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Toronto, Ont.

# 些CANADA LUMBERMAN 

## TORONTO, OANADA, DEOEMBER, 1900

ency which may be made by leakage. At the head of the sluice the deals are simply placed in the stream of water flowing down the trough, and left to their own sweet will in finding their way to the foot of the mountains or to the sea shore, as the sluice may lead them to. Of course, the precaution has to be taken that no jams occur, and if the deals went singly this would very easily happen, owing to the varying grades and the different depths of water and speed.

On a suddenly increased incline the water flows very swifty and thins out greatly, so that a deal behind could easily mount upon one in front, causing a jam: To guard against this the deals are tacked together, butt to butt in piles of some dozen or more, usually with five-link chains. Two-inch nails are attached to the end links of the chains, and the work of tacking the deals together is slight. Occasionally lath and

## PORTATION OF LUMBER BY MEANS

 OF SL":CES.of the most inte, ling features in conwith the lumber $t$ usiness in the vicintty sboro, N.S., is the method by which lumransported from the mountains and hills foast. Sluices a constructed of plank fy rough lumber usirg two-inch plank bottom and one " une and one-half inch the sides. The sinices are usually about es wide and 7 inches deep, being cleated cery three feet. They have an incline raries according to the lay of the land, being perhaps one inch to the rod at rest, and in other places ten inches to the d often steeper.
sluice turns and twists about the hills, ig mother earth wherever possible, or defying her close embrace, leaps into space er chasms and valleys with
skill.
w years ago the writer, heeling from Acadia Mines rrboro, suddenly saw bem, down a long, broad, ep valley, what seemed sigantic spider web deftly rom ridge to ridge, and nough apparently to waft breezes. A cautious and approach proved most inig in results. The skeleucture of round and rough hd poles, ingeniodsly framted and spiked together, aloft to nearly ${ }^{1}$ iso feet ad, supported far up there the breezes which gently it a strip of wooden which here and there ddrops of water upon the wayfarer beneath gazed in ronder at the innocent cob-web holding aloft a thread of water, which ast on its surface thousands of feet of lumhhour of the day, from its home in the reof those blue hills to the decks of vessels of the sea shore many miles away.
fillustration given with this article is of one e lairy structures in the neighborhood of ing Brook, on the Moose River, and is point 135 feet in height. Last spring torn down and rebuilt, and in the summer , 000 feet of lumber passed over it. It is ged and braced that it can rēsist great wind e, and is an example of the skill and inrequired in modern lumbering. The Id sediment liun the streams of water into these sluices soon fill up all cracks kie the troughs wry water-tight. Someas in the case of the Canaan sluice, which miles long, no feeders are necessary, but small streams are led into the sluice at ient points on the line, suppiying any defici-


Trestle Supporting Lumber Sluice Over Humming Brook, N. S.
renewing usually being necessary at expiration of that time. They are oftell over a hundred feet high, and again may tunnel bencath an inter. secting lumber road or highway.

It is most interesting to watch the stream of weter beneath: one fluting swiftly past, bearing presently on its surface from around a neighboring curve a single deal which passes silently and in a moment tops a rise and flips from sight. Then a string of deals may tullow, with joined hands as it were, by reason of their connecting links, and they, with equal celerity and silence, swirl past and downwards without a sound save the gentle swish of water and an occasional nudge to the side planks. Of course, the route must be watched, for a jam soon multiplies, and they are not entircly avoidable. Shelters are built here and there for the men along the sluice, and these are nothing if not picturesque, as they perch high upon the end of a long trestle, but once the sluice is built and in operation the mill is almost equal to being located at the wharf, the expenditure for trensportation being limited to the care of the line and its watching, and amounting to perhaps 25 cents ner thousand feet of lumber.
A. B. P.

## AN ELECTRIC PLANING MILL.

A writer in Barrel and Bos expresses his pleasure in inspecting a planing mill plant which was electrically driven from stem to stern. Every planer along the line, he says, had a motor right on the ? planer counter shatt of such size as the individual ma-
ordinary nails are used to make the connection. Arriving at the whart, or destmation, the lumber falls from the carrier on its proper pile, and in some cases has been thrust directly from the mouth of the sluice to the deck of the vessel, while the water falls shorter and goes down between the deck and the whart. The chains are loosened easily by means of a claw pry two or three feet in length, and as they accumulate are loaded into a wagon and hauled up into the woods again.

A sluice used at River Hebert by Mr. Kelley, though quite a long one, has such a uniform grade that no tacking is necessary. When the sluice is tasked to its full capacity, boards may be loaded on top of the deals and int down. These carriers are often very long, the longeat near here being the one at Moose River, which is $61 / 2$ miles in length. The Canaan sluice is 4 miles, another at Lakeland is 3 miles, and the Elderkin sluice, down shore, is a shorter onc. The Moose River sluice has been operated for 6 or 7 years, which is about their lease of life,
chine required, and there was no shafting in sight whatever, except these little short counters which go along with, and are essentially parts of the machine. There were eleven motors in this place, each swing crosscut saw had its little individual motor, which was set on an overhead beam and belted directly to the counter shaft at the upper end of the swing frame, and over in one corner was the grinding machinery, which also had its little individual motor. All through the place it was impressive of the statement made in the first of the series of articles, that it seemed as if electricity would crowd the heavy belts and long strings of line shafting to the wall-lay them in the fence cor-ners-for this plant had a general appearance of not having any machinery of this kind about it. The power for the plant was supplied from the engine ruom of the saw mill, which was some distance away, and it was doing its work silently and unobtrusively.

The Canada Lumberman (weekly and monthly) One Dollar per year.

# PROSPECTS FOR LOGGING OPERATIONS 

Information from all parts of the Dominion.-Scarcity of Labor in Many Districts, and Wages Generally High. Output of Logs Likely to be Less than Last Winter.

LOGGING operations for this winter being well under way, opinions were solicited from several lumbermen as to the conditions which have existed in the woods and the prospects for the season's work. By the kindness of those from whom enquiry was made, we are permitted to publish helow letters from nearly every section of the Dominion :

Alexandria, Ont., Nov. 19 th. - Wic would sny the amoun of timberexpectedto come out in thecaaternsection will be nbout the same nmount as usual. The advance III prices of all kinds of goods, and of wages, will raise the cost of loges nbout 25 per cent. over that of furmer years, which, we hope, will be offset by an equal advance in the price of lumber.

## Mactharso، \& Schall.

Peterborolibs, Ont., Not. 1qth. - We expect the saw logging industries in this locality to vield about the same vutput as in the past year. In our camps we expect to cut about $12,000,000$ feet. The fine weather this fall has been well taken advantage of in clearing up creeks and dumping grounds and in creck rgpairs. Labor is offering freely, but at an increase in rates over last season. Supplies generally are plentiful and at about last year's prices, excepting bacon, which is considerably higher.

Tak Dickson Co.

Rockland, Ont., Nov. tath.-At presem we cannot give you information that ran be relied upon as to the iminke of saw logs for the coming winter, so much depends on the nature of the winter we may have. Men's wages are excessively high, and the cost of logs will even be greater than the very high coss of last season. Fewer men are in the woods, and with the most favorable winter the crop wilt be somewhat short of last season. The full measure of the shortness vill depend on the character of the winter.

> w. C. Edwards \& Co.

Otralin, Ont., Nov. 12th.-Logging operations are about in the same condition as one year ago. Labor is much more unsetiled and wages much higher, being fully $20 t 025$ per cent. nbove last year. The same may be mid of provisions and supplies in the main, but not every article. Pork is worth fully 30 per cent. more, also sugar, beef, butter, in fact atmost evergithing but flour, which remains about the same. Hay and oats have not advanced nearly so much as pork. I think the production for the winter will be fully as great as last winter and likely more.

St. Anthony Lumber Co.

Orrawi, Nov, loth.-Regarding legging operations, we do not think that they will be quite as extensive as last year, owing to the fact that men are so bard to obtain. We know of several operations which are being carried un with not much more than half the complement of men required, and this seems to be the general complaint in eviry section Then ggain, the cost of labor and sup. plies is going to be thre means of putting a number of the simaller operatiors out of business, as they are going to find it much tharder to oblain both men and provisions, the former of which only call be had on a strictly cash basis, as the men are very independent now and will go where they can get the best wages and best attention. Assumings that we have good weather, we thonk that the output will be tairly large, but we do not know that it will exceed last , car s con, especially in thas section, as another difficults has arren wibich will prevent two or three paties taking out as large a supply of logs as they did last year, and that is the fact that two or three of the mills have been burned. There is soing to be considerable difficully experienced in the cutting of the logs.
"Ottawa Valley Manufacturer."
Three Rivers, Que., Nov. 13 th.-From what 1 can make out now I think the eut this winter in our district
(weathes favorable) will be, viz, logs, pine and spruce, fit for anving into dealy, planks and boarily, about sante: pulp wood loge, spruce, fully one-linird more. The cost will be 12 to is per cent. grenter than last winter.

Albx. Baptist.
Charlemageng, Qub., Nov. 17.-IVe expect to get out our usual supply of logs this winter, 250 to 300 thousand pieces. No firms in this district have increased their operations. The weather has been very favornble for cutting and skidding, but men are searce sudd all supplies dearer. The cost of getting out loget this coming senson will be $\mathbf{2 5}$ or 30 per cent. more than last year:

Charlamage \& Lac Olarbaul lumber Co.
Qutbec, Nov. izth - lt is tou cally yet to say how far weather conditions will affect our oulput. The labor question is a very important factor, for wages have gone up very considerably and laborers are scarce. Another difficulty which has to be confronted is the scarcity of suitable horses. The cost of supplies will not materially affect the output where markets are good and labor available at reasonable prices. Our view of the situation is that labor being scarce and a large portion of this labor devored to the production of wood to be converted into pulp, the cut oflogs to be sawn inio lumber will be conniderably reduced, probably to the extent of 101015 per cent. These remarks apply allogether to the crop of spruce logs in the Province of Quebec.

King Brothers.
Amherst, N. S., Nov. 20th.-Regarding the output of logy from this province for the coming winter, our opinion is that the quautity taken out for the regular stationary mills will be about the-same as last ycar. The portable mills, however, will not likely get out over sixty or seventy per cem. of last year's cut.

Rhodes, Curry \& Co.
Yarmouth, N. S., Nov. ' 5 th.,-The cul of logs for sawing is affected by the kind of weather we have in January, February and March. If we have a fair amount of cold and snow, cold to frecze the swamps over and snow to faciliate hauling logs to the river margin, we will have average cut here.

Parker, Eakins \& Cu.
Bear River, N.S.,Nov. 13th.-The outlook for lie coming season is about as usual, and the result of the winter's work will depend entirely upon the supply of snow. Last winter was scarcely an average cut owing to the unfavourable winter, but with reasonable good weather there will be a moderate increase pever last year's output. The quantity carried over from this year will be the smallest in the last 20 years, and the demand is good.

Wolfville, N. S., Nov. '9th.-Regarding lumbering prospects for the coming season, would sty, first, that supplies are about the same price as last year; beans, pork and fish are somewhat higner. Labor has advanced slightly. Our logging season usually being very short. we seldom have any snow hinuling until the latter part of January, and even if the coming winter should be a favorable one, it is doubtful, on account of many small properties being worked out, if any mure logs will be taken out this year than last.
S. P. Benjamin.

Lowbr Stewiacke, N. S., Nov. ${ }^{5}$ (h), UUp to the present tume here the weather has been exceptionally mild and also rainy-so much so that lumbering operations in the forest are very much retarded. Supplies aro high and labor is higher. I regard the latter item as the worst feature in our business, since labor is bath scarce and dear. The production of logs in this section is certain to be smaller than usual this winter, from several causes: First, the scarcity and dearness of labor: secondly, lumber is getting cut away and is not so pientiful as formerly; then agdin the foreign outlook is not so promising in respect to prices as at this date
last year. On account of : Scotin, last winter, our 1 prices dilu not realizo high ${ }^{1}$ for lower ratey, labor being encouragement is not prese knowing, of cnurse, what ks: If ne unfavorable as last, it operating, especially if ans In Noyn Scotin, the larger. business going, but are nol more than an average cut, it again, a smaller class of mills, buying upl small tracts of timber as ing the same into deals. These people tis. not nearly so much in evide we. Ther ca te withoul much loss to themst wes, and aredieg of instances. Hence, all indications piay 41 production of lumber here, "ven under be able circumslances. The foreign astes available stock on hand, nra not motiag io s contracting, thinking price, 100 high. Oxp backward nbout going into the woods, hais? prices, and it vill soon be toos late to catte pit cilt, even should the European buyers une hal

St. Grurce, N.B.,Nov, $1211 .-$ We ltathite ber on our river (Magaguadavie) will be antits yenr.

Jous Denut
St. Juhn, N. B., Nuv. 1211 .-di preserik, for successful logging operations are poor, unfavorable, wages excessicely high and en ingly searce, while supplies of all kinds ate with favorable weather, logiging operaizes or in be less than last year.

Andre Cises:
Sheila, N. B., Nov. 16.-As far as re 23 judge there will be about the same qualiar $d$ in this district as last season. Labor is sarci, cost more than last year, and the wealher hat favorable-100 much rain all fall; thesecasse logging more expensive than last seasoll, as ${ }^{\prime}$. a tendency to reduce the output.

Tracadielias
Chathan, N. B., Nov. 1gth. The mealkeo so far this season have been favorable for kutis ations, but it is too early to make any pretais winter. The stock wintering here has nos sabed up, but so far as we can judge, it will be that as last year. The preparations for logziog w twenty per cent. less than last season, betif favorable weather this may be slighly decof only slightly, as men are very scarce, add nga twenty per cent. over last year's rates. Thepreat visions is generally higher, and the oukth season's European markets is not bright.
J.B.Ss

Suediac, N. B., Nov. aist.-I can bans.: opinion as to the quantity of lumber this distrid duce for next season's shipment, but it sea? pretty generally conceded that the higt prop, past year will net be maintained dunng thenth hence my opinion is that operators will bes gois? same extent as last winter-we ,u least shad at as heavily. Labor is at leass is per cere mas last year, supplies somewhat husher, and lex this part of the province not entouraging ap $p=$; yarding logs.

Brandon, Man., Nov. 17th. the camps and intend sending winter. We are counting on 1 .. feet this year, $4,000,000$ feet fi. out 7,000,000 feet last year, so crease our output by $1,000,000$ sent are looking very favorable of writing ? nice fall of snow, commence lugging at once. II average us about the same as point will bd somewhat scarce. district has been very slow for owing to the shortage of crops

We are our two hested ing out aiox $t^{3}$ cach arn y sec $\pi$ cixis el. Thiegra here being all here beeog think tbe at year. Cos, The lomberstre the last trex

## the hanit

HuE, O:Tt, Nov, 24 wes scalc in this dure satce and way.
lootput in lisis se: crused serious del all hrough, it dou" antity of logs will b

hunts. hei: Lumber Compans.

Man., Now I $^{\text {It }}$. Iwing to the poor crop gemen small demann' . ir lumber, stocks in the aery beavy, and in . ur opinion logking operaberonsiderably cur. ....d this season. Sales of eslow al present. 1.0e weather has been fine as snow, and so l... is the weather is cone conditions could ant be more favorable for a and work. The labur question may also make ense in the volume of business done in the Wages are high, Irom \$20 to \$45 per monith , uhich price, of cuurse, includes board.
hleghs \& Long.
HeER, B. C., Nov. is ln reply to your enquiry blogging operations in British Columbia for this plogging probably atrectls know, the great bulk grog on this const in done during the summer fibe winter season bemg so rainy that work in Is cannot sery well te carried on to advantage. helast few years, however, a number of the fo mulls, in fact all of them, have been taking logs altogether by machinery, so that they have elocarry on wo:k in weather in which teams for wik to any advantage. The mills which on thus equyped have been able during the last fs tosecure a more steady supply of logs the year The mulls generaity plan to have a considerck of logs in the water at the beginning of feacon, so that with what they can get out he winler they will have sufficient to keep running fogain. At the present time, and during all , there has been a plentiful supply of logs, and prospects indicale that enough logging will be 5 minter to keep those mills well supplied which Wisent orders to keep them running. Loggers' ind cost of supplies are about the same as during two or three year. We have just had a ffll of $x$ ncthes of snow, which is quite unusual $b=$ a at of the year. Thus will retard, rather th in help the neods, as it has fallen on sof ground. I that the cargo mills in British Columbia, as hose on Puget Sound and in California, are short at the present tume. This condition has preuning the last twn or three months. I may also at the British Columbia mills are considerably tpped on account of no lumber carrying ships med in British Columbia, making it difficult to sarters.

> H. H. Spicer.

## IIPBULLDING IN BRITISH COLUMBIA.

olowing letter, out the mportant subject of shipin Bntish Columbin, appears in a recent issue of s-Aderther, of $1 . . .{ }^{2}$ waver. The writer is supertof the Moody woic l.and and Saw M... Company: The redent and ac.... needed agitation by our If Trade and busucoss wen generally, of the quesplacing suitable seamers on the Vancouvery rowte, calls ip the somewhat larger and more important subject-that of ship-building Promoce. It is duaulta, however, if the necessary for such work call we secured at the present time ivate sources onls, .ad this being the case, it is csirable that out tioninctal Government should ancial aid to the enterprise, to just what extent what particular way cat be left to future considerThe general was, t uwever, for such aid to be exis by giving a cert..11 sum per ton register for ing vessels, and $s$ ) much per mile for distance ed doring the first two or three years of a ship's

It is doubtful if there is another seaport, eitioer in Canada or the United States, of the importance of Vallcouver, that has not more or less of a locally owned fleet. That a number of vessels, built and owned in and oierated from this port, wouid be a great advantage to all classes of our cilizens, can scarcely be queationed. Belig somewhat interested in shipping, I have had occasion to note the many disadvantages the port labors under, owing in a great measure to the fact that we have no vessels of our own. I will just give one illustration. A great many of the vessels loaded in British Columbia with lumber are owned either in San Francisco or Puget Sound-the owners in many cases being closely allied with the owners of the Sound mills. The natural result follows, and every American ship-uwner does his utmost to liave his ships go to l'uget Sound, and in order to do this many owners grossly exaggernte the difficulties of coming to Burrard Inlet, and actunlly state in the Charter Party that if the ship goes to Burrard Intet, the freight will be Go cents per thousand feet more than if loaded in Puget Sound. In many cases our mills cannot possibly afford to pay the 60 cents exira, and the vessels go to the Sound-our people lose the orders and many times are compelled to close their mills, which, of course, affects every man with whom they have business relations.

I mention lumber carriers particularly, is for the present lumber is the principal export; but it is only a ques. tion of time when this discrimination agninst the port will spread to all other freight, both in and out. Let both the Provincial and Dominion Governmentsgive their aid to ship-building, and the whole Dominion will benefit by it. I trust that persons more competent to handle the subject (to say nothing of the governments) than I. will take it up and give it lheir earneyt atiention.
J. G. Wooms.

Moodyvilie, Nov. 17th, 1900.

## LOG RUN OR CỤLLS?

A peculiar controversy has arisen between a buyer and seller of lumber and has been brought to our altention.
A dealer bought of a manufacturer a certain lut of lumber "log run." The National inspection rules defines " $\log$ run" as "the full run of the $\log$ mill culls out." The buyer had not seen the lumber when he made the contract and when the lumber cance to be delivered it was found that almost every board wias missawn and badly missawn. The rules say that all badly nissawn lumber shall be classed as "cills," the word "culls" evidently having reference to shipping culls. Now, the question arises, is the dealer bound to take the lumber as $\log$ run?
It seems to us that he is not. When a dealer buys lunber " log run" he laikes his chances as to the quality of the logs, but he is ertitled to have the manufacturer use ordinary diligence to properly grepare the lumber for market. No matter how poor the quality of the logs, if the dealer had contracted log run, and the manufacturer had properly manufactured the logs into lumber, the dealer would have been compelled to take it, even had it been all culls. When, however, the lumber is made all culls through the negligence of the manufacturer, or his inability to properly manufacture it, then the dealer cannot be compelled to take the lumber as log run.
The rules say that log run is the full run of the log mill culls out. To our way of thinking, that does not only mean the full number of fect in the log, but also the proportion of high grade s ock which the logs would produce with reasonable care in the manufarture. When, howeter, the buyer fails to receive the propoltion of high grade stock which is in the log, either because it has been selected out by the manufacturer or because through negligence on the part of the manulacturer the lighgrade stock is reduced to cull, the buyer is not getting the full run of the log.
In a certain lot of logs, if reasonably well manufactured, there are a certain number of fect of firsts and seconds, a certain number of feet of common and a certain number of feet of culls, the value of all being, say, $\$ 5,000$. When through gross negligence on the part of the manufacturer the logs produce nothing but culls, valued at, say, $\$ 3,000$, then the buyer is falling $\$ 2,000$ short of getting that which is his due.

The case will probably be decided in the courts, and we believe the foregoing position will be sustained.Hardwood Record.

## BRITISH COLUMBIA LUMBER SHIPMENTSS.

The following vessels sailed from British Columbia ports, lumber laden, for loreign destin. ations, up to October 31 st, 1900 :

| Vesel. | Sailed | From. | Forr | Carge $\sqrt{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| ${ }^{\text {Latona }}$ | Ian. 9 | Moodrville | Yalaa |  |
| Guy C. Grs.. | Jan. 19. | . Lianthat | Phuadelpia | 1,030,625 |
| Fred jivool. |  | E. | Sana koulia |  |
| Antoragasa | feli ${ }^{3}$ | bemainus | Anturagasa | 84.154 |
| ${ }^{2}$ | Atar. | Hastings |  |  |
| Creedmo | Mar. 30 | Chmamis | U. k . | 1,156.540 |
| Star of tira | Mar. ${ }^{\text {an }}$ | .lanings | Sjuney | $1{ }^{180} 1293$ |
|  | Mar. ${ }^{\text {d }}$ | Chemainus | UK. | 1,106,548 |
| Adderly | April 3. | Moody yille. |  |  |
| Wenater | Nar. 31 | Chemainu | Mellourne |  |
| Genersion | May. | \% |  |  |
|  |  |  |  |  |
| Fred J. Wood | May it | do | kobe | 7 7ntos |
| Handaneira | May ${ }^{\text {a }}$ |  | .U. K.... | 1,54.025 |
| Glemesslin | may ${ }^{\text {a }}$ | Chemainus | Cape lown | , 1.45 .988 |
| Ferus | june 1.... | Mocelivville | Cork. |  |
| Arnold |  | Hesstings. | Newent | ${ }^{612,637}$ |
| Onaway | June 26. | Port Moxdy | Adelisida. ... | 687,353 |
| Detance | lune ${ }^{\text {a }}$ | Conwichan | Santa Romsla. |  |
| Drummuir | june ${ }^{\text {n }}$ | Chennainus | Me boume | 2.508,649 |
| Sunoma. | June 11 | Hayling ${ }^{\text {di... }}$ | Me bourne | $7{ }^{70378}$ |
|  |  |  |  |  |
| Totan D. Tallant | .june 29. | Modisulite. | Guayaquil | -1,9741188 |
| Emilie. | July 3\%' | Chemainus | U. K. | 1,393,219 |
| John Smith | July as | N. Wesiminstr | Nagamaki... | 673,47 |
| Tartar..... | [my ${ }^{\text {chy }}$ | Casings | M10018 Kona | 419102 |
| Grana |  |  |  |  |
| A.J. West | July is. | Cowichan. | Sama Kosilia.: | 1440 |
| Sames Drumn | Aug. 13. | Chemaicus | Sy |  |
| Mart |  | Moudy ville. |  | ,312,375 |
| Thist | Aus. 9 ? | Mody | Ficemantic | 942943 |
| Chas F. Cocker | Aus. | Hastings |  | 880 ¢09 |
| Bertha | Alge is | Moalyvilie | Valpuraio | 673.333 |
| L.mam D. Fost | Aus. 4 | Chemainus | Austalin.... .- | 887,130 |
| Elwell. |  | do | Cape Towa | 099.534 |
| Hesper | Aus. 24 |  | Melluurne | 394059 |
|  |  | Moody ville. | Calla | 331,298 |
| He Thomas | Asp. 31 | Chemanus |  |  |
| Lousiana |  | Hastios |  |  |
| William il Smith | Sepi 28 | Moodyville ${ }^{\text {a }}$ | Stuney | i, 508,362 |
| Lindficld | Seph. 24. | Hasting.... | London. | 1.721.893 |
| $\mathrm{A}^{1}$ mimiral Te ectuhot. | Sept. $0^{0}$ | Chemainus | Antotapasa | 266,025 |
| Marion Chilcots | Sept. 26 | Chemainus. | Adelaide | 400,654 |
| Trensit.. |  | Chrmainus | Sylunev. | 67.851 |
| Defiance | Sept. ${ }^{8}$ | Cowichan. | Sydney | $6{ }_{5} 910 \times 3$ |
| James H. Bruc | Sept. .8. | Chemain | Sy ney | 592,288 |
| Expansion | pt. | Cow | Santa Roslia. | ${ }^{13120018}$ |
| Yithelmine | Oct. 2 | flasting! | South Arica... | 1,379.305 |
| $\mathrm{Nixy}_{\text {Ixy }}$.... | Oct. ${ }^{\text {che }}$ | Masty | Sohson | ${ }^{1}$ |
| Sea king | Oct. 34. | Moody ville | Sydney.... | 1.109,485 |
| Hawaisa lises | cr. 23 | Cbemannus | Mellournc...... | 2.929 148 |
| Arelhusa | cct. ${ }^{\text {r }}$ | do | Harve. |  |
| Republic |  |  | Medluourne. | 898,813 |
| Condor | Or. 8 | Moodyville | W C of S . | ${ }^{8}$, 695 |
|  |  |  |  | 63,975 |
| Paul Rickmers. | Loading |  | 1 London |  |
| Atalanta. .... |  |  | W. C. ar S. A |  |
|  |  |  | Coninent. |  |
| Rufus EE Wood. | do | Chemainus | Melluourne |  |
| Si. Davth. |  |  | South Afric |  |
| Eliabelh Nición. | do | N. Weamiter. | Stanghai |  |

Mr. C. A. Duff Miller, Agent Gencral for New Brunswick, ${ }_{17}$ Leather Market, London, Eing., has riceived a communication from a Glasgow merchant who wishey to represent a Canadian pulp manufacturer.
The secretary of the Canadian Manufacturers' $\Lambda$ ssociation, Toronto, is in receipt of a communication from the Imperial Institute, asking for the names of manufacturers of wooden handles. The name of a large firm in Manchester is furnished as desirous of buying these in large quantities, and as Canada has direct steamship service to Manchester, the prices would be quoted at a very reasonable rate. Along with the request came three samples of the sort of dandles required, so that any manufacturers interested can call at the office of the Manufacturers' Association, Board of Trade building, and be able to place exact figures for the supply of these goods. The secretary is also in receipt of an enquiry for manufacturers of hardwood blozks for flooring.

A Glasgow firm of umber amporters desire to be placed in conmunication with Canadian firms in a position to supply quantutes of boxwood. Name and address at office of Camada Lumberman.

A manufacturing firm using large quantities of dimengion hardwood timber invites communications from Canadian manufacturers. Pariculars irom Mr. Harsison Watson, Impersal Institute, Iondon, Eug.

## hard to beat.

Mr. E. Todd, Brantford, Ona, in renewing has subscription, writes: "You will have to husile next year if you expect to beat this year's Lumberman."

It is rumored that a pulp mill will be estublished a Nanainio, B. C.


MONTKLY AND WEEKLY EDITIONG publisiesd yy

The C.H. Mortimer Publishing Company of Toronto, Limited

Confburration Lifb building, Torontc
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Imprrial building, Montrbal
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Tine canada lumazaian is publiabed in the interests of the lumber
 Presentative in Canada of this foremost branch of the commerce of this
counnry. It ains at siving full and timely information on all subje is country. thains at giving fusing andimely information on all subje ts fro a disu sion by otherx.
Especial pains are taten to recure the latest an 1 most trastworthy mare
 he traze in Canada 1 .formation $1 n$ which it can rely in its operations.
Siectal corrapondents in Incalities of importance pescri an accurato malters speciully intrecsing to our readera Bus correspondence is not maly wetcome, Wut is innted frum all who have any information 10 com.
ont municate or subjects io discerss relating to the \& ade or in anyway a ficting ih. Even when we may not be blle to 1 agree with he witers, we will give them a dair opportunity for fret discussion 2s the Lass means of eliciting
the truth Any items of inter it are pariculatly requeted, for even if not the aruth Any items orinter 1 are panticrially requeted, for even if not
of great 1 mportanee individually they contribute to $a$ fuad of iaformation from which Reneral results nre obsained.
Advenisers will receive caretul atecnion and libural ereatment. We need dot point out that for many the CAMADA Luspra3MN, with its spes cital chass of readerz is not only an excopitionally yood medum for securng the notice or thas class Special altention is ditected to "Wante "For Sale advertisement, which will be inserted in a conspicuous posi ion at the uniform price of is cents per line for each inserion. Announce pents of this cbaracter will be subject to a discount of 25 per cent. it adered for four suocestive issues or longer.
cubscabers will find the zmall amourtt they pay for the Cavada Lug. pos an andividual in the trade, or 4 rccially interested in it, who should not teon our list, thus oltaining the present benefit and aiding and encour asing us to render it even more complese.

## THE LABOR PROBLEM.

Tuy difficulties which confront the lumber manufacturer in respect to labor are showing no indications of relief. Lugging operators in many instances are unable to obtain a sufficient number of men for work in the woods, and the production of logs during the coming winter promises to be reduced on this account. Some dissatisfaction is also reported as to the class of labor obtainable.

The demand for labor is such that employees are often indifferent and do not discharge them duties as fa thfully as when employment was less plentiful. These conditions must affect the cost of producing lumber.

The opinion was recently advanced in these columns that current prices are not out of proportion to the cost of producing lumber. In a recent issue the American Lumberman takes up this question ar 1 gives some striking examples of the increass the wages of those engaged in lumberingr opera. . 's. Taking the wages paid hy a large lumber manufacturer in Duluth, the increase this year as compared with 1896 is about 30 per cent., as the following table shows:

| Clascks or Lamm | -8gh | ¢000 | Incranse |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pilers. | \$1.62 | \$2.00 |  |  |  |
| Graders | 1.37 | 2.00 | 46 |  | ، |
| Sciters | 1.75 | 2.00 | 14 | - | - |
| Clearing gangs | 1.75 | $2.121 / 2$ | 21 | " | " |
| Commion labore | 1.25 | 3.623/2 | 30 | " | ' |

The increase in the wages of woodsmen have
been much greater, and show an increase as compared with four years ago of nearly 85 per cent. The comparison is as follows:

| Classes of Laion bgog <br> Teamsters. .... $\$ 16.00$ |  | 1900 |  | Increasm |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$30.00 10 | 0.00 |  | er cent. |
| Swampers. | 13.00 | 28.00 to | 32.00 | 115 |  |
| Choppers. | 14.00 | 28.00 to | 32.00 | 100 | ' |
| Sawyers | 14.00 | 28.00 to | 32.00 | 100 | 1 |
| Graders... .. | 13.00 | 28.00 to | 32.00 | 12 | ${ }^{\prime \prime}$ |
| Lnying iron. | 13.28 | 28.00 to | 32.00 | 110 | " |
| Cliore boys | 12.00 | 20.0 | 26.00 | 76 | " |
| Blacksmiths | 35.00 | 50.00 to | 60.00 | 43 | " |
| Cooks. | 45.00 | 50.00 to | 60.00 | 11 | ${ }^{4}$ |

We believe that in Canada there has been an almost corresponding advance in the wages of the employees of the lumber trade. This advance cannot be disregarded by manufacturers, who must of necessity secure for their product a price sufficient to cover the increased cost of production. The consumer who believes that by waiting he will be able to purchase his supply of lumber at lower prices will probably find that he has been laboring under a delusion.

## THE OUTLOOK.

As the exponent of the lumber industry, the Canada Lumberman has felt an interest in the election campaign which recently closed in the United States, and we must confess to a teeling of satisfaction with the result. No doubt the prosperty which the country has enjoyed during the past three yea $s$ was a strong factor in determining the result. The business interests are now assured that there will be no change in the policy of the Government for four years at least. The immediate result will be the carrying out of plans which were temporarily deferred, while the commercial industries will continue to espand.

Although a political campaign in Canada does not affect the business interests in the samedegree as in the United States, yet it is a cause for congratulation that in this country also we are now reasonably certain of a settled policy for another tour years. Tariff regulations are not likely to undergo material change, and manufacturers will be in a position to plan their undertakings accordingly.

The lumber trade has perhaps felt a greater interest in the recent election across the border than any other branch of industry, as some 500,000,000 feet of the lumber product of Canada is annually marketed in the United States. A prospectite glance shows the ourlook for the lumber industry of this country to be rather bright. Lumber is still a large factor in building operations. These will soon be terminated for this year, but we anticipate that the spring of 1901 will be the beginning ot an active building season. In the city of Toronto the number of vacant houses has greatly diminished within the past year, and the demand is such that new residences must be huilt to accommodate the rapidly growing population. The holding of a Dominion Exhibition in Toronto next year is likely to cause the erection of buildings on the Exhibition grounds to cost in the neighborhood of $\$ 200,000$, while the proposed palact hotel on King street is expected to call for an expenditure of neariy $\$ 1,000,000$. In Ottawa building operations next year promise to be on an extensive scale, as, in addition to the regular building, many structures destroyed by the Ottawa-Hull fire last spring are yet to be replaced. A considerable volume of building is likely to be done in the city of Montreal, not to speak of the extensive harbor improvements
which are under way in that cily, pis the conditions in these three cilites situation in the smaller willes and wot, the country, and that we shall the
healthful revival of buading operial year.
Tua consumption of luanber for mast purposes is likely to increase. Funime plements are two of the main brancered facture in which lumber is emplojed, wid these are in a most provperous coatia addition to a steadily increasing hoow the expor, of these articles is iarmes shown by the official returns issued to partment of Trade and Commerce.

So mucls for the home consumpling it dition which will characterize the tha are less certain. It is not improbake United States will take from this wore year fully as much, if not more lumber, the season now closing. So with ix market. And it is probable that otherio countries will increase their imports br ada, partiy as a result of our exhilitd products at the Paris Exposition. ith African Republic will eventually be a $b$ porter of lumber, but the country will a become sufficiently settled to permit $\alpha$ d ports in 1901.

Lumber manufacturers may, we thar into the future with some degree of ere that, with a moderate output, all $\boldsymbol{B}_{2} \mathrm{y}$ manufactured will find a market, asd business will realize a fair margin of prof of the things to be guarded against is $u$ a sive production.

## EDITORIAL NOTES

To tur lumber fraternity the Cannostr maN extends its greetings upon the apre festive season.

Here is a trade barometer: "Tbec of wood pulp exported from the Docis? Canada to Great Britain during the ust year was almost twice as great as duqu preceding year." The Scandinavian mus ers are gradually losing ground in as market, because of the superior qualitid adian pulp.

New blood from lumber circles has hero duced into the Dominion parliament of ta tion of Mr. J. T. Schell, of Alexandna, 位 Mr. Gibson, jr., of Marysville, N. B. If gentleman put into their parliamentargaz same keen foresight and telling energ) characterized their business operations al bermen, we may expect. to see the mart d impress upon the work of the ninth Prate of Canada. Is it too much to preditit position of the long-looked-for import United States lumber?

The Great Northern Railway lias bens pleted. The road runs from Queber iot Hawkesbury, connecting with the Bochat system, over which it has running primis Parry Sound. It passes through theridy bered country on the upper reaches of thes that flow from Quebec into the St. Lase and furnishes a continuous line betme
found in effect that the salw was not securely guarded, and that by reason of the defendants' neglect to guard it the plaintiff was injured, and that their finding involves a finding that plaintiff was properly where he was when the accident happened, and the motion should therefure be, and is, dismissed with costs.

## LOGGING MAHOGANY.

Tus following somewhat lengthy description of the mode of of logging mahogany is taken from Self Culture. It is worth reading:
"The mahogany hunter is the most : mportant and best paid laborer in the service, for upon his skill and activity largely depends the success of the season. Ma`ogany trees do not grow in clusters, but are scattered promiscuously through the forests, and hidden in a dense grow of underbush, vines and creepers, and it requires a skillful and experienced woodsmen to find them. No progress can be made in a tropical forest without the aid of a machete, for the way must be cut step hy step. The maliogany is one of the largest and tallest of trees, and the hunter, seeking the highest ground, climbs to the top of the tallest tree and surveys the surrounding country. His practiced eye soon detects the mahogany by its peculiar foliage, and he counts the trees within the scope of his vision, notes directions ard distances, and then, descending, cuts a narrow trail to each tree, which he carefully blazes and marks, especially if there is a rival hunter in the vicinity. The axemen follow the hunter, and atter them cone the sawyers and hewers.
"To fell a large mahogany tree is one day's task for two men. On account of the wide spurs which project from the tunk at its base, scaffolds must be erected and the iree cut off above the spurs, which leaves a stump from ten to fifteen feet in height-a sheer wasce of the very best part of the tree, and one which American ingenuity would certainly devise some means to prevent. While the work of telling and hewing is in progress other gangs are busy making roads and bridges over which the logs may be hauled to the river. One wide 'truck pass,' as it is called, is made through the center of the district occupied by the woiks, and branch roads are opened through this main avenue to each tree. The trict employed are clumsy and antiquated affd., which no American would think of using; the aales and boxes are imported trom England, while the other parts are made upon the ground. The wheels are of sold wood, made by sawing ont he end of a log and fitting iron boxes in he center, no spokes or tures being used. New wheels are in constant requisition, and repars cause frequent and expensive delays. Most of the trucking is done at night by torchlights of pitch pine. The oxen are fed on the leaves and twigs of the brear-nut tree, which gives them more strength and power of endurance than any other obtainable food. The trucking being done in the dry season, the logs are collected on the bank of the river and made ready for the floods. On the longest rivers these begin in June and July, and on others in October and November. The logs are turned adritt and when they reach tide water are caught by means of booms. Indian loggers, usually Caribs, follow the logs dowa the river in order to release those which are caught by obsta=les.

No little judgment and experience are required to determine at what exact stage of the flood the logs should be set adrift. Should the waters rise to what is called 'topgallant flood' befure the logs reach the boom, many st them would be carried over the banks and left high and dry in canebreaks and thickets, or covered up by sand and rubbish. From the boom the logs are rafted to the etnbarcadero and 'manufactured' for shipment.
"Mahogany trees give them from two to five logs each, measuring trom to to 18 feet in length and from 20 to 44 inches in diameter after being hewed. The manufacturing process consists in sawing off the log ends which have been bruised and splintered in transit down the river, and in relining and rehewing the logs by skillful workmen, who give them a smooth and even surfice. The logs are then mensured, rolled back into the water at the mouth of the river, and made into rafts, to be taken to the vessels anchored outside the bar."

## LACING A BELT.

A writer in The Engineer suggests a new method of preparing the ends of the belt lacing, concerning which he says: Every one who has to lac belte knows how difficult it is to push the soft ends of the lace through the belt, unless the. holes are much larger than they should be. The majority of men use either a nail or the point of a file to aid in this work, but this is cumbersome, and, too, a nail of the proper size or a file is not always on hand. There are metal tipped laces and also metal tips on the market, which are adapted to cover the end of the lace and thus make it stiff enough to be pushed through the holes in the belt, but 1 believe my method is superior to either of those already mentioned, inasmuch as it is more of a time saver. My method consists in holding the tapered ends of the lace leather over a lighted match untul the leather becomes charred, when it will be found to be quite hard, and plenty stiff enough to be pushed through the holes in the belt without breaking. Care should be taken not to char the leather too much, otherwise it will become orittle. A title experimenting will enable the work to be done just right.

## TREATMENT OF RUBBER BELTS

To obtain the full value from a rubber belt, it is cssential to buy the best belt, provide pulleys of ample diameter and face, avoid excessive strain, distribute the strain over the wnole width of the belt as equally as possible, have the fastenings made so that they will not pull out the ends of the belt, and avoid having the belt exposed to excessive heat or to grease or dirt. You can greatly increase the service and life of a belt by applying with a brush a compontion made with equal parts c'red lead, black lead, French yellow and litharge mixed with builed lirseed oil and japan, enough to make it dry quickly. This will produce a finely polished surface. A coat of the same composition may be applied if the rubber gets peeled trom the surface of the belt. Animal vils, grease and castor oil are injurious to rubber belts and should not be used, the composition mentioned ahove being all that is necessary. Belts to be adjusted to the pulley should lave the ends cut square and true, and be cut shorterthan the distance around the pulley by an $1 / 8$ to $1 / 4-$ inch tor every foot when measured with a tape; a steel tape is the best. They sh, ould be stretched as tightly as possible, and with wide belts this can be done best by the use of clamps secured firmly to each end of the belt. There is no danger of breaking, as a belt of good quality, 6 inches wide and 3 -ply thick, will stand a direct strain of 5,000 pounds. - Steam Engineering.

Mr. A. F. Bury Austin, the well known lumber merchant, of Montreal, left for Brush Columb:a on November chant, of Montreal, left for Brtush Coluinv:a on November
19th, on an extended business trip. Cpon his return he will 19th, on an extended business trip. Cpon his return he "ill
be pleased to receive enquiries for all kinds of material in his. be plas.

NOTES FROM 'THE EASTERN PROVINCES.

## [Cortespondence of the Camada Lumarksian.]

A new company hasy been formed in Fredericton, N.B., for the manufacture chiefly oflumbermen's supplies, including peavies, hames, cant dogs, boot caulks, table blocks, all kinds of drop forgings, wire nails, has pitchers, etc. The name of the concern is the McFarlane-Neill Mfg. Co., and it starts out under particularly advantageous circumstances. The firm has acquired the fine plant of the late Walter McFarlane, which was so successfully run by him up to his dealh, and since then with continued success by Mrs. McFarlane. This plant consists partly of a large brick building in St. Marys, just opposite Fredericton, fully equipped with engines and the best machinery. This old concern has a first-class name among the lumbermen and a good connection with them. Their peavies have for years been shipped all over the Maritime provinces and central and western Canada. One customer alone in Qucbec has bougit over $\$ 5,000$ worth of peavies. The personnel of the new company is as follows: Mrs. W. McFarlane, Jas. S. Neill, E. Byron Winslow, F. T. Morrison and N. A. Tweedate, the latter beirg manager. Mr. Jas. S. Neill is well known among lumberomen, having, in Fredericton, one of the best hardware stores in New Brunswick, from which he has shipped large quantities of lumberren's supplies. For years he has manufactured boot caulks in a little factory at Nashwaaksis, for whicla he has found a large markel. New equipmem is at once to be added to this factory on account of incereased oulput. The concern is the only one in Canada which manufactures the celebraled wrought band and solid eje peavy. For this they hold the Canadian patent, which, was taken out by the inventor, the late Walter MeFarlune, who made a geod thing out of it and sold the L'nited States patent the a Bangor firm. They also manufarture the malleable band peavy such as is made by Copper Canadian firms. To sice a slight idea of the extent of this business it inas be mentioned that in this factory upwards of 90 carloads of lumber are sawn ipto peavy handies each year. This lumber is hauled to the factory in the rough log, and there sitwn and sphit in order $t 0 \mathrm{get}$ the green of the log.

Thos. Robinson, a well-known mill owner, died a few days ago at his home in Lower St. Mary's, N.B. For many years he succesifoblly san the saw mill which he recently leased to Alderman MeKendrick.
The Robb Enginecring Compiny, of Amherst, N. S., secured the order a few days ago for a large and heavy prortable saw mill, with engine and boiler and all appurtenances complete, to be shipped to the Parific cuast. It is destined to the Chillistack valley in Brush Columbia. The leceight on this purchase will be between $\$ 800$ and $\$ 1,000$. This mill has becn bought by Clifford Paterson and some other lumber operators of :his county who have organized to carry on a big lumber industry in the west. The men to man the mill will probably accompitry it acrass the continent.
C. Pickard, of Sacksillc, has a portable mill at Braoklyn, some miles distant on the Cape Tormentine Railroad, and cuts from one to one and a half million feet of spruce a year, which goes to the English market.
Jav Smith, of Sackuille, has lately been turning out between 10 and is thousand pairs of moccasms in a sea. son These are ail tanned. Vichas been steadily refusing orders for some time, as the capacity of his factory is noll cyua' to the demand. He employs 35 hands and does a huge irade in thene lumbermens goods.
 mathe cnurmoun younutics of dumbermens harness, which in nout then spectaily. Thers tactory wis the targest of the kind in the Mathime provinces and one of the best in Canada.
Jaw. F. Sherry has opened ep in Memrameock in the manulacture of lumbermen's shoc procks, moceasins and larrigan: He os employing abuut 20 hands and makes a good articte. llis specially is shoe packs. Next year he hopes oo have about so hands at work.
A. E. Wry \& Co., Sackville, are manufacturing lumbermeris hamess, and showed Tilf: Lumarnan's reprecentative subetantial odders from well known lumbermen ann dealers from the north.
Chax. Dickenson. the larrygan manufacturer in Woodsock, whose advertisement in seen elsewhere in ilus issuc, has a pair of shoe packs in his possesson whith were :!nm fromacape Town to I'reluria and back by the Rew.

Mr. Lane, who accompanied the first contingent. They are neither worn through or ripped in any part, but sho:v many deep scratches and cuts from the rocks.

The second largest larrigan factory in Canada is in Parrsboro, and lumbermen throughout eastern Canada know the name of J. S. Henderson so well that they will be interested in a short description of his business. It is but a few years since he began to manufacture on anything approaching a large scale, but already his business is enormous and he now employs abnut seventyfive hands and turns out 32 dozen pair a day of shoe packs and larrigans, not including moccasins. Mr Henderson has his own tannery in connection which he has been running for many vears and makes up all his own leather, so he knows exactly what goes into his goods. His tarrigans and shoe packs all have the rivet through the vantp and quarter on each side; this, he claims, is an absolute essential to lastingr quality, and it looks most reasonable. Some makes are without this important icature. A large addition was recently added to the factory, and another spring further additions will go up. Mr. Henderson last February sold in one order, to a Montreal firm, 26,000 pairs. He has sent large shipments to Vinnipeg and Bruish Columbia. His advertisement may be seen in this issue, and The Lumbermas trusts that soon Mr. SIenderson will occupy no second position in Canada. T. E. Henderson, of Parrsboro, is the inventor of the Henderson patent larrigan which is gaining such a good reputation. A pair of these is on exhibition in his shoe store window, made to the order of Chap!ain Lane, of the first contingent, for presentation to the Prince of Wales.

## farrsborós lumber industri.

It may not be generally known that Parrsboro ships one-quarter of the entire lumber oulput of Nova Scotia, but there dre many interesting things to be leamed of this progressive and always busy lutte town, whech is harbored so securely on the northern shore of the beautiful Minas Basin. At an early date The Lumbermas hopes i: publish some interesting sketches and descriptions of the town and vicinity relative to the lumber induster, but at present a few items will give the trend of recent events in this connection. Backed by a great lumber district, intersected with splendid carrsing facilities, fronted by much good shipping conveniences and peopled by men who know their business, Parrsboro has been doing, and will continue to do a heavy export trade. The town is growing and growing well as the years go by-

The Newville Lumber Co., whose mill is 10 miles from Parrsboro, on the Cumberland railroad, have been cutting about $4,500,000$ fect. The mill is eguipped with a gang, edger, trimmer, lath, planer and other machines. About 700,000 fect of this cut is of pine. They stream drive largely to the mill. The office of the firm is in Parsboro, in charge of Mr. MeAloney, who greally admires The Llumernas: They sell largely 10 Malcolm Mackay and ship murl) to the United States; Stetson, Cutier \& Co. handling most of this. The firm is composed of W. W. Black, N. A. Rhodes, N. Curry, C. A. and J. B. Lusby; and George A. Fowler. These men are from Amherst, with the exception of Mr. Fowler, who is now in Newoundland as manager of the Explons Lumber Company there Captain Nordby, of Parrsboro, agent for Georse Mekean, of St. John, shipped about 12,320,000 feet this year.
D. A. Huntley, manufacturet and shopper, thes a mill on the wharf in which he cuts about $3,000,000$ fecta year. As he does a grood deal of vessel building the uaes a for getting out deck planks, etc. He iy just now bunding a 500 ton barque. He has another mill at Canaan, 10 miles north east of Parrsboro ; he cuts ahout $1,000,000$ deals a year. He has also stave, shingle, and heading machines He selts principally to George Mckean and B. L. Tucker.

Gco. W. Day, of Parrsboro, at present Nayor of the torn, has a portable mill at Canaan, and cut about 2,500,000 fect of deals, boards and scantling last year. Mir. Day knows the fumber business thoroughly in all its fealures, and has been very successful.

The Moose River Lumber Company has heen organized during the past month at Parrsboro, and will now carry on a large business. The gentiemen intercsted in this concern are Mesers. E. L. Tucker and Newton Pugsley. of that town. They have bought a property consisting of 12,000 acres of well wooded land lying about cast of Parrsboro on the northem shore of the Basin of Minas.

This property has been cutting from feet for years. They expect to cu using portable millsand doing consid Mr. Tucker, as buyer and shippe. 20,000,000 feet last year, shipping
English market. He does not Enylish
market.
Chas. J. Willis \& Company, of shipped some 40 cargoes of Jumber er was due liere on the 5 th of No take away $1,5000,000$ more-the shipments. This firm ships from ( fax, Shediac, Pugwash, Grindst points. In 1900 they olipped over Atherton le.tves this office early in England.
The barkentine Florence B. Edg. ., loaded wil 000 feet of lumber, for Cape Town, ,iled receest Parrsboro, N. S. Nearly all of tha is to be exed pairing the mines and railuays wreched in Suedh The commander of the vessel is $\mathrm{C}_{\mathrm{i}_{1}}$ ann J . $\mathrm{N}_{\mathrm{o}}$ Nor was but a few weeks ago marric. to dis Ge Stehelin, of New France, near 1 beymouth, is accompanied her husband on the tryp. Mrs. Kaji is the well-known lumber operator ... New Frase

Nov. 18th, $\mathbf{1 9 0 0}$

## QUESTIONS AND ANSWERS

"C. B.", Halifax writes: 1 have $\mathrm{m}_{\text {mo liond }}$ ing to be driven from one electric motor. Casln belts off it, or will I have to belt from one lise of on to another?
Ans.-If you have room to put your motor berser two lines, it would be best to belt direct from ia is line, the bells driving cach way from a special poity ing two crowns. This method has the edradun the one in which a pulley is used at cach end oftibes? of reducing the strains on the bearings acd frame, an so of giving freer access to the motor for insexcian cleaning.
"Enginecr" says: We are pulting a dew e in our mill, for which we will have to gel a demberi fifly feet long. As I want to get the vers bederif possible out of it, please advise me which sidel shon next the pulley.
A.ss.-If your beit is to be single, you sboadd ta fiesh or grain side out, because the oulside of bebed passing around the pullicys is subject to more orkat extension strain, over and above the straig doe of the load it is driving; whereas the inside of the bet goes over the pulley is to a certain extent cogys obviously, the flesh side being of a more soft and nature than the hair side, is more suited to the in tension strain. If the belt is double, both iside grain, the hair sides being glued togetiact, of have no choice in the matter.

## SNEEZE WOOD.

Among its many peculiantues South Atres iocioh " snecre-wood" tree, which takes tis uame frest that one canulut cut it with a saw without socering, fine dust has exactly the effect of snuff. Eren is the wood it will sometimes cause snecung. hia: worm or barnacle will souch it. it is very binesu taste, and its specific gravity is heavier than ratecolor is light brown, the grain very cluse and bure a nice looking wood, and takes a good polish. for work, piers or jetties it is a useful tumber, lasing a while under water. -The Building News.

## PERSONAL.

Mr. Joseph Botsford, forcman in the pladigy Graham, Home \& Company at Fort $W$ illiam, 0 , slricken with paralysis last month and died akri. thereafter.
The marriage of Mfr. J. Quincy Altms, of Kive Ont., inspector for the British-Canastan Timete Manufacturing Company; of London, Eng., shoot been chronicled in last issuc. The liady of his de was Miss Maud Alineria, daughter of 1 r . W. Erim of Harriston, and the event took place at Sh Geut church at Harriston, Rew. J. Hirst Ross 050ums. Mr. and Mrs. Adams we extend ox: congath
save mill h..
Greenc.
Ad Smith is o dang a sashand door factory at
on, N. B.
erson Bros.,
NEWS.
are remodelling their mill at
on completed at Templeton,
ned busincs-
Fsav mill ha ueen established by Oliver Bros.
ord, N. W. 1.
Eastman Lum, .., Company are repairing their Cat Racine, Qu.
dickie, of... wacke, N. S., is building a large mill at Liscrmbe Mills.
Mrlean \& ( mpany have built a large addicir planing mod at Wiudsor, Ont.
Hes Pedwell erpects to commence the erection mill at Lion s Head, Ont., early in the spring.
Perland, Innes \& Company, of Chatham, Ont., blishing a stave and heading mill at Castleford.
iw mill, pulp min, ind stave factory are among the filions expected by the citizens of Beaver Mills,
kie \& NcGrahb, of Tusket, N. S., are desirous of ga number of purtable mills to saw hardwood

Chippewa Lumber Company, of Southampton, eextending ther planing mill and sash and door

Hiam Millions, of Carleton Place, Ont., has gone foundland to superintend the erection of a large It itere.
Pallerson, of Millstream, N. B., has purchased a fract near Grand Falls, which he wiul log during riog rinter.
Eillizmson \& Crombie, of Kingsbury, Que., expect fate their saw mill throughout the winter, having fed for 2 supply of logs.
A. Patterson, of Apohaqui, N. B., has purchased F. mill of the Stevens Lumber Company at Salmon N: B., the consideration being about $\$ 5,000$.
fole Hastings Stungle Manufacturing Company, of sures, B. C., are cperating their shingle mill night 3y. They have installed a new lath machine.
Ten for the lumber woods in the Lake of the Woods fl are searce. The Rat Portage Lumber Company dverising for teamsters, road-makers, axemen, etc.
En Eoglish firm have sent a representative to Oda to locate a site for a furniture factory. It is fred that the factory will be located at Araprior,

The Ral Portage i,umber Compiny are opening a ber jard al Purtage la Pranre, Man. It will be the managcincut of A. Sterens, formeris of ras River.
Price Bros., of Wucbec, are building a large saw mill . Catharines Cuve, near Tadoussac, Que., which is geted to be in operation next spring. Mr. Charlion be the manager.
The sam factory of William Chaphin, at St. CatharS. Ont., was completely destroyed by fire carly in kember. Mlr. Chaphins loss is estumated at S75,000, is onlp parially covered by insurance.
Mr. Batoon, ol Wingham, purposes building a factory Zanitowaning, Ont., for the manufacture of broom fies and other wiod specialtics for foreign markets. *ang ako go into the manufacture of furniture.
L VanDusen, if Otama, an employec of the E. B. TS Company, ha nvented and patented a new match thime, paid to he apable of making froun blocks of d 1,00 gross of f war kinds of matches in ten hours. Extensive lumin', yards have been established in Fira by W. H. $\because$, duliffe. They are situated on apaia street, ha. I piling capacily of over $1,000,000$ , and are equipy a with drying and storing facilities. Fire anempis ، ..ec been made recen'ly to effect the trecion, by fise, of Miessrs. Schurman, Lefurgy \& F property in .....cy, C.B. The large new wareC, whinh con... .acri offices and large quantitice of
dressed and manufactured lumber, narrowly escaped. No reasen for the action has yet been found.
-Clifford Patterson, and oilier lumber operators, of Cumberland County, N. S., intend building a large steant mill in the Chilliwacs Valley, British Columbia. The machinery is being built by the Robb Engmeering Company.
-It is said that the owners of the MeLaren mills at Barnet, B. C., have under consideration the building of several lumber schooners at their mill this winter. This step has been suggested by the excessive freight rates ruling this year.
-An order in council has been passed permitting the Pigeon River Lumber Company, incorporated under the laws of the slate of Wisconsin, to carry on the business of manufacturing lumber in Ontario. Herman Finger, of Fort William, Ont., is attorney for the company.
-The Rat Portage I.umber Company have opened a new retail lumber yard in Winnipeg. It is located on Point Douglas, close to the site of their proposed saw mill, and is in charge of J. M. Chrisholm, who for some years has been manager of the retail lumber business of Dick, Banning \& Company.
-It is probable that a large saw mill will be buite next spring on the sute of the old Couroy mill at Deschenes, Que. The gentlemen interested are Messrs. J. B. Fraser and John Bryson, of Oltawa. The site for the mill is an excellent one, there being lange piling grounds and good facilities for the shipping of lumber and the handling of logs in the river.
-Davidson \& Thackray have entered into the first contract with the Poutiac \& Pacific Junction Railway, the Ottawa and Gatineau Valley Railway, and the Interprovincial Bridge Company 10 carry lumber across the new bridge between Ottawa and Hull. The contract calls from 400 to 600 car loads a year. The lumber will be brought from Quyon and Fort Coulonge to the firm's planing mill in Ollawa.
-What is said to be the largest perfect plank ever turned out bj a saw mill was manufactured by a California redwood mill not long ago. The plank is $a$ inches thick, 6 feet wide and 17 feet long. It was cut by a band saw, and is perfect and without a flaw. Much larger pieces of redwood in the form of planks have been produced, but they were not perfect specimens.
-Rumurs have been current for some time that the Pacific coast fumber manufacturers had organized under the name of the Associated Lumber Manufacturers of the Pacific coast. The proposed organization, it is said, is to be divided anto two branches, an export branch and domestuc branch. The territory to be covered meludes Britist, Columbia, Oregon, Washingıon and California.
-The mill of the Longford fumber Company at Gravenhurst, Ont., was closed on October 3 ist, the company, as usual, giving the employces a dance and supper. The empluyees took advantage of the uccasion to present their foreman, Mr. F. L. McNab, with a handsome gold watch and chain, logether with an illuminated address expressive of the good fecling which has existed between the foreman and the employees during the past threc years.
-The Chemainus Lumber \& Manufacturing Company, of Victoria, B. C., have given out the following list of ve:sels under charter by the company to hold lumber: A 380 ton American schooner, now in port; Hawaiian barque Fort George, to load for Sydney. Irfi Honolulu for Chemainus on October 20th ; the Great Adnimal, 10 load for Sydney; the Antofaganta, now en rouse to load at Chemainus; the St. Janes, now loading; the Roland, now on the way from Newcastic to Chemainus; and a German vessel and another British ship.
-Great improvements have been made to the mill of the North Pacific Lumber Company al Bamet, B. C., which is now under the management of J. M. Poltras. The circular saw has been replaced by one to-foot band mill and one 8-foot band mill for resawing. There are four Berlin machines and one timber planer $24 \times 3^{\circ} \mathrm{ft}$., bull espectally for this mill. The sminke stack is of immense size; the lower 40 fl , has a wetter jacket in which the refuse of the mill is bumed. The capacily of the dry kiln is 250,000 feet of lumber. The shipping facilities are excellent, an ocean wharf $500 \times 500$ fect per milting of vessels luading from three sides. A loading shed on the railroad track is $66 \times 100$ feet.

- An important deal was recently completed at Viancouver by which the Buse mill at llastings was purchased by the William Tytler Lumber Company. The Buae mill was owned by some Minneapolis parties, J. J. Banfield being their local representative. The mill itself is of smatl capacity, but the sute in an excellent one, with deep water wharfage for ocean vessels at low tide. It is stated that English capitalists are interested in the purchase, and that it is the intention to ereet an export mill of large capacity.
-From Kinghon, N. B., the manager of the Merchants Bank of Halifax sends some interesting particulars about matters on the Northumberland Strait: "Trade here, which is principally in lumber, has been very good :his year. All the mills on the Riclibucto and Buctouche rivers have been very busy during the summer, and prices have been high. Shipments of deals to England Thive been larger than usual, and the "boom" in Cape Breton has increased our coastal trade." To a similar effect writes the manager of the Union Bank of Halifax at Annapolis, N. S.: "In reply to your enquiry I would say that our lumber exports have been more active than formany years past, and business generally has been fairly good in this section."
-The new saw mill of Edmund Hall at Sarnia, Ont., is nearly completed, although work on the tramways and docks will nrobably not be commenced until next spring. The mill is located about 1,000 feet from the shore of Garnia bay. It is the present intention to make an island of the space immediately surrounding the mill, with a causeway and tram connecting it with the Grand Trunk railway, the main line of which runsparallel with the bay shore line. The equipment of the mill consists of two band saws, one gang saw, lath mill, and shingle mill. Power will be furnished by seven 16 foot boilers, supplying two engines of approximately 500 h.p. cach, and smaller engines as occasion demands. There will be a private hghtugg systen and an independent is stem of fire protection.


## CASUALTIES.

-While working in Nichols \& Kennedy's sash and door factory at Onemee, Juhn Watson had the thumb sawn off his right hand.
--Patrick Flannigan, a logger, was instantly killed in Forbe's logging camp, near Vancouver, B.C., by a branch of a lree falling upon him.
-George Mitton, who operated an edger at Drader: mill at Chatham, Ont., uas almost invanily killed by being struck by a board thrown im the saw.


SOLE MANGFACTURERS
IN CANADA OE
S. K. C.
alternating gurrent apparatus CENERATORS MOTORS TRANSFORMERS
Always a large stock of varinus sizes on hand.

## All kinds of supplies in stock

WRITE US YOUR REQUIREMENTS
ESTIKATES PROMPTLY FURNISHED

## WOOD PULP~ ๑~ DEPARTMENT

THE SAULT STE. MARIE PULP MILLS.
In a previous insue we outlined the steps which led to the establishment of the great pulp mills of the Sault Ste. Marie Pulp and laper Company at Sault Ste. Marie, Ont. In this number we present illustrations of the mills, and give some particulars of the extensive industries whach have been established.
Two of the mills, shown in the first illustration, manufacture mechanical pulp. Their cost of construction was in the neighborhood of $\$ 2,000,000$, and they give employment to 500 men, white quo othery are engaged in the forest getting out spruce logs. The matls are operated day and nught and the value of the annual production is about $\$ 1,000,000$. No. 1 mill is 600 feet long and 80 fect wide, and No. $2800 \times 100$ feet.: It is estimated that the power required to run the nulls is 14,000 horse power. The company have establistied a reserve supply of raw material and of the finished preduct, in order to meet the possible contingency of an accident entating a delay 11 operation. This consists of about 30,000 cords of spruce logs and about 1,000 tons of wood pulp.
These mills being completed, the manufacture of sulphite pulp next engaged the attention of the manager, Mr. F. H. Clergue. The great drawback to the econ omical manufacture of sulphite pulp was the bigh price of sulphur, the chief source of supply heing the Sicily mines. Mr. Clergue, however, set about to discover a means of getting a subply of sulphur. He went to Sudbury and notuced that sulpharic acid gas to the value of \$2.000 a day was being allowed to escape during he process of roasting nickel ore, large quantities of which exist in the Gudbury district.
The outcome was that Mr. Clengue discovered a method $t 0$ get sulphurous acid gas out of the pyrshotite, and the crection of a sulphite mill was immediately decided upen, and is now neanng wompletion. It is a 7 b feet long, of feen wide, and 1 so feet lugh. At the southern end there is an annex for the acad department 40 by 42 fect, surmounted by a stately tower. The height of this tower from the ground is 1 jo fect. The sulplite mall has been butl of structural steel and native stone. It will turn out sufficient chemical pulp to treat the product of the two wood pulp mills, and in adduinn will produce dally 75 tons ot clear, bleached sulphite fibre. The latter brings \$75 a ton, and the annual output represents at value of ovet $\$ 2,000,000$. The same number of hands will be given employment as in the ground wood puip mills, viz., 500.
Two huge digesters, 54 feet in height by 17 feet in diameter, and built of $11-4$ inch sicel, are being placed in the sulphite bualding. The foundations of masonry under each will be capable of sustaning 750 tons, and will rest on solid rock.
The question if a supply of suiphur naving been disposed wf. Mr bergue turned bis altention to orther dis coveries. It was luund that the residue left after the sul-
phur had been removed from the ore contained nickel and iron in a perfect state of harmony, and when fused into a metal it produced an alloy of nickel steel. This discovery resulted in the construction of reduction works and a ferro-nickel plant. The warks consist of a building $104 \times 5$ feet, comtanung an ore crushing plant with a capacity of 500 tons per day, and a second building $158 \times 88$ feet conthining the roasters.
glass pump into limewater, which is theo ext bleaching the sulphise pulp.

So large a quantity of nickel ore arequired to the reduction works that the sulph $e$ mill is cupt utilize it all, and a surplas of sulhmious tomes therefure, undisposed of. To allow his to excapeom a great loss, and so a means was duised of coemen the gas into liquid sulphuric acid, which is in grat mand for the purposes of ore refinim, and tor bxis is arts. It is proposed to manufacture the acid aed se it in tanks to the trade for use in notring supbite phy 50 per cent. less than sulphur can lee oblained ica ba Sicily.

The nickel ore or pyrrhotite hav $\cdots$, been fredt sulphur, will be delivered to 100 elentrical fumsesest tons a day, where it will be lurned out in the lare ferro-nickel pig. The intention is then to reficet to nickel steel. There are a splendal foundry; mate


Pulf Mills Nos. 1 and 2.

To remove the copper fiom the nickeliferous pyrithethe, alkal) works were established. They are equipped with $: 20$ electrical machines for treating salt by the Rhodin process. Sodum is uned for separating the copper from the nickel, but there is the chlorine still to be considered. This is conierted $f$ the aid of chlorite gas and lime into bleacheng pouder, a substance ued for blear lank woullens, cluths and tabnics. The chlorine gas, instead of being allowed to escape, is forced by a
shop, pattern shop, carpenter shop and lathoratun tis are equipped with plant and applances of the as modern character. The foundry buthding is 260 fer $200 \times 75$ fot :oo feet in Nidth, but a wen toundry best is $160 \times 80$ fect, operated by electric priwo-
Extensute works are slill contemplat.d. At Horre Point, three miles west of the present er up of adeco will be located huge blast furnaces and works ix manufacture of Bessemer steal in thuse wols 5,000 operators will be given constant employment.

## ©~ SPECIAI NOTICE ~

We have inaugurated a STOCK REDUCING SALE for October, November and December, and will quote reduced prices on all inquiries reaire for shipment during time named.

We have a complete stock in all kinds, grades and dimensions, one to two years old, Bone Dry Hardwood Lumber, Yellow Pine and Cjpres, kiln dried Maple Flooring, plain and quartered White and Red Oak Flooring, Surfaced Lumber, Wagon and Dimension Stock, and can ship strijis or. mixed car lots, quick delivery.

We have numerous stocks, last year's cut, piled in connection with saw mills in the country that we propose to close out and will quote ra: on a basis of lumber made, dried and delivered from the stump to your factory (no yarding expense). Besides we are offering special prices a Quarter Sawed Forked Leaf strictly White Oak, all one kind and color, well manufactured, band sawed, principally large figure, gond widhs ai bone dry, including Quarter Sawed Ked Oak, uniform color, quality and grade.

Inquiries solicited.

YULP NOTES.
American capta... - are said to be considering the establish ment of a pulp mill al Buckingham, Que.
Hanna \& Hutch win Bros, of Huntsville, Ont., want to prathase 5,000 con… of spruce and hemlock pulp wood.
The Rojal Papry Mills Company, of East Angus, Que., is buildicg a danu and intends erecting another pulp trill at an esuly date.
The steamer Noulen has been chartered by the Cushing

A scheme is said to be under way, in which Glasgow parties are interested, to remodel and put into operation the pulp mill built some years ago at Alberni, B. C. The capital of the proposed company is fixed at $\mathrm{X} 100,000$. An English capitalist residing in Victoria, B. C., is interesting himself in the undertaking.

The Lake St. John district, in the province of Quebec, is attracting considerable attention from pulp mill projecturs. Mr. Worden, representing a large firm from Christinna, and Mcssrs. Glysrul and VonRruysel, representing a Belgian

Messrs, Edmund de Vindder \& Herman Cortuet, of Irussels, are shareholders in the Belgo-Canadian Pulp and Paper Corporation, which intends building pulp and paper mills at Shawinigan Falls, on the St. Maurice river, Que. Mr. J. N. Greenshields, Q. C., of Montreal, recently visited Belgium and France in connection with the enterprise. He sta's that over one million dollars is to twe put into the undertaking by the Belgian capitalists. It is expected that the output will be marketed largely in Belgium.

Another efficient substitute for pulp wood in paper making


Grindfry in No. 1, Pulp Mill-Sault Ste. Marie Pulp \& Paper Conpany.


Sulphite Puip Mill-Sallt Ste. Marie Pulp \& Paphr Company.

Sulpbite Fibre Cumpany to take a cargo of pulp from St. jobs, N. B, to Cremat Britain.
The Chicoulunia Iulp Company, of Chicoutimi, Que., purpose incteasing thers plant. The present capacity is 100 tons of polp a day Ttus wall be increased to 300 tons. It is said that the.company will produce 150 tons daily of dry pulp for the Freach markei, for which purpose special machinery will be installed.
syndicate, have been looking over the limats and water powers with a view to the establishment of pulp and paper mills.
The Dommon Industrial Company is applying for a Dominion charter, to rannufacture pulp woor, pulp and paper, and to acquire the business of the Cuokshue Mill Company, at Cookshire, Que. The capital is to ie $\$ 200,000$ and the head office at Sherbrooke. R. H. Pope, M. P., of Conkshire, and F. P. Buck, of Sherbrooke, are directors of the company.
has been discovered in the southern saw palmetto, which hithertu has been cunsidered merely a troublesome undergrowth to remove in clearing land A paper plant has now been established at Pensacola. Fla, relying entirely upon this matertal for its supply and very successfully The palmetio is assurance that it will be just av abundant ihe fuhturing seasun. It reniains to be seen whether as a valuatice product of the soid it will retain the thriftiness which is supposed to belong merely it will retain the th
to useless plants.
P. PAYETTE \& CO.

Penetangulshene. Ont
Macciaturers of .
CAW MILL MACHINERY, MARINE EN. $S$ GNES BOLLERS,
CASTINGS,
ETC.

## puns, Estimates Supravision a Contracts.

## Chas. H. Vogel



Tme THORULD, ONT. specialties: Paper, Pulp and Sulphite Fibre Hills. Paper P Pl
Electic Plants. Electsic Plants.
sinveya and Improvement of Water Power. Hisy Yan' Exparience. Refernces on Application. $^{\text {. }}$


Solo Canadian agezats :-: Pricas Redreced. WATEROUS, BRANTFORD, CANADA.

## JOHN BERTRAM \& SONS

manufacturers of .
PAPER MAOHINERY

## Cylinder Moulds Wet Machines

## Cutters Dryers




T HE above view shows one of the many styles of setting and case to which our

## CROCKER ㅍ. TURBINE

may be adapted. This plant was built for direct connection to Wood Pulp Grinders.

We invite correspondence from those contemplating the erection of Ground Wood Mills. Estimates submitted for complete equipments.

Let us have your address and we will send you a copy of our new 1900 Turbine Cataiogue, also circulars of the Port Henry Grinder, etc.

## IRADE NOTES.

We are advised by Mr. Feeny, manager of the Ollawa Saw Works Company, that the company s new works will be put in operation in about a fortught.

The Truro Foundry \& Machine Company, of Truro, N.S., recently shipped a steam rotary mill, wilh trimmer and haul-up, to Rutledge \& Sample, Salmon River, N.S.

The Jenckes Machine Company, of Sherbrooke, Que., have found it necessary to increase their accommodation. When the addittion now under way is completed their foundry will be $200 \times 80$ leet.
We have received from Messrs. J. E. Rhoads \& Sons, of Philade/phia, a handsonely printed and illustrated catalogue of one hundred pages, descriplive of their leather betting and factory fire extinguishing appliances, etc.
Messrs. W. B. Mershon \& Co., Saginaw, Michigan, make an annoucement in the advertisement pages of this number regarding their celebrated band resaws. They report trade to be satisfactory, one of their most recent sules in Can-dat being one of their style $F$ band log mills to Messrs. Firsibrosk Bros., of Teronto.
About fifty men will be employed in the new factory erected by Mr. J. W. Wonds, the well known manufacturer of lumbermen's supplies, Qucen strect, Ottawa. The building is about completed, and operations will be started oun a full scale by December ist. An electric motor is being installed to operate the sewing, cutting, binding and button hole machines. The new structure, ope of the most inposing in Oltawa, is a four storey one, thoroughly fireproof. The basement has been arranged for the safe storage of goods. Mr. Woods intends making a considerable inerease in his manufacturing department.
Messrs. Campbell Bros., of St. John, N.B., advise us that during the past year they have done an exceptionally large !rade in axes. They have received some encouraging testimonials on their last season's goods, and report that lumbermen are asking for their axes to a greater extent than ever before. Their hand made single and double bitted axes seem to begreat favorites with the choppers, who appreciate a good axe better than anything else.

Messrs. Campbell Bros. are now operating their factory to its full capacity, with an increased number of employecs, and expect that their output of axes this season will be so per cent. greater than last year.

Elsewhere in this issue will be found the advertisement of the Blyth Handle \& Turning Works, situated at Blyth, Ont., of which Mr. E. Livingstone is proprietor. Blyth is situated on the G.E.R., but shipment on the C.P.R. can be made from Wingham, or by boat from Goderich. Fire destroyed Mr. Livingstone's planta few yearsago. Since that time he has buill his present factory and thoroughly equipped it with the most modern machinery inecessary for the manufacture of all kinds and sizes of tool handles. Being situated in a district where second growth elm, suitable for handies, is in be had, he made a practical test of its adaptability for this purpose. It proved perfectly satis-
factory, making the best handle in the market, At, Livingstone expects to do a large expr trade, that paying particular altention to lumbermen' upplies.
A most:enjoyable evening was spent by emenbend the James Warnock Co. and their emplor is of Galt, ou the occasion of their second annual dinn. held on tion gth, at the Imperinal Hotel. Mr. John St. ('- 'r. foremand the tool shop, presided, the vice-chair bein.. occupied by Mr. Geo. Fairgricve, superintendent of $u$. works. the chairman referred to the fact that $t$. oy had the generations working in the shops, a undition the probably did not exist in any other t. tery in tan Mr. F.H. Hayhurst, the efficient business on nager, mend to the toast "Ourselves," referring to $1 .$, , history growth of the business since first establishol in 18 it 20 Charles Stevart replied on tehalf of "Our lanutat Industries." Mr. Geo. Fairgrieve did justic. © "The "Lse of the Maple." An excellent orchestra and ome well fore. dered sonps added much to the enjoyment if the occasime

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A DOUBLECUTTING SAW.
Mr. J. F. MlRac and Mr. Cliafles Hamilton, foreman and filer respectively for the Rat Poriage Lumber Company, of Rat Porlage, Ont., halle for some lime been experimenting on a double-toothed saw, running on an old type of a Prescott band mill. As a resull, they have
satisfied themselves that they can operate the saw on his mill to advantage, and effect a considerable saving. We understand chat they intend instaliing the saws for next season's cut. MeRaceclaims that on account of having a top guide on the mill, it is an advantage over the telescopic mill, masmuch as sawyers will not keep the mill down to the cut.

## John : Bertram

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