturer of Belle Center, Ohio, who recently bought timber in Tennessee and has equipped a plant down there. He has an 18 horse-power engine that was successfully used up in Ohio for hauling staves to the railroad, pulling a carload of staves at a trip on four wagons. Now he has taken this engine down to his Tennessee plant and proposes to haul logs with it with a confidence of getting good service from it during the summer season, when the roads are comparatively free from mud. And he will likely do just as well as he figures with it, for he knows his business thoroughly in every detail and is well enough acquainted with this engine as a road machine from his past experience with it, to have a pretty well defined idea of what it will do. Then the question is, will the traction engine in its improved state become anything of a factor in southern logging? Its record in the past does not speak so well for it in that territory; it has been used quite extensively and apparently very successfully in the north-

est woods, its advent dating back quite a number of years, but its career in the south has been rather checkered—so much so, in fact, as to dampen what early enthusiasm it did create. Several mill men tried expensive experiments with it in one form and another, usually terminating in putting the engine under a shed and using it to drive a small mill or some other machinery. But maybe when it gets its second wind and we go at it with a wider knowledge and better engines the outcome will be different, and maybe it wont. It looks like the modern idea in this line should turn to something in the form of an automobile

The railroad for transportation and the mechanical log loader make the best combination to be had where the timber belt is sufficiently heavy to justify the outlay, and it is only a question of modern ideas and appliances in carrying out the details of the work under such conditions, but there are other conditions, and there comes the rub. We have come to the point where available heavy belts of timber are not so plentiful and must now turn quite extensively to the small tracts scattered here and there that do not justify railroad building.

at the planing mill or finishing plant. Some mill men have followed this plan more or less in the past, but we are coming to a point where we will be confronted with this scattered timber problem so generally it is not a matter of mere incident here and there; it is a big problem, covering a wide field, and the question is, which direction shall we take in the effort to solve it; shall we turn to the portable mill or seek improvements in logging methods? If it is logging methods it means mechanics in some form or other.

To leave the log road for a while and get into the mill, there is a seasonable topic for discussion in the matter of house cleaning, the use of those twin implements of cleanliness and safety, the broom and the whitewash brush. Their value as an asset may not show up in figures on your books, but they do not draw heavily on the expense account, and they actually give more returns for the time and money expended than any other appliances about the place. The ghost of spontaneous combustion that begins to haunt the mill man as soon as the hot, dry weather comes along can be laid with the broom and buried with the whitewash brush till his chances for a walk in the night are slim enough to make rest easy at night and insurance rates lower. The real facts in the case of most mysterious fires are that the majority of them originate from sparks falling in the dust about the mill and yard, where fire smolders along unseen until it reaches a point or object to induce flame, and then it gets into action at a lively rate. This fact has been demonstrated time and time again, not only on the point of unobtrusive smoldering in the dust, but also in the matter



LUMBER YARD OF THE RAINY RIVER LUMBER COMPANY, RAINY RIVER, ONT.

With timber of this class it becomes a question of small mills and the hauling of rough lumber or the larger and more modern mill plants with some improved method of logging, and it will unquestionably be more satisfactory if a method of logging can be developed that will permit the latter. If it can not be done the saw mill men might take up the plan of the oak stave men of having a finishing plant at some central point and portable mills to move here and

of sparks so insignificant as to be unobservable in daylight, frequently starting fires in unexpected nooks and corners about the mill and yard. The first remedy is to use the broom, use it persistently and unsparingly all over the mill. Beams, joists, journal boxes, and, in fact, everything that accumulates dust, no matter how inconvenient to get at, should feel the broom, and then follow with the whitewash brush, or with its modern successor, the spraying machine.

BRITISH COLUMBIA SAW MILLS

Photographed and Described by Our Travelling Representative.

THE FERNIE LUMBER COMPANY.

The accompanying illustration shows the saw mill of the Fernie Lumber Company, Limited. The company was organized by Mr. McDougall and Mr. L. M. Proctor in the year 1900, operations commencing by the purchase of the mill and limits of W. B. McClain and John McDonald at Fernie, the present mill being merely an enlargement and improvement of the one purchased. The company's entire plant consists of a saw mill, planing mill and lath mill, occupying with the yard and piling grounds a site of fifty acres, out of the 113 acres owned by the company in the locality, one mile east of Fernie, on the Crows Nest Pass Railroad. To the north flows the roaring Elk river, running for some distance almost alongside the mill. It is down this stream that the logs are driven to the mill from the company's limits some distance east, consisting of 7,000 acres of spruce, fir, pine and cedar. During the winter season they are hauled to the mill by sleighs.

The saw mill is 40 feet by 80 feet in dimensions and is equipped with circular, edger, trimmers, butting saws, log haul up, steam nigger, steam feed conveyors, etc. It has a capacity of 35.000 feet per day of 10 hours. The planing mill runs parallel to the saw mill, the lumber being carried from one to the other by live rollers. It is equipped with three planers. The lath mill has a capacity of

the vicinity of Fernie, a large local trade has sprung up. At the time of writing a good deal of local trade is being done in rebuilding the business section of the town which was devastated by fire in May of this year.

Mr. John Alexander McDougall, popularly known as "Sandy", president of the company, is a product of Arnprior. Ont., where he was engaged in the lumber trade from childhood. He came west in 1898, cutting timber for the projected Crows Nest Past Road and finally drifting back into the saw mill trade. Mr. L. M. Proctor, the vice-president, is a native of Ogdensburg, New York, where he was engaged in the lumber trade. He came west in 1898, working on the construction of the Crows Nest Road. Both gentlemen are men of ability and are held in the highest esteem by the citizens of Fernie.

The company purpose building in the course of a few months a logging railroad four miles long, of the standard gauge, to their limits. Power to commence with will be supplied by horses, but later will be superseded by the company's own locomotives. The estimated cost of the road will be \$6,000 a mile.

HAZELMERE LUMBER MILL.

Among the latest additions to the lumber industry of the Coast is that of the Hazelmere Lumber Mill, owned by G. M. Thrift, an experienced western logger. Building operations

30 feet broad and is equipped with two Simond's log saws, rollers, log hauls, planers, with matcher and flooring machine complete. The capacity is 40,000 feet per day of ten

The boiler house is separated just a few feet from the main building and is equipped with one boiler and one engine.

Although just commencing operations, they have already secured large orders from the local trade and are receiving every day inquiries from Manitoba, the Territories, and even as far east as Toronto. The mill ent-ploys thirty hands.

D. & J. HADDEN.

The D. & J. Hadden mill, engaged in the manufacture of shingles and clear cedar, is



AN ONTARIO SHIPMENT BY D. & J. PADDEN, CLOVERDALE, B. C.

situated at Cloverdale, B. C., eight miles from the boundary of the State of Washington and on the line of the Great Northern Railway, which has just lately tapped the growing city of Vancouver. It was built just one year and a half ago by the owners, who had from Orillia, Ontario, being formerly owners of the Foxmead mills there.

The main building is 100 feet long by 50 feet wide. It is equipped with two of John-



Saw Mill of the Fernie Lumber Company, Fernie, B. C.



CUTTING LOGS FOR THE HAZELMERE LUMBER COMPANY.

25,000 daily. Power for driving the machinery is obtained from two large Waterous engines and two boilers. Connected with the power house is a filing room and blacksmith shop.

The principal timber manufactured by this firm is spruce, with a slight sprinkling of tamarac and pine. Mr. Proctor assures the writer that so popular has become the demand in the Territories for this mountain spruce during the past year that they are finding difficulty in keeping up with the orders. Most of the output is marketed in the Territories and Manitoba, although during the past six years, since the advent of the coal mines in

were commenced in January of this year and completed on May 29th. The mill is splendidly situated on the Great Northern Railway three miles from the boundary and right in the centre of some magnificent limits of fir, cedar and spruce owned by Mr. Thrift. This proximity of a plentiful supply of good logs will no doubt prove a great asset in days of keen competition, enabling the owner to save the freight charges for hauling and thus be in a position to sell cheaper than his rivals to the local trade.

The mill was designed by Mr. H. Humphreys, of Drayton, Wash. It is 100 feet long by

son's upright shingle machines manufactured at the Schaake Machine Works, New Westminster, lumber rig and planer. The output is 60,000 shingles per day and 15,000 feet of cedar, all of which is marketed locally and in Ontario.

Power for driving the machinery is derived from one boiler and two engines situated in a fireproof building fully 50 feet clear of the mill. A dry kiln and machine shop are other adjuncts of the plant.

The owners, who are both bright, energetic men, full of vim and snap, always being ready to seize an opportunity, purpose increasing the capacity of the mill and going still more largely into the manufacture of clear cedar.

THE Ganada Lumberman

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ADVERTISING RATES ON APPLICATION.

THE CANADA LUMBERMAN is published in the interests of the lumber, wood-working and allied industries, being the only representative in Canada of these important interests. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Especial pains are taken to secure for publication in the Weekly Lumberman the latest and most trustworthy market quotations throughout the world, so as to afford to the trade at home and abroad information on which it can rely in its operations. 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.

Advertisers will receive careful attention and liberal treatment. For manulacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, wood-working factories, pulp mills, etc., the CANADA LUMBERMAN is undoubtedly the cheapest and most profitable advertising medium. Special attention is directed to "WANDED" and "For SALE" advertisements, which are inserted in a conspicuous position on front page of the Weekly Edition.

MILEAGE AND STUMPAGE CHARGES.

The new regulations imposed by the New Brunswick Government on Crown timber lands have now been in operation a year. It will be remembered that the annual charge was increased from \$4 to \$8 per square mile, and the stumpage dues on spruce, pine and fir saw logs from \$1 to \$1.25 per thousand feet, and on cedar from 80 cents to \$1.25. The result of the first year's operations has clearly shown that the advanced charges were imposed at an inopportune time, for the lumber industry of New Brunswick is now in a very depressed condition. With the high wages which have prevailed, and the fixed charges incident to the ownership and cutting of timber, the lumbermen find it almost impossible to operate at a profit.

A delegation representing the Lumbermen's Association recently waited on the Government to ask that the mileage on timber limits be reduced to the old rate of \$4 per mile, this rate to continue at least until the lumber market improves. It was pointed out that the higher charges were imposed after a few years of prosperity in the lumber trade, and at a time when the signs pointed to a reaction. Since then this condition has been realized, the present season being the most unsatisfactory that has been experienced for many years. It is most difficult to place a cargo of lumber in the British market, and, with the exception of the cargoes that were sold during the early spring, very few shipments will be made to that market.

The increased mileage charges represent about \$40,000 annually, while the stumpage increase amounts to approximately \$43,000. The total is not a large amount, but under existing conditions the lumbermen consider it a hardship to be compelled to pay the higher rates. As it is in the interest of the Govern-

ment as well as of the province that the saw and shingle mills should be operated, it is believed that the Government will at least accede to the request for a lower mileage charge.

RED CEDAR SHINGLE DIFFICULTIES.

The shingle mills of British Columbia, unlike those in Eastern Canada, can be operated the year round. The possible production is the daily capacity multiplied by the number of working days in the year. A comparatively small mill will, in the course of twelve months, produce a considerable quantity of shingles, and during a portion of this productive period the consumption of shingles is almost at a standstill. The large number of new mills which have been built within the last three years have a combined capacity greater than is generally supposed, and, taken in conjunction with the old established mills, the output has been greatly in excess of the demand. Overproduction has resulted in a demoralized market, prices having steadily weakened for some months past, until now they are at the point where the manufacturer's profit is entirely obliterated. This is all the more regrettable for the reason that the red cedar shingle is in popular favor and has always been in good demand. The North-West trade this year has been particularly brisk.

Various plans have been originated to maintain prices at a reasonable basis and prevent, if possible, serious loss to the trade. This has been found difficult of accomplishment. The large number of small mills were a great source of annoyance and even some of the larger manufacturers did not adhere to association prices, so that it soon became a question of price cutting to obtain orders, and there is now practically no standard prices. When business is brisk and orders plentiful, an association designed to regulate production and maintain prices may easily be kept together, but when heavy stocks are being carried for which there is little demand, many are apt to yield to the temptation to break away from all unity with confreres and endeavor to reduce the burden they are carrying even if at prices which represent no profit.

How best to handle the Ontario trade is a proposition to which the B.C. shingle manufacturers have given much consideration, without, apparently, arriving at a satisfactory solution. The appointment of five selling agents for the province was one of the plans inaugurated, but after a test it was found impracticable. Another proposition that has been considered is the appointment of a secretary through whose hands all orders for the Eastern trade should pass, he in turn to appoint district re. presentatives where found advisable to do so. By some it is believed that such a plan might be successful, but others, remembering the fate of previous efforts, are skeptical.

We must confess that the immediate outlook for the B.C. shingle industry is not promising. It will probably pass through a period of reformation, during which time some of the weaker manufacturers may succumb. Some mills will be closed down and probably dismantled. Little money is likely to be made by either manufacturer or dealer. In the meantime the

market will expand and a year or two hence production and supply will get closer together and the business will once more be on a substantial footing. This forecast is not very acceptable to those who have invested their money in shingle plants, but it is a fair statement of the situation, all the more deplorable because brought about solely by the shingle manufacturers themselves rather than by trade depression. Too many persons, with no experience and little capital, sought to become rich through the operation of a shingle mill. The craze for shingle manufacturing has now, we hope, spent its force, and, disastrous as have been the results, a useful lesson may have been learned.

FIRE RANGING ON LICENSED LANDS.

The Government of the Province of Quebec are about to adopt new regulations looking to the better protection of timber lands from fire. Before finally adopting the new laws it was considered advisable to ascertain the views of the limit holders, for which purpose a meeting was held in Ottawa recently. The suggestions submitted to the meeting by the Government

First. To increase the fire tax on limit holders from 171/2 cents to 25 cents per square

Second. To increase the number of fire rangers from 65 to 100 for fire districts Nos. 1 and 2.

Third. To require lumbermen to pay the whole cost of extinguishing fires instead of one-half as at present.

The lumbermen agreed to the first and second suggestions, but claimed that the Government should continue to pay one-half the cost of extinguishing fires. The discussion on the subject brought up the question as to the relative merits of the Quebec system as compared with that existing in Ontario, and the opinion of many of the licensees strongly favored the method in force in Ontario. In this province the government charges no fire tax. The limit holder is allowed to name as many fire rangers as he considers necessary for the safe protection of his limits, the cost thereof being divided equally between the Government and the licensee. The rangers are selected by the licensees, but the Department of Crown Lands reserves the right to reject or remove any person who r they consider unfit for the position. This system has provided very efficient protection, the limit holders fully realizing its benefits and availing themselves of its operation. The number of rangers employed on licensed territory has increased from thirty-seven in 1885 to two hundred and fortyfour in 1903.

A comparison of the operation of the systems in the two provinces leads one to favor the Ontario system from the standpoint of both efficiency and economy. According to the last report of the Minister of Lands, Mines and Fisheries, the area of timber lands under license in the Province of Quebec was 62,730 square miles. The number of fire rangers on this territory was only seventy-two, whereas the fixed charges to be paid by license holders, according to the rate of 171/2 cents per square mile, was \$10,977. Each ranger would have an average of 750 square miles of territory under his supervision, and the average cost to the licensee would be \$152 per ranger. It must be admitted that seventy-two rangers are not sufficient to patrol 62,700 square miles, and the wages of all the extra rangers necessary for the proper protection of the limits must be paid by the limit holders.

In the Province of Ontario there were under license in 1903 17,033 square miles of timber limits, on which two hundred and forty-four fire rangers were employed. The cost to the licensees was \$31,257. Thus there would be provided one ranger to every seventy square miles, at an average cost to the licensee of \$138 per ranger. The cost of extinguishing fires is divided between the Government and the licensee.

The Ontario Government and the timber limit holders alike seem well satisfied with the operation of the fire ranging system, and other provinces might, with advantage we think, adopt this system. Unfortunately, several of the provincial governments have as yet made no provision for fire ranging. Whether or not the destructive fires which have occurred recently in British Columbia would have been prevented by a staff of fire rangers we cannot say, but no time should be lost in adopting such regulations as would be likely to reduce the danger from fire to the minimum.

EDITORIAL NOTES.

According to the Government reports, for the period of ten months ended April 30th of the present year, lumber was imported into Canada, largely from the United States, to the value of \$4,676,556, as against \$2,920,876 in the corresponding period of the previous year. Thus American lumber sent into Canada almost doubled in value in the last ten months, as stated.

Occasionally argument is heard against the imposition of an import duty on United States lumber. A gentleman who deplores the idea of taxing raw material, and who has given some study to the Canadian timber supply, points out that increasing difficulty is being experienced by lumber dealers and contractors in securing bill stuff in Canada. He claims that white pine has become too valuable to be used for that purpose, and that it is almost impossible to get a large order for dimension timber executed by the white pine mills. For this reason he argues that we must import southern pine. His remarks, of course, were intended to apply particularly to Ontario. It is an argument that has not been advanced heretofore to our knowledge, and one which is entitled to some consideration.

The lumber manufacturers of Nova Scotia are likely to adopt a wise policy in connection with the coming winter's logging operations. In view of the prevailing depression in the British market and the low price of spruce lumber, there is a strong feeling in favor of curtailing the production of logs, a decrease of 50 per cent. being spoken of. A meeting of the Lumbermen's Association will be held at

an early date, at which such action is likely to be agreed upon. It is probable that it will also be decided to hold such lumber as is now on hand rather than attempt to market it in Great Britain. Such a policy is to be commended and we sincerely hope that it may be strictly carried out. Timber is too valuable to be sacrificed, and it will make more money for its owner by being permitted to stand in the tree than if cut down and sold at an unfavorable time.

We wou'd direct the attention of our readers, and especially the retail dealers of Manitoba and the North-West Territories, to the large number of lumber and shingle manufacturers of British Columbia now advertising the products of their mills in the columns of the monthly and weekly issues of THE CANADA LUMBERMAN. The list includes some thirty-five of the largest firms in the province and

represents an invested capital of about \$20,-000,000. During the past twelve months these manufacturers have marketed their stocks in Manitoba and the Territories in the face of considerable difficulties and disadvantages, such as excessive freight rates and the competition of surplus stocks of low grade American lumber; but, with this latter evil eliminated, as we hope it will be, the volume of trade is certain to assume very large proportions. This is as it should be, and we feel convinced that the longer the acquaintance of the buyer with the B. C. mill products, the more convinced will he become of their excellent qualities, and we assure all retailers that they will do well when in search of lumber to carefully consider the B. C. product.

Subscribers are expected to send us lumber news items from their locality. Don't neglect to advise us of all improvements, business changes, etc.

IMPORTS OF FOREST PRODUCTS

The following table shows the value of the products of the forest imported free of duty into Canada from the United States during the months of March, April, May, and June, 1904. The table is compiled from the unrevised monthly statements of imports and exports issued by the Department of Trade and Commerce:

Class of Timber.	March. Value.	April. Value.	May. Value.	June. Value.
Sawed or split boards, planks, deals and other lumber	\$207,405	\$260,904	\$236,800	\$388,904
Logs and round unmanufactured timber	29,894	11,062	17,885	84,487
Timber or lumber, hewn or sawed, square or sided	6,489	29,967	11,705	46,005
Cherry, chestnut, gumwood, hickory and white wood	45,861	42,633	55,561	48,625
Oak	122,823	137,252	125,926	164,382
Pitch pine		19,562	29,745	69,401
Mahogany		15,259	5,885	0,840
White ash		9,770	14,469	10,155
Walnut	2,855	9,259	4,161	4,6.6
Spanish cedar	322	313	317	
African teak	1,498	316	139	586
Pine and spruce clapboards	1,651	747	361	18
Laths	3,335	7.379	4,825	10,139
Shingles	1,621	3,058	693	976
Staves	16,502	8,013	15,011	8,465
Shovel handles	6,520	2,209	2,698	7,370
Felloes of hickory, rough sawn to shape only	1,936	2,560	4,412	2,834
Handle, heading, stave and shingle bolts	4,136	1,526	4,291	381
Hickory billets	555	79	110	979
Hickory for spokes of wheels	390	² 53	244	76
Hickory spokes, rough turned	27,279	29,860	18,027	22,144
Hubs for wheels, posts, last blocks, etc	4,219	2,596	3,287	4,138
Fence posts and railroad ties	4,346	13,572	S,830	28,693
Total	\$524,265	\$60), 169	\$625,382	\$910,214

EXPORTS OF FOREST PRODUCTS

The following table shows the value of the products of the forest exported from Canada to the United States during the months of March, April, May, and June, 1904. The table is compiled from the unrevised monthly statements of imports and exports issued by the Department of Trade and Commerce:

Class of Timber.	March. Value.	April. Va uc.	May. Value.	June. Value.
Planks and boards	\$205,830	\$347,191	\$523,001	\$1,572,224
Basswood lumber	332	756	435	1,866
Pine deals	237	1,338	7,890	7,508
Spruce and other lumber		12,696	7,819	15,227
Laths	28,391	29,857	54,830	135.431
Pickets		341	6,215	18,586
Scantling	3,387	1,698	16,230	16,267
Shingles		1,6,429	153,137	252,697
Shooks	1,605	379	6,943	7,250
Staves and headings	4,217	4,256	8,382	12,840
Telegraph and other po'es	1,155	4,924	1,990	6,205
Cedar and tamarac posts	• • • •	1,397	2,262	7,856
Shingle bolts	500	138	350	ıSo
Sleepers and railroad ties	5,816	12,493	14-327	34,496
Stave bolts		113	163	930
White pine timber	574			25
All other square tunber		507	265	808
Pulp wood	117,229	142,204	163,225	277.531
Lumber not elsewhere specified	3,480	5,783	14,195	17,868
Cedar logs	90		700	4,920
Elm logs	24	370	70	1,115
Hemlock logs	576	48	15,497	4,343
Spruce logs	2,702	2,958	33,221	5.957
All other logs	16,692	10,429	30,747	63,399
Total	\$469,585	\$716,305	\$1,062,004	\$2,462,509

THE WINNIPEG EXHIBITION.

Office of the Canada Lumberman, McIntyre Block, August 19, 1901.

Since our last issue Winnipeg has been the centre of great excitement on account of the Dominion Exhibition and almost every line of trade has been influenced thereby, but probably the one to be least affected in this regard is the lumber trade. It is true that, during the preparations, a quantity of lumber was of necessity called into requisition, from which a certain benefit accrued, but, generally speaking, business in these lines has gone on in the usual manner. There are distinct indications that the rush of trade that com

menced with the opening of the season har now found its level, and things are steadying down, awaiting the results of the coming crops. Money, too, is getting very tight, attributed generally to the indisposition of the Banks to accept farmers' paper, their adverse experience of last year making them unusually cautious. However, should the harvest be up to expectations, the financial aspect will immediately improve, and a move in trade with be looked for in consequence.

There are also indications of improved conditions with the B. C. mills. During the opening months of the year the trade was greatly favoring the U. S. mills, and much anxiety was expressed, but lately there has been a better proportion of trade going to mills on this side, owing probably to prices showing a better parity.

LUMBERMEN'S TOOLS AT THE DOMINION ENHIBITION.

Among the several exhibits in the Machinery Hall of the Winnipeg Exhibition which attracted universal attention was that of Shurly & Dietrich, of Galt, Ont.

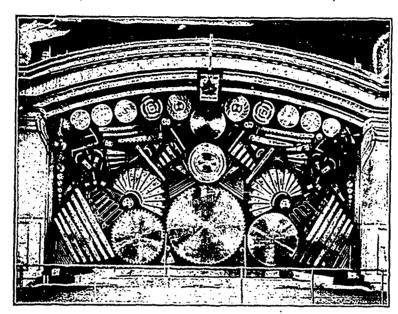
This firm had a prominent position across one end of the building, the wall of which was arranged with a circular display of their various tools and implements. mounted on dark purple plush, the centre-piece being a fine circular saw 71/2 feet in diameter, the largest crucible steel plate that has been made. Arranged around this in artistic form were samples of their many tools. There were their " Maple Leaf " lance crosscut saw and hand saws of the same brand, the quality of which is well known on account of this firm's special secret process of tempering. It is a noticeable feature that Shurly & Dietrich are the only Canadian firm who are doing an export trade in these goods with Australia, New Zealand and United States, which fact speaks well for the quality of their goods, since this has been done in the face of a duty of 30 per cent. They also had on exhibit samples of their harvest tools, which are manufactured by and under the style of the "Maple Leaf Harvest Tools Company," of Tilsonburg.

Another exhibit of great interest to lumbermen was that of the Dundas Axe Works, Dundas, Ont. This firm exhibited a fine collection of double and single bit axes in both overcoat and insert steel, prominent among which was to be seen their well known "Crown lewel" axe, which we understand is gaining a place in the front ranks among lumbermen.

The James Smart Manufacturing Company, of Brockville, Ont., showed an attractive range of lumbermen's axes and other tools, together with their stoves and generators.

WOOD-WORKING MACHINERY.

The Goldie and McCulloch Company, of Galt, Ont.



DOMINION EXHIBITION, WINNIPEG-EXHIBIT OF SHURLY & DIETRICH.

had a fine location extending across the centre of the Machinery Hall, in which they made an interesting display of their machinery, comprising an Ideal high-speed enclosed self-oiling engine, a ten inch moulder, a full set of Philbrick patent adjustable matcher heads, etc.

The Robert Bell Engine and Thresher Company, of Seaforth, Ont., had in operation on the Exhibition grounds some very powerful 20 h.p. traction and portable engines, particularly adapted to saw mill work. They also had on exhibit one of their No. o portable saw mills suitable for 12 to 30 h.p. This company received some very excellent testimonials regarding their engines and machinery.

The E. Long Mufg. Company, of Orillia, Ont., had on exhibit in the Machinery Building a creditable display of various machines, noticeable among which were their Clipper shingle machines, Lockport swing saw mills, a three saw double edge lathe and picket

machine, a saw carriage and frame, and double geared log haul-up. There was a good deal in this exhibit of an attractive nature and much attention way given to it by the various visitors.

The A. R. Williams Machinery Company, of Winnipeg, displayed a range of lathes, drills and woodworking machinery, and also a complete outfit for sammills, with engines and boilers. This firm, whose address is 45 Notre Dame street east, carry in stock a full line of all necessary mill and machinery outfits

The Canadian Iron and Foundry Company, of S. Thomas, Ont., showed samples of their "trolley" wheels, high grade machinery wheels and grey iron castings.

The Stuart Machinery Company, or Winnipeg, the Western agents of the E. Long Mnfg. Company, Orillia, had a fine showing of wood-working machines, a prominent feature being their log frame and saw carriage, for which they claim special advantages over other makes. It has an extra wide friction drive, an entirely new saw guide, extra size wheels on log frame, which ensures special case in running, and a new adjustment to drive, which minimizes wear and tear. They also showed surfacers and matchers, exhaust fans for the removal of dust and shavings, emery wheels and saw sharpening outfits.

The Northern Iron Works, Winnipeg, had an attractive display arranged with their own fencings and crestings, painted in colors, enclosing their space. They had on exhibit shafting, boxes, and all kinds of machinery castings, as well as an outfit of circular saws.

The Waterous Engine Works Company, of Brantford, Ont., had one of their No. 7 fire engines on ex-

hibit in the grounds of the Exhibition. This engine, all cold, can be started in two minutes and in less than five minutes will be throwing a stream of water 100 feet high. At a test at Red Deer it three two streams with the wind 150 feet and with side-winu 136 feet. Through a line of 1,000 feet hose it is capable of projecting a stream of water through a one-inch nozz'e 100 to 120 feet, according to wind, or two lines 500 feet with 2½" nozzles simultaneously 100 feet.

The western selling agents for the Gutta Percha & Rutber Manufacturing Company, of Toronto, had an excellent display of rubber goods, with a special show of their well-known brands of belting and hose foremost amongst which is their "Maltese Cross' special stitched belting, made particularly for dynamos and mill purposes. Their other brands, viz., "Monarch," "Red Strip" and "Lion Brand," were also well in evidence. Their display of fire hose, made under the vatious brands of "Eureka," "Paragon" and "Red





DOMINION EXHIBITION, WINNIPEG-EXHIBIT OF PENBERTHY INJECTOR COMPANY.

DOMINION EXHIBITION, WINNIPEG-EXHIBIT OF GUTTA PERCHA & RUBBER CO.

Cross," was also very attractive. The brand known as "Guttaperch," we understand, is a make of special excellence, and has been approved by the Board of Underwriters, it being especially antiseptically treated and made particularly to meet the most severe requirements.

The Penberthy Injector Company, of Windsor, Ont., had a very fine display of their injectors, connected and arranged to form a barrier rail to their space. They had also a series of stands showing every size and pattern made. An interesting feature of this exhibit was a machine in full operation for making the Penberthy injectors. With the exception of perhaps one or two, all the machines at work on the grounds were fitted with this company's injectors.

The exhibit of the Metallio Roofing Company was in charge of their Winnipeg agent, Mr. Thomas Black. The had four panels of wall designs and two points of zinc and copper ornaments, these making a wall 12 feet high and 30 feet in length. In front of this wall was a platform extending 18 feet, on which was shown panels of ceiling designs and other lines of their manufacture. Their famous "Eastlake" shingle was shown as applied in actual work, as were also their "Spanish tile, "Diamond" tile, "Gothic" tile and "Empire" shingles.

The Inbricating industries were represented by the Imperial Oil Company and the Canadian Oi Company, of Toronto, and McColl Bros & Co., of Winnipeg, all of whom displayed their goods in attractive booths.

The Henderson Roller Bearing Company's exhibit was one which attract-

ed a good a good deal of attention, and was interesting as showing the great advantage in economizing power which a bearing of this description has. A large roller, weighing 5,648 pounds, was mounted on this bearing and was driven throughout the entire fair time by an ordinary fishing line. On an ordinary shaft were mounted three wheels, one an ordinary brass journal, the second on ball bearings, the third mounted on Henderson's roller bearings. The shafting was mounted on pedestals and revolving on the Henderson roller bearing, being driven by a silk thread.

TRADE NOTES.

The Canadian Casualty and Boiler Insurance Company, of Toronto, have opened an office in Winnipeg, in charge of Mr. W. O. Tassie.

The Fairhanks Company, of Montreal, have just acquired the plant of the Northrop Iron Works, at Valleyfield, Que. The company purpose commencing operations immediately for the manufacture of brass and iron goods.

The firm of Burridge & Cooper, machinery dealers, Winnipeg, have formed a joint stock company, which is capitalized at \$50,000. The officers are: President, James Burridge; vice-president, E. F. LeGrasley; so tary-treasurer, Alfred LeGrasley; manager sales department, E. S. Cooper; manager electrical department, F.A. Fry; manager mechanical department, C. Sifton.

The A. J. Burton Saw Company, Limited, of Vancouver, B.C., have completed their new works and are now in a position to supply inserted tooth shingle and band saws, file room machines and tools, bits and shanks, etc. This company are agents for British Columbia for the well-known saw firm of R. Hoe & Company of new York, and under the able management of Mr. A. J. Burton we predict a prosperous future for them.



DOMINION EXHIBITION, WINNIPEG-EXHIBIT OF E. LONG MFG. COMPANY.

Mr. M. L. Killam, of Truro, N.S., has secured a patent for an auxilliary saw guide and self adjusting sett collars that are placed on saw arbors and are now used in circular saw mills. His claims are as follows: They are giving perfect satisfaction, as any sawyer can use them. They guide the saw perfectly in every cut without moving the front guide, and by this improvement and saw guide to top of saw it is no troublle to run thinner saws. It has cut more and better lumber than ever before sawn on circular saw mills. When sett collars are properly placed on the arbor it is impossible to heat or damage the saw in any way, as it has been tested, and when using top guide it keeps the saw in the right place and no time is lost when a larger log comes than will go under the guide, as it is hinged at right angles from the saw. When the large log comes in contact with the guide it moves out of the way and when the log returns back the guide is then pulled back by means of a small cord at the sawyer's hand, no time being lost at any movement of the carriage, and the carriage or the log can be moved back at any part of the cut, while the guide is in perfect safety of any accident. When using these attachments the saw should be in perfect line with the carriage and a guide at opposite directions from the one in front of saw, only on log side of saw, to keep saw from tipping against log. Further particulars, prices, etc., may be obtained by those interested by writing The Oxford Foundry & Machine Company, Oxford, Nova Scotia.

PUBLICATIONS.

"Tools for the Care of Saws" is the title of the latest catalogue issued by the William Hamilton Manufacturing Company, of Peterboro, Ont, who have lately entered into an agreement with the Covel Manufacturing Company, of Chicago, whereby they secure the sole right to build their saw sharpening machinery in Canada. All the Covel machines have been brought strictly up-to-date.

A booklet recently to hand is devoted to the Cape Town International Industrial Exhibition, which will be opened at Cape Town, South Africa, in November next and continue for three months. We learn that several hundreds of the leading firms covering practically every branch of industry in which South Africa is interested have arranged to exhibit, and that the Exhibition is now regarded as an assured success.

The American Wood-Working Machinery Company, 136 Liberty Street, New York, have just issued Catalogue "B" referring to special planing mill machinery. While in this catalogue there are illustrated only a few of the many machines which this company manufacture that are specially adapted for planing mill use, yet it represents the latest improvements in wood-working machinery, and should be in the possession of all persons

interested in the manipulation of timber. They have also published a pocket edition of their 1904 catalogue, by means of which a full line of machinery is presented in as compact a manner as possible, and have now in course of preparation Catalogue "C" of sash, door and blind machinery, and Catalogue "D' of furniture machinery.

The pulp rates from Chatham, N. B., to Eastern States points have been placed on a par with those from St. John.

Canadian exports to South Africa last year amounted to \$1,931,541. For the calender year of 1902 the imports of the South African colonies amounted to \$242,000,000, the United States sending goods in that year to the extent of \$22,000,000. With the aid of the preference and the direct line of steamers lately established between the Dominion and South Africa, Canada ought to successfully compete with the United States in such articles as bicycles, flour, chairs, agricultural implements, cotton, lumber, doors, sashes, blinds, household furniture, dairy products, musical instruments, carriages and harness, hay, condensed milk and provisions.



DOWNSON EXHIBITION, WINNIPEG-EXHIBIT OF JAS. SMART MFG. COMPANY.



DOMINION EXHIBITION, WINNIPEG-EXHIBIT OF THE METALLIC ROOFING CO.



HOO-HOO CONCATENATION AT WINNIPEG.

A concatenation of the Hoo-Hoo order was held at Winnipeg on August 4th, with a goodly attendance of members, as many persons were in the city on account of the Dominion Exhibition. The proceedings took place amid great enthusiasm, the introduction to the light of Hoo-Hooism of some eight new kittens gave rise to the usual degree of joviality and good will, and the usual initiatory formalitieswere carried through with a strictness and precision worthy of a religious duty and to the entire satisfaction of the members and officers present.

After the completion of the concatenation ceremonies, a banquet worthy of the occasion was given to the "new kittens". Those initiated were: R. Lockhart, Fort William; W. Martin, Wapella; H. S. Galbraith, Winnipeg; M. M. Boyd, Winnipeg; C. Mader, Seattle; W. P. Dutton, secretary Red Deer Lumber Co.; A. Tennant, Rat Portage Lumber Co.; W. Springate, Brunette Sawmill Co.

The officers in attendance were: G. B. Housser, Viceregent; A. McKinney, Senicr Hoo-Hoo; J. G. Foss, Junior Hoo-Hoo; J. C. Graham, Bojum; J. L. Spencer, Scrivenoter; W. B. Tomlinson, Jabberwock; D. B. Sprague, Custocation; D. L. Lincoln, Arcanoper; D. J. Macdonald, Gurdon.

The order is one which gives itself strictly to the promotion of social fellowship and good feeling amongst its members, the membership being limited to those who are directly interested in the lumber trade.

PROGRAMME THIRTEENTH HOO-HOO ANNUAL.

WEDNESDAY, SEPTEMBER 7.

Annual meeting of Osirian Cloister, probably in forenoon.

Afternoon—Initiatory ceremonies of Osirian Cloister.

Evening-Annual Banquet of Osirian Cloister. (All the officials of Hoo-Hoo will probably reach St. Louis by the morning of Wednesday, September 7, and while the Osirian Cloister is in session, or between the meetings of the Osirian Cloister, these officials of Hoo-Hoo will arrange to get in the best possible shape for expeditiously handling of varous matters to come before the business sessions of Hoo-Hoo proper; probably a number, if not all, of the committees can be appointed by the Snark.)

THURSDAY, SEPTEMBER 8.

Thirteenth annual meeting of Hoo-Hoo called to order at 9.09 a.m. by Snark Vietmeier; roll call for quorum; speeches of welcome to be delivered probably by Hon. Dav'l R. Francis, President Louisiana Purchase Exposition, response by Senior Hoo-Hoo Frank N. Snell; address by Dr. Tarleton H. Bean, of the Department of Forestry, and by Mr. J. A. Freeman, official orator, "Yellow Piners"; annual address of the Snark; annual report of

the Serivenoter, announcement of regular committee, and any other business that may appear proper to come before this first session. When adjournment is taken, it will likely be for all day, and the afternoon will be devoted to such entertainment features as our St. Louis hosts will tender.

FRIDAY, SEPTEMBER 9.

Business sessions resumed at 9.09 a.m. Reports of committees, action on reports and new business. When adjournment is taken, it will likely be for all day, the afternoon being devoted to such entertainment as is provided.

Evening-Annual Hoo-Hoo Concatenation.

SATURDAY, SEPTEMBER 10.

Business sessions resumed at 9.09 a.m. and continued all day it necessary to complete the business. The election of officers will occur in the afternoon of this day.

A LUMBERMAN'S PICNIC.

Hon. Peter White, of Pembroke, Ont., gave a picnic to his employees and their friends at

broke Milling Company, and the Pembroke Navigation Company. A splendid programme of sports and music was provided and thoroughly enjoyed.

THE "HOE" SAW EXHIBIT.

Among the many handsome and interesting exhibits in the Liberal Arts Building at the Louisiana Purchase Exposition, that of chisel-tooth saws shown by the firm of R. Hoe & Company is among the most interesting. This firm are also manufacturers of printing presses, which accounts for their exhibit being located in the Liberal Arts Building.

The saws are by no means the most uninteresting part of the exhibit, and seem to attract the attention and admiration of visitors quite as much as the more intricate printing presses. R. Hoe & Company's specialty is the inserted tooth circular saw, of which they were the originators and inventors. These saws have been in use for many years, and their superiority over solid saws for almost every kind of work has been thoroughly demonstrated. It is claimed that there is no finer inserted-tooth saw made than that in chalactured by R. Hoe & Company.

work has been thoroughly demonstrated. It is chained that there is no finer inserted-tooth saw made than that in thalactured by R. Hoe & Company.

The accompanying picture shows a small section of the exhibit. The stand at the left side shows the name "R. Hoe & Co." artistically worked out in bits and shanks. The saw in the middle is six feet in diameter. On the left of the large saw is a small solid saw, with the date 1824 above it also made with bits and shanks, and on the opposite side is a small chisel-tooth saw with the date 1904 above it. This shows that R. Hoe & Company not only consider the chisel-

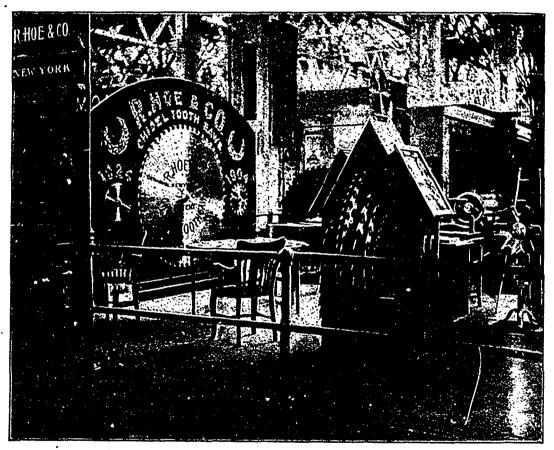


EXHIBIT OF R. HOE & COMPANY AT THE ST. LOUIS WORLD'S FAIR.

Golden Lake on August 4th, at which nearly seven thousand persons were present. Everything was provided free by Mr. White, and in addition all the employees were allowed full pay. For the purpose of satisfying the appetites of the large crowd, there were provided 1,350 pounds of cooked meats, 300 pounds of pork, 1,300 pounds of beef, 1,000 loaves of bread, 300 pounds of beans, 150 dozen buns, 800 pounds of cheese, 100 pounds of biscuits, 150 pounds of jam, 50 pounds of tea, 75 pounds of sugar, and cigars, soft drinks, fruit, cake and candy galore. Among the industries represented were the saw mills of the Pembroke Lumber Company and A. & P. White, the National Manufacturing Company's establishment, Pink's machine shops, the Pemthoth saw the circular saw of the twentieth century, but also qat they have been manufacturing saws for eighty years—to: ite an enviable record.

A handsome mahogany glass case contains samples of the different styles and sizes of bits and shanks, also a complete assortment of saw tools. The saws, of which there are a dozen or fifteen, varying in size from 12 inches to five feet, are held in a simple but artistic stand in such a way that they can be easily removed and shown in detail to those interested.

Several of R. Hoe & Company's friends have been so pleased with the work accomplished by their saws that they have sent, not only testimonials, but samples of the work done by them, showing that the saws will cut iron as well as wood. Several of these relies have been exhibited; among others a horse shoe is shown sliced off by a saw. In some way the shoe had become imbedded in the tree. No damage was done to the saw, other than the dulling of a few teeth. Another relie has been sent by Messrs. Chas. Smith, Jr., & Sons, of Mt. Vernon, Indiana. Their letter reads as follows: "We cut into a 3%" bolt of iron twice the other day with your chisel-tooth saw and did not injure the saw."

R. Hoe & Company have spared no pains to make this a handsome exhibit, and they certainly deserve the greatest r edit for their patriotism and liberality.

:

NEW ONTARIO FORESTS.

Mr. Archibald Henderson, who is one of a party now exploring the region to the west of Lake Abittibi, writes to the Toroto Globe regarding the timber as follows:

Along the rivers, and for the most part the creeks also, the country naturally appears at its best. The most valuable timber, as also the soil promising most for the agriculturist, is here found. White spruce as large as 32 inches in diameter, averaging sixteen inches, aspen and balsam poplar some 28 inches, averaging fourteen inches, are the most valuable trees. Mixed with these are the smaller black spruce, white birch and balsam. Such a forest

unfortunately extends from only two or three chains to half a mile inland from the waterfront. This is not as serious as might seem at first, however, as the whole country is drained by numerous small unnamed rivers and creeks, as yet not marked on any map, besides the large rivers, and each of these as a rule has sloping banks, in some cases from 30 to 40 feet high, and timbered almost as well as the usually somewhat higher banks of the larger rivers. The subsoil in such localities is a heavy clay, covered with several inches of vegetable mould, and supporting besides the timber a rich flora.

Inland from the rivers and creeks the character of the country changes very considerably,

and in various areas assumes four different aspects. By far the greatest part is well wooded with black spruce, in size up to thirteen inches, averaging probably seven inches. These grow on a clay soil overlaid with two or three feet of humus, which again supports moss to the extent of about eight inches. Many of these spruce woods are quite wet and the mossy floor is of a sphagnous nature, while in other drier localities the floor is largely composed of Bryaceous mosses. Scattered through the black spruce are many tamarac, which in wetter areas are collected into tamarad swamps. These trees, unfortunately, are dead almost without exception, having been killed within recent years by the larch sawfly in these areas.

Are your Facilities for Handling Glue and "Glued-up" Stock Strictly Up-to-date?

And even though you answer Yes, are you sure you are familiar with the most modern machinery for this important branch of wood-working?

If you will ask us for Catalogue No. 1367

You will find it presents a very complete line of the latest things out for handling glued stock of all sorts. Glue Spreading Machines, all manner of Glue Clamps, Glue Boilers, Heaters and Cookers, Contact Glue Heaters, etc., etc. Write for copy and be sure to mention the number, 1367.

Hammacher, Schlemmer & Co.

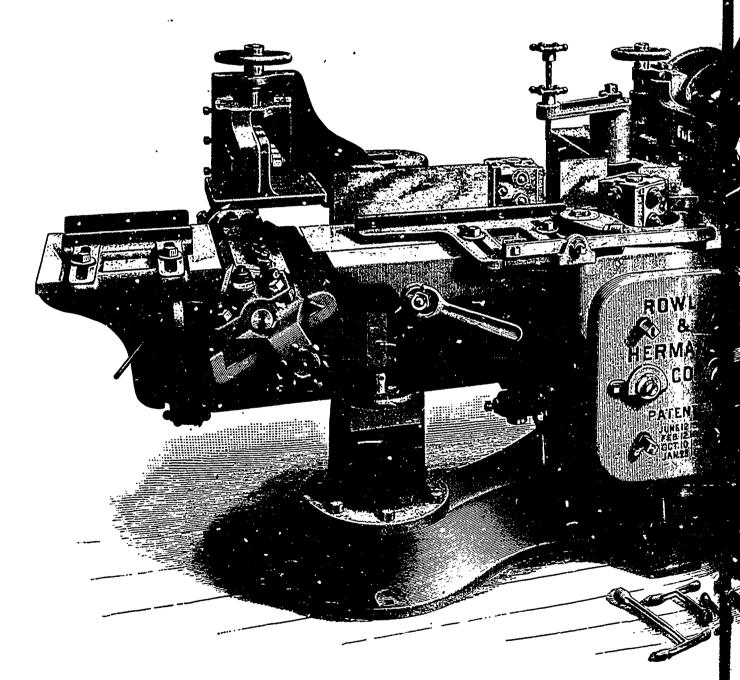
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All Adjustments made from the Front or The Easiest to "Set Up." The Most Conv



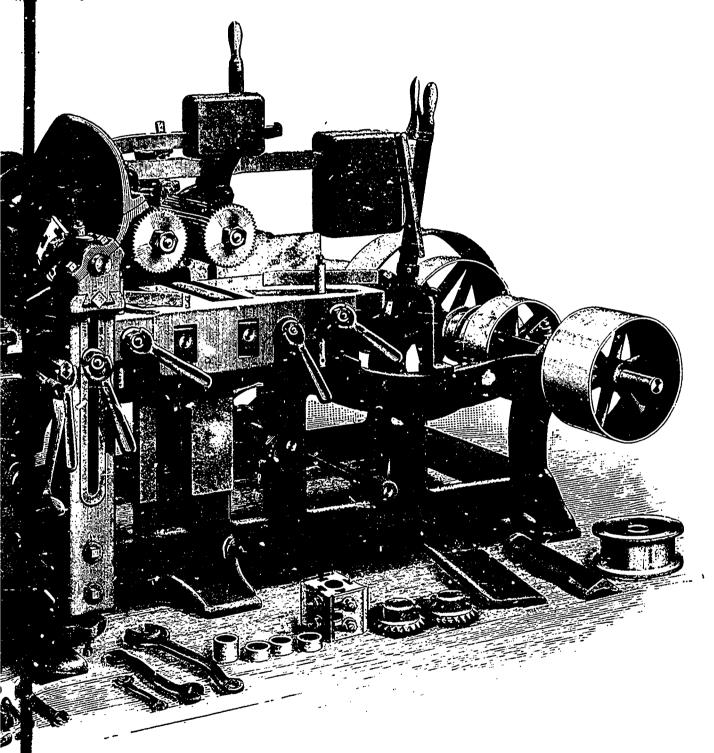
Our new Columbia Series of Moulders are built we It will pay you to investigate. For full detail in at

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AMERIA

EAT MOULDER.



will work 7 in., 8 in., 9 in., 10 in., 12 in., and 14 in. wide.

AN WOOD WORKING MACHINERY CO.

136 Liberty Street, NEW YORK CITY.

Wood-Worker and Retailer

GLEN COVE BOSS TIMBER SIZER.

The accompanying engraving illustrates the Glen Cove Boss timber sizer, built by the American Wood Working Machinery Company. This is claimed to be the heaviest and most powerful as well as the simplest and most easily handled machine of this class on the market. It is fully up to date in design, simple in construction and all material and workmanship are of the very best. The parts liable to breakage are reduced to a minimum and a complete system of numbering and lettering applied, which is a great convenience when ordering necessary repairs.

This machine is built to work 30 \times 20 inches, 30 \times 18 inches, 30 \times 15 inches and 20 \times 20 inches, with eight feed rolls; also 30 \times 14 and 30 \times 12 inches, with six feed tolls. The accompanying illustration shows the S-roll machine.

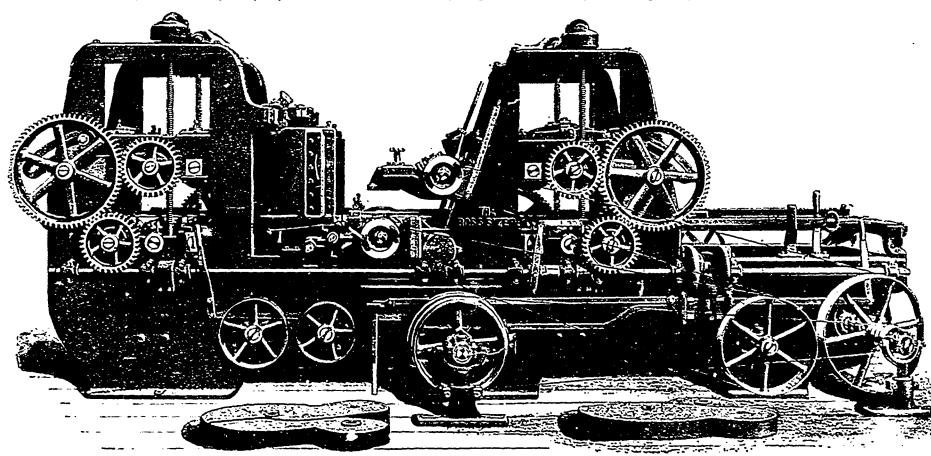
All of the adjustments are easily and quickly made and

information upon application, and our conders are requested to address the office nearest to them as follows: American Wood Working Machinery Company, 136 Liberty St., New York City, or The Fairbanks Company, Vancouver, B. C.

CUT-OFF SAWS.

The writer recently paid a visit to a wellequipped factory, where everything seemed to be working in fine order except one cut-off saw and a trim saw. Talking to the manager, he asked about men and machinery, stating that his sawing did not come along as it ought, and escorted me to the place where the sawing was done. Everything was neat and tidy, but possibly be told in words. Take particular notice of the position of the teeth while in the cut. A and B represent the board or plank. The writer, after many years of study and practical experience, prefers the one shown in Fig. 2.

In the saw shown in Fig. 1 there is no possible chance of the teeth carrying the sawdust through the cut. It will be noticed that both the front and back of the teeth, if the lines were continued, would all meet on a line just one-fourth the diameter of the saw, thus making a very stiff tooth; in fact, just twice as stiff



GLEN_COVE_BOSS TIMBER SIZER.

those necessary for a change from one class of work to another are all made from the operator's positions at the side or end of the machine, and so easily and quickly as to make this machine capable of covering a very large range of work from surfacing four sides (full capacity of the machine) to car sills, flooring, decking or any similar work.

The frame is substantial, the sides are heavily ribbed and cross girts are all planed to a seat and strongly bolted, and all the upper work applied in a way to add strength and stability

The feed is exceptionally powerful. All rolls are geared at both ends. The first two top rolls are divided, except in the 20 × 20 inch machine, where the rolls are solid. All top rolls are independently weighted and rise and fall parallel with the bottom rolls. The feed as well as the power hoist is handled from the operator's position from the end and side of the machine. The feed hoist is very effective and is available when the feed is on or off.

The manufacturers will be pleased to send illustrated cirulars giving a complete description of all details and other the saws certainly needed attention. The first suggestion was to joint up the saws, which were out of true. The next was to shape the teeth, which were bad for the kind of work being done.

The saws in use for stock sawing were like those shown in Fig. 1. This kind of saw has been in use many years, and, when properly cared for, can be made to do very smooth and accurate work, but where large amounts of everything and anything must be cut quickly and accurately, the style shown in Fig. 2. should be used. This saw, with a little set, properly jointed and filed, will do an enormous amount of good wor. Note the difference: the sketches will explain more than could

as the one shown in Fig. 2—a very good thing in its favor, but not nearly so important as the good cutting edge, which is just about twice as good as Fig. 1, although the tooth is only half as strong.

Progressive manufacturers are looking for a tool that will do good work and lots of it. The saw shown in Fig. 2 is just as smooth a cutter as can be made of that shown in Fig. 1, but it must be kept in good order, or the tide may be turned in favor of Fig. 1. There is no tool so badly abused as the circular saw. Every man thinks he can run it, and in fact he can, but how? It is not a particularly hard job to keep wood-working tools in order if men will only think a little.

FOR THE CAMP—

We have a very suitable lot of goods for camp supplies. We make this kind of trade a specialty. You who are not getting suited just as well as you would like, try us for your next order, and give us a chance to demonstrate our ability to give you satis faction in this very important department of your business.

H. P. ECKARDT & CO.

Wholesale Grocers

TORONTO

Now let us true up and sharpen the saw shown in Fig. 2. To begin with, take a piece of grindstone or emery wheel and true the saw while it is running. Be sure the sides of the teeth are not touched by staying in one spot in the stone, for if the teeth lose their sharp corners by becoming round by wearing a groove in

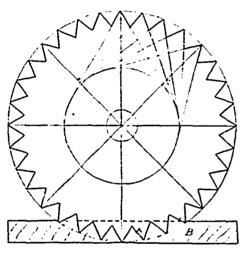
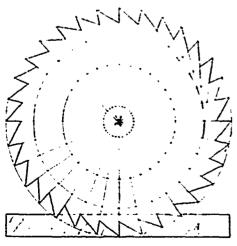


Fig. 1.

the stone, the operator has done more damage than good. Whichever saw is to be used, file the teeth beveling on the face and back, and every other tooth in the other direction; in other words, from the other side of the saw. Do not get too much bevel to teeth, for if you do you are sure to have trouble; the extreme points



. Fig. 2.

of the teeth become too thin and weak and can not stand up to the work. Study the nature of the material being worked, and, it possible, have the saws filed and fitted accordingly. When this is done, very little trouble will be experienced in doing good work and lots of it

For rough and ready stock cutting, use a straight gauge saw with very little set, but for trim sawing, where true and smooth work is required, use a hollow-ground saw with no set. As for the shape of tooth to select, if it is hard and heavy cutting, needing great strength, use the one shown in Fig. 1; if for the ordinary run of work, use the one shown in Fig. 2. Should it be desirable to have a combination rip and cut-off saw, all that is necessary is to file every third or fifth tooth square across. These teeth carry the sawdust through the lumber, which is necessary in ripping. The one thing to be careful about is not to have the square or rip teeth longer than the bevel or cross-cut teeth. In this way one gets a very smooth cutter for either ripping or cross-cutting. - "W. H" in The Wood-Worker.

STAVE BOLTS BY THE POUND.

The Indianapolis Woodworker, speaking of a pencil slat factory in Tennessee that is buying cedar timber by the pound, paying at the rate of 6 cents a pound therefor, brings to mind again the question of buying certain kinds of timber by the pound instead of by the cord or per thousand feet. Down in West Virginia there was a stave factory that once made it a practice to buy slack-stave bolts by the pound instead of by the cord. A wagon scale was made use of and by frequent comparisons with the weight and measure a system of weights was designed for the different kinds of wood, so that when a farmer came to town with a load of bolts it was a simple matter of weighing in and then weighing the wagon out. This practice probably still holds at that place, for it was said to give very good satisfaction and to make the problem of measuring much easier than when it was necessary to cord the stuff up, but for some reason the idea has never taken well with the trade as a whole. In fact, it does not seem to have met with favor enough to even gain a fair trial, and there may be more in it than is thought; it would at least be interesting to hear from any others who may have given the weighing system a trial.

TO READERS.

Readers of THE CANADA LUMBERMAN are invited to send us contributions upon any subject relating to the lumber trade in which they may feel an especial interest or which they may desire to discuss. All letters of a sincere character will be published. Contributions for the October number should reach our office by September 20th.

HOW TO KEEP A FILE CLEAN.

Knowing how to keep a file clean is one of the fine points about filing. A great many filers, and probably nearly all of them, have a piece of a card which is tacked on to a narrow piece of board. These cards are pieces of leather some two inches wide, with fine steel wires driven through them and the points bent over, and are made primarily to be used on machines for carding wool and cotton in factories. A much better thing than this is a narrow piece of commercial steel, about 1-16x 34-inch, filed to a rather thin edge. This pushes whatever there is in the teeth of the file out absolutely, and there is no scratching to be done.

ASSOCIATION OF MANUFACTURERS OF WOODWORKING MACHINERY.

The Association of Manufacturers of Wood Working Machinery throughout the United States has a social organization, and at its last session it was determined to hold their next meeting in the House of Hoo-Hoo at the World's Fair. The meeting will take place early in October, and it is expected to be well attended by the members of this important branch of the machinery industry. The officers of the organization are now making arrangements for the meeting, which will doubtless be a most successful gathering. Mr. H. E. Erwin, New Britain, Conn., is the secretary of the organization.



THE NEWS

ONTARIO.

-Robert Hower, of Port Arthur, Ont., has just completed extensive alterations to his planing mill.

-James Ingram had his arm broken in McCastrey's saw mill at Stittsville, Ont., by being caught in a belt.

-Mr. J. J. White has recently sold his planning mill at Wheatley, Ont., to Mr. Ivison, who will continue the business

—The saw mill property of William Caldwell at Carleton place, Ont., has gone out of Mr. Caldwell's hands, Robert Patterson having purchased it as an investment.

—Two of the largest lumber cargoes that ever passed through the Welland canal were carried down by the barges Viking and Vineland during the latter part of luly.

—A by-law was carried at Cornwall on August 7th to loan J. B. Atchison \$17,500, without interest, for twenty years to assist in rebuilding his saw mills and sash and door factory.

—A serious accident happened la t month at the Preston-Bell mill at Fort Francis, a young Frenchman by the name of F. Ducet losing his life by falling from the log deck into the water below.

—A disastrous boiler explosion occurred in Smith's saw mill at Langton. Ont., on August 11th, resulting in the death of Isaac Leworge and Norman Wingrove and serious injuries to John Leworge. The building was completly wrecked, fragments being thrown a great distance.

-The St. Catharines Wood & Lumber Company, Limited, recently incorporated at St. Catharines Ont., with a capital of \$40,000, is composed of W. H. McCordick, Frank C. McCordick, and C. B. Barson, of St. Catharines, H. J. Nicholls, of Huntsville, and E. O. Babcock, of Niagara Falls, N. Y.

The largest raft that ever came into the St. Clair river within the memory of local lumbermen was brought to Sarnia recently from the Georgian Bay by the Reid Wrecking & Towing Company's tug "Ottawa." It consisted of 7,000,000 feet of logs and was consigned to the Cleveland Sarnia Saw Mills Company.

The Keewatin Lumber Company, of Keewatin, Ont., manufactured 15,000,000 feet of lumber last year, nearly all of which was marketed in Manitoba. They are building a tie mill 134 miles east of their present property. It is to have a capacity of 4,000 ties in 10 hours, and will cost in the neighbourhood of \$25,000.

—The William Beatty Company, Limited, has been incorporated, with a share capital of \$60,000, to carry on a general lumber business at Parry Sound, Ont. The incorporators are W. J. B. Beatty, Isabel Eliza Beatty, Frances Isabel Margaret Beatty, and Annie Georgina Bowes Beatty, all of Parry Soun I, and John D. Beatty, of Sarnia.

—A number of American capitalists interested in the power development at Rainy River, Ontario, visited that town recently. The party included Thomas II. Shevlin, E. W. Backus, W. F. Brooks, E. L. Carpenter, H. C. Clark, F. M. Prince, Count Kalhoff, and others, of Minneapolis; J. Swift and J. B. Kilburn, of Chicago; Walter Douglas, of Cedar Rapids, and F. P. Nicon and F. C. Chamberlain, of Lacrosse. The object of their visit was to consider the best means of developing the water power of the Rainy river with a view to establishing pulp mills and other industries in addition to the extensive saw mill which they now have in operation.

—The Northern Land and Lumber Company, of Port Arthur, Ont., have just completed their new planing mill and dry kiln. The company, which was only organized in April of last year, is experiencing very prosperous times and is now the largest handler of yellow pine in the Dominion, their shipments locally and to Manitoba amounting to 1,500,000 feet. They are especially fortunate in having such a good point as Port Arthur to trade from, as they are able to bring in the lumber in its rough state from Wisconsin free of duty, tow it across Lake Superior and manufacture so cheaply as to enable them to successfully compete with any competition from the States.

THE EASTERN PROVINCES.

-W. W. Shaw is rebuilding his saw mill at Hartland, N.B.

—The Gaspe Lumber Company, of Gaspe, have just installed a powerful new boiler in their saw mill.

—The Dathousie Lumber Company are building a third mill at Dathousie, N. B. It is located on the lower islands.

-The Dominion Tar & Chemical Company have under consideration the erection of an extensive plant at Sydney, N. S., for the creosoting of timber.

—The Comstock saw and planing mill at Stanstead was completely destroyed by fire on August 6th. The loss is estimated in the neighborhood of \$5,000.

-Wilfrid Ratti, convicted of stealing logs from B. A. Scott, of Roberval, Que., has been committed to stand his trial at the next session of the Criminal Court at Chicoutimi.

—The lumber exports from Newfoundland this season promise to be greater than any previous year. The Timber Estates, Limited, have contracts to ship 12,000,000 feet to South America.

—The old saw mill of Gilmour & Hughson at Chelsea, Que., has been sold to J. Wilcox & Company, of Montreal. The mill will be demolished and with its removal an old landmark will disappear. It is eight years since the mill was operated.

—The Estate of the late James McLaren, of Buckingham, Que., purpose constructing a number of dams on the Upper Lievre river for the purpose of conserving the water supply so as to permit of the operation of their saw and pulp mills all the year round. —The lumber business carried on by the late James MacLaren at East Templeton, Que., is to be wound up. Tenders for the purchase of the business as a going concern, including timber limits, mills, plant, etc., will be received by the executors up to September 12th

The Caraquet Railway, which consists of 85 miles of track extending from Bathurst to Tracadic Mills, N.B., through a good farming and lumbering country, which has heretofore been owned by Englsh bond-holders, has been purchased by a Toronto syndicate represented by Peter Ryan and T. P. Coffee.

- J. D. Scott, general manager of the Quebec and Lake St. John railway, has just returned to Quebec from an extensive trip to England, where he succeeded in securing financial assistance for the construction of the La Tuque branch of the Quebec and Lake St. John railway. This is of special interest of lumbermen, as the railway will open up a very valuable lumber country.

MANITOBA AND THE TERRITORIES.

-T. A. Burrows is building a planing mill at Grand View. Man.

-W. F. Lawrence has sold his lumber business at Maple Creek, N.W.T., to A. A. Mene'ly.

The Macoun Hardware & Lumber Company have opened a lumber yard at Hitchcock, N.W.T.

-The Alberta Lumber Company are preparing to build their saw mill on the old site at Cardston, N.W.T.

Charles Schack, lumber dealer, High River, N.W.T., has sold out to the High River Elevator & Lumber Company.

-The Rushton-Layton Lumber, Grain & Commission Company have opened a lumber yard at Stony Creek, N. W. T.

—Fleming & Son, foundrymen, of St. John, N.B., have dismantled the old Jewett saw mill at Millidgeville. Thus has passed one of the thriving industries of a few years ago, and one which was the chief means of livelihood for the people of the village.

—The Hanbury Manufacturing Company, of Brandon, Man., have been compelled to build another large addition to their factory for the manufacture of sash, doors and interior wood work. The company now employ 150 men in their factory and in logging operations.

—Paul Lea is making extensive improvements to his wood-working factory at Moncton, N.B. A new Corliss engine of 80 horse power has been installed and a new dry kiln built, in which the McEachren system as furnished by Sheldon & Sheldon, of Galt, Ont., will be used.

G. M. Annable, of Moose Jaw, N.W.T., has organized a company to carry on lumbering operations at Violin Lake, south of Rossland, B.C., where 5,000 acres of timber limits have been acquired. It is proposed to market the lumber in the North-West Territories. The capital of the company is \$50,000.

CRAIG MINE CRYSTAL CORUNDUM WHEELS



Our Pure Crystal Corundum Saw Gummers have no equal for their rapid, cool, cutting properties.

Read the following from Bulletin 180 of the United States Geological Survey, which says:

"Often a distinction is made between emery and corundum, many persons not recognizing emery as a variety of corundum.

Emery is a mechanical admixture or corundum and magnetite or hematite. It is, of course, the presence of corundum in the emery that gives to it its abrasive qualities and makes it of commercial value, and the abrasive efficiency of emeries varies according to the percentage of corundum they contain."

Emery is imported, mined by Greeks and Turks and contains only about 25% corundum. Our Crystal Corundum is guaranteed to be 98% pure alumina, a Candian product, mined and manufactured by Canadians for Canadians.

HART CORUNDUM WHEEL COMPANY, Limited, Hamilton, Ont., Can-

BRITISH COLUMBIA.

-- The Ontario & Slocan Lumber Company ship the entire output of their shingle mill at Slocan City to

-G. M. Thritt, owner of the new Hazelmere Lumber Mill, reports good business since commencment of operations in the month of May.

-A Cotton, shingle manufacturer, False Creek, Vancouver, is marketing considerable stocks in eastern points and the New England States.

-The Abbotsford Lumber Company, of Abbotsford, are doing a pretty extensive business in the Territories and Manitoba in heavy bridge timbers.

-The Chilliwack Shingle Manufacturing Company are seriously contemplating erecting a large saw mill and going into the manufacture of clear cedar.

-W. H. Higgins, of Vancouver, B. C., has purchased the right to 150,000,000 feet of standing timber on Humphrey Channel, ninety miles north of Vancouver, where he purposes opening up a number of camps.

-J. Johnson, inventor of the Johnson shingle machine, which is specially adapted for B.C. timbers, continues to successfully operate the shingle mill of the Brunette Saw Mill Company at New Westminster.

-The U. S. Government keep nineteen officials at Sumas, on the International Boundary, and any British Columbian trying to transport a load of lumber across the International line free of duty can only hope to do so by the aid of tunneling.

-Henry Schaake, of the Schaake Machine Works, New Westminster, reports very large sales of saw mill machinery and equipment throughout the province. This is the only firm in British Columbia manufacturing an entire equipment of saw mill machinery.

-The construction of the mills of the Rat Portage Lumber Company at Harrison River has been completed. However, the company in view of the present condition of the lumber industry, purpose delaying the installation of the machinery until such times as the trade shall demand it.

-A forest fire which raged in the vicinity of the Big Eddy saw mill of the Revelstoke Lumber Company at Revelstoke, assumed such large proportions that the operation of the mill was stopped and the assistance of the citizens of Revelstoke called in. The fire was successfully checked.

-The Monarch Lumber Company, which recently acquired the Ross-MacLaren saw mill on the Fraser river, at New Westminster, B.C., will, according to report, commence operations as soon as some improvements to the plant are completed. The company will employ upwards of 200 men.

-The Canadian Pacific Lumber Company at Barnet, near Vancouver, are pushing rapidly ahead with the construction of their new mill which is being erected in place of the one lately consumed by fire. In their planing mill, which also was consumed, they had the misfortune to loose a planer which would accomplish the remark (b)e feat of dressing timber 24 inch 5 square.

The Victoria Lumber & Manufacturing Company, of Chemainus, Vancouver Island, in view of the continued depression in the foreign markets, have lately been turning their attention to developing a trade in Manitoba and the Territories, their efforts being attended with considerable success.

-A wealthy eastern syndicate headed by a Mr. Cook, who has large mills in Algoma, Ont., is negotiating for the purchase of 17,000 acres of timber land from the Nelson and Fort Sheppard Railway Company, with the idea of establishing a large saw mill industry in the neighborhood of Ymir, B. C.

The operations of the Canadian Timber & Saw Mills, Limited, of Trout Lake, have been attended with considerable success since commencement in June, under the improved market conditions of Manitoba and ries. The daily output is 60,000 feet of lum vi,mostly cedar, 80,000 shingles, and 25,000 laths.

-The East Kootenay Lumber Company, Cranbrook, B.C., are doing a tremendous business in the manufacture of ties for railroad purposes. It is believed they are among the largest tie manufacturers in the Dominion, their shipments last year amounting to the enormous figure of 1,000,000 ties to the C.P.R. alone, it taking 250 train loads to transport the product from the mills to their destination.

-The B. C. Mills, Timber & Trading Company, of Vancouver, B. C., had a very creditable exhibit at the Winnipeg Fair, consisting of five ready-made houses. Numerous orders are coming in to the company's offices both at Winnipeg and Vancouver for these up-to-date dwellings, which are shipped in their parts and soon after arrival put together, presenting the appearance of first-class dwellings houses. Prices are moderate and within the reach of all settlers.

The CANADA LUMBERMAN directs the attention of its readers from coast to coast to the splendid list of advertisements which are now appearing in both our weekly and monthly numbers from British Columbia lumber and shingle manufacturers The strong headway made by British Columbia lumber products in the various markets of Manitoba and the Territories and even the East, in face of heavy freight rates, is, we believe, greatly due to the judicious expenditure of money for advertising purposes and also to the conducting of energetic canvassing of prospective buyers throughout the country.

A MILLION POUNDS OF GRATES.

It is said that the Gordon Hollow Blast Grate Company, of Greenville, Michigan, who claim to be the largest manufacturers of blast grates, edgers and trimmers in the world, sell a million pounds of Gordon hollow blast grates and their connections annually.

A singular fact in connection with this is that, in spite of the vast number of these grates in use, some of them having been installed early in the nineties, only about 5 per cent, of their annual output is for repairs, the grate being so durable that very few customers ever have occasion to renew any portion of the apparatus.

WELL PLEASED WITH THE LUMBERMAN.

<u>na ja kao ili unito di companyone di compan</u>

Mr. Joseph Innes, mill superintendent Chilliwack (B.C.) Shingle Company, writes: "I am well pleased with THE LUMBERMAN, and have passed many happy hours reading its pages."

PERSONAL.

Mr. J. M. Agnew, secretary treasurer of the North Star Lumber Company, Cranbrook, B.C., was in the East on a business trip last month.

Mr. George McCormick, of the Kamloops Lumber Company, has just lately returned from a trip embracing Toron to, Montreal, and Ottawa.

Mr. Alexander McDougal, who is engaged in the lumber business at Fernie, B.C. was married at Arnprior, Ont., a few weeks ago to Miss Harvey.

Mr. H. Cameron, manager of the Moyie Lumber Company, Moyie, B.C., has lately joined the ranks of the benedicts. The Canada Lumberman extends congratulations.

Mr. E. B. Eddy, president of the E. B. Eddy Company, paper manufacturers, Hull, Que., received many congratulations upon the occasion of his seventy eighth birthday on August 22nd last.

The death occurred recently at Jacquet River, N.B., of James P. Doyle, one of the oldest residents of that neighborhood. Mr. Doyle was in early life engaged in the lumber business and was well known by all the old New Brunswick manufacturers.

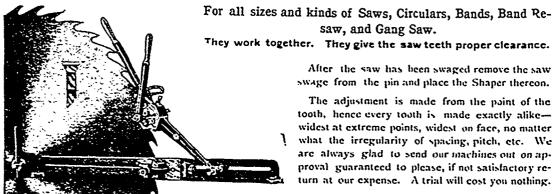
The Rainy River Lumber Company have just opened offices at 13 Bank of Hamilton Building, Winnipeg, where Mr. J. L. Spencer will take up the position of sales manager. Mr. Spencer has been for some years with the Cookston Lumber Company and leaves his post with that company to locate in Winnipeg.

Lady Joly de Lotbiniere, wife of Sir Henri Joly de Lotbiniere, lieutenant-governor of British Columbia, died in Victoria on August 16th, from the effects of a paralytic stroke, sustained some weeks ago. Her death is deeply regretted throughout the entire Dominion, for she was widely known and most highly esteemed. She was always a true helpmate to her husband in the many positions of responsibility and honor which he has occupied, and her wise counsel will be greatly missed.

Referring t the fact that the Dominion Exposition is being held at Winnipeg this year, and that last year Toronto was the point chosen, the Maritime Merchant points out that next year's Exhibition should justly be held in the Maritime Provinces. It is absolutely essential that the people of the different provinces should become acquainted with the possibilities of each province and as a means to this end a Dominion Exhibition should be held in the Maritime Provinces.

A company has been organized in the city of Mexico under the title of the Mexican Permanent Exposition Company for the purpose of maintaining a permanent exhibit in that city of such products of other countries as are best adapted to Mexican cultivation and uses. They have already secured a government concession, and are erecting extensive buildings which are to be opened in the latter part of October. J. Landero Y. Cos is president and E. Hegwisch secretary.

HANCHETT SAW SWAGE & SWAGE SHAPERS



Hanchett Chemat Saw 51 age with Bench Attachment and Jeinter.

swage from the pin and place the Shaper thereon.

The adjustment is made from the point of the tooth, hence every tooth is made exactly alikewidest at extreme points, widest on face, no matter what the irregularity of spacing, pitch, etc. We are always glad to send our machines out on approval guaranteed to please, if not satisfactory return at our expense. A trial will cost you nothing.

Write for circular "F" to

saw, and Gang Saw.



nauchell Circular Swage Shaper with Bench Attachment.

Hanchett Swage Works, Big Rapids, Mich., U.S.A.

MANUFACTURE OF TRIANGULAR TIES.

Mr. M. Macauley, of Portland, Oregon, describes in the Columbia River and Oregon Timberman the manufacture of triangular railway ties as practised by the John O'Brien Lumber Company, of Somers, Mont. This company is located in a large belt of timber, principally tamarac, well adapted for the manufacture of railroad ties. This timber is tributary to the Whitefish, Stillwater and Flathead rivers.

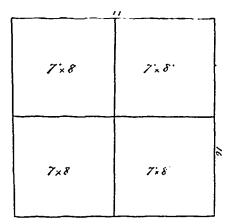
President Hill, of the Great Northern Railroad, who is interested in the company, while in Austria several years ago, became inbued with the advantages of the triangular tie over the square tie, and has been using a considerable number of these ties for several years in his system.

The mill differs but little from the ordinary sawmill, the only difference being that in order to produce triangular ties the square timber is transferred to beveiled rolls and re-sawed.

ADVANTAGES CLAIMED.—The triangular tie requires less timber to serve the same purpose as the ordinary square tie.

The ease with which the tie accommodates itself to the roadbed by reason of its V, or wedge-shaped, form, making it practically a self-tamping tie, at the same time offering a surface bearing on the rail equal to the square tie.

It is contended that the triangular tie is more durable and less liable to rot in the track



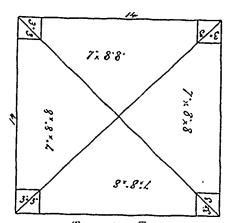
ORDINARY SQUARE TIE.

than the square tie, by reason of its form providing a natural watershed for the portion embedded in the track. This is obvious, there being a face of only three inches on each side before the acute angle of the tie is reached. On the square tie the water follows down the sides and lodges at the base, and every impact has a tendency to soften the ballast directly under the tie, and work loose the tamping, which is very noticeable at the extreme end of the ties, especially in the case of poor or soft ballasting.

DISADVANTAGES.—The triangular ties does

not serve the purpose of the square tie, and from what I shall endeavor to show, are manufactured at a loss of timber, costing one-fourth more than the square tie.

To produce eight square ties 7"x8"x8 feet, it requires a timber 14"x16"x16 feet. To manufacture eight triangular ties 7"x8"x8 feet it requires a timber 14"x14"x16 feet, after making



TRIANGULAR TIE.

allowance for saw kerf. A timber 14"x16"x16 feet containing 298 2-3 feet, makes eight square ties 7"x8"x8 feet, 37 1-3 feet each, equal to 2982-3 feet. It is obvious there is no loss. To manufacture eight triangular ties 7"x8"x8 feet it requires a timber 14"x14"x16 feet, containing 261 1-3 feet, a gain in manufacturing triangular ties of 37 1-3 feet.

But while this gain appears, there is a loss of 48 teet in manufacturing eight triangular ties out of 14"x14"x16 feet timb.r. In order to give the ties an 8-inch face the timber loses four pieces 3"x3"x16 feet cut triangular, and instead of 32 2-3 feet in each triangular tie, there is but 26 2-3 feet, or a loss of 6 feet per tie.

Figuring this loss of 6 feet on the daily output of 1000 ties it means a loss of 6,000 feet of lumber. Computing the cost of 6,000 feet of lumber at \$7.00 per 1000 feet, means \$42.00 per day, or 4 1-5 cents additional to the cost of every triangular tie manufactured.

It is admitted, however, that the 3x3 edging cut triangular, as shown by the diagram, could be utilized in the manufacture of quarter-round moulding, but even this saving would not make up for the loss of six feet per tie as indicated above.

In this connection it may be stated that the size of logs from which the triangular ties are cut make practically only four ties each, the lumber on the outside being clear makes it available for moulding stock.

In the square tie 7"x8"x8 feet there is 37 t-3 feet, in the triangular tie there is 26 2-3 feet, a difference of 10 2-3 feet. It cannot be expected that the 7"x8"x8 feet triangular tie can serve the purpose of the square tie for solidity and safe-giving qualities.

The triangular tie splits more rea 'ily than the ordinary square tie, owning to the small body of timber available to receive the spike.

In laying the ties in a new piece of track their pyramidical form precludes their use without first ballasting to some extent, as the impact of the rolling stock on the rail has a tendency to cause ties to deflect from the perpencular.

Before using the ties they are treated in the tie preserving plant, constructed adjacent to the mill, with a solution of zinc and glue, a treatment which it is claimed preserves the life of a tie from five to fifteen years.

After three years' experiment it may be of interest to note that the use of triangular ties fails to demonstrate any merit that would warrant their universal adoption.

SUPERIORITY OF B. C. SHINGLES.

That the British Columbia manufacturers produce a better shingle than the Washington mills, is admitted by the Pacific Coast Lumber Trade Journal, in which we find the following: "Without going into the merits of the controversy that has been raging at Olympia and other places in this state relative to the employment of Japanese shingle weavers, it can be truthfully stated that the Japanese crews employed in the British Columbia mills turn out a better grade of shingles than the white labor employed on this side of the line. trouble with the latter is that there are too many individuals in the ranks of the white shingle weavers who labor by the sweat of their jaws and not their brow, and the result is that they will not do decent work. This is emphasized by recent strikes on Grays Harbor and in Skagit county, where the crews walked out in a body because the foremen insisted on better packing. It is no secret that the millmen have lost considerable business this year because of the loose and careless work done by the shingle weavers, and when prices are forced down by lack of demand due to slovenly methods of the packers and knotsawyers and wages are reduced because of it, the jawsmiths refuse to work or to allow others to labor also."

THE BIGGEST SPRUCE TREE.

It has been found again—that is, the biggest spruce tree on the coast. This time it is the real thing. No wonder it has grown to wondrous size, for it was found in God's valley, twelve miles from Nehalem, in Oregon. It is 21 feet in diameter, hence 63 feet in girth. It will have to be chopped down to count its rings to ascertain its age. It will now be in order to estimate how many feet of car siding could be made from it; how many butter firkins; how many apple boxes and how much sawdust would be wasted with a circular saw over a band saw.—West Coast Lumberman.

HERMAN H. HETTLER LUMBER GOMPANY 1324 Elston Avenue, CHICAGO, ILL., U.S. A.

North rn (ffic): MIDLAND, ONT.

White Pine Red Pine Hemlock, Lath, Etc. All Kinds of Lumber
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OUR SPECIALTY

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Yellow Pine Timbers
Sills, Flooring, Etc.

PULP NOTES

Sir. I fred Harmsworth and a number of newspaper proprietors of London, England, are reported to have just closed negotiations for 1,500 square miles of timber hmats in the interior of Newfoundland, on which they propose to erect an immense pulp mill.

It is reported that the industries contemplated by the Quatsuo Power & Pu'p Company at Quatsino Sound, B. C., are to be proceeded with under a contract that

provides for the operation of the p'ant within or e year. The plans call for a pulp mill of 125 tons capacity daily, and it is intended as soon as business warrants to build a paper mill to manufacture the pulp into paper.

A boiler explosion occurred in the Kinleith Paper Company's mill at St. Catharines, Ont., on August 13th, by which the building was badly wrecked. The exploding boiler was one of the rotary rag boilers situated on the second flor of a three storey stone section of the mill. Another similar boiler was carried out into the old canal, together with all the other machinery and debris. The rag boilers were generally operated at a pressure of 25 and 30 pounds. They were fed by pipes from a large steam boiler in another part of the establishment which carries a pressure of 125 pounds, and it is the impression that the regulator must have failed to work and allowed the low pressure boilers to receive the full 125 pounds.

It is again reported that English capitaliss will build a pulp mill on the Gilmour & Hughson water power at Chelsea, Que.

Fire Clay Products

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THE CLENYARDS FIRE CLAY CO.

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Cablegrams : Glenyards, Bonnybridge.

Codes used, A.B.C. and Glenyards.

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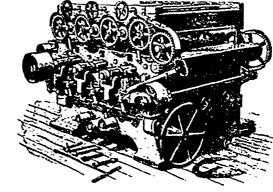
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GUESTS OF THE HANBURY COMPANY.

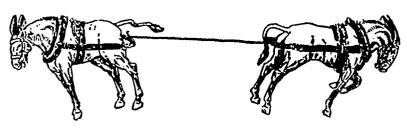
The Hanbury Manufacturing Company, of Brandon, Man, entertained about one hundred of their friends, many of whom were members of the Western Retail Lambermen's Association, during the Western Manitoba Fair held in that town August 9 to 12. As the guests of the Hanbury Company, they were courteously cared for at the Empire Hotel, which is one of the finest in the Canadian North-West. On the morning

of the 10th they were entertained at the factory of the company and in the afternoon were taken to the fair grounds by a special train, where their red badges secured them free admission to everything of interest. The following forenoon they were taken to the Brandon Experimental Farm and Indian School, being afterwards delivered at the saw mills of the Hanburry Manufacturing Company, where they saw a complete here facturing Company, where they saw a complete lumber manufacturing plant in operation. In the afternoon they were again taken to the Fair grounds by a special train, where they witnessed the races of the winners at the Dominion Fair at Winnipeg.

The occasion was one of much enjoyment, and all expressed their gratitude to Mr. Hanbury f.r his kindness and hospitality. The saw mills of the Hanbury Manufacturing Company at Brandon, Man, and cranbrook, B. C, will manufacture about 25,000.000 feet of lumber this year.

Makes Men Good-Natured

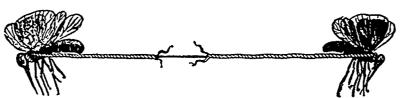
An ill-natured man never works well, but Clark's Pork and Beans is so good it makes all men good natured. Made by Wm. Clark, Montreal, of select Canadian pork and prime Canadian Beans, the lumberman's Ideal.



Mules Cannot Break This Yarn These

BECAUSE IT WAS MADE BY THE

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Poor Yarn is Dear at Any Price

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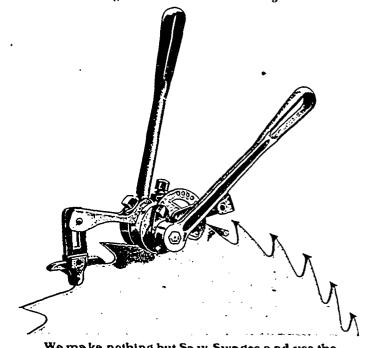
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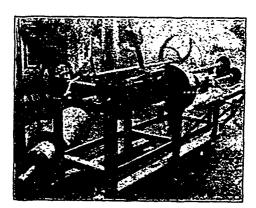


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The Kennedy Island Mill Co., Ltd., Riviere du Loup, Que., says-

"I might say to you that this Grinder is all right and has paid for itself twice over since I bought it. No Shingle Mill of any account should be without one."

rant the Saw stays down and trims, see cut. To cut off more than two feet, bad ends, etc., pull the cord, see duted lines. The whole Board can be cut into two foot lengths or trimined in any manner. The Saw frame is balanced, the Arbor pulleys are 8 in. x 8 in. We build several styles of Trimmers, also all kinds of

Saw and Shingle Mill Machinery

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B. R. Mowry & Sons,

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The following candidates successfully passed the Ontario log cullers' examination held at Aruprior, Ont., on August 16th last: T. Wm. McCreary, Arthur Jas. McCreary, jr., Jas. McCudden, Adolph Pr rel, Daniel P. P. Neil, John Laderoute, J. A. M. Lachlin, Norman McLachlin and R.J. Murphy, Arnprior; Thos. O'Neil, Bancroft, Ont.; Jas. Collins and Frank Doran, Barryvale, Ont.; John R. Woods, Antrim, Ont.; Patrick Finnerty, Rockfort, Ont.;

Peter A. Duff, Claybank, Ont.; John E. Almon, Hawkesbury; Alex. M. Taylor, Burnstown, Ont., Sylvester Kennedy, Brule Lake, Ont.; Stirling Buchan, L'Original, Ont.; Edward Goddin, Griffith, Ont.; Edward Reymour, White Fish, Ont.; Laughlin McDonald, Pendelton, Ont.; Geo. E. Elliott, Peterboro, Ont.; Jas. B. Gilmour and W. Sereney, Braeside, Ont.; Alex. W. Stewart, Lanark, Ont.; John Lochnan, Aylmer, Que.; Jos. Plaunt, Jos. Grout and Wm. B. Plaunt, Eganville; Frank

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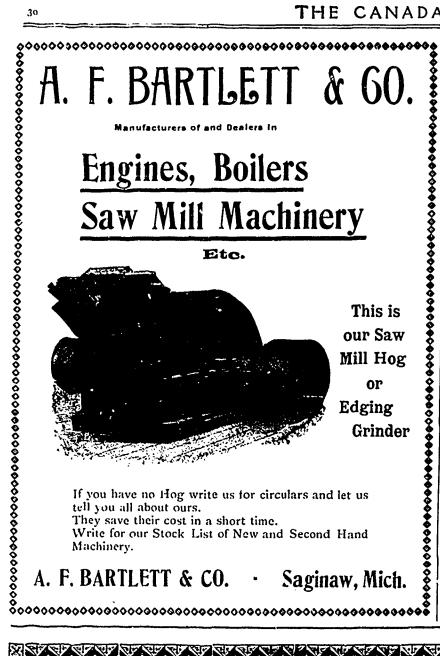
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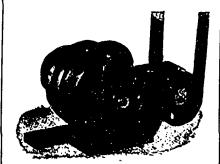


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is our latest production. It does the work without extra cost, while the flooring strip is being run through the flooring machine. Get a ma-chine and get ahead of the other fellow by putting jointed and bored flooring on the market before he does. Write for cuts and descriptions of our machines, also for list of users. We make the

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The company has purchased land, consisting of four lots, upon the corner of McLean Drive and Powell Street, Vancouver, B.C., facing Powell Street, and running back to the C.P.R. track, and with one side upon McLean Drive, (now opened up). The whole measuring 185 ft. by 132 ft.

Upon this a building has been erected, 85 ft. by 40 ft., two floors, with a tempering shop 26 ft. by 32 ft. one floor at one side.

A 50 h p motor and the main shafting and pulleys are already installed. A portion of the machinery has been ordered, including a milling machine for the inserted teeth saws, a heavy parallel grinder for band saws, and the material for the tempering furnace.

The company is having its circular saw grinding machine built after the latest improved American model.

The stock already sold is more than sufficient to cover the cost of the land, buildings and the machinery and supplies now in hand and ordered.

Further stack is now offered for purchasing the further necessary plant and supplies, to complete the whole, and enable the company to execute the orders which are already promised to the company.

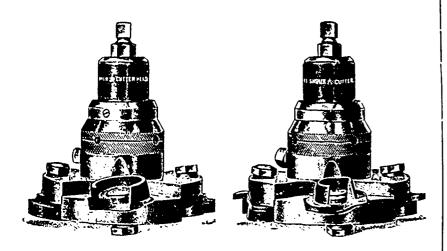
The inquiries already received from users of the company's manufactures ensures that the works will be fully occupied in executing orders, and sufficient land is owned by the company for extending the works when the needs demand it.

The company enjoys the advantages of cheaper fuel for the tempering furnaces, and oil for hardening, than can be obtained in Eastern Canada, and Messrs. Jessop, of Sheffield, have quoted the company the same prices for their steel delivered at Vancouver as at Toronto.

Applications for shares will be received by the Secretary, HERBERT WILKINSON, at the company's offices, corner Powell Street and McLean Drive, Vancouver, British Columbia.

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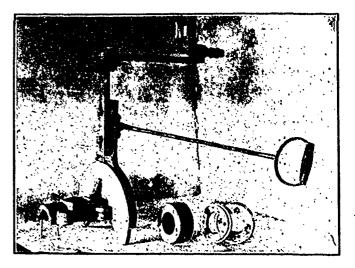


Are built from forgings of Steel and finished throughout in the solid metal. This insures accuracy, durability and perfect mechanical adjustments.

They are appreciated by the user because they hold up under the severest tests. They cut easily all kinds of hard, knotty and cross-grained lumber. If you make single tongue and groove Flooring, Ceiling and Wainscoting, buy THE SHIMER CUTTER HEADS and you will have no disappointment. Address

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Smaller expense in operation thus preducing lumber at a lower cost per thousand feet than any other method.

Requires no more help to operate it than any well equipped Circular Saw Mill.

Lumber has been sawn better and more accurately cut by this method than by any other now in use.

in use.

The Killam Tandem Circular Mill requires no more skilled men to operate it than is required to operate the ordinary Circular Mill.

If solid saws are used, the larger one, when worn down can be used for the smaller one, thus saving expense for saws.

No difficulties in handling or setting by this machine and no delays.

No time is lost in setting for any thickness from the cut of stationary saw up to six inches. This machine takes the place of a resaw in a mill and only requires a floor space of 6 ft. x 6 ft.

Also takes the place of a Twin Circular Mill that is now used for slabbing, and this machine will side as much lumber as any Twin Circular, thus saving the expense of a resaw and men to operate the same.

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Yours very truly.

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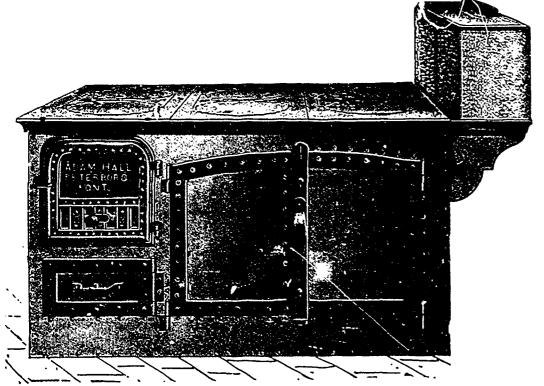
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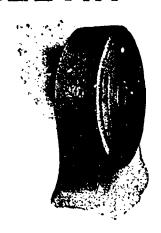
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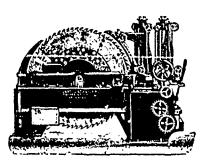
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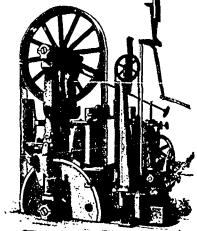
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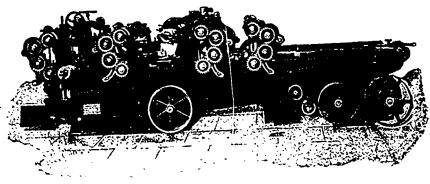
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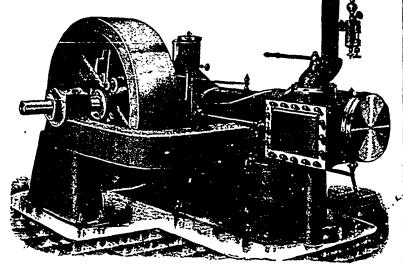
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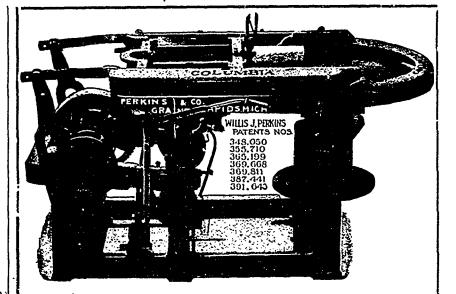


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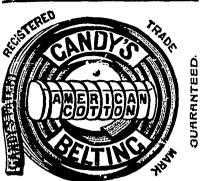
Can be obtained from every 1,000 feet of logs if this machine is used—due to its point regulation which enables you to maintain any thickness of point without interfering with the butt.

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When using a Babbitt Metal in your Bearings use

Manganese Anti-Friction Metal

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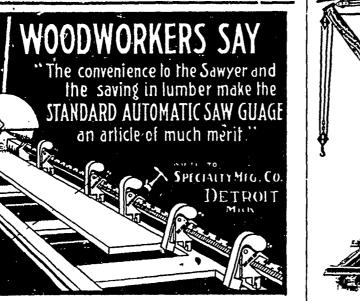
..BUCKEYE SAW M'F'C. CO...

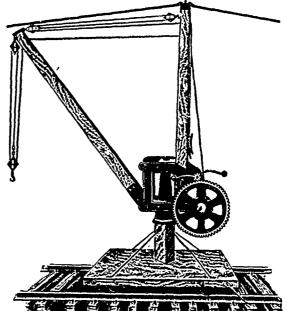
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Special Derricks for Handling Timbers and Logs

Derrick Fittings Stump Pullers Grubbing Machines

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THE BEST IN THE WORLD

There is no doubt about the fact that the

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This machine will slab opposite sides of a log in one operation at the rate of two thousand logs in 10 hours.



A MONEY MAKER

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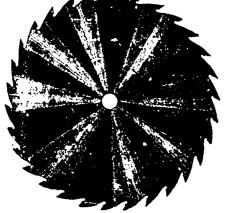
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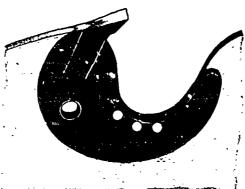
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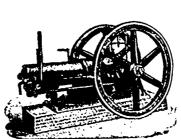
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Have no Superior. Simple in Construction. Symmetrical in Appearance. Economical in Fuel, Easily Operated.

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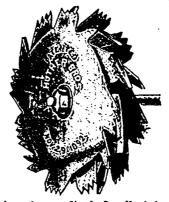
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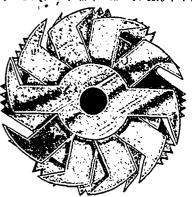
Mill Dogs, Edgers and Mill Supplies High Grade Portable and Stationary Engines and Boilers

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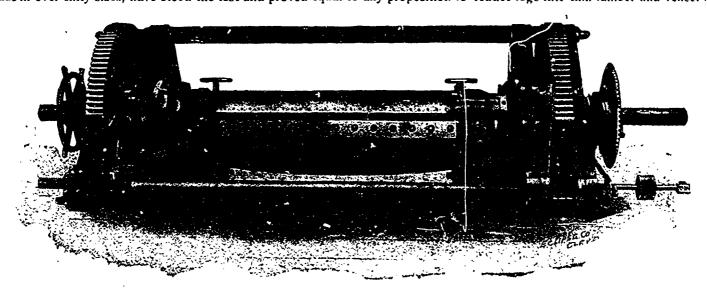
Will cut a perfect groove with or across the grain.

This is the only Dado Head on the market that gives entire satisfaction on all classes of work. No screw adjustment For different width grooves, simply remove or add inside cutters. Sold by builders and dealers of woodworking machinery in all parts of the United States. Will send on approval, in competition with any other make on the market, if not the best return at our expense HUTHER BROS. Platt Street, ROCHESTER, N.Y., manufacturers of Circular Saws, Morgan Pattern Lock-Corner Box Cutters, Concave Saws, etc.

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made in over sixty sizes, have stood the test and proved equal to any proposition to reduce logs into thin lumber and veneers.



The product is high grade.

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Quite a combination, is it not?

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Buy a Coe Veneer Cutting and Drying outfit and prepare to The cost of operating and maintenance is reduced to a minimum. supply thin lumber and veneers which have a healthy growing demand. More money in it than sawing your logs into lumber.

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Largest Builders of Vencer Cutting Machinery in the world.

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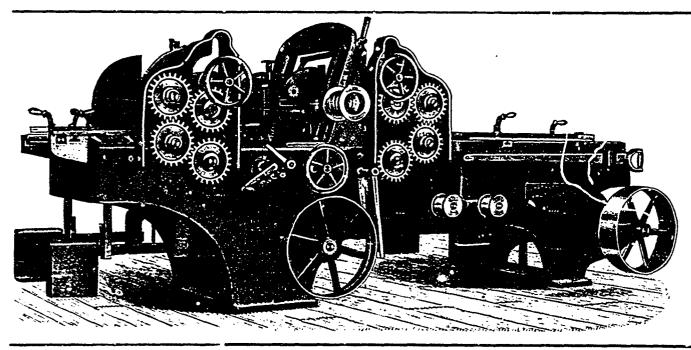
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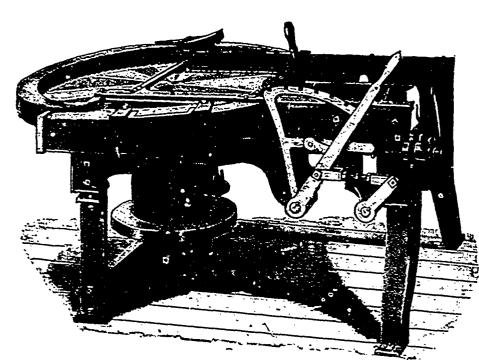


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Made in Three sizes.

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A handy book for Lumbermen, Gives Correct Measurements of Scantlings, Boards and Planks; Cubical Contents of Square and Round Timber; Doyle's Rules, and much other practical information.

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No logging outfit is complete without a supply of reliable veterinary remedies. Getting the wrong kind means the loss of the use of your horses when time is valuable.

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JOHNSON'S VOCUTHIRTY NOMEWOOD
are guaranteed never to fall when used
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They are
Johnson's Horse Linimint No. 1.
A penetrating Alcoholic Linimint.
Put up in one gallon jugs, with full
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Put up in bulk, per lb. 3C.

These goods being put up in bulk are more economical than others, as cost of bottling, etc., is saved

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In addition to our Veterinary Remedies we make a line of medicines for lumber, men, including a strong, penetrating flaiming, healing ointment, cholera cure, liver pulls cough syrup, in fact anything in the form of Camp Drug Supplies. We know that there are no better remedies made than those we offer. There may be others nearly is good, but they lack our quarantee. Satisfaction or money back. A trade discount of log allowed off all orders amounting to \$100.

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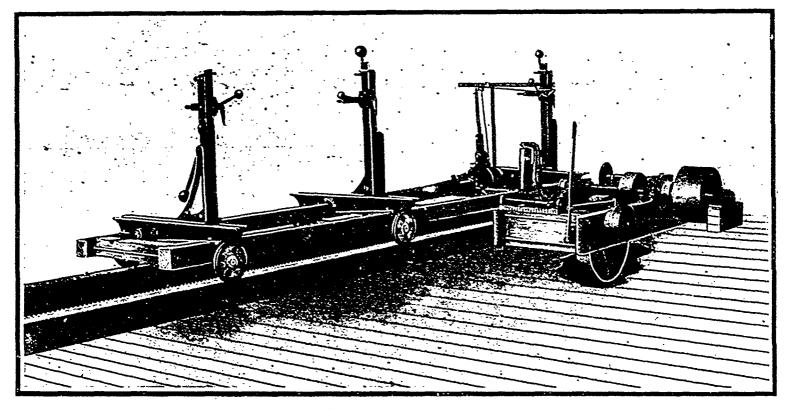
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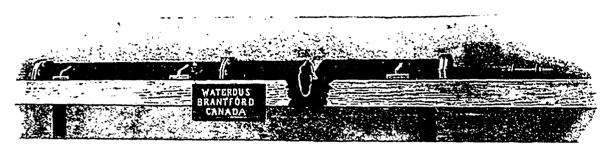
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The above cut represents our new No. o Sawmill, capacity 5,000 to 8,000 ft. per day, to carry up to a 56° saw.

DON'T WASTE TIME

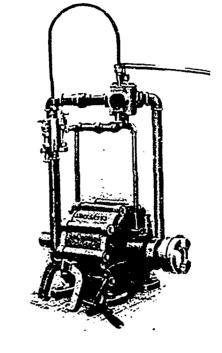
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Standard sizes 7", $7\frac{1}{2}$ ", 8", 9", 10", 11" and 12". Cylinders in six foot lengths.

These FEEDS are provided with our latest PATENT VALVES-the best in valve construction, works easily and certainly.



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is not surpassed by any other similar Feed that is made. easy to handle, easy on steam, no leaky joints, no trunions to wear. We furnish these FEEDS complete with two sheaves, all fittings and castings for attaching ropes to carriages. The Beck Feed stands for Capacity, Reliability and Economy.

THE GUNNINGHAM OSCILLATING TWIN **ENGINE FEED**

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Write Us for Prices on these Feeds

And We Will Gladly Farnish Prices and Estimates on Machines for Saw Mills, Pulp Mills, Steam Plants, Boilers, Engines, Etc.

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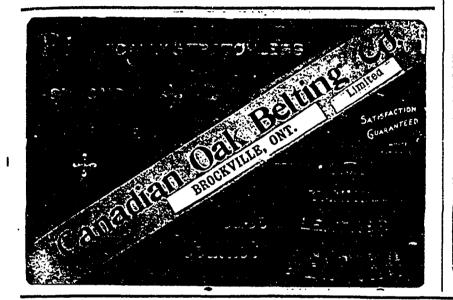
MOIST AIR .. DRY KILNS

LUMBER TRUCKS and TRANSFER CARS

Write for prices and particulars of the most simple and efficient Natural Draft Dryer on the market. Testimonials and list of users sent on application. Every square inch of heating surface is utilized to the uttermost and perfect ventilation and circulation is obtained by a very simple arrangement of ducts. Write for particulars to

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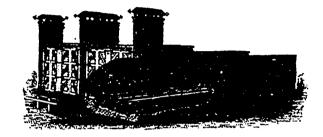


Successful Drying

By the Standard Moist Air System

No matter what the variety of the lumber, your stock can be dried dry, inside and out, without injury and without trouble, in

THE STANDARD DRY KILN



The intense moist heat at the receiving end of the kiln starts the sap from the heart of the lumber first of all, and in its progress through the kiln the stock is rapidly and evenly seasoned "from center to surface." It comes out in first-rate condition.

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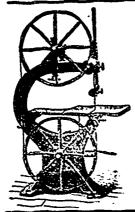
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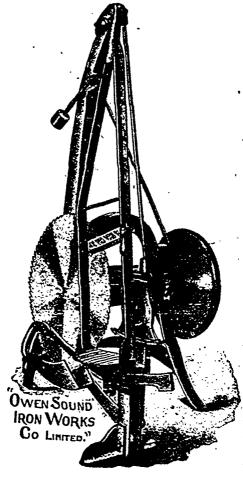
We also Manufacture a complete

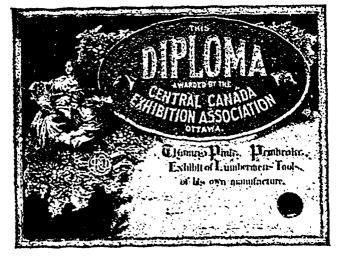
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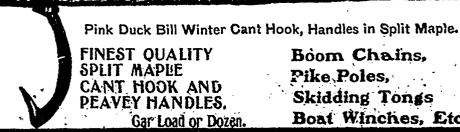
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