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Wood-Workers', Manufacturers' and Millers' Gazette


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# T를 CANADA LUMBERMAN 

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 ist last, operations being commenced ten days later.

The main saw mill building, shown on following page, is $220 \times 62$ feet; the lath and shingle mill $120 \times 32$ feet; the filing room 46 $x_{3}=$ feet. The main equipment of the saw mill consists of two large double cutting band mills, one 52 -inch gany and two mammoth edgers, each fed by two men.

The satw mill power house is $76 \times 54$ feet,
saw; 54 inch band resaw; one cut-off saw ; one timber planer, capable of handling timber $2+$ inches square.

The power house for the planing nill is $54 x$ 46 feet, and is equipped with a $20 \times 42$ 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 teet.

The company have a very complete lighting system, the saw mill being lighted by a $50 \mathrm{k} . \mathrm{w}$. direct connected generator driven by a $12 \times 12$ Ideal engine, and the planing mill by: $30 \mathrm{k} . \mathrm{w}$. belted generator and a $10 \times 12$ 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 setting to the consumer, but there is plenty of rowm between the tree and the car, says the St. Jonis l.umberman, to make or mar the success of the mill man, especia. ${ }^{\text {, when lumber prices get cluse enough }}$ to make the margin of profit small. When that time comes it is a yuestion of who can cover the distance from tree to car at the smallest cost per thousand feet. Did you ever go over the grounc. carefully, step by step, as it is covered by mill men in evers-d.y practice, and try to figure out where and how a saving in zost could be effected? If jou have jou have probably noticed that the avelage mill man puts most of his saving grace, so far as


Vibiss of the Ramy Ruger ligmer Company: Mum. and Dock, Ramy Rater, Ont.
equipped with one $32 \times 4 S$ Corliss engine and a battery of six boilers 72 inches by i 9 feet, complete with Duich ovens and automatic fecders. The smoke stack is 90 inches in diameter and 172 fect high; the refuse burner .$i 2$ fect in diameter and 120 feet high. At the rear of the mill there is a timber dock son 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 tracknge system, covering 17.4 track miles. There are two tracks in each piling alley, and one track in the rear cf each alley for the purpose of hauling dry lumber to the planing mill

The planing mill is $1+0 \times 72$ 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 $62 \times 270$ fect 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 17. 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 vencer plant of the Lake Superior Company at Sault Stc. Maric, 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 at tre 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 hoth large and important, s me 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 oul of them. Others take to the railway and mechanical appliances for handling logs, and then there is another, and a largre class at that, of mill men who devote by far the larger portion of their cconomical energy to the manufacturing end, letting nothing pas: by that gives promise of reducing the cost of converting logs into lumber. Of course, there are those who combine all of these to ath extent, men who look closely
ifter every step in the process from tree to car, but generally the men who concentrate their altention 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 fror new idene, so to get at the ideal all along the line there is prohably 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.


Dien of Minit and Sorting Shed, Rainy River Lumber Company, Rainy Riter, Ont.
to garner ideas from the leading specialists in the different steps and cumbine them.

An idea that his had a more or less checkered career in connectron 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 taiken this engine down to his Tennessee plant and proposes to haul $\log s$ 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 iraction engine in its improved state recome anything of a factor in southern logging? Its record in the past does not speak so well for it in that terridory; 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 puting 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 beiter engines the outcome will be differert, 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.
there for cutting rough stock for concentıati, , at the planing mill or finishing plant. Some mill men have followed this plan more or les 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 bir problem, covering a wide field, and the ques. tion 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 drais 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 fiame, 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


Llmuer Yard of the Ramy Riter l.cmber Compani, Rabiy 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 swill 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 ahout the mill and yard. The first remedy is to use the broom, use it persistently and unsparingly all over the mill. Beams, joists, journal toxes, 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 wi'h its modern succesvor, the spraying machine.

## BRITISH COLUMBIA SAW MILLS

Photographed and Described by Our Travelling Repreaentative.

## THE FERNIE LUMBER COMPANY

The accompinging illustration shows the saw mill of the Fernic Lumber Company, Limited. The company was organized by Mr. McDougall and Mr. I. 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 satw 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, une mile east of Fernie, on the Crows Nest Pass Railroad. To the north fluws the roaring Elk river, running for sume distance almost alongside the mill. It is down this stream that the logs are driven to the mill from the company's limits sume 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 carcular, 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 lucal trade is being done in rebuilding the business section of the town which wats devastated by fire in May of this year.

Mr. John Alexander McDougall, popularly known as "Sandy", president of the company, is a product of Iruprior. 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 Og densburg, 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 hours.

The boiler house is separated just a few feet from the main, building and is eguipped 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 Manituba, the Territuries, and even as far east as Turonto. The mill entploys thirty hands.

## D. \& J. HADDEN.

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


An Ontario Sumpment hy D. \& J. Iadmen, Ciovermane: 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 hat from Orillia, Ontario, being formerly owners of the Foxmead mills there.
The main building is 100 feet long by 50 fee: wide. It is equipped with two of John-


Siw Marl. of tite fernie Idamber Compani, Fernie, 13. C.


Cuttini. Joos for tile llazienmere I.tmber Combiny.

25,000 daily. Puwer for driving the machinery is obtained from twolarge 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 pinc. 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 splendidIy 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 huilding tully 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 beine 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
MONTHLY AND WERKLY EDITIONS

The C. H.Mortimer PublishingCompany of Toronto, Limited,<br>Confbderation Lafk Bullong, Toronto. Mrancil Ofpichs

38 Allinnce Building, Montrenl.
310 Mclntire 13Lock. Winnibec.
21 Great St. Melens, Londun, E. C.
The I, ustmaraian Weekly Edition is published every Wedtuesday, aud the Monthly Idation on the ist day of every month. TBRMS OR SOBSCRIPTION:
Ono Copy, Weekiy and Monthly, One Year, in advance,
Ono Copy, Forelgn Subscription, $\$ 2.00$ a Year.
Advertising Rates on Application.
Tins Canada Iomabriman is published in the luterests of the lunber, wood-worliniog and allied industrics, being the only ep giving fuli and timely information on all subjects tonchiog at giving fult and invitcs free discussion by lis readers.
thespecial pains are token to scure for publication in the thapecial pains are taken to secure for publlcations in the Wapkiv I, umugranink the latest and moss trust worthy market quotations throughout the frosid, so as to afford to the trade at operations. Subscribers will find the small amount ithey pay for the Canada loamexasa quite insignificant as compared pith its ralue to them. There is not anindividual in the trade. or spectally interested in in, trho should notbe on our ist, thus
obtaining the present benefit and addiag and encouraging us to obtaining the present benegt a
render it even more complete.
Advertisers mill receive coreful attention and tiberal treat. ment. For manulacturing and supply firms wishing to briag and planing mills, wood-vorsing factories, pulp mills, ete. the CaNADA I OMayRasAN is undoubtedly the cheapest and most progitbile adverising medium. Special attention is are inserted in a consplcuous position on front page of the Areinsertedin a
Weekly Rdition.

## MLLEAGE AND STUMPAGE CHARGES.

The new regulations imposed by the New Brunswick Government on Crown timber lands have now been in operation a jear. It will be remembered that the annual charge was increased from $\$_{f}$ to $\$ 8$ per square mile, and the stumpage dues on spruce, pine and fir saw logs from $\$_{1}$ to $\$_{1} .25$ per inousand feet, and on cedar from So 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 nileage 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 ata 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 expetienced 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 he 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 Goverrment 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 Canadi, 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 strall 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 almest 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 conjuncion 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 teen orignated to maintain prices at a reasenable basis and frevent, if possible, serious loss to the trade. This has been lound 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, with: out, apparently, arriviag 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, be in turn to appoint district re. presentatives where found advisable to do so. By some it is believed that such a plan might be successtul, but others, remembering the fate of previous efforls, 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 final!y 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 were :

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

Second. To increase the number of fire rangers trom 65 to 10 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 clained 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 hetween the Government and the licensee. The rangers are selected by the licensees, but the Depariment of Crown Lands reserves the right to reject or remove any person whon they consider unfit for the position. This system has provided very efficient protection, th : 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 $\mathrm{IS}_{5}$ to two handred 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 conomy. According to the last report of the Minister of Lanrih, . Wines 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 heense holders, according to the rate of $173 / 2$ cents per square
mile, was $\$ 10,977$. Each ranger would have an average of 750 square miles of territory under bis 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 :inles, 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 licemees was $\$ 3 \mathrm{r}, \mathbf{2 5 7}$. Thus there would be provided one ranger to every seventy square miles, at an average cost to the licensee of $\$ 138$ per renger. The cost of extinguishing fires is divided between the Government and the licensee.
The Ontario Government and the timber linit holders alike seem well satisned 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 tor 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 3oth of the present year, lumber was imported into Canada, largely from the United States, to the value of $\$ 4,6,6,556$, 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 Srates 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 remarl:s, of course, were intended to apply particularly to Ontario. It is an argument that has not been advanced heretotore 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 jo 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 teing 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 Tire Cavada Lumberman. The list includes some thirtyfive of the largest firms in the province and
represents an invested capital of about $\$ 20$,o00,000. During the past twelve month these manufacturers have marketed their stocks in Manitoba and the Territories in the face of considerable difliculties and disad,antages, such as excrssive freight rates and the competition of surplas stocks of low grade American lumber; but, with this litter 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 acyuaintance 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 13 . C. product.

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

## IMPORTS OE EOREST PRODUCTS

The following table st ows 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, 1got. The table is compiled frum the unrevised monthly statements of imports and exports issued by the Department of Trade and Commerce :

| Class of Timber. | March. value. | April. value. | May. <br> Value. | June. <br> Vilue. |
| :---: | :---: | :---: | :---: | :---: |
| Sawed or split boards, planks, deals and other lumber. | \$207,405 | \$260,904 | \$236,800 | \$388,904 |
| Logs and round unmanufactured timber. | 29,594 | 11,06: | 17,885 | S4,487 |
| Timber or lumber, hewn or sawed, square or sided. | 6,489 | 29,967 | 11,705 | +6,005 |
| Cherry, chestnut, gumwood, hickory and white wood | 45.861 | +2,633 | 55.561 | 45,625 |
| Oak | 122,823 | 137,252 | 125,926 | 164,382 |
| Pitch pine. | 1, 4,887 | 19.562 | 29,745 | 69.401 |
| Mahoganv. | $4,34^{2}$ | 15,259 | 5,885 | 6,840 |
| White ash | 15,279 | 9.770 | $1+4(0)$ | 10.153 |
| Wa!nut | 2,855 | 9,259 | 4.161 | 4.6 .6 |
| Spanish cedar. | 322 | 313 | 3:7 |  |
| African teak | 1,468 | 316 | 139 | 580 |
| Pine and spruce clapboard | 1,651 | 747 | 361 | 1 S |
| Laths. | 3.335 | 7.379 | 4,525 | 10,139 |
| Shingles | 1,621 | 3,058 | 693 | 972 |
| Staves | 16,502 | 8,013 | 15.011 | 8.465 |
| Shovel handles | 6,520 | 2,209 | 2,6,8 | 7,370 |
| Felloes of hickory, rough sawn to shape only | 1,936 | 2,560 | 4.412 | 2,834 |
| Handle, heading, stave and shingle bults. | 4,136 | 1,526 | 4,291 | 381 |
| Hickory billets. | 5.5 | 79 | 110 | 979 |
| Hickory for spokes of wheels | 390 | 253 | 244 | 76 |
| Hickory spokes, rough turned | 27,279 | 29,860 | 18,027 | 22,1.14 |
| Hubs for whecls, posts, last blocks, ctc | 4,219 | 2.596 | 3.287 | 4,13. |
| Fence posts and railroad ties.............. | 4.3 .46 | 13.572 | S.830 | 2S,603 |
| Total...... . | $\$_{52} 2,265$ | \$60, 169 | \$625.382 | S910.2tif |

## 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 $i$ uports and exports issued by the Department of Trade and Commerce :

| class of Timber. | March. Vnlue. | $\begin{aligned} & \text { April. } \\ & \text { value. } \end{aligned}$ | May. | Junc. inluc. |
| :---: | :---: | :---: | :---: | :---: |
| Planks and boards. | \$205,830 | - ${ }_{3} 347,191$ | S52.3,091 | \$1,572,224 |
| Basswood lumber. | 332 | $7{ }^{7} 6$ | 425 | 1,8i60 |
| Pine deals | 237 | 1,338 | 7.800 | 7,5o8 |
| Spruce ard other lumber |  | 12,6x | 7.819 | 15.227 |
| Laths.. | 28.391 | 29,857 | 54.830 | 1.35.4.3' |
| Picke | 238 | $3+1$ | 6,215 | 18.586 |
| Scantling. | 3.357 | 1,608 | 10,230 | 16.267 |
| Shingles. | 75,.38 ${ }^{8}$ | $1.6,429$ | 153.137 | $252.60_{3} 7$ |
| Shooks | 1,605 | 379 | $6,9+3$ | 7.250 |
| Staves and headings. | 4,217 | +1,256 | $8,3{ }^{\text {S }}$ | 12,840 |
| Telegraph and other po'es. | 1.155 | 4.924 | 1.900 | 6,205 |
| Cedar and tamarac posts |  | 1,397 | 2,2()2 | \%, $\mathrm{S}_{5} \mathrm{C}$ |
| Shingle bolts. | 500 | $13^{8}$ | 350 | 150 |
| Sleepers and railroad ties | 5,8,6 | 12,493 | ${ }^{4}+3.387$ | $34.40 \%$ |
| Stave bolts. | 701 | 13 | 163 | 930 |
| White pine timber. | 574 |  |  | 25 |
| All other square tunber. | 431 | 507 | 265 | $80 \%$ |
| Pulp wood.. | 117,229 | 142,204 | 16,3,2:3 | 277.533 |
| Lumber no: elsewhere spee | 3,480 | 5.783 | 1+195 | 17,868 |
| Cedar logs.. | 90 |  | jod | 4,920 |
| Elm logs.... | 24 | 370 | 70 | 1,115 |
| Hemlock logs | 576 | 48 | 15.497 | 1,34, |
| Spruce logs. | 2,702 | 2,958 | 33.2:1 | 5,9:3 |
| All oiher logs | 16,692 | 10,429 | 30,747 | (3,3\%) |
| rotal. | S 569,585 | \$716.305 | St,062,00.4 | \$2,462,509) |

## THE WINNIPEG EXHIBITION.

Office of the Canada zombaranan. Mcintyre Block, August 19, igat.
Since our last issue Winnipeg has been the centre of great excitement on account $o^{\prime}$ 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, genernlly 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 has now found its level, and things are steadying down, awaiting the results of the coming crops. Mones, too, is getting very light, altributed generally to the indiaposition of lite Banks to arcept 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 will 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 tavoring the U. S. mills. and much anxiety was expressed, but lately there has been a better proportion of trade soing to mills on this side, owing probably to prices showing a better parity. LUMUERMEN'S TOOLS AT THB DOMINION EXIIBITION.
Among the several exhibits in the Machinery Hall of the Winnipeg Exhibition which altracted universal attention was that of Shurly \& Dictrich, of Galt, Out. 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-picce being a fine circular saw $7 \not 12$ feet in diameter, the largest crucible steel plate that has been made. Arranged around this in artistic furm were samples of their many tools. There were their " Miaple 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 fcature 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 Leafliarven Tools Company," of Tilsonburg.

Another exhibit of great interest to lumbermen was that of the Dundas Axe Works, Dundas, Ont. This firm exinibited 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 Smatt 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 Goldic and McCullocl Company, of Qalt, Ont.
machine, a saw carviage and frame, and double geared log haul-up. There was a good deal in this en. hibit of an attractive nature and much attention was given to it by the various visitors.

The A. R. Williams Machinery Company, of Winupeg, displayed a range of lathes, drills and woul. working machinery, and also a complete outfit for sanmills, with engines and boilerg. This firm, whuse address is 45 Notre Dame street cast, carry in slock . full line of all necessary mill and machinery outfirs
The Canadian Iron and Foundry Company, of $s$. Thomas, Ont., showed samples of their "trolley" wheeh, high grade machinery wheels and grey iron casting. The Stuart Machinery Compans, "I Winnipeg, the Western agemts of the E. Long Mulg. Company, Orillia, had. fine showing ot wood-working machus. a prominent feature being their log frathe and saw carriage, for which they chatur special advantages over other makes, bay an extra wide friction drive, an con tirely new saw guide, extra size wheck on $\log$ frame, which ensures special eat in running, and a new adjustment 1. drive, which minimizes wear and tear. They also showed surfacers and matho ers, exhaust fans for the removal of dust and shavings, emery wheels and siat sharpeningr outfits.
The Northern Iron Works, Winnipeg, had an attractive display arranged uith 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 .in an outfit of circular saws.
The Waterous Engine Works Cim. pany, of Brantord, Ont., had one of their No. 7 fire engines on ex-
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 highspeed enclosed self-oiling engine, a ten inch moulder, a full set of lhilbrick 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 li.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 $3^{n}$ h.p. This company received some very axcellent testimonials regarding their engines and machinery.
The E. Long Mnfg. Compitny, of Orillia, Ont., had on exhibil 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 l.the and pieket
hibit in the grounds of the Exuibition. This engite, all cold, can be started in two minutes and in less than five minutes will be throwing a stream of swater 100 feet high. At a test at Red Deer it threw wo streans with the wind 150 feet and with side-winu 136 fert. Through a line of $\mathrm{r}, 000$ feet hose it is capable of projecting a stream of water through a one-inch nozzic 100 to 120 feet, acsording to wind, or two lines 500 fect will $2 \frac{3}{4}$ " nozzles simultaneously 100 feet.
The western selling agents for the Gutta Percha \& Rutber Manufacturing Company, ot Toronto, had an excellent display of rubber goods, with a special show of their well-known brands of belting and hove foremost amongst which is their "Maltese Cross: special stitched belting, made particularly for dynanos 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 various brands of "Eureka," "Paragon" and "Red


Dominion Enbmition, lifinnipeg-Enhmat of Penbertuy Injector Company.


Dominion Exhibition, Winnipeg-Exhibit of Gutta Percha \& Rubber Co.

Cross," was also very altractive. The brand known as "Guttaperch," we understand, is a make of special excellence, and has been aporoved 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 hat also a series of stands showing every suze and pattern made. An interesting feature of this exhibit was a machine in full operation for miking the Penberthy injertors. 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 Metaltio Roofing Cumpany was in charge of their Winnipeg agent, Mr. Thomas Black. The had four panels of wall designs and two $p$ i. Is of zine and copper ornaments, these mahing a wall 12 feet high and 30 feet in length. In front of this wall was a phatorm 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 lubricating 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 ,heir goods in attractive booths.
The Henderson Roller Bearing Company's exhibit was one which attracted a good a good deal of attention, and was interesting as showing the great aduantage in economizing powert which a bearing of this description has. A large roller, weighing $5,6,8$ pounds, was mounted on this bearing and was driven throughout the entire fair time by ancrdinary fishing line. On an ordinary shaft were mounted three wheels, one an ordinary hrass 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 toller 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 Fai:hanks Company, of Montreal, have just aequired the plant of the Northrop Iron Works, at Valleyfield, Que. The company purpose commencing operations immedately for the manufacuure of brass and iron goods.

The firm of Burridge \& Cooper, machinery dealers, Win.nipeg, have formed a joint stock company, which is capitalized at $\$ 50,000$. The oficers are: Presir nt, James Bur. ridge ; vice-president, E. F. I.eGrasley; se 'tary-treasurer, Alfred LeGrastey; manager sales department, E. S. Cooper ; manager electrical department, F.A. Fry; manager mechanical department, C. Sifton.

The A. J. Burton Saw Company, Limitel, 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 touls, hits and shanks, elc. This company are agents fur British Columban for the wellknown saw firm of R. Hoc 太 Cumpany of new York, and under the able management of Mr. A. J. Burton we predict a prosperons future for them.
saw, to keep saw from tipping against log. Further partic. ulars, prices, ete., may be obtained by those interested by writing The O, Ford loundry is Machine Compans, Ovford, Nova Scotia.

## PUBLICATIONS.

"Tools for the Care of Sawy" is the thte of the latest catalogue is uned by the William Ilamilton Manofacturing Company, of leterboro, Ont, who have lately emtered into an atreement with the Covel Manufacturing Company, of Clicago, whereby they secure the sole right to build their sall sharjening machinery in Can. add. All the Covel machines, have been brought strictly up-to-date.

A booklet recently to hand iv devoted


Dominion Eximition, Winnipig-Eximit of E. Long Mfg. Compinv. to the Cape Town International Indus. trial Exhibition, wheh wall be opened at Dape Town, bouth Africa, in .Vovember next and continue for three montlis. We learn that several hundreds of the teading firms covering practically every branch of industry in which South .Ifrica is interested have arranged to extitbit, and Wat the Extibition is now regarded ay an assured success.

The American Wood-Working Machinery Company, 136 Liberly Strect, New York, have just issued C.atalogue " 13 " referring to special plating mill machinery. White in this catalogue there are illutrated 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

Mr. M. I. Killam, of Truro, N.S., has secured a patent for an auxilliary saw guide and self adjusting sett collars that are placed on saw arthors and are now used in circular saw mills. His claims are as follows: They are giving perfect ratisfaction, as any sawjer can use them. They guide the saw perfectly in every cut without moving the front guide, and by this improvement and saw guice to top of saw it is no troublle to run thinner saws. It has cut more and better lumber than ever before sawn on circula: saw mills. When sett coilars are properly phaced on the arimor 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 gude, 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 $\operatorname{lng}$ 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 carrage, and the carnage or the log can be moved back at any part of the cut, while the guide is in perfect saiety of any accident. When using these attachments the saw should be in perfect line with the carriage and a gutde at opposite directions from the one in front of saw, only on ligg side of
interested in the manipulation of timber. They have also published a pocket edition of their 1904 catalogue, hy 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 sishsh, door and blind machinery, and Catalogur " D ' of furniture ma. chinerv.

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

Canadian exports to South Africa last year amounted to $\$ 1,931,54^{1}$. Fur the calender year of 1902 the imports of the South African colonics amounted to $\$ 242,000,000$, the United States sending goodv it that year to the cxtent of $\$ 22,000,000$. Wilh the aid of the preference and the direct line of steaners lately estabpreference and the directione of seen the Dominion and Sollh Africa. Canada lished betwecn the Dominion and Solthatrica, Canada
ought t. successfully compete with the United Siates ought t. successfully compete with the United Siatey in such articles as bicycles, flour, chairs, agricultural
implements, colton, lumber, doors, sahes, blinds, implements, cotion, lumber, doors, sinhes, blinds,
household furniture, dairy products, musical instruments, carriages and harness, hay, condensed milk and provisions.


Douinjon Exhibition, Winnipeg-Exhbit of Jas. Smart Mfg. Compani,


Dominion Embimtion, Winnipeg-Eximbit of the Metallic Rooking lo.


HOO.HOO CONCATENATION AT TVNNIPEG.
A concatenation of the Hoo-Foo order was held at Winnipeg on August 4 th, 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 enthus. iasm, 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 seremonies, 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, Senic: 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 fecling amongst its members, the membership being limited to those who are directly interested in the lumber trade.

## PROGRAMME THIRTEENTH HOO.HOO ANNUAL. <br> 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 se sions of HooHoo 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. Tarleten 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 $9.09 \mathrm{a} . \mathrm{m}$. 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 tu his employees and their triends at
broke Milling Company, and the Pembroke Navigation Compatıy. A splendid programme of sports and music was provided and thoroughly enjoyed.

## THE "HOE" SAX EXHIBIT.

Among the many handsome and interesting extiluw in the Liberal Arts Bullding at the Louisiana Purchase lixposi. tion, 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 acccounts for their exhibit being located in the Literal Arts Bualdurg.
The saws are by no means the most uninteresting patt of the exhibit, and seem to attract the attention and admuation of visitors quite as much as the more intricate printing press. es. R. Hoe \& Company's specialty is the inserted toush circular saw, of which they were the originators and invent. ors. These saws have been in use for many year, and their superiority over solid saws for aimost every kind of work has been thuruughly demonstrated. It is clamed that there is $n-$ finer inserted-rooth saw made than that mathatac. tured by R. Hoe \& Company.
The accompanying piclure shows a small section of the exhibit. The stand at the left side shuws the name " K . 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 albove 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 Worldos 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 purpuse of satisfying the appetites of the large crowd, there were provided $1,35^{\circ}$ 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 Pem.
thoth saw the circular saw of the twentieth century, but also qat they have been manufacturing saws for eighty yearsouite an enviable record.
A handsome mahogany glass case contains samples of the different stvies and sizes of bits and shanks, also a complete assortment of saw tools. The saws, of which there are 2 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 thay can be easily removed and shown in detail to those interested.
Several of R. Hue \& Company's friends bave 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 relics have been cuhibited: among others a horse shoe is shown sliced off by a saw. In among others a horse shoe is shown sliced of by a saw. In
some way the shoe had become imbedded in the tree. No some way the shoe had become imbedded in the tree. No
damage was done to the saw, other than the dulling of 2 damage was done to the saw, other than the dulling of 2
few teeth. Another relic has been sent by Messts. Chas few tecth. Another relic has been sent by Messrs. Chas
Smith, Jr., \& Sons, of Mit. Vernon, Indiana. Their lettes Smith, Jr,"\& Sons, of Mt. Vernon, Indiana. Their letter
reads as follows: "We cut into a ss" bolt of irnn twice the reads as follows: "We cut into a $f f^{\prime}$ " bolt of irnn twice the
other day, with your chiscl-tooth saw and did not injure the saw."
R. Hoe \& Company have spared no pains to make this 2 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 I oroto Globe regarding the timber as follows:

Along the rivers, and for the most part the creeis 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 balsain poplar some 28 inches, aver aging 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 bigh, 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 river: 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 thirtecn inches, averaging probably seven incl:es. These grow on a clay soil overlaid with two or three feet of humus, which agatu supporis 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 Bryaceuns mosses. Scattered through the black spruce are many tamarac, which in wetter areas are collected into tamarad swamps. These trees, unfortmately, are dead almost without exception, having been killed within recent years by the larch sawily in these areas.

And even though you answer Ycs, 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.

## Hardware, Tools and Supplies

Now Homo After Sopt., 4th Avo. and 13 th St.


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

## A <br>  <br> MOULDER

# THE <br> Wood-W orker and Retailer 

## GLEN COVE BOSS TIMBER SIZER.

The accompanying engraving illustrates the Glen Cove Boss timber sizer, buile by the American Wood Working Machiners Company. This is chaimed to the the heaviest and most roustfal as well as the simplest and most casily hamated machine of thin class on the masket. It is fully up (0) date in design, simple in construetion and all material and workmanship are of the vesy bent. The parts liable to breakage are icduced to a mininumand a complete sjstem of numbering and lettering applied, which is a great convenience when ordesing neeessary repairs.
This machine is huilt io wook 30 < 20 inches, $30 \times 18$ inches, $30 \times 15$ inches and $20 \times 20$ inches, wish eight feed rulls; also $30 \times 14$ and $30 \times 12$ inches, with six feed rolls. The accompany: ing illustration shows the $S$.roll machune.
A!! of the adjustatents ate casily and quickly made and
information upon application, and our a wiors ase requested to addess the office nearest to them as follows: American Wood Working Machinery Company, 136 Liberty St, New Yock City, or The Faithanks Company, Vancoujer, B. C.

## CUT-OFF SAWS.

The writer recently paid a visit to a wellequipped factory, where everything seemed to b* 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 piank. The writer, after many years of study and practical experience, prefers the one shown in Fig. 2.

In the saw shown in Fig. I there is no pos. sible 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


Cinen_Cour_Ross Timafer Sitzer.
thme nermury for a chatige foom one class of work to another ate all made form the operators peritions at the side or end of the machine, and en easily and quickiy as to make this machine ajabie of crovering a vesy large range of work from surfacing four sides (full capacity of the machine) in cas sills, thonring, decking of any similar uork.
The fame is sulstantial, the sides are heavily ribherl and ctme gitts are all filanedion a seat ani uroagly lented, and all the upper work applied in a way to adid stecngth and statitity
The feed is execpionally muctfol. All woll are geared at boith rate The find inn ing rolle ate divided, cecopt ia tie $\leq 0$, 20 inch methins, where the snits are solid. All imp rolls are indeperibenty weightel and sise and fall furallel with the lx:tom rolls The feril as well as the
 end arod sole of the machine. The feed hoiss is very effeclire and is araila!?, when the feed is on or of.
The manufactarers will ix picased in send illonasted ciralars kimna a complete desectiption of all deiails and otter
the saws certainly needed attention. The first suggestion was to joint up the saws, wh.ch 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 kiad of salw has been in use many years, and, when properly cared for, can he 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. $=$. should be used. This saw, with a little set, properly jointed and filed, will do an enormous ameunt of good wor. Note the difference: the sketches will explain more than could
as the one shown in Fig. z-a very yood thins 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 coly half as strong.

Progressive manulacturers are looking fo: a tool tha! will do good work and lots of it. The satw shown in Fig. $=$ is just as smooth a cutter as can be made of that shown in lig. 1 , lon it must be kept in good order, or the tide may be turned in favor of Fig. I. There is no toil so badly abused as the circular saw. Ebery mana thinks he can run it, and in fact he cim. but how? It is not a particularly hard joh in keep wood-working tools in order if men $1:: 1$ only think a jittle.

We have a very suitable lot of goods for camp supplics. 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 in give you satis faction in this very important department of your business.

H. P. ECKARDT \& CO. Wholesale Grocers

Now let us true up and sharpen the saw shown in Fig. 2. To begin with, take a piece of grindstone or emery wheei and true the salw while it is running. Be sure the sidas 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


Fぃ: .
the stone, the uperator 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 ti,n saw. Do not get too much bescl to teeth, for if you do you are sure to hate trouble; the extreme points

.Fir. =.
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 stuck cullingr, 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 tecth. In this way one gets a very smooth cutter for either ripping or cross-cut-ling.- "W. H" in The Wood-Worker.

## STAVE BOLTS BY THE POUND.

The ludianapolis Woodworker, speaking of a pencil shat factory in Temessee that is buging cedar tiober by the pound, paying at the rate of 6 cents a pound therefor, brings to mind arrain 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 bolt.s by the pound instead of by the cord. A wayron scale was made use of,and by frequent comparisons with the weight and measure a system of ueights 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 wayron out. This practice probably still holds at that place, for it was said to give very good satistaction and io 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 ats 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 bave given the weighing system a trial.

## TC READERS.

Readers of Tilt. ('inams l.ombthmas ate invited in send us contributions upon any subject relating to the lumber trade in which thery may feel an ropeciat interent or which they may deore to diseuns. . Wh lethers of a vincere caracter will be publwhed. Compibusions for the October number should reach our uffice by september soth.

## 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 ate pieces of leather some two inches wide, with fine steel wires drivan through them and the points bent over, and are made primarily to be used on mathines for carding wool and cotton in tactories: A much better hing than this is a barrow piece of commercial steel, about $1-16 \mathrm{k}$ $3 /-$-inch, filed to a rather thin edge. This pushes whatever there is in the teeth of the file out absolutely, and there is no seratching to be done.

## ASSOCIATION OF MANUFACTURERS OF WOODWORKING MACHINERY.

The Association of Manufacturers of Wood Working Machinery throushout the United States has a social organization, and at its last sevion it was determined to hold their next meeting in the House of Hoo-Hoo at the World's Fair. The mecting will tatic place early in ()etoher, 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 merting, which will doubters he a mont succesful gathering. Mr. H. E. İrwin, Cew Britun, Conn, is the secretary of the orsamio. tion.


## ONTARIO.

-Robert Hower, of Port Arthur, Ont., has just completed extensive alterations to his planing mill.
-James lugram tad his arm broken in MeCaftrey's saw mill at Stiltsville, Ont., by veing caught in a belt.
-Mr. J. J. White has recently sold his planning mill at Wheatley, Ont., to Mr. lvison, who will continue the businesir.
-The saw mill property of William C-aldwell at Carteton place, Ont., has gone out of Mr. Caldwells hands, Robert latterson having purchased it as an uvestment.
-Two of the largest lumber cargoes that ever pavsed through the Welland canal sere carried down by the: barges Viking and lineland during the latter part of July.
-A by law was carried at Cornwall on Augunt fith to loan J. B. Atclison $\mathrm{Si}_{\mathrm{i}}^{\mathrm{7}, 500 \text {, without interest, for }}$ twenty gears to ansis in rebuilding his sall mills and sash and door tactory.
-A serious ace:dent happened lay month at the l'res-ton-13ell mill at Fort Francis, a young Frenchman by the atame of F. Ducet losing his life by falling from the log deek into the water below.
-A disastrous bonler explosionoccurredin Smillis saw mill at Langton. Ont., on iugut 1 th, resulting in the death of lsatac Leworge and Norman Wingrove and serious injuries to John leworge. The building was completly wrecked, fragnents being thrown a great distance.
-The St. Catharines Wood \& Lumber Compan:, Limited. recently incorporated at St. Catharines Ont., with a capital of $\leqslant 80.000$, is composed of W. H. McCordick, Frank C. McCordick, and C. B. Barson, of St. Catharnes, 11. J. Nicholts, of Huntsville, and E.O. 13:acock, of Niagara Falls, N. s.
-The largest raft that ever came into the St. Clair river within the memory of locallumbermen was brought to Siania recently from the Georgian Bay by the Reid Wrecking \& Towing Company's sug "Outawa." It consirted of $7,000,000$ feet of logs and was consigned to the Cleveland Sa:nis Saw Mills, Company.
-The Keewatin lumber Company, of Kecwatin, Ont., manafactured $25,000,000$ feet of lumber last year, nealy all of which was marketed in Manitobat. They are buidding a tie mill $1 / 2$ miles cast of their present property. It is to have at capracity of 4,000 ties in 10 hours, and will cosi in the neighbourhoud of $\$ 25,000$.
-The William Reat:y Company, Limuted, has been incorporated, with a share capital of $\$ 60.000$, to carry on a general lumber business at I'arry Sound, Ont. The incorporators are W'. J. B. Bealty, lsabel Elizz lically, lirances lsabel Margaret Deatty, and Annic Georgina lowes Beally, all of Farry Soun 1 , and John D. Beatly, of Sarnia.

- A number of American capitalists interested in the power development at Rainy River, Ontario, visited that town recently. The party included Thomas 11 . Shevtin, E. W. l3ackus, W. F. Brooks, E. L. Carpenter, II. C. Clark, F. M. Prince, Count Kalhoff, and others, of Minneapolis; J. Swift and J. B. Kilourn, of Chicago; Watter Douglas, of Cedar Rapids, and F . P. Nicon and F. C. Chamberlan, 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 kuln. 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 Man:tob:i amounting to $1,500,000$ fect. They are especially fortunate in having such a good puint as Port Arthur to trade from, as they are able to bring in the lumber in its rough state trom Wisconsin tree of duty, tow it across Lake Superior and manulacture so chearly 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 poweriul new boiler in liseir saw mill.
-The Dathousie Lumber Company are building a third mill at Dalhousie, 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 Gth. The loss is estimated in the neighborhood of $\$ 5,000$.

- Wilfrid kati, convicted of stealing logs from B. A. Scolt, of Roberval, Que., has been commited to stard his trial at the next session of the Criminal Court at Chicontimi.
-The lumber exports from Newfoundland this season promise to be greater than any previous yevr. 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 heen 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 wator supply so as to permit of the operation of their saw and pulp naills all the year round.
-The lumber business carcied 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, plam, etc., will be received by the executurs up to September 12 th .
The Caranuet Railwaty, which consists of $\$_{5}$ miles of track extending from Bahburst to Tracadic Mills, N.B., through a good tarming and lumbering rountry, which has heretofore been owned by Einglsh bond-holders, has been purchatsed by a Toronto syadicate represented by Peter Ryan and T. P. Coffe.
- J. D. Scott, generial manager of the Quebec atad lake St. John railway, has jush seturned to Quebec from an extensive trip to liugiand, where the succeeded in securing financial assistance for the construction of the la Tuque branch of the Quebec and Lake St. Jolm railway. This is of gecial interent of hmbermen, as the railway will open up at very valuathe lumber country.


## MANITOBA AND THE TERRITORIES.

T. A. Burrows is building a planing mill at Grand View, Man.
-IV. F. Latwrence has sold his lumber business at Maple Creek, N.W:T., to A. A. Mene Iy.
The Macoun Hardware \& I.umber Company have opened a lumber yard at litechock, N.W:T.
-The Alberta Lumber Company are preparing to buitd their saw mill on the old site at Cardston,N.W.T.

Charles Schack, lumber dealer, High Liver, N.W.T., has sold out to the High River Elevator \& Lumber Company.
-The Rushton-Layton Lumber, Grain \& Commission Compiny have opened a lumber yard at Stony Creek, N. W. T.
-Fieming \& Son, foundrymen, of St. John, N.B., have dismantled the ofd Jewell 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 billage.
-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 interiur wood work. The conjpany now emplny 150 men in their factory and in logging operations.
-Patl lea is making extensive improvements to his wood-working factory at Moncton, N.B. .I new Corliss engine at So horse power has been inctalled and a new dry kitn builh, in which the MeEachren system as farnished by Slecldon \& Sheldon, of Galt, Ont., will be used.
G. M. Amable, of Moose Jaw, N.W.T., has organize. 1 a company to carry on lumbering operations at Violin Lake, south of Rossland, B.C., where 5,000 acres of timber limits have been aeguired. It is proposed to market the lumber in the North. West Terri. torics. The capital of the company is $\$ 50,000$.

# CRAIG MINE CRYSTAL CORUNDUM WHEELS 

# Our Pure Crystal Corundum Saw Gummers have no zqual 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 entery as a varicty of corundum.

Emery is a mechanical admixture or corundum and magnesite or hematite. it is, of course, the presenre of corundum in the emery that gives to is its abrasive qualitien and makes it of commercial value, and the abrasive efficiency of emerice viaries aecording to the percentage of corundum they comain."

Emery is imported, mined by Greeks and Turks and contains only about 25\% corundum. Our Crystal Corundum is guaranteed to be $9 \$ \%$ pure alumina, a Cint idian product, mined and manufactured by Canadians for Canadians.

## BRITISH COLUMBIA.

-The Ontario \& Slocan Lumber Company ship the entire ounput of their shingle mill at Slocan City to Ontario.
-(i. M. Thritt, owner of the new Hazelmere l.umber Mill, reports good businens since commencment ofoperalisns in the month of May.
-A Cotton, himgle manufacturer, False Creek, Vancouver, is marketing considerable stocks in eastern points and the New England Staten.
-The Abbotsford lamber Company, of Abbotsford, are doing a pretly extensive business in the Territories and Alanitoba in heavy bridge timbers.
-The Chilliwacl: Shingle Manufacturing Company are serionsly contemplating edeling a large saw mill and going into the manafacture of clear cedar.
-W. H. Hygins, of Vancouver,13. C., has purchased the right to $150,000,000$ feet of standing timber on Humphrey Channel, ninety miles north of lancouver, 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 Bu unette Saw Mill Company at New Westminster.
-The L'. 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 ais of tumneling.
-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 manulacturing an entire equpment of saw mill machiners:
-The construction of the mills of the Rat Portage Lumber Company at Harrison liver 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 Bigh Edds saw mill of the Revelstoke Lumber Company at Revelstoke, assumed such large proportions that the operation of the mall wass stopped and the assistance of the citizens of levehtoke called in. The fire was successfully checked.
-The Monarch Lumber Company, which recenlly acquired the Ross-Maclaren saw mill on the Fraser river, at New Wentmanter, B.C., Will, according to report, commence operations as soon as some improvements to the piant are completed. The company will cmploy upwards of 200 men.
-The Canadian Pacific l.umber Company a Barnet, near Vancouser, are pushing, rapidly ahead with the construction of their new mill which is being erected in place of the one lately comumed by fire. In their paning mill, which .hoo was comamed, they had the mosfortune tolowe ot pame which would atromplash


The Victoria Lumber \& Manulacturing Company, of Chemainus, Vancouver Island, in view of the continued depression in the foreign markets, have lately been turning their atlemtion to developiny a trade in Manitoba and the Territories, their efforts being attended with considerable success.
-A wealhy eastern syndicate headed by a Mr. Cook, who has large mills in Algoma, Ont., is negotiating for the purchase of 17,000 acrey of timber land Irom the Nelson and Fort Sheppard Railway Company, with the idea of establishing a large saw mill industry in the negghorhood of Ynair, B. こ.
-The operations of the Canadian Tim: or \& Saw Mills, I.mited, of Trout lake, have been attended with considerable success since comenencement in June, under the improved market conditions of Manitoba and the .- Jries. The daily output is 60,000 feet of lum - r,mostly cedar, So,000 shingles,and 25,000 laths,
-The East Kootenay Lumber Company, Crantrook, 13.C., are doing a tremenduts business in the mandac. ture of ties for railroad purposes. It is believed they are among the larkest tie manufacturers in the Dominion, their shipments last year amounting to the enormous figure of $1,000,000$ ties to the C.P.K. alone, it taking $2 j^{\circ}$ train loads to tran-port 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 soffices both at Winnipeg and Vancouver for these up-to-date dwellings, which are shipped in their parts and soon alter arrival put together, presenting the appearance of first-ciass dwellings houses. Prices are moderate and within the reach of all settlers.
-The Canaida Lemberman 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 nunibers from lBritish 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 treight 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 lie Gordon Hollow Blast Grite Compang, of Greenville, Machigan, who claim to be the largest manufacturers ol blast grates, edgers and trimmers in the world, sell a million pounds of Gordon hollow blast grates and their connections anoually.

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 $s$ per cent. of their annual output is for repairs, the grate being su durable that very tew customers cier have uccavion :o renew any portion of the apparatus.

WELL PLEASED WITH THE LUMBERMAN.
Mr. Joscph lames, imil supermbendent (hilliwack (B.C.) Stingle Compans, writes: " 1 an well pleased with The lit mbermas, and hatve pancod many happy hours reading its pages."

## PERSONAL.

Mr. J. M. Annew, secretary trensurer of the North Star Lumber Compaus, Cranbrook, B.C., was in the East on a business trip last month.
Mr. George MeCoranich, of the Kamloops S.amber Company, has just lakis riturned frum a tip cmbracing Toron to, Montrial, and Ottawa.
Mr. Alevander Mcl Dougal, who is engaged in the lumber business at Fernic, B.C , was married at Arnjuior, Ont., a few weehs ago to Miss Ifarves.
Mr. 11. Cancoon, manager of the Moyie Lumber Compan), Moyie, 13 (C., has lately joined the ranks of the benedicts. The Casaba l.umbik was extend, congratulations.

Mr. 1E. B. E:ddy, president of the E. Is E.dd Company, paper manufacturers, Hull, Gue., recelved many congratulations upon the occasion of his seventy eighth birthday on August 22nd last.
The dea:h occurred recently at Jacqurt liver, NB , of James ir Doyde, one of the oldeat residents of that neighbothood. Mr. Doyte was in early life engaged in the lumbee business and was well known by all the old New Branswick manufacturers.

The Rainy River luniber Company hate just opened oflices at is Bank of Hamition Huilding, 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 Wimipeg.
Iady Joly de Lobbiniere, wife of Sir llenri Joly de Lotbiniere, lieutenanegovernor of British Columbia, died in Victoria on August $16: h$, from the effects of a paralytic stroke, sustaned some weeks ago. Her death is deeply regretted throughout the enture Domanon, for she was widely known and most hyghly esteemed. She was always a true helpmate to her huskand in the many pusitions of responsibility and honor which he has occuped, and her wise counsel will be greatl) missed.

Reterring t the fact that the Dominion Expositoon is being held at Winnipex this gear, and hat hast year Toronto was the point chosen, the Maritine Merchant points out that next year's Exhibition should justly be held in the Maritime l'roviaces. It is athsolutely essential that the people of the different provincess should become acquainted with the possibilites of each nrovince and av a means to lhis end a Dommion Exhibition showld be teld in the Maritime Provinces.

A company has been organized in the city ef Mexico under the title of the Mexican lermanem Expobition Company for the purpose of mainatinitis a permanemt exh:bit in that city of such products of other comatrics as are best adapted to Mexican cullitation and usp. They lave alleady secured a governam:nt concersion. and are erecting exienvere hatadogs whath are to be
 Con is president and E. Hegninch secretary.


saw, and Gang Saw. Bands, Band Resaw, and Gang Saw.
They work together. They give the saw teeth proper clearance.
After the saw has been swaged remove the saw swage from the pin ind place the Shaper thercon.
The adjustment is made from the point of the tooth, hence every touth is made exactly alikewidest at extreme points, widest on face, no matter I what the irregularity of spacing, pitch, ete. We are always glad to send our machines out on approval guarantecd to please, if not satisfactory return at our expense. A triat will cost you nothing.

Write tor circular "F'to


MANUFACTURE OF TRIANGULAR TIES.
Mr. M. Macauley, of Portland, Oregon, describes in the Columbia River and Oreson Timberman the manufacture of triangular railway ties as practised by the John O'Brien Lumber Company; of Sumers, 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 yars 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 transterred to beveiled rolls and re-sawed.

Advantages Clamen.-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 tic.

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


Orminary Sgitre. Tif.
than the square tie, by reason of its form providing a natural watershed tor the portion embedded in the track. This is obvious, there being a face of only three inches on each sice before the acule angle of the tie is reached. On the square tie the water follows down the sides and loiges at the base, and every impact has a tendency to solten the ballast directly under the tie, and work loose the tamping, which is very notiecable at the extreme end of the ties, especielly in the case of poor or soft ballasting.

Disadvantaces. - The triangular ties does
not serve the purpose of the square tie, and Irom 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 $7^{\prime \prime} \times 8^{\prime \prime} \times 8$ feet, it requires a timber $14^{\prime \prime} \times 16^{\prime \prime} \times 16$ feet. To manufacture eight trianguiar ties $\eta^{\prime \prime} \times 8^{\prime \prime} \times 8$ feet it requires a timber $14^{\prime \prime} \times 14^{\prime \prime} \times 16$ feet, after making

allowance for saw kerf. A timber $34 " \times 16 " \times 16$ feet containing $2982-3$ feet, makes cight square ties $7^{\prime \prime} \times 8$ " $\times 8$ feet, $37 \times-3$ feet each, equal to 2982-3 feet. It is obvious there is no loss. To manufacture eight triangular ties 7 " $\times 8^{\prime \prime} \times 8$ feet it requires a timber $14^{\prime \prime} \times 14^{\prime \prime} \times 16$ 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 manulacturing eight triangular ties out of $14^{*} \times 14^{\prime \prime} \times 16$. feet timb.r. In order to give the ties an 8 -inch face the timber loses four pieces $3^{* \prime} \times 3^{\prime \prime} \times 16$ feet cut triangular, and instiad of $3=2-3$ feet in each triangular tic, there is but $262-3$ 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 41.5 cents additional to the cost of every triangular tie manufactured.

It is admitted, however, that the $3 \times 3$ 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 sise 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 $7^{*} \times S^{*} \times S$ feet there is $377^{1-3}$ feet, in the triangular tie there is $262-3$ feet, a difference of $102-3$ fect. It cannot be expected that the $7^{*} \times S^{\prime \prime} \times 8$ 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 tir, 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 einc 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 Olyn:pia and other places in this state relative to the employment of Japanese shingle weavers, it cau be truthrully 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. The 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 jatws 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 tweavers, 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 lound in God's valley, twelve miles from Nehalem, in Oregon. It is 21 feet in diameter, hence 63 teet 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 <br> 1324 Elston Avenue, CEICAGO, ILL., U.S. A.

Worth-ra (ffics: MIDLAND, ONT.

White Pine Red Pine<br>Hemlock, Lath, Etc.

Sir : Ified llarmsworth and a number of newspaper proprectors of London, England, are reported to have just chored negotiations for 1.500 square miles or timber hants in the interior of Newfoundland, on which they propose to ereet an mmenve pulp mill.
It in reported that the industries contemplated by the Quatomo Power \& Pu'p Company at Quatsino Sound, B. C., ate to be proceeded with under a contract hat
provides for the operation of the prant whthin ore year. The plans call for a pulp mill of 125 tons capacity daily, and it is intended as soon as businesy warrants to build a paper mill to manufacture the pulp into paper.
A boiler exp!osion occurred in the Kin!eith Papea Company's mall at St. Caharines, Ont., on August 13th, by which the building was badly wrecked. The explodang boiler way sue of the rotary rag boilers situated on the stecond $f$ or of a three storey stone
section of the mall. Another simitar boiler was carsied out into the old canal, together with all the other machinery and debris. The rag toibers were getleralls operated at a presenre of 25 and 30 pound. They were fod by piper; from a large stean boiler in amother part of the contabinhment which catries a prensure of 125 pounds, and it is the impression that the regulator must hase failed to woik and allowed the low pressure builers in receine the full 125 pounds

It is again reported that English capitalis's will build a pulp enill on the Gilmour \&Hughon water power at Chelsea, Que.

## Fire Clay Products THE GLENYARDS FIRE CLAY CO.

 BONNYBRIDCE, SCOTLAND.Cablograms : Glonyards. Bonnybridic. $x$ or Codes used, A.B.C. and Glenyards. Manufacturers of all kinds of Fire Clay Goods, Ganister and Silica Goods, for Iron and Steel Works and Gas Works, including Boiler Seating Blocks and Covers of all sizes. Ground Firn Clay, Ganister and Silica $\begin{gathered}\text { in an packagos } \\ \text { of }\end{gathered}$

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GUEST'S OF THE HANBURY COMPANY.
The llanbury Manufacturing Company, of Brandon, Man., entertained about one hundred of their friends, matily of whom were members of the Western Retail Lumbermen's Avsociation, during the Western Manitoba Fair held in that $t$ swn $A_{\text {ugust }} 9$ 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 toth 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 Hanbury Manufacturing Company, where they saw a complete lumber manufacturing plant in operation. in the affer noon they were again taken to the liar grounds by a special train, where they withessed 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 hii kindness and hospitallty. The salw mills of the Himbury Manufacturing Company at Brandon, Man, and (rallbrook, B. C, will manulacture about 25,000 .00n feet of lumber this year.

Makes Mon Good-Natured
An ill-natured man never works well, but Clark's
Pork and Boons is

naturect.
Belcet Candian by pork noma prine Canadtan lieans. rhe tumberman's Ideal.


These Mules Cannot Break This Yarn bechuse it was made bi the


Poor Yarn is Dear at Any Price

Double and Single Lath Yarn, Shingle Yarn, and Cordage Of Every Description

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B. R. Mowry \& Sons,


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."

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## TRIMMERS

If the Board does not teach the quad. rant the Saw stays down and trims, sre bad ends, etc., pull the cord, we dulted lines. The whole Board can be cut mo two foot lengths or trimmed in any man. ner. The Saw frame is batanced the Arbor pulleys are 8 in. $\times 8$ in. We build several styles of Trimmers, also all kinds of

Saw and Shingle Mill Machinery
Our "Boss" Shingle Machine is second to none in Canada. Our sales will prove it. We make Saw Jointers and Kinfe Jointers, also Packing Boxes. Send for Catalogue.

For Sale
2 sets of Ellla offacta-Cheap.
One serondehand stationary Bell Crant beam Nigger manufactured by the Wim. Itatnition M. Cond Peterboro Capstans to parties requitios samie Prices

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## SUCCESSRUL CULLERS

The following candidates successfully passed the Ontario log cullers' examination held at Aruprior, Ont., on August 16 h last: T. Wm. McCreary, Arthur Jas. McCreary, jr., Jas. MiCudden, Adolph Pr eel, Daniel P. P. Neil, Join Laderoute, J. A. Mh Lachlin, Norman McLachlin and R.J. Murphy, Arnprior; Thos. O'Neil, Bancroft, Ont.; Jas. Collins and Frank Duran, 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, Bracside, Ont.; Alex. W. Stewart, Lanark, Ont.; John Lochnan, Aylmer, Que.; Jos. Plannt, Jos. Grout and Wm. I3. Plaunt, Eganville ; Frank

Barnard, Diamond, Ont.; J. A. Toner, Portage Du Fort, Que.; Bernard Bastoral, Hardwood, Ont.; Wm. A Markely, Henry W. Link and H. S. Brock, Ottawa; Hugh R. Murphy, Ottawa East; Daniel N. Campbell, Buckingham; Henry W. Thrasher and Wm. A. Hawkins, Pembroke.

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# THE LUMBER MUTUAL FIRE INSURANGE GOMPANY OF BOSTON. MASS. <br> <br> DIVIDEND TO POLICY HOLDERS <br> <br> DIVIDEND TO POLICY HOLDERS <br> total saved <br> POLICY HOLDERS <br> Dividends Paid to Date <br> \$99,865.14 <br> SURE INDEMHITY PROMPT ADJUSTMENTS Losses Paid to Date <br> \$191,977.49 

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A little reminder of the "TRIPI.E A" in the way of a pretty watch charm to Mill men who write for it. Also cur Mill Supply Catalogue. Both tree.
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## FAn wey <br> <br> The A. J. Burton Saw Co. Liniteded, vancower B. .C. <br> <br> The A. J. Burton Saw Co. Liniteded, vancower B. .C. <br> <br> INCORPORAKED 1904 <br> <br> INCORPORAKED 1904 <br> AUTHORIZED CAPITAL, $\$ 75,000$, IN 750 SHARES OF $\$ 100$ EACH <br> A. J. BURTON, Managing Director. HERBERT WILKINSON, Secretary-Treasurer. <br> BAHKERS, Molsons Bank, Vancouver, B.C.: <br> BOARD OF DIRECTORS: ROBERT JARDINE, President; DR. E. SAWYER, VicePresident; E. W. Mclean, henry pim, a. J. burton. Office and works, Corner of Powell Street and Mclean Drive, Vancouver, B.C.

The company is offering slock to the public at par.
The company has purchased land, consisting of four lots, upon the corner of McLean Drive and Powell Street, Variouver, I3.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 $\mathrm{B}_{5}$ ft. by $13^{2}$ ft.

Upon this a building has been erected, 85 ft . by 40 ft ., two floors, with a tempering shop 2 Cft . 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 at milling machine for the inserted tecth 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 st eck 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 MicLean 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.

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The following advantages are obtained:
I, ower cost of installation than nuy other method which will saw ant equal number of superficial feet in n given length of time. smaller expense $\ln$ operation thus preducing any other method. cost per tho kequires no more
well equipped Circular Sav ilill. it than any dumber has becusawn betier nud more necur. ately cut by thls method than by any ollei now
The Killam Tandem Circular Mill requires no more skilted ment to operate it than is required
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If solid kaws are used, the inrger one whell worn down call be used for the amaller one. Thus speingexpense for satws.
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minchine and no dielnys. No time is lost In setting for nuy thickneas from the cut of stationary naw up to shx inchea. This machine takes the place of a resnw han mill and only requires a noor spice of oft. x xf . Also takes the place of n Twing birculnt Mill that is now used for siabeing. nind this machine thus suting the expense of a remw and men to operate the same.
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