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


Coloured covers/
Couserture de couleur

$\square$
Covers damaged/
Couverture endommagéeCovers restored and/or laminated/
Couverture restaurée et/ou peiliculie

$\square$
Cover title missing/
Le titre de couverture manque

$\square$
Coloured meps/
Cartes géographiques en couleur
Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

$\square$
Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Bound with other material/
Relié avec d'autres documents
Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

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

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


Coloured pages/
Pages de couleur

$\square$
Pages damaged/
Pages endommagées

$\square$
Pages restored and/or laminated/
Pages restaurées at/ou pelliculées

Pages discoloured, stained or foxed/
Pages décolorées, rachetées ou piquéesPages detached/
Pages détachées


Showthrough/
Transparence
Quality of print varies/
Qualité inégale de l'impressionContinuous pagination/
Pagination continueIncludes index(es)/
Comprend un (des) index
Title on header taken from:/
Le titre de l'en-tête provient:Title page of issue/
Page de titre de la livraisonCaption of issue/
Titre de départ de la liuraison


Masthead/
Générique (périodiques) de la livraison

Additional comments:/ Some pages are cut off.
Comnıentaires supplémentaires:

This item is filmed at the reduction ratio checked below/
Ce document est fitmé au " $\quad u x$ de réduction indiqué ci-dessous.


## THE

## Canada Lumberman



The C. H. MORTIMER PUBLISHING C0., of Toronto, Limited

# ADAIVI II AII, peterboro, ontario, canad. <br> manufacturer <br> OF....... <br> <br> STEEL RANGES 

 <br> <br> STEEL RANGES}

For Lumbermen's and Railway Camps, Boarding Houses and Hotels


Lumbermen's Siz Pot Hole Range.

We have been manufacturing Steel Rangr. and Heaters for Lumber Canps for the past Twent)tour Years, and have supplied the wants of nearn all the Lumbermen in Quebec, Ontario and Man toba-they are unexcelled for Baking and Cooking. and are strong and durable.

This No. ${ }_{1025}$ Six Pot Hole Range is largels used in Camps of Fifty (50) Men ana foi use when driving the Rivers. Weighs 400 pounds.


This No. 1026 Leader Range with Front Hearth and Copper Reservoir is made for either Coal or Wood and is largely used in Boarding Houses and Hotels The Wood Range weighs 500 pounds; the Coal Range weighs 600 pounds.

We make a number of other sizes of Ranges, also a Lumberman' Eex Stove of Heavy Steel Body and Cast Meta! Ends, in 36 inch, 42 inch and 48 inch-they are Excellent Heaters, Strong and Durable.

## THE

# CAWDA LIMBRMNAN 

Wood-Workers', Manufacturers' and Milleis' Gazette


# ALLIGATOR ROPES 

And all Other Si:yles Any Sizes in Wire Rope W. H. G.Mussin \& 60, montreal


## The Wm. Hamilton Mig. Co., Limited

Builders of a Complete Line of

## SAW MILL MACHINERY

We show herewith one of our specialties-the very latest and best style of Steam Setter-our

## Combined Steam and Ratchet Set Works

One throw of the lever will give from $1 / 64$ of an inch to 4 inches, besides the saw kerf.

It is not an experiment, but a proven necessity in all saw mills.

Lumbermen sawing thick stuff and dimension timber for export will find it a great money saver.

We also manufacture Complete Filing Room Outfits, and have the Sole Canadian Right to build the famous Côvel Saw Sharpening Machinery.

We illustrate herein two of these Sharp-eners-the latest:Double Cutting Band Saw Sharpener and the standard machine for Circular Saws.


These tools have no equal for the purpose for which they are used, and they cost no more than any other.

WRITE US ABOUT ANY MACHINERY YOU REQUIRE Head Ofllee and Works:

PETERBOROUGH

*     * 


## MAPLE LEAF SAW WORKS

(®) Shurly \&
 GALT, ONT

Manufacturers of
gIRCULAR SAWS GANG SAWS MLL SAWS BAND SAWS GROSS-GUT SAWS


HAMD SAWS BUCK SAWS PLASTERING TROWELS BUTCHER SAWS STRAW KNIVES, \&c.

## 


ground thin on back
Save Labor Save Gumming

Save Time
Save Files

## This Sari Stands Fithout a Rizal

AND IS THB
FASTEST GUTIMG SAW IN THE WORLDI
Its Superiority consists in its Excellent Temper. It is made of "Razor Steel," which is the finest ever used in the manufacture of Saws. We have the sole control of this steel. It is tempered by our secret process, which process gives a keener cutting edge and a toughness to the stecl which no pther processs can approach ${ }_{\text {t }}$

## Maple Leaf Saw Set

manufactured by SHURLY \& DIETRICH, Galt,? Ont.

Directions. - Place the set on the point of tooth, as shown in the accum panying cut, and strike a very light blow with a ta
you roquire more set, fle the tonth with more bevel
If you foltow darecyions you cannut make a mistake Be sure ans ..." sinke too hard a blow, and it will set the
of 40 cente we will send one by mall


We are the only manufacturers in the world who export Saws in large quantities to the United States.


We Manufacture

## HICH GRADE BAND SAWS

Of All Widths and Lengths.
These Saws are made of Refined Swedish Steel imported direct, and tempered by our Secret Process; for Fine Finish and Temper are not excelled.

# OXFORD VULCAN Logging Camps, Railroad Construction Gangs, Boarding Houses, Etc. 



The Vulcan is a Stove made for heavy work and rough usage.

Provided with 6-10 in. Cooking Holes- 28 in. Fire Box- $8 \times 81 / 2$ in. Fire Door-Oven, 25x28xi 6 in.

The Body is made of extra heavy steel.

The Top and Fire Box linings exceptionally heavy.

Reservoir of 15 gallons capacity.
THE GURNEY FOUNDRY 60., Limited, Toponto, Winniped, and 151 Hastings st.. Vancouvep THE GURNEY STAKDARD METAL 60., LImised, Galgary, Alberta.

## Horse Sense

Cnuld he taken to mean Common Sense in the treatment of your horses. All Lumbermen depend largely on the efficiency of their horses. This can easily be maintained if

## Johnson's Veterinary Remedies

 are used.The following valuable preparations have been largely in use amongst the Lumbermen of the Dominion for years. They are put up in bulk and are therefore more economical than similar lines, as the cost of packages, bottling, etc., etc., is saved :

## Johnson's Horse Liniment No. 1

 Swellings, Lameness, Curbs, Splints, ctc., etc.,\$4.50 per Imp. gallon.
Johnson's Horse Liniment No. 2
An excellent Oil Liniment for the same purpose, $\$ 300$ per gallon.
Johnson's Horse Colic Remedy
An absolutely safe and quick remedy for Colic of all kinds, $\$ 5.00$
per Imp. gallon.

Johnson's Vetepinapy Healing Ointment and Gall Gilpe.
Positively the best all round Healing preparation on the market fo: Cuts, Corks, Sore Shoulders, Wounds, Galls, Scratches, etc., etc., $\mathbf{\$ 2 . 2 5}$ per a pound tin. Put up in 4 ounce tins if preforred. Special prices for quantilies-Ask your lumbermen lriends about this King of all Gall Cures.

Ten per cent. discount off orders amounting to $\$ 50.00$ or upwards. A full stuck of all Drugs and Patent Medicines kept always on hand at lowest wholesale rates. Correspondence solicited. Orders by mail receive special attention. Let me figure on your requirements.

## A. H. JOHNSON

HAMS For Logging Tramway, Switches YARD LOCOMOTIVES

John J. Gartshore ${ }^{83}$ Front St. West,
(Opposite Quern's Mctel,) Tomonto.


OUR EXIRA HAKD. MADE
AXE

This Axe stands
belter in frosty belter in frosty
weatherthan any weather than any Sent for mample. Can zupply any
palterm. с1uxala mas Minfs. 8t. J0hn, N.B.

The . . .
 Head Office: TORONTO.

IIIGHEST GRADES OF
Refined Oils Lubrication Oils AND ALL Petroleum Products

Special Attention given to Steam Boiiers
Tte Steam boiler Policy of the Canadlan Casualty and boiler Insurance Co. givea Free of CostRegular Inspection of Boilers. Free Insurance of Bugineers and Firemen, Public Liability Protection, and the advice of out Consultigg Eagtazcre - FRBB Write to-day for Booktet "To Steam Osers"
alysandix Sutibraland, D. D., President.
A. G. C. Dinnict, Mranaging Director
H. N. Bath, w g. Dinzick, Vlce-Presideate.
A. M. Wicersa, Chief Engineer.

RUSSEL WHEEL and FOUNDRY C0., Detroit, Mich., U.S.A.


Builders of All Styles and Gauges of

## LOGGING G丹RS



Rock City Tobacco Co. Limited HIgh Grade CUT tem PLUG tobaccos

Quebec

THE DUNDAS AXE WORKS Dundas, Ont.


## OATS

Write or wire us for quotations. We make a specialty of shipping to Lumbermen in bulk or sacks Delivered at any point in the Dominion.

The Northern Elevator Co., Linited Winnipeg, Manitoba.
ผ. BAWLF, President.

## Wholesale Grocers and Importers

## LUMBERMEN'S SUPPLIES A SPEGIALTY

Our knowledge of river navigation is earned through－long experience and exceptional opportunity．We design the boat and build the entire and complete outfits of driving machinery for powerful light－draft vessels，having the best of modern shop facilities to aid us in doing all the work．Write to us before you act．

## 



DUNMAS AXE WORKS DUNDAS，ONT．

## Canada Chisel Tooth Saw Patent For Sale

 Dato Novomber 24, 1903Something now. No hammering required. Will run two gnuges thinner than any other saw and make better and smoother lumber. The holdar costs less to maniffacture than the tooth, which is a very simple drop forged tooth. No thilline or machine work on the plate, consequently a higher tempered plate and a plate that will require no hammering, as tempered piale and a plate lhat win require no hammering, as
there is absolutety no wear in service orin changing the tectli: thero is absolutety no wear in service or in changing the tecth:
mo rivets nor wedges. The only chisel tooth that will stand no rivets nor wedges. The only chiset tooth that will stand lrom the log in use. To partics who mean busincess and want Irom the log in use. To partics who mean busincss and want o control the inserted tooth saw irade in Canadh, 1 will seli cheal!. Ivill retain my U.S. Patent, and need more funds to push it. Other patonts now pending, and will be assigned. Cut sample of toothand holder, and sworn statement of results
from a test ot this saw will be furnished to those interested from a test of this saw will be furnished to those interested
who have a goud commercial rating, and a shw will be shipped who have n yourd co
for trial. Address
J. H. MINER, Inventor Care 1st National Bank, - LUMBERTON, MISS.

## PROVISIONS

Flour, Pork, Beff, Larpl, Bultiep. Smoked Meats, Beanc, Peas, Pot and Parl Barled, Odtmeal, Gopr and Oats, Etc.
$\mathrm{BY}_{\mathrm{m}}$
GEO. TANGUAY, Quebec, Que. Office, 48 St. Paul Stroet
Warehouses: 34 and 35 St. Andrew Street, Quebec

ENHHEERS FOUNDERS

MACHINISTS

## BUHL

Elevating, Conveying and Power Transmitting Machinery

## SPROCKET CHAIN ano WHEELS

 MALLEABLE OR STEEL BUCKETSWe Guarantee our Goods to be of Standard Design and Unexcelled Quality. . . . . .

Belt Conneyors and Spiral Steel Conneyors

MONTREAL TOROMTO VAMCOUVER WIHNIPEG

## Spocial to Lumbernena, Miners and Ralluay Gontracourors

## MINGE MEAT, BAKING POWDER, SPICES

And all Kinds of Grocers' Sundries for Camp Use.
SAUER KRAUT and SAUSAGE MEAT in Season.
aetSpecial Attention Given to Mall Orders.
Order Your minge meat Now for the Drive, Guaranteed to Keep During Summer.

## AMERICAN NO. I5 DOUBLE SURFACER

A Heavy Machine, from New Designs, for General Planing Mill Work and Box Factories.


The Bed raises and lowers.
Four Feed Rolls, driven by heavy gearing.
Top In-Feeding Roll divided. Has par. allel lift.
Cylinders carry three knives, with lony journals of large diameter. Top cylinder double belted.


Full detail iaformation and price. given on application. Ask nearest salesroom for Catalogue.

## Amerfan Woow Working Macolinefy 60 .



## DODGت

STANDARD

## IRON SPLIT PULLEY

WYith Katerchangeable Bualinige

## ALL SIZES

IN STOCK

SINGLE OR DOUBLE BELTS


Send for Lists and Discounts.

# DODGE MANUFACTURING COMPANY 


. . For all Purposes . .
LARGE STOCK CARRIED-CUT TO ANY LENGTH
Special Ropes for Lumbering
The Dominion Wire Rope Co., Limited montrral, que.

## TEON BELTING


leather beiting GAPATA BELTING (8antat
P. H. WILBY, $271 / 2$ Front Street East, TORONT0 8OLB AGEIT POR CAEIADA

## Garlock Packing Co. mamilton . : . canada <br> 

## GARLOCK'S PACKINGS <br> PATEEN EDI

Asbestos and Mineral Wool Pipe and Boiler Coverings. Engineer's Supplies in General.


# T프를 CANADA LUMBERMAN 

# TREND OF TItE GAMP SUPPLY TRADE 

Price Fluctuations During tho Past Year Comparatively Narrow.-Only a Eow Lines Show Important Changes.-Labor Still Scarce and Wases High.

In this, our Second Annual Camp Supply Number, it is appropriate to take a retrospective glance over the field and enumerate the changes which have taken place in the prices of supplies for the logging camps as compared with one year ago. Not that we can hope to tell the purchasing agents of our lumber companies much that is not already within their knowledge, but rather that in crystalized form the information may be uselul for comparative purposes and for reference at some future time.
The business of supplying the camps is of increasing importance, for while our production of lumber may have already reached the maximum quantity, more men are required to-day to bank a given numher of logs than were necessary ten or cven five years ago. The average wcodsman of today is a man of independence. He knows that if fhis services are rejectcd in one camp he will be extended a hearty welcome at another. In other words, the labor supply is scarcely equal to the demand, and the shantyman does not feel that compulsion which he once did to exert himself in his employer's behalf. This latter remark will apply to other walks of life as well as "in the woods". Nevertheless, the result is that the lumberman conducting operations on a similar seaie to some years ago is called upon to provide food for a greater number of men.
Taken as a whole, camp supplies have remained almost stationary during the past year. Some lines have advanced, others declined. The most important advance is in the price of cotton goods, owing to the sharp but sumewhat artificial rise in the price of the raw material. Pork prices represent the greatest decline, current values being much lower than one year ago.

## LABDR.

As in all other lines of industrial effort, the labor problem plays an important part in the lumber world. True, strikes have never in an organized state caused much trouble except at the mills, but on the other hand the question of supply and demand has always cut a big figure on the limits. This problem has in fact reached an acute stage in the past ferv years,
toba Capital and neighboring towns with strong young immigrants from the British Isles particularly, and Europe generally. After the summer's work in the harvest fields, these men were out of employment and readily accepted work on the limits. As the rate of wages was lower than in Ottawa, the American firms gave the western men the prelerence. Just here it may be remarked that this new phase of the labor problem may have an important bearing in Ottawa, but it is difficult at present to make a prediction with any degree of assurance.
Getting back to Ottawa. however, it may be stated that until recent years the supply of men was equal if not greater than the demand and wages remained normal. Wages have been known to drop as low as \$ioa month and board, and \$18 a month and board was considered a good thing. The French Canadian had the field to himeelf, and the field had the French Canadian to itself. The mill, camp and drive were his princip. 1 avenues of employment. However, the establishment of pulp and paper mills, the building of railways, the movement to Western Canada and the
and naturally occupies much attention and creates much discussion.

Since the days of Bytown, Ottawa has held the position of Hub in the Eastern Canadian lumber world. The far reaching river with which the Capital sbares its name, has been the means whereby the industry has been developed and maintained. The Chaudiere district alone with its mills has attracted and held an industrial army in Ottawa. Hence it is but natural that the city should have become the great hiring center for the workers on the limits and the log drives. Even the firms operating in the Georgian Bay district and larther west in Ontario look to the Capital for their men. As a matter of fact though, Winaipeg entered the field last year and supplied many hundreds of men for the Lake of the Woods district. The popular move to the Canadian West filled the strects of the Mani-


The Dining Room of a Logging Camp.
wages hold good for the future, or will they suffer a decline or advance? A prominent Ottawa district lumberman gave it as his opinion that the wages would drop. He figured that there would be an easier feeling in the labor market during the coming summer, and that lack of other employment would make
good help remains short, they will get what they ask. This phase of the case takes on a humorous turn when it is borne in mind that the high wages are responsible in a large measure for the advance in lumber.

The hardy contented lumber jack of former years is slowly but surely passing from the


Sleigu Haul, Cefveland.Sarnia Saw Mills Company, on Vermillion River.
more men available for the limits and conse. quently wages would drop.
On the other hand, the managers of the employment agencies state that the wages will remain firm at the figures quoted above. There seems a good prospect of the resumption of operations on the part of the Soo companies and that will make an increased demand for men. Then again the building of the Grand Trink Pacific Railway will make a hole in the supply of labor, but it is hardly likely this will affect the lumber interests before nexi year.
The French Canadians' undisputed clain to the work on the limits and drives is being challenged. Winnipeg was not the only city that sent hardy immigrants into the camps. Several hundred, nearly all Britishers, were forwarded from Ottawa. With their willingness to work and their na ural intelligence they made good, where other immigrants from across sea would have failed. The Canadian firms are averse to engaging any but the French Canadians, claiming that the others, not having the necessary experience, are a hindrance rather than a help. Howevcr, the American firms think different. As was the case with the men hired in Winnipeg, they were not averse to giving the nev 'mers a trial. Of course, they started them at reduced wages, but this was only an incentive to the immigrants to quickly master the fine points of the game and get on the full pay list. As a matter of fact they are even eager to try their hand at log driving, but few have been engaged for this risky work.

In discussing the future of the labor question as far as it affects the lumber industry, the buoyancy of the lumber market itself must not be overlooked. As long as high prices rule, the men hiring for work on the limits and drives and in the mills will demand correspondingly gnod wages. As long as the supply of
land. High wages in other lines of industrial activity andidhe prospect of an all year residence in town or city has lured many of the able bodied fraternity from the limits. Their places have been taken by undersized youths and inexperienced men from different walks of life. As a consequence there was no end of troubie last winter from "jumpers." The proximity of the railways and the very question of wages itself were responsible for the fiittings to and fro of the hands. In former years the men at' the low wages were content, even
city shown below, transportation to the camps to be advanced by the Company anu repaid by the undersigned, but will be retunded to those who have worked until the end of the hauling season. The Company agrees to remit monthly on demand one-half of the wages earned by the men to their families so soon as men have worked sufficient time to protect transportation. Insobriety, insubordination or incapacity to be sufficient causes for dismissal at any time."
The manager of this company stated that the law will not uphold a company that makes any deduction other than that for railway transportation when a man quits his job before his time is up.

## GROCERIES AND PROVISIONS.

The lumberman who contemplates operating in the woods next winter will probably be able to purchase his meat supply at very favolable prices; in fact, it is a question if he should not take advantage of the low prices which now prevail. Compared with one year ago barrelled pork, which is one of the principal commodities purchased for the lumber camp, can be obtained at a decline of six dollars per barrel. Current prices of live hogs and packing house products as compared with the corresponding time in 1903 are as follows :

| 2903. |  |  | 1904. |  |
| :---: | :---: | :---: | :---: | :---: |
| Live Hogs, \$ 6.7 |  | \$ 7.00 | \$ $5.12 \%$ 年 0 | 5.25 |
| Mess Pork, 20.00 | - 0 | 21.00 | 14.00 to | 15.00 |
| Pure Lard, 1 | 10 to | 101/4 | 73610 | 8 |
| S. P. Hams, | 18 to | 11\% | 10\%/2 to | 1 |
| Smoked Hams, | 12/5 to | 13 | 1210 | $121 / 2$ |
| Lonc Clears. | 9/2/2 to | 10 | 7\% to | 8 |

It would seem reasonable to expect a stronger tone to the pork market throughout the summer period, as the consumptive demand will no doubt improve. It must be admitted that prevailing prices are on a very reasonable basis.
Grocery supplies have been somewhat uneven in price. One of the leading staples, sugar, is about 20 cents per 100 pounds higher


Skidding Long Timber: with Steam Skidner, Cleveland-Sariia Saiy Mills Company.
eager to work, not only the whole season but season after season, with the one company. The following is a copy of the agreement demanded by one of the leading employment agencies which was found to give satisfaction and prevent "jumping":
"We the undersigned do hereby agree to work for and faithfully serve
during the lumbering season of 190 and following spring for the wages and in the capa-
than last year. On account of the prospects for the sugar trade in Europe this advance is likely to be maintained. Coffee is about ten per cent. higher thar one year ago owing to a shortage in the crop and manipulative tactics ou the part of speculators, but tea values show no material clange. The price of evaporated apples is about $1 / 2$ cent per pound higher, the supply being in a few hands and indications pointing to no decline in price before autumn,
even if then. In cloves there has been an advance of almost 100 per cent. Canned yoods are bigher in the majority of eases, and present prices of sauer kraut and pickles are St per barrel above those of last year. Oatmeal shows an advance of about $\$ 1.00$ per barrel, but there is no material change in split peas and pot barley.
Of the few articles showing a decline in price are rice and white beans, which are about io per cent. lower. Beans have recently been advanced in the United States and the market here is very steady and may advance in the near future. Prunes are slightly lower than last year; in tobacco there has been no change.
Molasses are probably more uncertain in price than any other commodity supplied by the wholesale grocer. In the West prices are about the same or slightly higher than one year ago, but the market in the Maritime Provinces has been unsettled by large importations from the West Indies, where conditions have been favorable to a large production. Barbadoes molasses is now quoted as low as 9 cents per gallon. Barbadoes has a very large crop, whereas Porto Rico will fall short in its output of Muscovado molasses, which is the grade principally cousumed in the Maritime Provinces. The Barbadoes market opened on January $25^{\text {th }}$ at 12 cents, declined February $4^{\text {th }}$ to 11 cents, February $13^{\text {th }}$ to 10 cents, and held strong at 10 cents until April 6th, when it declined to 9 cents, from which there has been no further break. In 1903 the market opened at 10 cents and was in a short time forced up to 18 cents. In April, 1902, Babadoes molasses was purchased for the St . John market as low as $71 / 2$ cents. From what can be learned the present decline, while influenced by overproduction, is to some extent due to competition between rival shippers.

Owing to the recent change in the assessment of duty on molasses, there will be less of the low grade New Oilians product imported into Canada than there i.es been in past years, and there will probably be a greater consumption of molasses produced in the British West Indies, which is of a superior quality. A large quantity of New Orleans molasses has been imported into Western Canada in late years.

From present indications, with few exceptiens, there is likely to be very little change in the prices of groceries during the next six months.

## CLOTHING.

Clothing supplies tor the lumber camp are likely to be more expensive than last year, and especially articles made from cotton, such as overalls, top shirts, etc. Cotton goods have advanced about 25 per cent. this year and are not likely to be any lower until after the next crop at the earliest. If the cotton crop of the Southern States should be even a partial failure this year, still higher prices for goods made of this material may be experienced. A large consumer of cotton rope advises us that he is paying $\$ 5.50$ per hundred more for this material than was paid last Fall. Woolen gcods are about the same as last year on many lines, but the heavy articles composed of pure wool have advanced from 5 to 10 per cent. on ac-
count of the increased cust of raw material. There is very little difference in the price of general lines of ready-made cluthing. Larri gans, muccasins and snow shoes, are the satme as last year.

The price of rubber boots has recently been advanced from 50 cents to $\$ 1$ per pair, this course being rendered necessary by the increased cost of raw rubber which now enters into the manufacture of so many articles. On December 3 oth last raw rubber was quoted at $g 6$ cents; a year and a half previously it was only 70 cents; now it is $\$ 1.17$. The American manufacturers of rubber boots have since February ist last advanied prices 20 per cent. In Canada the advance thus far has been only 5 per cent., but it is understood that a further marking up of values is impending.

## LOGGING APPLIANCES.

United States manufacturers of axes have to some extent made Canada a slaughter ground from their goods, and competition for this source has been felt quite keenly by the Canadian makers, some of whom advocate a return to a specific duty instead of the ad valorem duty which now exists and which they claim gives too great opportunity for flooding our market with the cheap grades of tools. Canadian inanufacturers, however, have maintained prices remarkably well, relying on the quality of their goods to hold the trade. Prices of axes, peavies, cant hooks, pike poles, skidding tongs, etc., have therefore undergone no appreciable change in price as compared with last year. The tendency in logging tools, if anything, is towards an advance, especially in those lines where the handle constitutes the principal cost of the tool, as increased difficulty is being experienced in securing suitable timber for making handles and higher prices have to be paid for it. Steel in the finer grades also shows a tendency to advance, which must be considered in fixing the price of the manufactured article. These remarks will also apply to saws, which have remained stationary in price but which are more likely to advance than to decline.

Logsing sleighs are more expensive, the chief agent in producing this result being the higher cost of timber. Prices of stoves, ranges and tinware for lumber camps are almost the same as last year, and unless there is a decided change in the United States, Canadian manufacturers are not likely to alter their quotations in the near future, as present selling prices bear a fair relation to the cost of the raw material and leave a fair margin of profit for the manufacturer.

## HORSES AND THEIR SUPPLIES.

The best method of obtaining a supply of horses for woods operations is a question to which lumbermen have been obliged to give more consideration in late years. Previously the custom with many of the large firms was to purchase oaly a limited supply of horses and rely upon hiring a sufficient number from teamsters and settlers in the vicinity of operations to handle the cut of logs. This plan worked satisfactorily, but the greater demand for labor which has been experienced in recent years encouraged the settler to place a higher
talue on his hire, and ruling wages heve been from $\$ 3.50$ to $\$ 5$ for one man and a team An unexpected difficulty arose, howevet Naturally the timber must accessible was first taken out and logging operations became more difficult each year. Many of these settlers, untamiliar with the logging business, wouid not drive their teatos down hills and in other seemingly treacherous places, and the lumbermen were obliged to have their own men take the reins in such cases, handing over the team to the seltler after the danger point had been passed. They are willing to risk their horses but not their own lives. The unsatisfactory character of the work performed by the settler, therefore, has induced it number of the lumber firms to purchase in tise fall of the year all the horses required for their roods operations. These are sold again the following spring; if in the meantime the demand for and price of horses has improved, the lumberman may be able to realize as much as he paid for them; if not, he stands the loss, feeling that the work performed by the animals during the winter has amply repaid hin.

The horse market is not materially different from one year ago. General purpose horses, 1200 to 1350 pounds, are worth from $\$ 145$ to \$190, whereas in the spring of 1903 the selling price quoted was $\$ 140$ to $\$ 200$. The depletion of the supply in Eastern Ontario and Quebec, however, makes it highly improbable that there will be any decline in the price of horse flesh for uext season's work.

Hay and oats are slightly lower than last spring, but the future course of prices will depend altogether on the crop harvested. The season so far has been backward and very unfavorable for seeding and the growing of grain and crops of all kinds.

## I.EEETINGS OF LOG DRIVING COMPANIES.

The annual meeting of the St. John River Log Driving Company was held at Fredericton, N. B., on Apral Sth, Mr. A. H. F. Randolph in the chair. Those present included Messis. W. H. Murray, John E. Moore, Henry Hilyard, J. F. Gregory, George S. Cushing, N. H. Murchic, E. L. Jewett, Charles Miller, F. D. Miles, St. John: Donald Fraser, sr., John Kilburn, Archic Fraser, Donald Fraser, jr., John A. Morrison, Kobert Aiken, James M. Scolt, Fredericton; G. R. Burtt, j. E. McCallum, Hartland; Senator Baird, Perth, and A. J. Beveridge, Andover. A statement was given out that the logs cut on the St. Jolin river last winter was estimated at $140,000,000$ feet. The logs will be driven by Mr. Morrison, whose contract does not expire until next year. The following board of directors was elected: John E. Moore, president; J. F. Gregory, secretary treasurer; John Kilburn, Charles Miller, A. H. F. Randolph, and Henry Milyard.

The Tobique River Log Driving Company held their annual meeting at Fredericton on April $7^{\text {th }}$. Henry Hilyard was re-elected president, and J. C. Harlley, of Woodstock, secretary treasurer. The other directora are Donald Fraser, jr., Senator George T. Baird, R.A. Estey and N. H. Murchic. The contract for driving from the forks to the mouth was let by public auction to Archibald Fraser at 23 cents on a 3 -year contract. It is estimated that $38,000,000$ feet will be driven down the Tobique river this season.
J. T. Schell, M.P. for Glengarry, has purchased the mitrests of his partner, D. Al. Macpherson, in the well. known lumber firm, of Macphersun \& Schell, diexandria, Ont. It is Mr. Schell's intention to further enlarge his extensive wood-working plant.

## NEW SAW MILL AT WINNIPEG.

The Rat Portage Lumber Company, Limited, of which Mr. D. C. Cameron, M.P.P., is president and manager, have recently completed a modern saiv mill at Winnipeg, Man. The photograph of same reproduced herewith was taken last fall before the mill was fully completed. The location is on the banks of the Red river adjacent to the city of Winnipeg, and convenient for the distribution of the product of the mill throughout the said city and suburbs.

Company, Limited, of Galt, Ont., manufuctured and supplied all the machinery in this mill, and it is of their best make.

Box Factory. - The box factory is supplied with up-to-date machinery for the manufacture of boxes of all sizes and kinds." The machinery for this part of the plant was also supplied by McGregor, Gourley \& Company, of Galt.

Sasil and Door Factory.- The sash and door factory, while having in view the manufacture of standard stock, is particularly design-


New Mill of the Rat Portage lumber Company on the Red River at Winnipeg.

The plant comprises saw mill, planing mill, box factory, sash and door factory and dry kilns. The design of the plant is such that it will take the timber or raw material and manufacture therefrom all the material made from wood that the builder may need in his general business.
Saw Mill Steam Power. - The saw mill will contain two double cutting band saws with the necessary edgers, trimmers and saws of various descriptions for the proper manufacturing of lumber, timber, lath, etc. The mill is entirely modern, being equipped with all the necessary steam operating machines for rolling, canting and transferring logs and lumber during the course of manufacture, nothing being omitted that will in any way facilitate the operations,reduce labor, or even make heavy labor lighter.

The band saws were built by the Waterous Engine Works Company, of Brantford, Ont. They are of the double cutting type, the saws having teeth on both edges, and really might be called two-faced saws, but if proper! y manipulated they are true as steel and will turn out lumber of excellent manufacture. The edger is a very heavy machine supplied by the Waterous Engine Works Company. It is adpated to edge boards, plank, and manufacture from cants small timber, which will in a measure add to the capacity of the mill. The balance of the machines and equipment in this mill were also built and supplied by the Waterous Company. A full line of the most modern filing machinery for the fitling up of the band saws has been installed.

Planing Mili.. - The planing mill is calculated and designed to manufacture flooring, siding, ceiling, shiplap, mouldings, and to dress lumber in all the varied forms called for. McGregor, Gourley \& Company and Cowan \&
ed for the manufacture of special orders which are met with so often in city trade, and it will be a valuable auxiliary to the already established factories which the company now have for manufacturing standard stock.

Dry Kilns. - The dry kilns for drying the lumber for the factories are of the design known as the moist air process. The machinery and fixings for this kiln, as well as the dust ma-
engines were built by the Inglis \& Hunter Company, of Toronto, and the boilers by the Bertram Engine Works Company, of Toronto.

The whole plan: will be lighted by electricity. The dynamo is of the multipolar type and was supplied by the E. S. Harrison Company, of Winnipeg; it is diven by a McEwen high speed engine built by the Waterous Engine Works Company, of Brantford. Other auxiliary engines are placed in convenient places to perform part of the work referred to.
The buildings were constructed with a view to reducing the insurance to a minimum. The mills and factories are what is known by underwriters as Standard Mill construction and will be fitted up with the dry pipe sprinkling system. The roofs are metal clad, the walls painted with fire-proof paint and the buildings whitewashed inside.

The mills and factories will be operated continuously and will be fitted up with steam heating apparatus for the winter.

The logs will be brought to the mill by rail and dumped into a pond artificially made for this purpose, and floated to the foot of the jack ladder. The water to supply this artificial pond will be pumped up from the Red River, a large pump and pipe system having been installed for this purpose.

The water as it is pumped up from the Red River will pass through the condenser, which will condense the steam from the Corliss engnes and heat the water in the pond, so that it will not freeze up in the winter, thus doing double service. The prevention of fire will have attention and the necessary hose and hydrants will be placed conveniently.

The buildings were constructed and the machinery installed by the company's own men, excepting some minor contracts, and the whole


Sash ann Door Warehouse of the Rat Portage Lumber Company, Winniprg.
chinery for the factories, are being supplied by Sheldon \& Sheldon, of Galt, Ont., and are of their latest design.

The principal motive power for this plant consists in a pair of cross compound Corliss engines, energized by a battery of boilers, having all the necessary pumps, condensers, etc., neatly housed in a brick building having metal roof and thoroughly fire-proof. The
work done by the direction of the company's engineer in charge.

The sash and duor warehouse in Winnipeg, of which a drawing is shown, is a four storey building, including basement, 220 feet long and 60 feet wide. The floors are supported by heavy timbers capable of carrying very great weight. The building is frame,-sheeted with steel.

## SOCIAL AMELIORATION IN THE LUMBERING

 CAMPS.By Alprbd Fitmparrick,
D A, or Toronto. Secretary of the Canadian Readiog Camp Associatlon.
References have already been made in your columns to a movement on foot in the Province of Ontario to establish reading and entertainment rooms, and a home study system of elementary education at the lumbering, mining and railway conslructing camps of Canada.
nor write, the Association decided that it was better to engage duly qualified teachers. Last year ten teachers were employed, two of whom were young medical doctors, a third a graduate of Oxford, a fourth a graduate of McMaster University, and two of the others were Undergraduates of Queen's and Toronto Universities respectively. The doctors practised med:cine in the camps, and one of the teachers


Reading Room, Booth \& Gordon's Camp, Azllda, Ont.

This work is mainly educational. It was begun in a tentative way. The isolation, and consequent moral degradation of many of these men, led to the belief that they ought to be surrounded with home-like infuences and innocent pastimes; that they ought to be kept in touch with the outside world, and led to sympathize with its problems by the beautiful in art and literature. It was felt in short that they should be.given the privilege of an education.
With this object in view three separate shanties were built, one at each of three different camps in the district of Algoma. These were supplied with stoves, chairs, games, books, magazines and current newspapers in French and English. It was found that the men spent their evenings, rainy days and Sundays in the se reading camps instead of going to the nearest town or village in search of questionable entertainment, and that the moral tone of the camps was decidedly raised. The empluyer now provides buildings and the provincial government supplies books. Some twenty-five reading camps were built and the work is being intiated in Manitoba and British Columbia and will be taken up later in the other provinces.

Our work is largely experimental and our object to develop public opinion in its favor, and urge the provincial governments, whose prerogative it is to educate our citizens, to take it up in all camps and make it a phase of public education. We do not attempt to cover even a tenth of the ground, but simply enough to demonstrate its practicability and popularize the movement.

## Camp schools.

So far as employers are concerned there is little difficulty in securing buildings. It was found, however, that some one is necessary to supervise each reading canip, and as there are a large number of men who can neither read
acted as clerk, while the others engaged in manual lator. Each men earned over one-half of his salary The Association paid the balance.

This is not only home education for the employees in these isolated camps, it is manual training for teachers, and that too of a practical and uscful sort. The henefits to both teacher and taught by the introduction of educated men in-
practicable has been fully demonstrated by the correspondence schools. Thousands of young men in these frontier camps spend their spare moments in private study even where tenting but for a night.

To argue that home education is impracticable in the lumbering camps is to tell us either that woodsmen have absolutely no leisure and are to all intents and purposes slaves, or that they have no mind and soul and are a different order of beings from those engaged in surveying and mining, which line of argument no sane employer will adop.

Considering that there are no counter attractions in the camps, although his hours of labor are long, the average shantyman has as much spare time as the average mechanic in the older settlements, towns and cities.

What is of more immediate importance is to enlarge the range of interest in life for the laborer that he may cmploy in a wholesome and profitable manner such hours of leisure as he has, that when the opportunity comes he may know how to use more free time. As a matter of fact, employers often fear to give their men too much spare time, not from mercenary motives, but lest the time should be abused and employed in gamblug, drinking and worse. evils. Experience proves that to increase the hours of freedom without ensuring that these hours are to be well employed is to drag men downward, and that this is true of the rich as well as the poor.

As already stated, the main difficulty in the extension of this work is not a question of buildings. All mining men and not a few lumbermen have either already made provisions of this kind at their camps or would be willing to do so if approached on the subject. The prob-


One of J. \& T. Charlton's Camps-Reading Room, 9 Miles pross Mouti of Wiitefisif.
to camp lite cannot be over-estimated. There is no reason why a boy's education should end with the school building. Systems of culucation should be as flexible as the needs demand. The boy who tor one cause and another escapes the school walls without an elementary education should be followed to the woods and mines. No state should tolerate an illiterate citizenship. That home education even at the most isolated mining and survey camps is
lem is largely one ot supervision. In a few cases buildings have been provided that have not been a success because the employers and the Department of Education did not, and the Association could not, engage men to look after them. The most successful club houses in the more permanent mining camps and saw mill towns have a man in each case who devotes his whole time to making the particular institution under his care a success. The next
are those in charge of teachers who engage in manual labor during the day, sawing, chopping, etc., and whose evenings are unemployed. Doctors end clerks are as a rule too busy evenings to accomplish much in the reading camps, although in some cases they have done good work.
As your readersare interested most in the lumbering industry I shall not devote much attention to work of this kind in the mining camps except by way of comparison.

The first club house at a mining camp in Canada so far as known to the writer was built by the Canada Copper Company at Copper Cliff, Ont., and its employees. This is an up-to-date building fully equipped with bath, parlor, reading room, etc. The first club house at a saw mill town is that at Cutler, Ont., built last spring by the N. N. Wright Conpany, now Loveland \& Stone. This has been mainly an experiment on the part of the company and has been entirely successful.. It is a commodious building, and wa- provided by the company with billiard and pool tables, etc., books from the Department of Education, stoves, chairs and daily papers and magazines from the Reading Camp Association, and a small organ from the Presbyterian Church of Weston. As at Copper Cliff a capable man is kept in charge by the company.
The good example set by the Canada Copper Company is being followed at other mining camps. The Massey Station Mining Company will erect a building for this purpose this spring, and the example set by Loveland \& Stone is likely to be followed at other sawmill towns.
The writer is deeply grateful to many employers for their kindly interest and co-operation. The three companies which have invested most in this endeavor to benefit their employees are The Parry Sound Lumber Company, The Rathbun Company, and Loveland \& Stone. Amongst others are Hale \& Bell, J. J. McFadden, J. R. Booth, Playfair \& White, The Georgian Bay Lumber Company, the late Edmund Hall, The Ontario Lumber Company, John Bertram, The Rat Portage Lumber Corr.pany, McLeman Bros. (Wabigoon), Alfred McDonald, Capt. Robinson, (Winnipeg), Booth \& Gordon, J. \& T. Charlton, N. \& A. Dyment, British Canadian Manufacturing Company, The Brennen Company, Algoma Commercial Company, and others.
Some who very seriously questioned the feasibility of the work, and who did not provide buildings, as Mr. E. C. Whitney and Hon. W. C. Edwards, generously contributed cash. Others, as Messrs. Playfair \& White, N. N. Wright and Loveland \& Stone, supplied both cash and buildings.
Too much cannot be said in praise of these and other employers in their quiet unobtrusive effort to make "the wilderness and the solitary place glad and the desert to rejoice and blossom as the rose."

The Meyer-Thomas Company, Granby, Que., are building an extension to their box factory, $24 \times 40$ feet and two stories. They have recently opened a branch in Montreal.

## QUBBEC TRADE PKOSPECTS.

(dy a Smbial, Correstomdrat.)
There are indications that the season upon which we are eutering will be a very plentiful one in the supisly of lumber generally. The great scarcity in the water supply last year prevented the bringing down of the whole of the previous season's cur of logs and in addition this season's production has been large, which, combined with the stocks on hand, will place a very plentiful supply on the market. The home trade in the Province of Quebec is continuing to be well sustained and dealers are looking forward with every confidence to a good season's business. Prices are also ruling firm on the home trade, although a slight decline would not be altogether unexpected.

The foreign markets are somewhat slow, particularly Great Britian, where conditions are in marked contrast to those prevailing at the close of last year. The decline is somewhat of a surprise to the dealers on this side, as prices were expected to have been at least equal to those ruliug during last season, and it was anticipated that all available stocks at the opening of this season could have been easily placed, whereas very few cuts have been disposed of in advance for this season's trade.

Several reasons are attributed for this state of trade. General business in Great Britain is behind expectations, and the lumber and timber markets are naturally being affected thereby, while at the same time a good deal of cheap timber is being pushed in from the Baltic.

There is no doubt also that the freight rates are playing no small part in the difficulties experienced on this side. A more moderate and steady rate would do much towards removing the difficulty in meeting prices by placing the Canadian trade on a more equal footing with other producing centres.

Labour. -The supply of labour in Quehec for the approaching season is expected to be ample to meet all requirements. The previous season stood at a great disadvantage in this respect, as the supply of labour was insufficient. Wages, however, are keeping well up to last year's standard.

Pork Products.-All pork products at the present time are ranging on high levels, which in all probability will ease off and leave a fi.m market at somewhat lower and yet substantial prices. The supply of good hogs has been somewhat backward, to which is attributed the present high rates, but there are indications of a better run of the supply of hogs, thus leading up to a more solid market for packer's products.

Flour. - The recent fall in price of flour has acted as a stimulus to the present market. Prices, however, are expected to be firm to a higher level, at winich they are expected to remain steady for the coming season.

Canned Goods.-Canned goods are in plentiful supply and are expected to be ample for all sequirements. Prices will probably be maintained throughout the season.

Woolens.-In all woolen supplies there is a steadily maintained demand. Conditions will prevail similar to those of previous season.

Tools, Etc.-Tools and logging appliances are also meeting with an active demand, many
manufacturers finding it difficult to keep pace with the anticipated demands. Prices are con. sequently firm, and there are little prospects of any weakening in these goods.

Horses.- The supply of good seasoned horses appears to be scarcely equal to meeting the existing demands for general trade purposes. Prices have steadily advanced for this class of animal, and it is not at all improbable that higher averages will have to be paid. This may not apply to the smaller class horse, although, generally speaking, horses are bringing prices in advance of previous seasons. This is in a large measure attributable to the heavy drain during the South African war, the market not having had sufficient time to recoup itself. Should there be any great increase of demand, it will be extremely difficult to find seasoned horses to meet that demand.

## THE CAMP SUPPLY TRADE IN NEW BRUNSWICK.

St. John, N.B., April 3eth, 1904.-In making a comparison of the cost of maintaining a lumber camp in New Brunswick during the past two seasons, we find last year to have been a more costly one to the operator than the season before, although there are many important lines that were less expensive. The chief factor is, of course, the wages of the men. During the winter just past, along the St. John River and its tributaries choppers received from $\$_{30}$ to $\$_{32}$ per month and team: sters from $\$ 22$ to $\$ 25$. During the logging season of 1902-03 choppers could be had at $\$ 28$ to $\$ 30$ and teamsters at from $\$ 20$ to $\$ 23$.

The operators in theae parts do not expect any increase in wages next year, but rather that they will be lower. This is owing to the fact that next winter's cut of logs will be less than this year's, because of the large stocks that will be held over next winter owing to the shortness of the present mapufacturing season. This will mean that there will be less demand for men, which condition will no doubt result in a reduction of wages.

Suitable horses are high in price and will in all probability continue to be so. A good horse that will answer the purpose will cost at present from $\$ 200$ to $\$ 250$, and they are very. scarce even at these figures. For several years the price has been steadily advancing; during the last two years alone the cost has increased trom ten to fifteen per cent. It is very improbable that they will be any cheaper during the coming season, the indications being that if there is a change at all it will be a further advance.
One branch of the business that has been more favourable during the season just past than in the preceding one is the price of camp provisions, as the following schedule will show:


In the price of stable provender there has been little change.. In the fall of 1903 feed was worth $\$ 24$ per ton, cornmeal $\$ 2.8_{5}$ per barrel, and oats 44 cents per bushel. The prices of a year earlier were practically the same.

In regard to the prices of any of the above lines it is almost mpossible to make a foreast for next scason, as there are so many circumstances that may govern the outcome that will arise in the meantime.
There has been very little change in the price of logging tools during the last two seasons. The prices paid in the fall of 1903 and which were practically the same as those of a year earlier are as follows :

Axes, single bitt, $\$ 5.50$ per dozen ; double bitt, \$io. Hand made axes, single bitt, \$6 per dozen ; double bitt, Sir. Peavies, No. 1 (handled) \$13 per dozen ; handles, $\$ 2.60$ per duzen.

The competition in axes on the part of American manufacturers does not greatly affect the price in this locality, and the prospects are, to quote the opinions of the largest dealers and manufacturers in these parts, that there will be litlle or no change in the price of tools during the coming season.

## PATENT FOR A TIMBER RAFT.

Mr. J. G. Elderkin, of Fox River, Nova Scolia, has invented a new methou of rafting timber, which will be understood by reference to the accumpanying illustrations. The invention relates to rafts constructed of logs, piling, spars, poles, or other lumber, and

The body of the raft, according to the claim of the inventor, is made up of separate independent sections that extend longitudinally of said body and are superposed one upon the other. In the present instance four of these sections are illustrated and designated by the reference-numeral io, th ugh any number may
and these tic-cables also pass vertically through the body of the raft, being connected to similar tension ${ }^{2}$ nces. Wherever the cables cross devices connect the same, these devices being so arranged that they will permit the relative movements of the cables. Extending centrally through the raft is a draft-cable,


Fig, 2.
be employed, as desired. Each section is com posed of timbers arranged end to end and having their joints disposed in staggered relation and therefore thoroughly broken. The sections extend from side to side of the raft, and each is tastened by separate binding-cables surrounding the same. Thus it will be apparent that each section is independent of the others, and should the upper one be removed the remainder will be intact. The several


Fig: ${ }^{\text {: }}$
designed for towing. particularly sea-going rafts which are required to withstand heavy strains, though also pertaining to those constructed for trar.sportation in inland waters. The object of the invention is to provide a raft which will be very strong, being doubly bound together, and which will move easily through the water without chafing or injuring the timber or lumber. It is also the object to provide a raft in which the different grades of timber or lumber can be assorted and kept separate, said raft being built up of layers so arranged that when one or more of said layers are built the raft can be moved from the place it was commenced to any other place to be finished. In like manner it can be taken apart section by section without mixing the timber or that of one section with another, also parts may be removed without breaking up the raft as a whole.

In the accompanying drawings Fig. 1 is a top plan view of a raft consttucted in accordance with the invention. Fig. 2 is a vertical sectional view through the ratt, on an enlarged scale, intermediate portions thereot being broken away, and Fig. 3 is a vertical crosssectional view taken on substantially the line $x x$ of Fig. 2. Similar reference-numerals designate corresponding parts in all the figures of the drawings;
sections are also fastened together by raftbinder cables, which surround all the sections, and thus secure the body of the raft together as a whole. In the preferred form the body of the raft, as well as the sections, is substantially rectangular in cross-section, and to maintain this form, as well as to more thoroughly strengthen the structure, tie-cables pdss vertically through the same. The lover ends

of the cables are fastened to the lower transverse stretches of the raft-binder cables, and said cables pass vertically through the body of the raft. Their upper ends are tastened to stems, upon which are screwed tension devices in the form of nuts, having suitable handles. The tie-cables are fastened to the lower - stretches of the lowest section-binder cables,
fastened at its ends to cap-plates that are arranged at the ends of the raft, said cap-plates being provided with suitable eyes, to which the tow-line may be attached. The raft may be constructed in any manner desired. For instance, in Fig. 3 there is illustrated cribwork. This, however, constitutes no part of the present invention.

It will be apparent that a raft constructed in the manner described is doubly bound, each section being separate and yet secured to the others, so as 10 make a strong and rigid structure. The body is tied horizontally by the section-binder cables, so that it cannot spread, and the vertical cables also serve to hold said body in proper place. These cables may be tightened as desired by means of tension devices. A still further advantage resides in the lact that a raft may be constructed in sections and taken apart in the same manner without materially affecting the body as a whole. Furthermore, the different grades of lumber may be kept assorted and will not become mixed when the raft is broken up. While in the drawings the cables have been represented as "wire" rope, it will be understood that the term is broad enough to include chains or other suitable riteans of a similar character.

## AMERICAN TIMBER IN GERMANY.

Kolniscke Zeitung, a German commercial journal, says that imports of timber into Germany from the United States have more than trebled since 1880, amounting in 1902 to more than $\$ 5,850,0$ oro. It consisted mostly of pitch pine, This wood is more resistant to the weather and costs less than oak, which averages $\$ 3.47$ per $35 \cdot 3$ cubic feet, while pitch pine costs only $\$ 1.66$ for the same amount. Oring to its utility and cheapness the pine is handled in the most remote parts of Germany. It is used for making doors, windows, floors, etc., while oak is used in the manufacture of the finer grades of turniture.

It is stated that the first saw mill built on the Pacific coast was erected by the Hudson Bay Company, near Vancouver, Wash., in 1828. It had a daily capactly of about 1,000 feel.

## THE Ganada Lumberman

MONTHLY AND WEBKLYY EDITIONS publashad by

The C.H.MortimerPublishingCompany<br>of Toronto, Limited,

Confbderation Lifb Building, Toronto. brancil ofpices :
38 Alliance Bulding, Muntrbal.
22 Great St. Hblens, London, E.C.
The lombarban Feekly gailion ia published every Wednesday, and the Monthly luation on the ast day of every month.

## TERMS OF SOBSCRIPTION:

Ono Copy, Weozly ana Montiny, Ono Year In advanco, $\$ 1.00$


Advertising Ratbs on Application.
Tub Canada Iovagaxsian la published in the laterests of the lumber, wood-woiking and allidi industrita, belog the only
represintative in Canada of these important futerests. It nims at gifing full and timely information on all subjects touchtag
 Fspecial pains are taken to secure for publication in the Wrgkiy , usisbrafan the latest and most trust worthy market
quotations throughout the world, an as to afford to the trade nt quotations throughout the worid, so as soafford to the irade nt operations. Subscribers will ind the amall amount they pay forthe CaNADA Lomararsan quite linsignifieant as compared
withits valuc to them. There is not an individual in the trade, with its value to them. There is not an individual in the trade. or spectally interested in it, who should not of on our ist, thus render it even more complets. Advertisers will receire catsful attention and liberal treatment. For mauutacturigg a:o supply arms vishitg to bring and planling mills, wood-working factories, pulp mulls, etc. the CaNADA I, unarranN is undoubtediy the cheaperi and most profitable advertising medium. Special attention is are lnserted in a conspicuous position on front page of the Weckiv Edition.

## EXPORT OF NEW BRUNSWICK LOGS.

The Legislature of New Brunswick has just disposed of a resolution introduced by Mr . Flemming designed to prohibit the export oi logs from the Province in the round or unmanufactured state. In support of his resolution Mr. Flemming argued that he was endeavoring to legislate for the future of the Province more than for the present, as the Restigouche and Western Railway, upon completion, would tap the St. John river at St. Leonards opposite Van Buren, Maine, and bring that town within forty miles of the best timber region in New Brunswick. He pointed out that the result would be that the timber cut above Grand Falls would go to the mills in Maine to be manufactured. The shingle business would also be seriously affected, as by manufacturing in the United States the duty would be escaped, which would be an advantage of $\$ 2.40$ on each one thousand feet of timber, this estimate being based on the assumption that a thousand feet of cedar will make about eight thousand shingles.

After a preliminary discussion in the House, the bill was referred to a special committee. A large amount of evidence was given by prominent lumbermen, many of whom, it is noticed, were interested in lumbering operations in the United States. Mr. Todd, of St. Stephen, presented some interesting figures. He said that there are in New Brunswick about 7,000,ooo acres of Crown lands, generally recognized as timber lands, and that timber is at present being cut on about $2,000,000$ acres, the total cut of logs on Crown lands being about 150,000,000 feet annually. In his opinion, with proper observance of the regulations, the Province might cut 300,000,000 feet a year off its Crown lands for twenty-five years, and barring forest fires, have more standing timber then than now.

The opponents of the resolution argued that
such legislation might disturb the present trade relations with the United States, that the lands above Grand Falls wire mostly owned by private mdividuals and the New Brunswick Railwny Company and hence would not come under the provisions of the law, and that as conditions now exist the balance of trade is largely in favor of New Brunswick, inasmuch as about $60,000,000$ feet of Maine logs are marufactured by St. John mills annually.

The committee reported against the bill, on the ground that up to the present time the quantity of logs cut on Crown lands and exported to the United States had been very small, that considerable advantage was now accruing to New Brunswick through the manufacture of Maine logs at St. John, and finally that such legislation would result in very little advantage to the people of the Province, while it would work to the disadvantage of the operators and others engaged in getting out timber upon Crown lands.

The question of prohibiting the export of unmanulactured timber from the Province of New Brunswick is therefore deferred for another year. While such ac ion probably best conserves the interests of the Province for the present, the time will no doubt come when the proper protection of home industries will demand that the raw material of the forest shall not be exported except in a manufactured condition. When that time is reached, the Government should not hesitate to act promptly and decisively. No consideration should be given to the arguinent that such a law might be regarded as irritating legislation which could be made an excuse for the adoption of retaliatory measures by the United States. The Ontario Government prohibited the export of both saw-logs and pulp wood without incurring any penalties from the United Siates. and this notwithstanding that the quantity of logs exported from Ontario to the United States was many times greater than that which is sent from New Brunswick. The Courts also upheld the Government in the contention that the right was reserved to impose new regulations affecting the cutting of timber on lands already under license, even to the extent of prohibiting the export of the timber.

## TIMBER LIMIT OWNERS EXONERATED.

The oft-repeated cry that the lumberman is the foe of colonization meets a sweeping denial in the report of the Quebec Colonization Commission which was recently presented to the Legislature now in session, and which is referred to at some length elsewhere in this issue. One of the duties of this Commission was to inquire into the number and causes of the difficulties between timber owners and licensees and to advise upon methods for their prevention and removal. The Commissioners have spoken in a fearless, impartial manner. They have not hesitated to condemn the officials of the Goverument and even the Government itse!f where they consider censure justifiable. The report is, as a whole, a commendable document owing to it: thoroughness, definiteness and impartiality.

The Commission found no grounds ot com-
plaint on the part of bona fide settlers, whou neither complain of the law nor of the regul .tions; neither do they complain of those $n$ '... hold licenses tor cutting timber, while ti. latter, far from complaining of the bona fidi settlers, want them and even look upun the... as valuable helpers and protectors of thw. domain against the ravages of fire. There i, stated to be no antagonism between the owner, of timber licenses and real settlers or tho,: who honestly take up public lands with the view of clearing them and not of speculating - 11 the timber. Only one case of cutting timber on lots under location tickets and taken out of th: timber licenses was found by the Commi, sion, and in this instance it appears that the lots were taken and held for the benefit of the owner of a saw mill in the vicinity rather th in for settlement purposes. This, however, did not justify the license-holder in cutting the timber after the lots had been taken out of his license. Many cases of alleged cutling of timber on settlers' lots were reported to the Commission, but beyond the one exception stated they were found not to be genuine, the persons making such claims being unable in produce any reliable evidence, which showed that they had taken for granted statements made without foundation.

In striking contrast to the above are the many cases of theft and fraud on the part of bogus settlers that came to the knowledge of the Commission. Forgery has been frequently resorted to in order to obtain possession of lands which were heavily timbered, in one instance an area of 1,500 acres or over two square miles being obtained in this manner.

The contention that no tirnber remains on the lots when they are handed over to the settlers is disproved by figures showing the quantity of .timber cut by settlers in different localities. One or two examples will suffice. In twenty-two townships rf Labelle region upwards of $28,000,000$ feet Nere cut on settlers' lands during the season of 1902.03. In the St. Maurice region the license holders obtained from settlers over $12,000,000$ feet of logs. Instead of the settler being deprived of his timber, he realizes a considerable sum by its sale, on account of the liberal settlement policy of the Queoec Government. The report states: "We are unable to obtain proof of a single case where a settler locating on a lot taken out of a license has failed to find wood enough on it to erect suitable buildings." The dissemination of false reports along this line is calculated to retard the progress of colonization, for the settler requires timber for his buildıngs and to enable him to earn a little money during the first year of his settlement.

The profits realized from speculation in lots fraudulently obtained are stated to be very large. One settler mentioned had as many as eighteen lots in his possession and resold not one of them for less than $\$ 200$. This illicit speculation has reached such a stage that it actually imperils the existence of the industries of the country. The proprietors of pulp mills have found it difficult to raise capital for the extension of their plants solely because of the way their limits have been depleted within a -few years under the pretext of colonization, and
the number of speculators in timber is stated to bi constantly on the increase. This is the sole cianse of the outcry that has been raised for some years past in regard to the pretended refusal bs the Government to concede lots to settlers.

Ihe Commissioners are of the opinion that the unsatisfactory conditions which exist are largely due to the inefficiency and neglect of the agents of the Crown Lands Department, and recommend that the Government take steps to reform the agency service with a view 10 bringing it up to the proper standard.

## EDITORIAL NOTES.

What constitutes hard wood? was the questuon which was recently propounded to the writer. The enquirer was of the opinion that ut the staple woods those which could be called hard wood in its true sense were ironwood, beech, and maple. He claimed that there were many others clàsses of timber which might be properly classed in the category of hardwonds, but which, strictly speaking, were not perfectly hard. Perbaps some of our readers who have siven this matter a little thought will state their oninions on the point.

Friends of organization must feel encouraged at the growth of the Western Retail Lumbermen's Association of Winnipeg. The secretary's report to the recent annual meeting show ed the membership to be 588 , of which 498 are yard or active nembers, and 90 honorary members. There was an increase of 155 active and 27 honorary members during the last year. This would seem to ba the strongest possible proof that the association is serving a useful purpose and that the members appreciate the advanlages to be derived from a well-conducted orgranization. There is need of more organizations of a similar kind among the lumber trade of Canada.

The recent announcement by the Outario Government of their intention to formulate regulations permitting the cutting of hardwoods on Crown lands again suggests the necessity of taking some steps to place the hardwood lumber trade of this country on a more substantial footing. If we are to increase our export business it is essential that organized effort be made to remove some of the oostacles which are hindering the development of that business. One of these is the absence of standard inspection rules. Business is constantly going to United States shippers on account of their superior grading rules and more defined business methods. The Timber Trades Federation of the United Kingdom has just organized a Hardwood Section, at the inaugural meeting of which the question of rules for the measurement of lymber and securing uniformity in the measurement of round and waney timber was discussed. This section are working in conjunction with the National Lumber Exporters' Association of the United States, the result of which will doubtless be that agreements will be reached which will greatly facilitate the transaction of business in hardwood lumber. This will tend to furlier handicap the Canadian lumberman in making shipments to Great Britain, unless, of course, he takes steps to place himself on an equality with his American cousin.

PROMINENT BRITISH COLUMBIA LUMEERMEN.
Mr. E. H. Hbaps.
One of the most important factors in the manufacture of lumber and shingles in British Columbia is the firm of E. H. Heaps \& Company, which has a very large establishment at Vancouver and another at Ruskin, besides operating its own steamers and several logging 'amps. Of thi; concern, Mr. E. H. Heaps is seniot partner and general manager. He is also President of the British Columbia Lumber \& Shingle Manufacturers' Association. This, of course, is separate from the organization of lumbermen in the interior of the province, where they are formed into the Mountain Lumbermen's Association.

It is in comection with the B. C. Lumber \& Shingle Manufacturers' Association that Mr. Heaps has been of particular interest during the last two months. He handles a large percentage of the local trade of Vancouver, which is no inconsideratle business when one knows that last year buildings to the value of

upwards of a million and a half were erected, and that so far in $190_{4}$ the amount in coniparison with the same period last year has teen doubled, with every prospect of a continuance. Mr. Heaps showed his independence when he declined to enter the selling pool which was being formed by the Association having for its objects the apportionment of all orders amongst the various mills and the making of all sales and collections through a central office. A large majority of the contractors who are members of the Builders' Exchange and honorary members of the B. C. Lumber \& Shingle Manufacturers' Association were strongly op. posed to the Centeral Selling Office. Mr. Heaps declined to entertain any proposition that ivas against the interest of the whole Assoriation and the trade generally, and the anrouncement was made on March 2oth that the formation of the selling pool was finally abindoned.

Mr. Heaps was born in the north of England near the shores of Lake Windemere, and was apprenticed for seven years to the well-known firm of Stead Brothers, cotton brokers, Liverpool. After spending three years in America,
he returned to England and was engaged in cotton manufacturing in Manchester for eleven years, when he retired from business. He removed to Untario, where he remained three years, removing to Vancouver about sixteen years ago. He has been connected with the lumber and shingle business in that province for sixteell years, and tweive years agostartedina small way the present establishment at Cedar Cove, now one of the largest in the province. Cedar Cove is a little bay in Burrard Inlet, at the extreme east end of Vancouver, and these mills are the centre of a veritable hive of industry. Cedar Cove has a post office of its own and several stores.

Twelve years ago, when the shingle market was just about to open up, Mr. Heaps commenced with two shingle machines. He paid close attention to business, making only a superior grade of shingles, and his trade grew. Now his business is nol surpassed by any in the province, and the machinery has been so increased year by year that at present it comprises a modern saw mill plant, equipped with two band mills, Pacific Coast edger and gang mill, a shingle mill with room and power for twenty machines, a sash and door factory, planing mill, machine shop, etc. In addition, the firm operates several logging camps of its own, located in various parts of the Coast, and has two steamers to do its own towing, thus precluding the possibility of rumning short on timber in the times when brisk business monopolizes the services of all the towing cratt.

In addition to the large plant in Vancouver, the firm owns and operates the mills at Ruskin, situated about 30 miles from the city at the confluence of the Stave and Fraser rivers, on the main line of the C. P. R. This branch is composed of a sav and planing mill, shingle mill, general store, etc.-in short, it is the town.

The success of Mr. Heaps can be summed up very briefly. He has always given close personal attention to business, and has been ably assisted by his partner, Mr. Wm. Sulley, and the managers of the different departments.

The subject of this article has made no pretence to prominence in municipal affairs, although taking an active interest in the welfare of the city at large. When he began business in Vancouver, the corporation :vas limited in its bounds, but he was one of those with the foresight to see that future years would bring great Jevelopment. When the Board of Trade was organized in the ealier days of the city's history, one of the first members was Mr. Heaps, but owing to the rapid development of his business he has been unable to devote much time to outside interests.

## NEW OUEBEC LUMBER COMPANY.

A company has just been organized for the purchase of 47 square miles of timber limits in the Charlevoix country. The land has been bought from Messrs. King Bros., Limited, of Quebec, and is supposed to contain some of the finest timber of the district. The company will be known as the Charlevoix Lumber Company, Limited, and will carry on a general lumber and pulp wood business. The directors are Messrs. A. I. Auger, E. Demers and F. D. Forest. The capital is \$20,000.

# REPORT OF THE QUEBEC COLONIZATION COMMISSION 

## Relations Betweon the Lumbermen and Bona Fido Settlors Perfoctly Harmonious. Stariling Evidenco Prosontod as to Wholosalo Speculation in Timbor on Protence

 of Settloment.-Recommondations for Remodying the Evil.The report of the Colonization Commission appointed by the Quebec Government has been presented to the Legislature and is a very im. portant document. The duties assigned to the Commission were, in part, to make a critical study of the laws and regulations respeting public lands, woods and forests, and the protection ot settlers; to enquire into the number and causes of the difficulties between settlers and holders of timber licenses, and to advise upon methods for their prevention and removal; to study the new proposal or systems which may be submitted to it, and, whilst taking into account the financial resources of the province, to recommend those which tend to amend the laws and regulations so as to foster colonization and the development of forest industries.

Ihe final Commission was composed of Messrs. J. H. Legris, Chairman ; J. C. Langelier, Secretary ; John L. Brodieand P. N. Thivierge.
The report is divided into two parts, what has been ascertained and what is rerommended. Extracts from the report are printed below.
The Commission found, practically speaking, no real grounds of complaint on the part of bona fide settlers. These settlers complain neither of the law nor of the regulations; neither do they complain of those who hold licenses for culting timber, while the latter, far trom complaining of the bonn fide settlers, want them and even look upon them as valuable helpers, as faillful guardians and protectors of their domain againat the ravages of fire. On this point we refer to the despositions of the limit.holders, espectally those of Hon, Mr. Edwards, of Mr. J. R. Booth and of Mr. W. Price, the largest holders of timber limits. All have declared to us under oath that, instead of being the toes of the limit-holders, bona fide setters are allies whom they need and who render them valuable scrvices.
There is therefore no antagonism between the holders of timber licenses and real setters or these who honessly take up public lands with the view of clearing them and not of speculating on the timber. On this point there can be no selious dispute based on facts occurring frequently enough to deserve being taken into consideration. Of course, there may be-we have even found some-isolated cases where the licenseholders have been guilty of irjustice towards bona fide settlers; but these are exceptions which only go to prove the rule.
It has been alleged that license-holders cut timber on settlers' lots even after the latier are taken out of their licenses. During the first inquiry held in Montreal, this charge was made by Mr. Carufel, secretary, and by Dr. Brisson, manager of the Colonization Society of that city. Nevertheless, when pressed by the commissioners to give facts in support of so serious an accusation, M. Carufel declared that he was unable to do so. Dr. Brisson cited a case in 1883 wilhout specifying any details and could not give any more recent facts. The evasive replies of those two officers ol the Colonization Society show clearly that they took for granted statements made wholly without toundation. The position they occupy gives to such stories a seriousness calculated to deter a great many who might otherwise be inclined totake up lands and settle on them. It is to be regretted that men, specially charged with the duty of furthering the colonization movement, should thus repeat, without being able to produce evidence ot any weight, statements so calculated to impede the progress of that movement.
cutting timabr on settlers's lots.
The only serious case of cuting timber on lots under location tickets and taken sut of the timber licenses is that in connection with lots 17, 18, 19, 20 and 21 of the 8th ange of Amqui in Metapedia. Aller advertising the cancelling of these lots, the Crown Lands Department, on two successive occasions, granted the holders of location tickets a dclav to enable them to comply with the regulations. During the delay and white the loration tickets were still in force, a jobber of the firm of Price Bros, and for the account of the said firm began lumbering there iast fall. During last winter ${ }^{1} 5,000$ logs were cut, and, as he himselr says in his evidence (Enquete at Quebec, deposition of J. A: Theberge), he would have cut 40,000 more had not his operations been stopped by threats of judicial proceedings on the part of the holders of lucation tickets.
To justify this proceeding, the contractor, Theberge, says in his evidence that the firm of Price Bros. had cleared the river; that the"lots were taken and held for the benefit of the owner of a saw-mill in the vicinity. All this is probably true but it is nevertheless a fact that the license-holder unlawfully caused timber to be cut on lots taken out of such license and in the possession of the holders of such tickets.
This is the ooly case that has come to the know. ledge of the Commission, in the course of all its investigations, of a license-holder having unlawtully caused timber to be cut on lots held under lecation ticket and taken out of a license.
is timber cut below regulation diameter.
Another alleged ground of complaint set forth in the evidence and elsewhere, is that the license holders hasten to strip the lots of timber as soon as the latter are put under 'xcation tickets; in other words they remove all the timber, even that which they are not allowed to cut under their licenses.
This assertion is neither founded on nor justified by facts. A few cases occur in which the license holders, or rather their jobbers, cut down spruce of sinaller dimensions at the stump, that is, two and a hall feet from tie ground, than is allowed by the regulations; but these cases are quite exceptional. In the course of lumbering operations in the forest it sometimes happens that, in cutting down a large tree, it catches in a small one which must also be cut down to allow the large one to fall. The small tree so felled is cut into logs and used although not of the regulation diameter. It must be admitted that it is better to use it than allow it to be wasted in the bush. Small trees are also cut to make skids on which the logs are piled. Formerly those skids were left in the woods and were lost; at present the employecs of the Crown Lands Departmen: compel the lumbermen to use them and take them aivav: thev figure amongst the logs. At first sight the presence of those small logs amongst the large ones seems an infringement of the regulations, but it is incontestable that this practice should be encouraged instead of being blamed, for it is to the advantage of the public revenue and makes the most of this small timber which would otherwise be lost.
The places where the cutting of spruce smaller than the regulation diameter most frequently occurs are the region of the St. Maurice, that of Mattawin and the country in rear of Joliette. On several occasions the woods and forests branch has caused inquiries to be held upon complaints being made to that effect and in four cases out of five it was found that such complaints bad no real foundation.

## timber for settlers.

The stories about stripping the lots of timber are almost invariably spread by speculators disappointed in their schemes by the vigilance of the Crown Lands Department and its officers. Unfortunately these speculators are to be found in large numbers even among the real settlers. A man takes up a lot, makes enough
improvements on it to protect himself against cancella. tion, but especially makes the lumber as quickly ay possible or sells the cut, then abandons the lot 10 take up another elsewhere. If he fails to secure this other lot immediately, he cries out that he is illotreated, that the Government is obstructing colomzation by retuang to sell lots to settlers. There are even some who cirry their spirit of enterprise to the length of changing di-. tricts, of moving from an agency, where they are too well known to further play this game successtully, to another where they are not known and where they can succeed more easily in carrying out their designs.

We are convinced that, by dint of repeating in evers key that in the Province of Quelice only lots stripped by the lumber merchants are placed at the disposal of settiers, on which there does nut even rematn enough wood for the construction of farm buildingy, considerable damage has been done to the progress of colomzation. It is necessary to checkmate the deplorable campaign organized by speculztors and represent thing, as thry really are.
What we have ascertained in the course of our enquiries enables us to tell o or fellow-countrymen in the Conited States and the people in the older parishes who are disposed to settle on Government lands, that they may be sure of finding thereon all the umber needed for building and even for sate to maintan their families during the first years, and suth wood is annually increasing in valuc.
As regards the timber which remains for the setter, the most advantageous repions are unquestionably the valley of the Metapedia and the county of Bonavenure. The ricbness of the lots in this region, espectally in cedar, is really extraordinary. Lots which yeid 5,000 or 6,000 and even 10,000 logs of cedar and spruce, apurt from birch and other woud, or $250,000,300,000$ and even $, 000,000$ teet of merchantable timber, are not scarce.
speculators in timber.
The number of speculators in Government lots and in timber, already very considerable, is constantly on the increase. These interlopers are the scourge of coloniz. ation, a subjec' of continual trouble and an occasion of serious losses to the license-holders and the Government. The extraordinary increased value which all woods bate altained within four or five years has caused this tribe to spring up in all parts of the province and their operations have assumed proportions which have become almost a menace to the legitimately conducted lumber industry.
The process adopted by these interlopers to create for themselves forest domains is of the simplest. Under the pretext of colonization, they g : lo's taken up by prein-noms or fictitious settlers, to whom they furnish the mones to procure the locat on tickets. Before even the issuing of the ticket, in many cases, they get the cut of timber on the lot transferred to them for a trifle and the game is played. If the Crown Lands Depart. ment hesitates to concede the lot applied for, the speculator sets to work all the influences he catn command. When all these intrigues fail to overcome the resistance of the Government, the disappointed speculator sets up the outcry that the Crown Lands Department is impeding colonization by refusing delivery of the public lands to settlers.

This is the great, the sole catwe-so to speak-cf all the outery that has been raised for some years past in regard to the pretended retusal by the Government to concede lots to settlers. And we regret to be under the painful necessity of stating that the ever mereasing phalany of these speculators is recruited even from among the leading classes of society.
thb law respecting fathbrs of twblve children.
In passing the law which gives to each father of a family of tweve living children the right to a free grant of one hundred acres of Crown lands, the Legislature had in view to stimulate the progress of colonization. The speculators, howeter, have managed to convert this patriotic legislation into one of their most effective weapons. In the Eastern Townships, chiefy, there are people who make a trade of hunting out the fathers of iwelve children in all parts of the province and purchasing their rights. They prepare the papers prescribed by the law, carry on the correspondence, ctc. The lot is sold to them in advance, generally for $\$ 30$, and the
lination ticket is transmitted to them as sosn as issued br the Crown Lands Department. They select lie lots themselves, which they get ench father of twelve children tuapply for, and it is aredness to say that they choose -my lia most richly wooded lots, withont concerning usemselices in the least about their adaptability, farm ug purposes.
One of these urganizations has presently betore the (rown Lands Department applications for over yo lols or about 7000 acres of woodland; if these are granted $.11 \$ 30$ each, these 70 lots wili cost the sperulator $\$ 2$. . iov, and he will easily sell the timber on them tor $\$ 20$. wou ur $\$ 25,000$. That is to say that, wilh the aid of tilis law, which is intended to favor the progress of culonization, speculation has found means to practically wive the regime of the great land owners, which did -o much ham to settlement in the Eastern townshipa recommbndations.
The recommendations of the Commission are in part as follows:
Division of the Lands. - The first meayure necessary is the division of the public domain into settlement lands and merchantable timber lands. Let us melude in the first category only the lands suseeptible at profitable cultivation and let us leave the other in the peacelut and exclusive possession of those who work them for the timber. Then there will be no more antagonstic interests on the same property and each will know exacily the nature and extent of his rights.
Prefbrance tu the Lilbnsb-Holder. To make this system praticable, safuguard the interests of the province and effect cally put an end to the speculation in timber, a clause must be inserted in the location ucket stipulating that the holder shall be bound to give, icr tha sale of his wood, the preference th the holder of the heense in which the 10 is contained. There can be no rensonable objection to this clause on the part of the yettler in good faith, since it takes from him absolutely nothing and causes him absolutely no loss. It is only the speculators, the traffickers in lots, the inter!oping traders, who might have anything to say against it; but for these, there should be no mercy ; they are the plague of colonization, as well as of the timber trade carried on regularly and under legitimate conditions.
Automatic Cancrllation.-Automatic cancellation will complete this reform and put an end to a host of frauds which do incalculable harm to serious colonization. The clamoss of the negligent or the speculators are accepted as well founded complaints, and people, inclined to take up lots to clear them, frightened, diverted by these false outcries, relinquish the idea. The law must decree that, on establistiment of the fact by affidavit of the Crown Lands agent or of an officer named for that purpose that the conditions, in whole or in part, of a locition ticket have not heen fulfilled, the holder of such ticket shall lose sil his sight to the lot, which shall revert to the Crown dumain and be at once entered among the available lots in the agents books.
Immediate Registration of Transfers.-The law does not prescribe any delay for registration of transfers of lots under location ticket. This is a want which it is important to supply, inasmuch as it gives rise to numberless frauds. The speculators take advantage of it to hold, with the help of prete-noms or unknowing accomplices, large uumbers of lots; they keep in their own possession the transfers which they obtain, in order to guard against cancellation under the regulation limiling the number of acres of land which may be possessed by the same person. An article should be added to the law providing that every transfer of a lot under location ticket shall be transmitted to the Crown Lands Department wilhin thirty days from its date, under pain of nullity, and that so long as this tiansfer has not been sent in, the lot shall remain the property and in possession of the vendor. We would be disposed even to recommend the imposition of a fine or a penalty for any infraction of this regulation on the part of the transferec. Lastly, it sloould be enacted that any person other than the holder of the location-ticket orthe holder of the regularly registered transfer of the lot, making or causing to be made merchantable timber on a lot which is not in his name in the books of the agency or of the Crown Lands Department, shall be liable to a fine or to confineation of the timber thus
made, to the benefit of the Crown. Though they may appear a little severe, these measures are absolutely necessary to put an end to speculation in and plunderisg of the public lands on the pretence of colonization.
To protect the setter and the publie revente articte 1342 should be amended and it should be enarted that any settler who makes or sells timber cut on his lot and does not send to the depariment before the 3 ott. April the prescribed uffidavit shall be ipso facto debarred of t.e right to claim the crediting or the refund of the stumpage dues.
Sworn reports, showing from whom the wood way bought, on what lots it was cut and where it was delivered, should also be required frum saw mill owuers, deaters in pulpwood and purchasers of ties. Ithe is required trom license holders, who are sperating legumately; why should it not also be required from speculatory and interlopers, who are operating illegitimately? With the aid of such reports, it would be easy to protect the settlers and to let tham get the benefit of the stumpage held back on the price of their timber.
Lots of fathbrs of Twelve Cillidren. - The neglect to enforce the provisions of this law has given rise to frands, the number of which is daily increasing. In the Eastern townships, chiefly, this law has become one of the favorite weapons of the speculators. To remedy this, it is essenual in the first place to pitilessly refuse to grant any tot on which there is merchantable umber, as prescribed by the law, and to add article 1267 the following provisions:
"The sale or alienation, otherwise than by donation inter vivos or by testamentary disposition, of a lot granted to a father or mother ot tweive children or the sale of the privilege of cuttung the timber thereon, entails the forfeiture of the grant, together with the confiscation of the lot to the benefit of the Crown."
Fires por Lann Clearing.-These are the most to be feared, the most frequent and tine greatest occasion of damage to the forest. With a little organization and good will on the part of settlers, however, it would be possible to considerably lessen the dangers arising from them. Article $13+5$ of the Revised Statutes permuts in a general way, for clearing purposes, burnu.g at all times except between the $i_{5}{ }^{\text {th }}$ June and $i_{5} \mathrm{~g}^{\mathrm{t}}$ September. Now, apart from the winter moniths, these three prohibuted months are the least dange rous. The verdure at the loot of the trees prevents the fire from spreading, just as that of the foliage renders the latter harder to catch fire, especially in the hard woods. At that peried the ferns. so inflammable before and after, constitute real "cut-fires," the rains are more frequent and the wards less strong, in fine everything contributes to leseen the danger by fire except in the pineries. The most dangerous season is the interval comprised between the $15 \mathrm{sin}^{\mathrm{i}}$ April and the $25^{\text {th }}$ June. At that period as soon as the snow has disappeared, a few days of fine weather suffice to render extremely inflammable the rotten wood, the moss, the shrubs, and, above all, the ferns. A spark is enough to start a fire, which in a few hours passes beyond control. This is the danger time par excellence, the time when the firerangers should concentrate their watchfulaess over the localities where they know that the settlers are landclearing, especially when these clearings are in the immediate vicinity of a pine forest.
Thr Promibited Fire Season.--The time during which it is dangerous to siart fires in the visinity of the forest varies so much aciording to climatic conditions, that it is impossible to practically fix it by law. In a same region, the snow disappeary more quickly from the hills and the high grcund than from the low ground; it disappears also more quickly from the deciduous woods into which the sun early penetrates than from the spruce woods, whose close, thick foliage prevents the solar rays from eaching the seil. The mountain slopes are also more sensitive to the sun's action than the level lands. If the temperature is wet, and the weather rainy in the beginning of spring, the danger of fire is hardly $t$, be feared. But it is just the contrary in a dry spring such as we had last year. It seems practically impossible to determine by law the petiod during which fires may be safely started in choppings and the matter should be left to the discretion of the fire-ranger, who, being on the spot and knowing the sir-
cumstances, would give permits to do so at the proper and safe time.
Diamzter of Pulp Woode, -: ecording to the admission of experts black spruce is the best woud fur pulp-making. This spruce attains only exceptionally more than eight or mine mether in ditamuter on tho stump at thity anches above the soll. To subjet this wood to the rule ayplienble to the other kinds of spruce, white and grey, would bo simply to consign it to an inevitable loss, since in reaching its maturity it would dry up and perish before atlaming the dinmoter of 1 inches at the stump prescribed tor the white and grey spruce. It way absolutely necessary therelure to allow a less dameter to permit its being ullized and turned to account tor the revenue and for industry. There are localities, however, and notably at Lake St. John, where the best arable lands are covered with black spruce. In these cases it seemsto un that it would not be fatr to the settlers and assuredly to the puble interent to not allow the hicense holders to cul black spruce trees of less than eight inchey in diametur at the stump. Shght as it may appeat, this change would assure to the setters enough timber for building purposes.
Diametrr uf Cibdar. - The regulitions permit the license-holders to cut cedar trees of aine inches diameter at the stump. This is unyuestiomably too stanll. When the cedar of nue inches at tho stump has been taken off, there remans for tho settlur nothing in tho way of building timber and very litilu for fencing wood. Ite diameler for the license huhters should be raised to twelve inches.
At What Hbight Should tub Diambtbr be Taken.-Formerly trees werefelled will the axe and the cuttiug in this way was hardly possible at less than two or there feet from the ground. Within several years, this practice has been almust everywhere nbandoned and the felling is done with the saw, which allows of the trees being cut at twelve or even six inches from the soil. In this way and without viohating the letter of the regulations, the licenso-tholder can remo. ; all the timber fit for use on a lot, expecinlly the whiti spruce, the yellow birch, and the cedar, and leave practically nothing for the settler. It would be advisable to clearly specify in the regulations that the prescribed diameter means the diameter at 24 inches from the ground.

## RECOVERING SUNKEN LOGS.

Diving for saw logs is a new industry to be engaged in at Clear Lake, Mich., next sumner by Messrs. J.W. McCaffrey and A. J. Boyer, of Union City, and Henry Dodge, of Cairo. They have just secured the title to the land on whicb this lake is located by purchase. It was the property formerly owned by Finnk Toonaisor, now of Detroit, who conducted largo lumbering operations on this lake 20 years ago. About 1,400 logs of the best timber are in shallow water, and it is estimated that at least 400,000 feet can be recovered by employing divers in the deeper parts. Miost of the logss are clear white pine, and as they are water cured, $n$ top-notch price is assured for the lucky owners.

## FORESTRY AT THE ONTARIO agricultural college.

The Ontario Agricultural College is branching out in every department of agricultural educntion. Mr. C. A. Zavitz has been appointed to look after a plot of land which has been set apart for forestry near the Macdonald Institule building. Some thirty thousand seedlings will be planted, principally Norway spruce, white pine, white ash, basswood and sugar magle. These young trees will be ready for distribution amonk the farmers in the spring of 1905 and 1906 . Mr. Zavitz will also attend to the distribution.

## LUMBER DEMAND IN AUSTRALIA.

Mr. J. S. Larke, Canadian Trade Commissioner, Sydney, Australia, in his last report to the Department of Trade and Commerce, Ottava, says: "Lanst year nearly fitteen million dollars were expended on buildings in Sydncy. The building trade is a little quieter just now, though there are some large warchouses in course of construction. The timber market is soniowhat upyet by the rapid fall in prices on the west coast, accertuated by a decline in freights also."

FORESTS AND WATER SUPPLY.
The Colorado Forestry Assuciation claims that every tree standing at an altitude of urer 8500 fect means so many buckets of water during the hot, dry season, when there is no rainfall. Since the year tyou there has never at any time been nearly enuugh water in the South Platte River to supply the water rights which are claimed in its waters. During these three years there are many water priorities which have not received one drop of water from this stream, occa se there was not sufficient water to reach around to them, while ten years ago they had a sufficiency.

These are statements made by experis. Conditions are the same in all of the water courses fluwing duwn the castern side of the mountains, and on the western slope the conditions are becoming the same. Evergunc understands that the forests in the muuntains, especially in the altitudes above 8500 foet, huld the snow until late in the springtime, and often all through the summer, when in places even much higher, where there is no forest, the snow melts entirely away in April, and during the entire summer the streams which should be fed by bed: of snow are dry. So serious has the situation grown regarding the
destruction of timber of the mountains that United St.ites Cummissioner Heary Michelson has securec an agreement from the state land board that they will not sell any of the timber belonging to the state without notifying him and securing an expression of opinion from him as to the advisability of holding such tim. ber to sonserve the water supply.

The Gold Medal Furniture Manufacturing Company, of Toronto, have a modern wood-working factory situated on Van Horne and Dufferin strects. It has 7,400 feet of floor space and a dry kiln capacity of 100 .ooo feet per week. They manufatlure flooring, shee 119, pine and veneered doors, etc.


## Modern

 Glue-Room Appiliances combination GLUE SPREADER WITH BOILER IN POSITIONThis marhine wan be used to grest advantage in all wood-working plasts where much "builiup stock " is used. It is simple, strong, well built, efficient and durable, and has all nesessary adjustments which can be easily and quickly adjustments which can be casily and quickly
mosde. It is so constructed that very littie time made. It is so constructed that very litte time
is required in changing it ether to a single or double glue spreading machine.
 clue spreading machines.

Glue supplied to the upper soli by a MOI,LOH TPOUGM CASTING, the ends of which ase packed steam tight, and the steam and nater connections

 whecls shown in from of trough. In this manacr the quantaty ef glue left on the roll can be regulated to apit the operator.

Itie hand-whect shown at wp of trame is used torame or lower the upper glue soll, tugether wath its giue truagh and alsu the small idle sol. The cut shows the
 machinct is ready to be used an a Double Sprcading Riacline.

The Gluo Rolls. now furnished, are of our impreved corrugated type.
 the upper glue trough nows in ifse lower glue tank through pipe "D".

The loose and tight pulleys are ioxz inches, and should make about 80 revolutions per minute.
We also make this machine as a Double Glue Spreading Machine only, without the small idle roll allached.



## OBITUARY.

Mr. Claude Mclachlin.
Mr. Claude Mclachlin, who died in New York on the morning of April igth, was at member of the firm 4 MeLachlin Bros., of Aruprior, Ontario He was liorn in Ottawa in 1854, and was the youngest son of the late Daniel McLachlin, one of the pioneer lumbernein of the Otlawa lalley, who as far back as the cirly forties was heavily interested in the square timber trade, and to some extent in the sawn lumber business in Ottawa. In 18 e3 Mr. Daniel MeLachlin purdiased the water powers at the mouth of the Madawaska river and the land on which the town of Arn

prior now stands, and in 8857 moved up fiem Ottana to Arnprior with his family. In tSES he ctectad the first saw mill to saw lumber for the American market in that place. In 1869 Mr. Danicl McLachten retired Irom busmess, leaving the work to be carried on by his three oldest sons under the style of McLachlin Bro. Before 1876 two of the members of this firm died and in that sar Mr. Claude MeLachin entered into partnership with his elder brother, Mr. Hugh F. Melachlin, who survives him, and the business bas ever sunce been carried on under the old name Me Lachlin Bros.
At the tame of the foundation of the nes partnerohip the bustnes; was entircly a Madawaska one, but as umber jecame scarcer on that river a large steam saw mill was erected on the bank of the Ottawa at Arnprior, which could be reached with logs from all the tributaries of the upper Oltawa as well as from the main river itself. In 1893 the firm found it necessary 10 meet the demands of their expanded buciness by building another steam mill a short distance from the first one.
Owing to the great extent of the business carried on by the firm of which be was a member, Mr. XIcLach. lin was of accessity brought into contact with the great majority of those who are interested in the lumber trade of Canada, and though a man possessed of a markedly quict manner, and of a rather retiring disposition, he hatd a faculty of obtaining the esteem of all with whom he had busincss relations, as was evidenced by the large number of prominent business men, esnectally those connected with the lumber trade, who followed has remains to the grave in the Arnprior Cemctery.
His loss will be very decply felt and lamented by all those with whom he was rrost closely connected, by his home town, in whose welfare he always took an active interest, and aiso by the lumber trade at large as long as energy, ability and integrity are looked upon as the foundation stones of a wise and successful business carecr.

## Mr. Saxier Chew.

Mention of the death of Mr. Samuel Chew, of Mid. land, Ont., which occurred on March 20th last, was inadvertently omitted from our April issuc. Mr. Chew wass one of the carly poincers of Midland. He was born in the Cuunly of York in the year 1890, and for
a number of years was engaged in the lumber buviness south of Orillia. He removed to Midland iwenty-nine years ago, where the continued in the lumber business for eight ur ten years, when the purchased a farm in the Township of Tay just outside the corporation of Midland, where he resided with his fanily until his death. Deceased had eniojed the best of bealth throughout his life unil about two jears ago, sinco which time he gradually faited, death being finally due to an attack of paralysis. He was most highly respected, being of a very kindly and charitable disposition. Five brothers and six sisters survive him, the former being George, Thomats, and William, the wellknown lumbermen of Midland, Joseph, of Vancouver, 13.C., and Fred, of Apto, Ont.

Mr. Thomas Cole.
The recent dealh of Mr. Thomas Cole, of Wectboro, Ont., remored one of the pioneer lumbermer ' • Oltawa Valley. Mr. Cole was born in Dev. •hire, England, in 1820, being therefore in his eighy-fourth year. He came to Canada when quite young and was altracted into the lumber business, first locating at Papineauville, Que., and taking out square timber on contract. Later he entered the employ of Mr. Allan Gilmour, who was at that time probably the heaviest timber operator in Canada. He was appointed manager of his business on the Nation River, and in this capacity became widely known throughout lumber circles. Some years later he became a partner of the late James AfcLaren, of Buckingham, Mr. J. C. Edwards and Mr. Danicl Cameron in a firm whichacquired the Gilmour timber and saw mill interents on the Nation river. This firn did business at the North Nation Mills unil 1878, when through the death of Mr. Cameron the business was wound up. Shorily after lhas ame Mr. Cole bough the Thumpon farm and homestead at Westburo, whete he lised for the batanion of his days. He leaves a wife, four sons and five daughters.

## Mr. Wili.inm Ronert Dick.

Mr. Willam Robert Dirk, a pionecr lumberman of Wimnifeg, Manitoha, died at his revidence, 43 Edmonion strect, on Thursday evening, March jisi, after a breef illness, at the ripe old sere of 83 . We was born


The Late Mis. William Robert Dick.
at Kingston, Ont., on December 31st, 1821, and when a boy moved with his parents to the Township of Fenelon, in Vietoria County, Ont., where he was brought up. He served as Reeve of the Township for several ycars, as well as serving on the County Council. In the carly days of 187 : he traced his way west and in the following year removed his family to Winnipeg.
Mr. Dick's first business was that of tumbering, and be built a san: mill at lice foot of Lombard atreet on the banks of the Red River. The late W.W. Banning went west at the same time as Mr. Dick, and from their acquaintanceship i isough being fellow travellers in the carly days, they became partners in the lumbering venture, the firm being called Dick \$ Barning. In 1875 they took up timber limits on the cast shore of

Late IV mipeg, and built a large saw mill, which way kept ruming at full capaciay manufacturing lamber for the growing little city of Winnigeg and vicinity.

In 1881, the C.1'.R. having just been built east as fur as Rat Portage, making it pussible to hip lumber in from the Late of the Woods district, and the city as well as the comitry west experiencing a wanderfal boom, the firm bought out the wholevate hambering and manufacturing business of the late W. J. MeAulay at Keewatin. In 1893 the nills at Rat Portage and Norman amalgamated under the charter of the Rat Portage Lumber Company, since which time the late Mr. Dick led at retired life at his home in Winnipeg.
Mr. Diek waselected a member of the Legistative Assembly of Manituba in - 74 , representing Spring. field lor one term as a liberal, alter which he retired fom public life, aldough solicited on several occasions to again enter the field ar a candidate for muncipal and provincall honors. He was a member of the First Baptist Church, Winmperg, being one of the seven constatuent members when the church was orgamzed in 1873 by Pastor Mcl Donald. Mr. Dick was married in $19_{43}$ to Isabellit, daughter of Robert Will. cock, of the Townslap of Maripsas, Victoria County, Ont., who died ill $: 899$. Three sons and three danghters survive.

Mir. Joserfi Nadeal.
Mr. Joseph Nade:a, head of the Port Daniel Lumber Company, of Port Danel, Que., ded in the city of guebec on March 26 th, Irom puenmonia, after a short Hllues. He was only tharty-three jears of age, and was a popular and energene business man. He leaves a widow and two chideren.

## PERSONAL.

Mr. C.E.S.ind, late of the Vallacuter Daily Le.igere, has aecepted the pasition of matager of the hazatmere Lumber Connpany, U:zelmure, B. C.
Mr. A. W. Featherntone, lamber dealer of Listowel, Oni., has been cliosen an one of the b.ewlern to go to the Old Conntio in May. He wall be :ibent three monthe and will sisit England, Scotand and Ireland
Mr. James Fazomanom, of Irnhtown. N. B., is now cokhy-five gear, of age, and of the eighy five winter, whath the has -a en the last suxty have been prent in the lumber woods. During the pat wimer t:e had change of a camp. He is still hale and hearty.
Mr. A. E: Dymear, M. P., of the hamber firm of $\mathrm{A}: ~ \&$ A. Dyment, Thevaton, Oni., has been unanimously chosen as the laberal candadate for die Duminion Parbanteut fur the new rudug; of Enst Agomat He has atou been eleated presudent of the Fish Ihgoma Liberal Association.
Many congratulatoms were actensed by Mr. J. R. Booth, the veteran tumberman of Uitaxit, who on April 5 th last celebrated has sevents-scienth birthday. Mr. Bouth is enjos ug excellent healih, and darmg the past long, hard winter he did not even contrat a cold. Mr. Boonh was born at Watcrioo, Quc., koing to Ultawa fity-une years ago, sate whil time be has been engayed in the tumber business on his own accuant.

## PUBLICATIONS.

The Seaforth lingine \& Machine Woris. of Scatorth, Ont., have iswued an altrative catalogre setting forth the advantages of the new "Bell" automatic engine.
"The Mechanic," a journal of interest to marhine wood-workers, reaches our desk regularly. It is published monthly by the II. 13. Smith Machine Company, of Snithville, N. J.
The Rodert Fell Engine \& Thresher Company, Seaforth, Orit, in a catalugue specially devoted to engines, show illusrallens of their No. o salw mill carriage and saw frame. They also point ont that they are agents for the Sawyer beling, which is made from duck and coustructed so as to give the greatest possible stringth and the least possibie stretch.

The Hastings Shingle Manofacturing Company, of Vancouver, B.C., advise us that the saw mill they are building at Moodywille is intended for the manu. facture of high-class lumber.

TIMBER SLIDE TOLLS.
The following judgment, given in the King's Bench Divisional Court, by Chief Justice Street, is of interest to all persons owning or using improvements on rivers or streams:

In Re. Beck and The Ontario Lumber Co. -This was an appeal by the Ontario Lumber Company from an order of the Judge of the District Court of Nipissing made upon the application of the C. Beck Manufacturing Company, Limited, under Sec. 13 of R.S.O., Ch. 142, fiving the tolls upon logs foated by the Ontario Lumber Company through a strean called Post Creek, upon which the applicants had made certain improvements.

At the hearing on the 16th December, 1903, before the learned District Judge, after some ev:dence had been taken a verbal arrangement was entered into between the parties for the purpose of empowering him to fix provisional tolls, which were to be corrected at a later stage in the proceedings, when further necessary particulars had been obtained.
The learned Judge, however, proceeded sbortly afterwards to deliver his judgment, absolutely fixing the tolls; and the Ontario Lumber Company appealed, upon the grounds, amongst others, that the learned Judge had not carried into effect the agreement of the parties ; that he had charged the Ontario Lumber Company with tolls upon logs which had been floated down the stream before the tolls were fixed, and that in fixing the tolls he had taken into considerat:on certain improventents alleged to have been constructed by certain persons named Pelton \& Reid who were formerly interested in a portion of the limits affected, and to have been purchased by the $C$. Beck Company from them.

On February 17 th the appeal was argued before a Divisional Court composed of Falconbridge, C.J.K.B., and Street and Britton, J.J., A. B. Aylesworth, K.C., and A. G. F. Lawrence for the appeal. H. E. Hodgins, K.C.. contra.

March 16th, Street J.: In the course of the trial the learned District Judge seems to have suggested to the parties, and they seem to have agreed, that he should be permitted to fix provisionally a rate of toll taking as the basis for it the plaintif's statement of the cost of the improvements on the river, and the quantity of logs which the two parties and any other persons had passed over them, or would probably pass over them during 1904, the date of toll so fixed to be revised and corrected upon other data being obtained, and the parties to pay or refund according to the revised figures; the defendants insisting that this agreement should not be taken as an admission of the Beck Company's right to take the Pelton \& Reid improvements into account, nor his right to recover tolls for any period earlier than the season of 1904 , nor that the Beck Company were owners of the Pelton \& Reid improvements, nor the value of those improvements.
The learned Judge after hearing further evidence as to the cost of the disputed improvements and the title to them, and as to the number of logs run over the improvements during 1901, 1902 and 1903 by the Beck Company, and the quantity estimated for 1904, made an absolute and unqualified order fixing a rate of forly cents per thousand feet board measure as the rate of toll to which the Beck Company were entitled, without specitying whether it was to be applicable to logs foated down by the Ontario Lumber Company in the past as well as the future, or in the future only.
The Beck Company claim upon the argument that it was intended to apply both in the past and the future.
The Ontario Lumber Company appealed upon the groend that the learned Judge had
disregarded the terms of the agreement at the trial under which they had abstained from giving evidence as to their past and intended cut. There was in fact no evidence given on the part of either of the parties as to the proportion which the cut of the Ontario Lumber Company in the past and the logs which remained uncut upon their limits bore to the cut of the Beck Company and to the logs remaining uncut upon the Beck Company's limits. Nor was any evidence given to show what fogs had been passed over he improvements by Pelton \& Reid while they owned the improvements.
The learned Judge in his order says: "In the absence of any evidence on tise part of the tespondents, I find that the improvements and constructions for floating and transmitting saw logs or other timber on said Post Creek are used by the applicants and respondents only, and by them in equal proportions."
This finding, however, is made in the absence of any evidence on the part of either the applicants or respondents, and as the rate of toll has evidently been fixed upon the finding set forth it should not be allowed to stand. The applicants, the Beck Company, were bound to support their application for the fixing of toll by evidence upon the points referred to in the finding, if those points were material, as no doubt they were, and no tolls could properly be fixed in the absence of such evidence.

Then I think the learned Judge has not acted upon the consent given at the hearing, which is only intelligible if it means that no final judgment is to be given upon the application until inspection of the improvements has been made and other particulars obtained, and that in the meantime a provisional rate should be fixed by the judge and acted on by the parties subject to correction upon the final judgment being given when differences between the provisional and final tolls shuuld be adjusted. The proposed arrangement is hy no means clear, nor can its intention be ascertained with certainty; but the parties appear to have abstained from giving some evidence upon the understanding that the tolls to be fixed were merely provisinnal and they should be put back to their former position.
With regard to the Pelton \& Reid improvements, the agreement between Pelton \& Reid and the Beck Company of 27 th March, 1901, is sufficient to transfer them to the Beck Company. Their cost, however, or their value are not the only elements to be taken into account when they are brought in as part of the material upon which tolls are to be fixed.

It should further be ascertained what quantity of logs had been passed over them by Pelton \& Reid themselves before the transfer to the Beck Company. Suppose that these improvements had been made in the first place by the Beck Company and that they had also owned the Indian Reserve timber limit upon which the improvements are situated, and had cut down and floated down the improvements all the timber upon the Indian Reserve, it is plain that in fixing the tolls to be paid by persons up the stream for subsequently using these improvements it would b: proper to take into account the use already made of them and the benefft derived from them by the Beck Company in respect of the timber on the Reserve ; and the position of their assignee of the improvements cannot be any better under the Act than that of the person who originally made them. This element has admittedly not been considered in fixing the tolls.
Upon the construction of the Act R.S.O., Ch. 142, I cannot find any authority fur the position that a persion who has made improvements upon a stream can ohtain from the District or County Judge an order fixing tolls to be paid upon logs which have been floated over them previous to the making of the order. A contrary interpretation woald entite the
owner of the improvements to go back tor si years and recover tolls fixed in 1900 upon log floated down in 1894 for instance.
The reasonable tolls payable under Sec. ${ }^{11}$ are to be taken as being those fixed under Sec. 13. and they are chargeable upon all lor going down after the tolls are fixed. The pro. visions of Sec. 19, under which a lien tor . summary method of collecting tolls, are given, show that the tolls mentioned in the Act, II accordance with the nature of tolls in general, are definite sums, ascertained in the manner provided by the Act before the logs becam: liable to them.
There is no hardship upon the owner of the improvements in so holding, because the pro ceeding before the judge is of a most summary character and may be made by him at any time.
It appears, therefore, to be necessary that the appeal should be allowed, and the order of the learned Juare should be set aside with costs, without prejudice, however, to a further application by either party to him to fix a proper rate of tolls to be taken for the future by the Beck Company, upon the further evidence necessary.
Falconbridge, C. J., and Britton, J. J., concurred.

## SUPERIORITY OF BRITISH COLUMBIA SHINGLES.

We have always maintained that the British Columbia red cedar shingle was a superior article in respect to manufacture, the reason for which probably lies in the fact that until recently the business was confined to a few enterprising manufacturers whe a few years: ago set themselves to work to carve out a market for B.C. shingles. Their motto seemed to be excellence of manufacture. How well they have succeeded is shown by the large number of new mills which have since been built, but more strikingly still by the admission which has just been made by the Interstate Red Cedar Shingle Company, which is the selling pool for the shingle mills of the State of Washington. This company has issued to mill owners a warning which contains the following:
"We find the market fur Washington red cedar shingles is in danger from Redwood and British Columbiat shingles on account of their superior quali ies in manufacture and packing. Eastern lumbermen are criticizing our shingles and we must improve our grades. We believe you should immediately advise your filers, sawyers, knotsawvers and packers that this matter of poor grades is serious and is actually responsible for much of the decline in prices. The above statements are not exaggerated, and unless manufacturers and their employees use more care in geting out well-made and carefully packed slangles, oiher goods will get our market."
It must be a source of gratification to British Columbia millmen to know that their efforts to produce a first-class article are appreciated by the trade and that buyers are discriminating aga nst those mills which turn out an inferior grade of shingle. It is this consideration which has enabled them to market their product in the United States even in the face of an import duty. It is to be hoped, however, that the British Columbia manufacturers will not rest on their laurels, but that they will continue to endeavor to produce an article which will have no rival. The large number of new mills which have lately been built in British Columbia is a source of danger in this respect, and it might be advisable for the British Columbia Lumber \& Shingle Manufacturers' Association to especially impress upon their members, as well as those outside the association, the advantages of maintaining a high standard of quality tor their product.

## THE NEWS

- C. Street has opened a retail lumber yard at Mc(iregor, Man.
-Joseph Dent is building a new heading mill at If chwell, Ont.
R Kalo, of Arkona, purposes building a cooperage 1 P , al Milverton, Ont.
N. Oliver has purchased the plant of the Cardston p,umag mill, Lethbridge, N.W.T.
-The Wetaskiwin Sash \& Door Company, Limited, H, Dben meorporated at Wetaskiwin, NiW.T.
-Isaac Murphy, Fox Warren, Man., has sold ths hardware and lumber business to John Dunsfield.
-E. D. Bentley, planing mill, Medicine Hat, N.W. T., has been succeeded by Bentley \& Humberstone.

The Miniota Lumber \& Grain Company, Miniota, Man., has been incorporated, wilh a capital of $\$ 50,000$.

The North-West Lumber Company are building a s.aw mill at Ponoka, N.W.T., estimated cost Sto,000.
-The Candadian Timber \& Sawmilh, Limited, expect to have their new mill at Trout Lake City, B.C., completed lhis month.
-The firm of McConnell \& Watson, lumber merchants, Hamiota and Crandall, Man., has been discolved.
-The Royal City Mills, New Westminster, B.C.,have recently built a new dry kiln $66 \times$ z 6 fect, as well as a warehcuse $66 \times 100$ feet.

- Mi. H. Beatty, of Toronto Junction, Ont., has purchased 800 acres of timber land near Sundridge, Onl., and will engage in the lumbering business.
-The firm of Weiler \& Son, saw nillers, Formosa, Unt, has been dissolved. Chris. Weiler will carry on the business in future.
-The capital stock of the Rat Portage Lumber Company, Rat Portage, Ont., has beell increased from $\$ 500,000$ to $\$ 2,000,000$.
-The Digsbury Lumber Company have taken over the business of Kirkpatrick \& Company at Digsbury, N.W.T. Tromb Bros. wall build a sash and door fartory at the same place.
-T. Mowatt, representing A. Haslam, Nanaimo, B.L., has established his headquarters at Calgary, N. II. T., from which point he will push the sale of B.C. cedar and other lumber in the Territories and Manitoba.
- J. D. McRae, of Eganville, Ont., has leased the Knught saw mill and property at Fourth Chute, and will operate both the Eganville and Fourth Chute mills this season. His limits are located on the Bonnecherre rater.
-The Hazelmere Lumber Company recently completed at Hazelmere, B.C., a large mill for the manufacture of rough and dressed luaber, shangles, etc. The machinery, which was supplied by N. Thompson \&

Company, of Vancuaver, is of modern design. The mill is located 88 milen trom New Vestninister and less than 3 miles from the boundary hae. The manager is George M. Thrift.
-Garfield \& Scaffer are building a saw mill on Sechelt inlet, B.C., tor the mamulacture of cedar. The Gower Point Timber and Logging Company are building a mill on Keats Istand, Howe Suund, for a similar purpose.

The new factory which the Woodstock Lumber and Manufacturng Company will build on the corner of Canterbury and Huron streets, Woodstock, Ont., will be of brick and stone, $50 \times 100$ feet, two stortes and basement.
-George Morin, the thrteen-yeat-old son of Peter Morm, of Hull, Que., was drowned last month in a tail race at J. R. Booth's mill. a rapidly revolving chan caught the sleeven of his wat and pithed him headlong into the river.
-The Manulacturers' Lumber Lompany, Lamated, Etralford, Ont, hav been meorporated, with a capital of $\$ 40,000$, to deal in lumber. The directors are $\lambda$. J. Mclonerion, Alexander IFaill, J. A. MeFadgen, J. L. Kastner, and Royal Burritt.
-The Canadian Elevator Company, Limited, of Winnipeg, have take over the retall lumber business of Van Wart \& Company at Calgary, N.W.T. William Stewart, who has been manager of the latter company, will retain his position with the new concern.
-The Cascopedia Manufacturing \& Trading Company, whose act of incurporation is now before the Dominion Parliament, have purchased 400 miles of timber limits in the Bonaventure district. It is urderstood to be their intention to build saw and pulp mills.
-Robert Moore has made application to the City Council of New Westminster, B.C., for a fifty-years: lease of the foreshore and land west of the Lulu Island bridge known as Dock Square. He proposes to erect a saw mill to cost $\$ 50,000$ and employing fifty hands.
-It is reported from Vancouver, B.C., that Mr. Merrill, an American lumberman who owns 50,000 acres of timber land in British Columbia, and James Dunsmuir, will join issues in testing the constitution thity of the law placing a tax on timber exported from the Province.
-The annual meeting of the Muskoka Woud Manulacturing Company was held al Huntsville, Ont., last month. The directors elected subsequently chove the following officers: President, Dr. J. W. Hart; vicepresident and manager, R. J. Hutcheson; secretarytreasurer, T. S. Parkinson.
-The Robb Lumber Company, Limited, was recent'y incorporated at Guelph, Ont., the prosisional directors being Gregory Klocpfer, Jacob Klocpfer, F. Frank, Thomas Griffin and J. H. Hewer. The company has a capital ot $\$ 40,000$ and is authorized to conduct a lumbering business in all its branches.
-R.W. Wood and A.B. Trite, of Fernie, B.C., have purchased the saw mill property of the Hayes Lumber Company at Elkmouth, for a consideration in the neugh-
buthood of $\$ 26,000$. The business will be condueted under the name of the Eikmouth I.umber Compratis. Mi. Wardrop, of Spanwood, has been engrged as manager.

- Mr. William Russell, of Matanc, Lue., reports under date of Aprel ishth that the weather in chat loeatily "as still very cold with wimter roads, and all whenms and rivers vely low. There was, however, plenty of snow, so that with mild weather and some rain no dificulty in connection with the drives is anticipated.

Hon. (i. E. Foster, of Toronto, Williza Irwin, of Pelerbors, and wher eanteno capitatints, reaently pur chased a lange salw mill at Kimloops, B. C', from the Asheroft Water \& Electric Improvement Company. The purchave insludes limber limits on Shurwap Lake The same partiencesent's wywred wher timber inter eves in the Okanagath district.
-E. L. Kannan was a shutt time aro alwaded a contrat to get out a large quantity of logs for the Canadian i. 'ber \& Saw aills Company, of C'ancouver, B.C. We are told that Mr. Kinman will adopt a new method of taking out timber. The limits lie along the take, and he purposes platug a large donkey engine on a barge, which can approach near the shore. From a windlass a cable half a mile in length will extend, and when the logss have been cut into suitable lengths, the) will be "snaked" into the water with this apparatus. It is thought that the method will work successfully.
-The Mcallinter Company have recently completed a new saw mill at llawksville, Ont. The building is $5^{\circ}$ feet square, with a smoke stack 75 feet high. The engine, 50 horse power, and the boiler, 60 horse power with $5^{2}$ flues, were supplied by E. I.eonard \& Suns, of L ondon, Ont., and the saw mill equipment proper by the Waterous Company, of Brantford. The company have a considerable quamtity of logs on hand and expect a busy season. They will manufacture cooperage stock as well as lumber.
-"Toredocs will not look at a turpentine pite" is the statement made by Mr. Fyfe Smith, who reached Vnncouver, B.C., recenily from Austiatia. He says that piles are made $j^{0}$ feet long from the turpentine tree of Austraha, and whthout being doctored are put into the water bark and all. The peculiar properties of the turpentine wood are objectionable to the toredo, and he gives the piles a vide berth. Mr. Smith has located in Vancouver whth the object of introducing dustrahan hatdwoods to Canadians. He will represent the Allan Taylor Company, lurge lumber exporters of dustralia.

Two eatalogues of meterest to the woodsuiking trade have been issued by Messrs. Himmacher, Schlemmer $\therefore$ Company, of New York City. The first is No. 225 and is entitied "Sanss and a Few Saw Sets." The second is NJ. 220 and refers exclusively to planes. These catalogucs are unique in that tool hoases do not ordinarily issue separate catalogues of these lines. They are also quite comprehensive, and as they are distributed gratuitously we would suggest that any person interested shoutd write the complany for a copy. Ther address is zug Buwery, New York.

## CRAIG MINE CRYSTAL CORUNDUM WHEELS



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

Read the following from Bulletin 180 of the Uaited States Geological Survey, which says:
"Otten a distinction is made between emery and corundum, many persons not recogriaing emers is a varicty of corundum

Emery is a mechanical adnuxture of curandum and magheite or heanatie. It in, of wharse, the presence of corundum in the emery that gives to it its abracite quatities and makes it of cummeraind walue, and the abrasive efficiency of emeries varies according to the percentance of corundum they comain."

Emery is imported, mined by Greeks and Turhs and contains only avout 25\% corundum. Our Crystal Corundum is guaranteed to be $95 \%$ pure alumina, a Canadian product, mined and manufactured by anadians for Canadians.

## THE

> Wood - Worker

## LETTER TO THE PRESIDENT.

The following letter was addressed to the president of the Western Retail Lumbermen's Association by Mr. D. E. Sprague, of Winnipeg, who was obliged to be absent from the city when the annual meeting was held on March 23. It refers to a meeting of manufacturers held in Winnipeg a few weeks previous to the convention of retailers:

## My Dear Mr. Campbell:

I regret exceedingly that owing to your recent illness you were unable to be presert and preside at the meeting recently held hare of the Honorary members with those of the Active members who were able to attend.
At this meetung large and influentual delegations were present representing the manufacturing interests both at the Cuast and in the Mountains. From the trend of the discussion, it would appear that the Honor. ary members in British Culumbia had become imbued with the idea that the retall dealers were receiving excessive profit, and were in consequence responsible for the agitation and criticisms aimed at the lumber interest in the Northwest generally, and that their interests were prejudiced thy the greed of the Active members. It was amply demonotrated, and 1 believe convincingly, that apart from a very tew isolated instances, where exceptional conditions prevailed, the profit obtained by the retail dealer was not mure than that allowed by the by-laws, viz., 20 per cent., and it rarely exceeded 15 per cent., surely as small a margin as will profitably maintain any lumber business. This information went towatds strengthening the gnod feeling between the Honorary and Active menbers. Knowing therr own margin of profit and having satisfactory evidence of the reasonable profit of the retailer, they were forced to the conclusion that the consumers of lumber in Manitoba and the Northwest procured their supply of lumber as cheap as it was possible to furnish it. So far as the cost properly belonging to the manufacturer and retail dealer was concerned, the only other factor entering into the cost of lumber to the consumer is the charge for transportation. To this last item of cost the delegations, therefore, directed their attention, with what success we have had some intimation.
The net result ot the conference seems to have been to promote the most friendly feeling between the two classes of members, and to stimulate the loyalty of both to the Constitution and By-Laws of the Association; but more important still, so far as the resident public and the inconing settlers are concerned, was to establish beyond successful contradiction the fact that lumber can be procured in Manitoba and the Northwest Territories at retail as cheip, if not cheaper, than in Minnesota and Dakota, notwithstanding the fact that the largest source of the pine supply is located in Minnesota, and that the territory served is much nearer the point of production than that covered by our members.

The operation of the Association so far as regulating prices within proper limits, maintaining suitable stocks and the dealing of the Active members with the public, was justified in the minds oi the Honorary members, and it gives me pleasure to be able to tell you that they were not slow in expressing their satisfaction and admitting that the information upon which they had formed their carlier opinions had been misleading and incorrect; as statements made regarding the Association gencrally are.

I regret exceedingly that I shall be unavoidably absent from the meeting. I shall, however, be decply interested in the proceedings.
Trusting that you may have a profitable and satisfactory session, and looking forward to again addressing you as President, $I$ am, with kindest regards, Sincercly Yours,
D. E. Sprague.

## MR. N. A. RHODES.

Mr. N. A. Rhodes, vice-president of Rhodes, Curry \& Company, Limited, manufacturers and builders, Amherst, N. S., is a self-made man in every sense of the word, having lost his parents at an early age and being thrown on his own resources when ten years old. He was born in Amherst; N. S., in 1845. After learning the

carpenter trade he went to the United States, where he remained for ten years, during five years of which he held a responsible position as superintendent with a large building' and contracting firm.
In 1877 Mr . Rhodes returned to Amherst and engaged in the manufacture of building materials. Later he took into partnership his brother-in-law, Mr. N. Curry, who is now president of Rholes, Curry \& Company, Limited. The business of this company is varied in character and includes operation of saw mills, planing mills, lath mills, shingle mills, brick warks, car works, machine works and loundry. The figures of the business speak for themselves and need no further comment. The total business transacted in 1903 was $\$ 2,700,000$; wages paid, $\$ 483,000$; freight paid, $\$_{154,567.54}$.

Mr. Rhodes also holds large interests in
other enterprises. He is half-owner in a large lumber concern at Sheet Harbor, N.S., where he and his partner, Mr. Curry, are operating on a large scale. He held a large interest in a Newfoundland lumber property, which was recently sold to a Boston firm for a large figure. He is also interested in other lumber properties.

Mr. Rhoues is a director of the Misaquash Marsh Company, which has been reclaiming a large hlock of over 5,000 acres of bog marsh, on which they have expended $\$ 60,000$ in cutting a canal ahout sever miles long through the centre of the marsh, draining off the fresh water and allowing the salt water and mud to kill the vegetable matter. This has proven a - great success and will be a wonderful source of revenue to the province in which it lies. He is also a director of the Maritime Heating Company, who employ a large nuinber of men, make the Robb heater, and carry on a machine business. He is a large owner in the New Brunswick Petroleum Company, for which there is a good outlook. The company have pored forty wells, all of which are giving splendid resuits. The nil is of the best quality and the company is now arranging to build a refinery.

As one of the Governors of Acadia University at Wolfville, N.S., Mr. Rhodes takes an active interest in the progress of that institution. He believes in a young man aiming high, and that with honesty and hard work the highest aims can be attained.

The popularity of Mr. Rhodes as a citizen was evidenced by his recent election as Mayor of Amherst, the first public office, which he ever sought.

## KILN.DRYING HARDWOODS.

Concerning the drying of hardwoods a writer in The Wood-Worker says:

As for the question of air-seasoning lumber before it is kiln-dried, that is a matter of opinion, and depends largely on whether you can carry a sufficient stock to allow of it. I do not consider it a necessity, as lumber can be dried as well green, if done properly, and without checking, but under ordinary conditions and with the appliances generally in use, a few months outdoor seasoning is beneficial; but this depends largely upon the season of the year the stock is piled, as lumber will season much faster during the spring and fall months than in the summer, owing to the wind, which draws the moisture from the pores of the wood and leaves them open, not shrinking the stock as much as does the heat. Of course, this airdrying helps the luraber when placed in the

## FOR <br> THE CAMP

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

# H. P. ECKARDT \& CO. 

 Winolesale Grocers . . TORONTOkiln, as the sap and much of the water is gone trom the wood and the heat doesn't contract the cells or pores quite so much.

The great trouble with hardwood lumber in drying is the tendency to honeycomb, which is due largely to the contraction of the pores on the surface hefore the moisture is released from the center. This is accomplished in air-drying because there is no extreme heat to close the pures, which remain in their natural state. Iou will readily see that it we keep the pores of the wood open until the moisture is drawn from the center, we avoid honeycomb or checking. The greener the stock the more apt it is to check. Oak is probably the worst of all hardwoods to honeycomb, owing to the coarseness of the grain and consequent amount of sap and water it contans. Maple is more apt to have what we call blits checks.

One thing that I think i; not properly considered is proper sticking of hardwood. The sticks should be narrow and project slightly over the ends of the lumber, each length pile separately and not too tight, keeping the sticks directly over each other. Then each piled should be well covered from the weather, pitch enough being given to the pile to shed rain easily. Lumber stuck this way rarely checks far at the ends and will come out bright in color, which is the main feature in fine finish.
Lumber air-dried fairly well should not take over five or six days to thoroughly dry, if heat is kept on continuously (which is preferable). Hardwood can be dried in less time, but I should not advise it under the ordinary conditions, as it requires close watching and better facilities than most plants are equipped with. There are few men who make first class lumber pilers, and that accounts for a great deal of crooked lumber. Great care should be taken to pile it straight, not too tightly, using as narrow sticks as possible. Lumber properly stuck will dry with much less danger of checks or honeycomb.

As for the method of drying, there are many that are good, and the time varies according to treatment. I have dried perfectly green stock in six days, but had specially arranged equipment for it. I will take the most ordinary method at present and give sore points for consideration. I think the ordinary blastkiln very satisfactory under ordinary conditions. I would advise a long kiln, cars to be
loaded at one end and unloaded dry at the other. By making the kiln long enough for eight or ten cars of about 2,000 feet of lumber each, you can take out one or two cars daily, if partly seasoned before putting in the kiln. One advantage of such a kiln is that the lumber is moved forward to the higher degree of heat gradually. In filling the kiln I should fill only two or three cars the first day, allowing only about 100 degrees heat at first, then fill a couple of cars each day, letting the others down until the kiln was full, then increase the heat from 130 to 140 degrees.

When the kiln is full the air is partly laden with moisture before it reaches the fresh stock, and does not check it so badly. If there is still a tendency to check the lumber, I should have steam pipes put in, with a valve opening in front of the hot-air inlet, by which I could let on live steam to moisten the air as it comes into the kiln. This keeps the outside pores open until the stock is dry. If you were to try this where you have been troubled with checks and honeycomb you would be surprised at the beneficial results, as the lumber is not case hardened, but soft and more easily worked. It does not require much steam. If lumber can be given a good steam bath before turning on heat it hastens the drying. Of course, the thicker lumber requires a longer time to dry. I have taken twenty days to dry 4 -inch hard maple, but it came out in first-class shape, free of checks and as wide as 16 inches.

DOUBLE CYLINDER "LIGHTNING" FLOORER.
We take pleasure in showing our readers an improved flooring machine and we know all those who have this class of work to do will be interested in its menits. It was patented Marel 201h, 1900, and is built especially for those who make flooring, ceiling, siding, casing and other work of that character in large quamities. Altention is directed to some wits imporlant points claimed by the manutacturers :

1. It warls 4 sides, 9 or 14 inches wide, 6 inches thick, and by the use of belt-ightening 2 pparatus, $11 / 2$ inch stock can be mateled to advantage. This last device is a decided improvement on this machine and one easily appreciated by all lumbermen. The frame is massive, prevents vibration, and resists all strain, and the machine can be run at a very high rate of speed, under instant control of operator.
2. The feed is six large powerlully-driven rolls, whth expansion gearing, that can be casily raised and lowered, and the tecding-ont one is provided with scrapers.
3. The matching works are very heavy, and cylinders lour sided and slutted, and chip breaking lips are
provided to work cros-grained or knotiy lumber. Shaving hoods swing outward to give access to knives. Pressure bars have easy adjusments to insure casy operation.
Taken altogether, this machine will be found to posisess many new advantages, and is in fact one of

the most successful specialties of the makers. Testimonial letters from users testify to its merit, and copies of them can always be had on application.
Further details can be hatd from the builders, J. A. Fay \& Egan Company, of Cincinnati, Ohio, who will also send free to those who will write for it,mentioning this paper, their ne.v illustrated catalogue of wondworking machinery.
```
                                    ~
```

J. Fyfe Smith is endeavoring to induce the City Council of Viancouver, B. C., to use Australian wouds for bridges and similar purposes. He offers to supply tallow wood for $\$ 49.50$ per thousind fet and guarantees the wood for 30 years. The engineer reported that the B. C. fir cost $\$ 20$ and lasted only threc years. It has been decided to use the nustralian timber in the Westminster avenue bridge as an experiment.



## QUEBEC PULP WOOD ASSOCIATION.

The annual meeting of the Province of Quebec Pulp Wood Association was held at Sherbrooke on April 8th, when the following officers and directors were elected: President, H. M. Price, Quebec; E. W. Tobin, M.P., Brompton Faiis, M. N. McCrea, Sherbrooke; O. C. Morrissette, Lake Megantic; G. H. St. Pierre, M.P.P., Cuaticook; O. Brouillard, Carmel; G. C. Poulin, St. Johns; G. T. Smith, Montreal; B. C. Howard, Sherbrooke; G. P. Nadean, Stanfold; John Campoux, D'Israeli.
It was decided to hold an association dinner at Sherbrooke on May 3 ist next.

## NEW PULP MILL COMPLETED.

We learn that the erection of the new pulp mill by the Chicoutimi Pulp Mill Company, Limited, at Grand Mere, Que., is now completed. This work has been in hand for nearly two years. It is probably one of the finest pulp mills in Canada, and has been built with a view of utilizing all modern improvements for convenience and utility. In addition to the mill itself, the company are providing an estate of forty houses, a church and parochial offices, and everything needful for their employees and the establishing of a trading village.
The arclitect who had the carrying out of this extensive establishment is Mr. R. P. Lemay, of St. John Street, Quebec.

## NEW SUPPLY OF PAPER.

It is announced that peat has been found to make an excellent quality of paper. A large mill was established a few months ago at Cel bridge, County Kildare, Ireland, which has been engaged in converting Irish peat into wrapping paper of various grades. The mifl site is on the River Liffey about wenty-five miles from Dublin, near the castern margin of the great bog of Allen ahich extends westward about seventy miles to the River Shannon.

The process of converting the peat into paper is a "underful metamorphosis. Carts are engaged hauling the raw peat from the bog, where it is dug direct to the mill. Then begin the various processes of cooking with the necessary chemicals until it hecomes reduced to the condition of pulp required, after which the methuds followed ate very similar to thuse of the ordinary paper mill. It is somewhat of a singular sight to see the black peat fresh from the bog thrown into the mill at one end and follow it to the other end where it emerges as paper. It is claimed for the new industry, this latest discuvery, that it will prove an opulent mine of wealth amorg the Irish people. Certainly the raw material is at hand in great abundance in the ample boglands of the island.

## THE PULP INDUSTRY IN ONTARIO.

The annual report of the Crown Lands Department of Ontario contains the following reference to the wood pulp industry:
The Sault Ste Marie Fulp \& Paper Company took out considerable quantities of pulp wood last winter, but owing to the unfor unate financial condition into which the affairs of this company have fallen, the pulp mills as well as the other industries were shut down for a considerable period. The Receiver has been operating the pulp mills since the beginning of November, and using up the wood taken out by the cumpany last winter.
The Sturgeon Falls Pulp Company has completed its new mills, and carried out to the full its contract with the Government, and has now in operation an extensive plant, capable of turning out from 40 to 50 tons of newspaper per diem. This company is taking out during the present winter a large supply of pulp wood.
The Spanish River Pulp and Paper Company has the construction of its plant sufficiently well advanced to warrant it in taking out a supply of pulp wood during the present winter.
The Nepigon Pulp \& Paper Company proposes to proceed with the erection of its mills on the opening of uavigation.
The Rainy River Pulp Company has had plans prepared, and is about to construct its dam at Sand Island Falls, on the Seme River, where it proposes to develop some 10,000 horse power.
The Montreal Pulp and Paper Company has not yet proceeded with active development.
The territory covered by the Blanche River pulp concession having been almost entirely settled up, the benefit of the pulp wood upon the lands will inure to the settlers instead of to the Crown. This company, however, has not yet erected its mills.

## THE DEVELOPMENT OF THE PULP AND PAPER INDUSTRY.

The Quebec Colonization Commission has reported at some length upon the various measures that have been proposed to stimulate the development of the pulp and paper industry, and in conclusion says: "There remains, therefore, as a practical means of stimulating the development of the industry, only the payment of an export bounty on paper manufactured in the country. Such a means of encouraging our native indus:ry entails no drawbacks. It is acknowledged as the most effective and its effect would be immediate."

Concerning the imposition by the Quebec Government of a stumpage sur-tax on the pulp wood cut on Cruwn lands and exported to the United States, the Commission argue as follows:

In addition to the olher drawbacks it entails, the imposition of a stumpage sur-tax by the provinsial authorities would effect only far too small a proportion of the timber exported to yicld results of any importance. The following facts seem to place this beyond a doubt :
From the information supplied us by the Department of Customs it appears that there were exported from Canada to the United States 379,338 zords of pulp wood, whereol

322,395 cords or 84.95 per cent. came from the Province of Quebec. The report of the Crown Lands Department of Quebec shows that, il fact, 202,633 cords of pulp-wood were cut on Crown lands in 1903, whereof only 51,91,2 cords were exported. Deduct this quantity from the total exported, say 322,393 cordi, and there remain 270,433 cords which were: evidently cut in the seigniories and on patented lands.

This clearly shows that the stumpage surtax imposed hy the Quebec Government can affect only a very small portion, one-sixth al the most, of the pulp wood we export to the United States. Moreover, such sur-tax has the drawback of putting the settler who es'ab. lishes himself on a Crown lands lot in an exceedingly disadvantageous position as compared with him who settles on a lot in a seigniory. If pulp wood sells at $\$ 4$ the settler in a seigniory gets $\$ 4$ net for himself, while the settler on a Crown lot who gets $\$ 4$ for his wood is compelled to deduct from such the stumpage payable to the Crown, 65 cents, which leaves him only $\$ 3.35$ net.

In reason and in equity a government should not be guilty of such injustice towards settlers who undertake to settle on its lands.

The imposition by the Federal Government of an export duty on pulp wood, say the Commission, would be a more effective means of attaining the desired end. The question is to $k$ :ow whether it would be prudent or equitable to adopt it. To be effective, this export duty should be high enough to counterbalance the difference between the cost of transporting the pulp and pulp-wood and the import duty imposed on pulp in the United States.

Between Ottawa and certain points in the United States, notably Buffalo and Shortsville, the cost of shipping pulpwood and pulp is $\$ 2.60$ per ton for the wood, and $\$ 3$ per ton for the pulp. It takes a cord of wood to make a ton of pulp, dry weight. But ground or mechanical pulp holds 50 per cent. of water, so that to ship a ton of this pulp to the United States, transportation must be paid on two tons of freight-on the pulp itself and on the water which it contains-which brings up the real cost of transportation to $\$ 6$ a ton on the dry weight. Pulpwood only pays $\$ 2.60$ a ton, which makes a difference of $\$ 3.40$ per ton against our pulp-mahers. Pulpwood pays no import duty in the United States, but pulp pays one of two dollars and upwards per ton, which increases to $\$_{5.40}$, the disadrantage under which our pulpmakers labor in placing the product of their mills on the American ma:kets. To overcome this disadvantage and place our Canadian manafacturers on an equal footing with the United States, it appears to us clear that we must give them the benefit of an export duty of at least $\$ 5$ or $\$ 6$ a cord on pulpwood.

In the long run, or rather at the end of a few years, the imposition of this export duty on timber would certainly produce the desired result, and would give a marvellous impetus to the pulp and paper industry; but the adoption of this measure would have the im. mediate effect of ruining by fai the greater number of the pulp mills now in operation in the province. This is the opinion of Mr. J. A. Dubuc, manager of the Chicuutimi Pulp Company, and undeniahly one of the most competent men to express a pertinent and practical opinion on this question.


## HOO HOO AT CHATHAM

The Concatenation held at the city of Chatham, Ontario, on April 29th was a grand success, and the five and forty lumber dealers who participated therein will long cherish the memory of that gathering. A class of nineteen presented themselves for instruction, and their names have been added to the growing roll of Ontario Hoo-Hoo. That the arrangements for the entertainment of the visitors were in the hands of Messrs. Chas. and Will Hadley was a guarantee that there would be nothing lacking. Chatham's hospitality is famous; the Hadleys have made it so. The visitors had looked forward to a good time, but the realization outdid their fondest dreams, and words failed to express their gratitude to the lumbermen and citizens of Chatham for the bearty welcome and entertainment.
One feature that was much enjoyed was an automobile procession over some miles of the broad, well-paved streets of the city, with its many fine buildings and beautiful homes. Mine host McCoig, of the Garner House, was most attentive to the comfort of his guests. The Concatenation was heid in Auditorium Hall, and at its conclusion all adjourned to the Garner Housf, where an elaborate banquet was enjoyed.

The menu cards were in the form of a black cat couchant with tail pendant and graced with a poem of welcome prepared for the occasion by the Hoo. Hoo Foet. Song, oratory and story so beguled the flecting hours that the evening seemed all too short. It is proposed to hold another concatenation shortly in Orillia.

## BAND WHEEL GRINDER.

We herewith present an illusiration of the Marshall patent band wheel grinder which A. F. Bartlett \&
hood of this duty being neglected. One of the best things about this machine is the fact that the manufacturers claim that it will pay for itself in three times using.

## NOTES.

It is reported that the E.. George Pulp \& l'aper Company, of S. George, N. B., will build a raper mill.
It is understood that Thomas Allison has been appointed manager of the Spanish River Pulp \& Paper Company at Webbwood, Ont.
The Rogal Pulp \& Paper Company, of East Angus,


Company, of Saginaw, Mich., are placing on the market. This is a machine which sloould be in every band mill. It is simple, easy to operate, heavy enough for strength, and light enough to be easily handled. Keeping the band wheels ground true lengthens the life of the saw, and dues better work. With a band wheel grinder alvays in the mill. there is less likeli-

Quc., will this month install new machinery for increasing the capacity of their paper mill.
The new pulp mill of J. R Booth at Oltawa will probably commence operations this month, and will likely run day and night, with 70 men. It is said that Mr. Booth is considering the building of a paper mill.


The attention of Manufacturers of Lumber is method of sewing lumber.
The following acivantages are obtained:
lower cost of installation than siny other superficial fectiongliva lengliz of time. smaliet expense in operation, thus producing lumber at a lower cost per thoussad feet than a:y other method. well equipped circular saw Mill. Iumber has bencur sam Mill. Lumber has beem samn better sind more accur. ately cut by this method than by any othet now
The Killam Tandem Circular Mill requires nonuore skilled tuen to operate it than is required
twoperate the ordinary Circular Mill.

If solid saws are used, the Jarger one, when worn down can be used for the amaller one thus saving expense for saws. No difficulties in bandling or settiog by this machinc and no relays. No time is lost la setting for any thickness This machine takeathe place of a resame in mili and only requires a foos space of 6 ft . x 6 ft Also takes the place of a Twia Circular Mill that is now used for slabbing, and this machine
will side as much lumber as any Thin Circular, whas saving the expense of a ress mand men to operate the same.
This machine is so cheap that any manufac hurer or humber cina well aford to hare one for ts Will cut so per in a short tume Circular mitis pow in ase.

BY MUFACTURED OXPORD FOUNDRI \& MACHINB COMPANY, oxFORD,
Mi. L. KILLABT, TRURO, N. S.

## REFERENCE.

Dear Sir- It gives us great pleasure to testify to the value of your Tondem Circular Saw Mill ass pald for itsel trice orer durlug the six monlis we have run if it requirea no more hesp to op crate it and the lumber is more evealy sawn. It does all that you clatm it will and we we:te recomtread il to any manifacturer who wishes to make moreand better lumber with the same help as with Dec. 35, 1903.

## "6LIGHTNING" FLOORING MACHINE



## Planers Surfacers and Matchers Timber Dressers

For these or other
J. A. FAY \& EGAN CO.

Cincinnati, Ohio, u.s.
WOODWORKING MACHINERY
WRITE
PEACOCK BROTHERS
ganada Llif Bullding, MONTREAL
agents for eastern canada

PROFITS FROM FORESTRY.
In the Black Forest of Germany is the little city of Freudenstadt, with about 7000 inhabitants, a busy industrial place, with iron and chemical works of some importance. Small as it is, Freudenstadt is a full-fledged city, with a mayor, half a dozen po'icemen and a fire engine. The public business is conducted on an econimical basis, and the total expenses do not exceed $\$ 25,000$ a year.

Freudenstadt has the distinction of being the only city in Germany, and perhaps in the world, which does not tax the citizens a dollar for municipal expenses. The yearly net revenue from the public property covers all the outgo. This property consists of about 6,000 acres of fine forest, which, being managed under the best forestry methods, is a permanent source of income. One or more trees are plant-
ed for every one that is cut down. No tree is cut till it can yield the maximum profit. After deducting all the expenses of the industry the annual profit to the acre is about $\$ 5$. This is exceptional, even for Germany, where the annual profit ranges from $\$ 3$ to $\$ 4.50$.

The question is olten asked in this country whether it will pay to keep land under permanent forest. Unless at least a moderote profit is possible no one can be expected to grow trees on land that can be used for any other purpose.

The Rhode Island Experiment Station is now giving some attention to this question, and in a bulletin just prepared by Prof. F. W. Card some interesting figures are presented. He cites the experience of Zachariah Allen, of Rhode Island, who planted a worn pasture with trees in 1820 and kept a careful financial
record till $1877-57$ years. After deducting all expenses he found that his profit was nearly 7 per cent. per annum on the original in. vestment.
There is also a record of the returns on a 40 -acre tract of white pine in New Hampshite for 80 years, during which time the averag, annual profit was $\$ 3.75$ an acre. The fact; given by Professor Card seen to show th it only a moderate profit is to be expected from forests treated as a permanent crop. Perhap, we cannot make as much money in this industry as is made in Europe, where every part of a tree can be marketed at some price, even the small branches and twigs being gathered into bundles and sold for firewood.

George White has just completed a new planing mill al l'arry Sound, Ont., equipped with modern mi. chinery.

## OILS

Vanufacturers High-grade Cylinder, Machine and Sawmill Oils.
Calypsol Grease
for Sawnill Purposes a Specialty. Our products nre made from finest peunwe solicit your correspondence
St. John stien Comer Commercial
 Newark, N. Jill.
Chicngo,

## SGRIBMER'S LUMBER AND LOC BOOK

A handy book for Lumbermen, Gives Correct Measurements of Scanllings, Boards and Planks ; Cubical Contents of Square and Cubical Contents of Square and
Round Timber; Doyle's Rules, Round Timber; Doyles Rules,
and much other practical inforand muc
mation.

Price 35 Cente
Address :
The Canada Lumberman TORONTO, ONT.

WIRE ROPE
Special Alligator Roges any lengths, fitted with proper attachments. Saw Carriage Roper. Haulage Ropes. Elevator Ropes. Smoke Stack Stays,\&e. Standurd and Lang's Patent Lay.
THE B. AREENBAE WIRE PDMPANY, LIM]EE HAMILTON. ONT.

MONTREAL, QUE.

# THE HANCHETT ADJUSTABLE SAW SWAGE 



Hanchett Swage Works, Big Rapids, Mich., U.S.A.
Plonso mention this papor.


Manufacturer of

## We Are Practical Men. We Have Spent Years in the Filing Room. We Know What is Practical.

The Hanchett swage is rapid to operate, does perfect work, is compact, solid and strong. Made of the best material and put up by skilled mechanics. Will save you time, files and saws-makes smoother, better and more lumber. The adjustments are perfect. GANT HOOKS, BOAT HOOKS, TIMBER DOGS AND GENERAL IRON WORK ...

```
Elevators for Loading Pulp Wood or Ties.None
```

> Patent Fire Escape and Roof Ladders.
P. O. Box 184


THREE RIVERS, QUEBEC

Wrousht Iron Bull Wheel Chains and Mill Chains of all Kinds.

| LogStamping Ham- <br> mers, Mining Ham- <br> mers and Mining <br> Tools. |
| :---: |

Established 1860

## RIVER STBAMBOATS.

In opportunity is afforded those who contomplate the buikling of river steamboats through the offermade if Marine Iron Works, Station A, Chicago, U.S.A., in make up and furnish without charge, complete norking planss and specifications, logether with small half model of the hull mode to scale, provided only that the order for the ontfit of driving machinery is first phiced with them, thareby permitting a correct design olo draft, power, strength, carrying capacity, ete. through the intimate knowledge which they have of the whiject and of the power that is to drive the vessel. The Marine Iron Works have just issued a pamphlet cmitled "River Navigation" that will be sent free on
request to persons mentioning The Canada Lumberman.

## PRIZES FOR TREE PLANTING.

In connection with the work of the Forevtry Branch of the Department of the laterior, Mir. J. H. Haslam, of the Haslam Land and Investment Company, proposes giving prizes aggregating one thousand dollirs, to be awarded to those who have must successfully gone into tree plantation during the present year.
The Forestry Eranch are sending out two million trees and to those who obtain the most successful results in the fall of 1906 will be atwarded prizes for forest plantations, wind-breaks, and hedges. The prizes to
go to farmers in Assiniboin, N.W.T. The conditions are: The forest plantations must not be less than an acre; wind-breaks must not be less than io fect wide; and hedges must be trimmed with no blank spaces, and all must be in good cultivation, with the trees lhrift).

The planing mill of Paul Lea, Moncton, N.13, was recently damaged by fire.

## OVER 1475 CIRCULAR FILERS

 now using my gauges and lnstructlons I qive the short ina perfect saw. Sent prepaid on trial to honesi men pity your bavt omy gauge and if it don't run perfectly i will gay freight Send for Cnanda referelles. J. II, MINHR, Lumberton, Asles.
## T LONG \& BRO. LIMITED Wholesale Grocers and Van Suppliers

## Collingwood, Ont.

We are situated on the South-East shore of Georgian Bay, and right in the hay and vat section. Our facilities for handling the Lumber, Mining and Railway supplying business are exceptionally good. We are fully equipped to supply all your wants in Lumbermen's, Miners', Railway and Camp supplies. Write or wire us for quotations. Our experience of fifty years in this business is at your service.
T. LONG \& BRO., Limited


## Saw Grinders



Tho 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."
B.
R.

Mowry
\&
Sons,
GRAYENHURST,
ohtario

## FORESTS OR HARDWOOD.

A resident of Bancrof, Ont, writes to the Toronto Globe as follows :
The question of whether the city man in the country or the country man in the city is the greener has been suggested as a subject for debating socuenes. A few days ago $I$ saw it stated in the report of the proceedingy of the Provincial Pariament that a prominent member of the Oppovition had expressed surprise at the statement made by the Commissioner of Crown Lands that there were large areas of hardwood land that are valueless for agricultural purposes. In the northern part of the county of Hastings and in the provisional county of llalibutton, and more or less from the Georgian Bay nearly to l'erth, a very large percentage of the land is densely covered with hardwood where it has not been burned up-and it is safe
to say that three.fourths of this land could never be ploughed on account of rock and stone. In some parts the suil is of fairly good quality, but boulders and projecting rocks render it practically valueless. When first cleared such land olten produces excellent crops, and if it is seeded down with clover and timothy about the second crop, good crops of hay may be cut for several years, hut the grass runs out and is replaced by the oxeye daisy or other weeds, and it is impossible to plough, so the land becomes practically worthless.
I should not perhapy have made any remark on the Opposition member's break if I liad not seen it stated in The Globe that the season for forest fires was from May till October. This is true enough, but in case ot an early spring with little or no rain the last two weeks of Arril is probably the most dangerous scason of the year for forest fires. The sun is very hot and the winds are ligh, and there is no green growth, either of leaves or srasses or herbs of any kind. The dry leaves lie thick on the ground, and every rotten log or branch
is ready to break into a flame the moment a spands touches it.
I have frequently heard of cases where fire ${ }^{\prime}$. carried more lian a mile across lakes and gre", swamps during the month of April, and by far th., most destructive fire we ever had in this divtru' was in April of last year. Speaking from the experience of a third of a century in the back country I tha, sny that the policy of appointing fire rangers is a gowd one, but they should in most years begin their worl: about the middic of April. In some years they ming be called in in the early part of October, but in dry fans the danger after the leaves have fallen is almost an great as at any time in the year.

## P. PAYETTE $\&$ CO.

Manufacturers of Saw Mill and Engine Machinery, andall kinds of Marine Machinery. PENETANGIEENUIE, OAI


These Mules Cannot Break This Yarn

## Gonsumbers Gordage 60., Limited



Poor Yarn is Dear at Any Price
We Manufacture
Double and Single Lath Yarn, Shingle Yarn, and Cordage of Every Description

Our mills are equipped with the latest improved machinery for maixing extra long lengths of Transmission Rupe.

## GPowell's Stave SaW SWago

hy cylinder saw swage has met with universal APPROVAL.


TRY ONE AND SEE HOW YOU LIKE IT.
Let Me Send Yuu Reference of Sume Who Have Used Tuem.
D. J. CROWELL 200 TERRAGE.

BUEEALO. N. Y.

## THE LUMBER MUTUAL FIRE INSURANGE GOMPANY OF BOSTON, MASS.

DIVIDEND TO POLICY HOLDE「N

Dividends Paid to Date
$\$ 88,684.75$

## TRADE NOTRS.

Emurson Smith \& Company, Beaver Falls, Pr., are sentung out copies of the 1904 edition of their saw hanut book and pri.e list. A copy of his book will be maticd to any of our readers who may write for same, menuoung the Canada Lumberman.
The A. J. Burton Saw Company, which has recently been organized at Vancouver, B. C., with a capital of $\$ 7,000$, liave purehased the site for their works and conmenced building operations. They expect to be in a pristion to execale orders about midsummer.
The attention of our readers is directed to the adiulumement of the Garlock Packing Company, of Hamilton, Ont., appearing on page opposite first re:ding page of this issuc. This company do a large irade in the line of nill supplies, such as belting, packing, ct... and will be pleased to send particulary of their
goods to any reader who may write for same mentioning their advertisement in the Lumberman.

The Dodge Manufucturing Compsny, of Torento, Limited, who in January last opened up a branch office and distributing ware rooms at 419 St . Jameq Strect, Montreal, report very gralifying results trons that quarter. The Montreal office is in charge of Mr. Frank F. Young, formerly of the sales department at l.ead office. Mr. Young says a large percentage of the mills and factories seem to prefer taking their requirements from the maker when it is made convenient for them to do so, and as Montreal is the recognized distributing centre for the enstern part of the province, he finds a ready welcome from all quarters for Dodge products.

Mr. G. H. Mosher, patent attorncy, of Truro, N. S., has just taken out a patent on behalf of Mr.M.L. Killam,
of the same place, for an nuxilinry sanv guide. He has also applied for a patent for selfadjusting sett colliars to be placed on saw arbors, by the uso of which sam. mill owners will be enabled to operato much thmer saws than have heretofore been used ot urtuhar saw mills. The Grand River Pulp \& Lumber Company, of wheh Mr. John A. Gillis is manager, are ceceling a large mill in Labrador wheh whoy are mitalling all of Killam's latest improvements, including tandem cir cular sawomill, auxiliary saw guide nadd velf ndju4ting cular saw-mill
sett collars.

The dissolution is announced of $R$. Jellymanl is Company, box manufacturers, Montreni.
When to Keep the Doors Closod
The door is alwayn kept closed when Clarko'n
 is prepared took for the name of pime beef properWilluam Clarle, MIontreal

## HERMAN H. <br> HETTLER LUMBER GOMPANY

1324 Elston Avenue, CHICAGO, ILL., U.S. A.
Northern Cmiv: MIDLAND, ONT.

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

Southern Offee: TIFTON, GA.

## Long and Short Leaf Yellow Pine Timbers Sills, Flooring, Etc.



BLUNDERS
in ordering woolwork may be avoided by correct measuring. Ruies and dirertions are given in the new book...

How ro
IMEASURE UP WOODWORK FOR BUILDINGS
By OWEN B. MaOINNIS
Auther of "Root Framleg," "Brickleylag," etc.


79 Page
161 Illustrations Useful Tables Well Printed Neatly Bound Price 50 cents
-
Copios zent postpele ca seeclpt oi pricer
 SAH MILL


Pivesizes, gialionary and Portable. Has the essentinl polnts of a portable mill. Bultt on scientlifepriacip!es. Quickly taken upand reset.
Easy runatog. Feed chanced inan Instant while Kalug through the log, from y/s luchio 5 inch. No feed belts to slip aud wear out. Sold on lta merits. Also Portable Hagines Write for particulars to
ENTERPRISE MFG. COMPANY
COLUMBIANA, OHIO.

Megtion the Carada Lomprrman


## The Jas. Smari Mía. 60.. Lt'ód

BROCKVILLE, ONT.


High-Gpade


MAULS, WEDCES, BRUSH HOOKS, ETC., ETC.

Catalogues and all
Information
Promptly Furnished.

When using a Babbitt Metal In your Bearlngs use

## Manganese Anti-Friction Metal

Every pound guaranteed.
SYRACUSE SMELTING WORKS
MONTREAL
NEW YORK
seattle

## BUCKEYE SAW M'F'G. CO... <br> mantopacturine of High-Grade Saws

Quick und careful work on Repairing. All kiuds of Mill Supplies.
REYNOLDS BROS., Propritorors aбy N. Water Strect, COLUMBUS ohio.


Special Derricks
for Handling Timbers and Logs Derrick Fittings Stump Pullers
and Grubbing Mach ne: Sor Hand and Horse Power Catalogue on Applleation NATIONAL HOIST \& MACHINE CO. CHICAGO, ILL., U.SA.
$\pm$ THE BEST IN THE WORLD $\%$ \%
There is no doubt about the r-at llat the
RODGGHRS

## Adjustable Log Siding Machine <br> is without a peer

This machine will slab opposite sides of a log in one operation at the rate of :-uo thousand logs in 20 hours.


A MONEY MAKER
A MONEX SAYER
HI'NDREDS OF LETTERS RECEIVED LIKE THIS
RODGERS IRON MANOFACTURING CO., Mfoakegoa, Mich. Roci: Island, Ill., Nov. 23, 1902.
Gentlemen - Replyivp to sours of recent date and referring to your adjustable log siding

 For fall perticulara and literature, mention thla paper and address :

## RODGERS IRON MFG. CO. MUSKEGON, MICH.




Manufncturerx of the well.known
Mrands of
"hair" ano "Mayave' (BALATA) BELTINGS
Specially adapted for mork in damp
or exposed places. Used very. largely in Sacr Mills, Pulp and Paper Mlis.
Wsite, phone or wite for catalogue and quota. tlons. Slocks carried at our Conadian branch
59-63 FRONT ST. E., - TORONTO
Ur shows our knd Matcher, the best ma.
cmine in tue market for cad matching chine in the market for end matching
Joorng strips. They dogotd work and Hoorang strips. They dogotd rork and
is that's why they nre ased by leading manufacturers of flooring. We make the
Shepman Side Boring Machines
Pot altachnedt to any Matches, to bore fooring
sun face up or face down. We มinke also sun face up or lace down. We minke also
Shepmai Face Boring Maching

Jsed as an attachment to any flooriag machine, | to bore jointed $\begin{array}{l}\text { dooring. Write for circular and } \\ \text { list of users. }\end{array}$ |
| :--- | list of users

W. S. SHERMAN CO. 1:50 Holton Street, Nilwaukee

## CANADIAN

 CORDAGE Q Mfg. Co., Limited HANUFACTURERS OFPura Manilla Rope
LLL KiNDS AND ALL SIZES
 Pure Sisal Rope
ALL kiNDS AND ALI. SIZES

## Shingle Yarn



FOI LOW PRICES AND HIGHEST QUALITY Wire, Write or 'Phone.
Ganadian Gordage \& Manulagturing Gompany, Peterborough, Ont., Canada

## 

William R. Perrin © Company TORONTO, CANTADA.

## The St. Louis Lumebrman

 Fullerton Building, St. Louis, Mo.Twice a Month IF YOU WAHT TO KEEP POSTED READ IT.

Subscription Price $\$ 2.00$ per year

> Euerybody wate to bur somenhn smenctime: Constant Advertising Strikes that "Sometime."
Cons'ant Aduertising Brings Them Together
Nobody knows whete to byy if
Constint Advertising tells the "Where"
Anybody nowadays must adrertise.
Constant Advertising Strikes Constint Readers.

SEND fOR SAMPLE COPY ANE ADVERTISING RATES

## The Snimep Guttep Headis

 WITH EXPANSION

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

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

## SAMUEL J. SHIMER \& SONS Miltor, Pennsylvania


sola Canadian azents WATEROUS, brantpord canada


GREENVILLE, MICHIGAN
The Largeat Manufacturer of

## HOLLOW BLAST GRATES EDGERS AND TRIMMERS

IN THE WORLD.
The Gordon Hollow Blast Grate makes two boilers dr the work of three. Suld on approval after 30 days exhaustive trial.


The TOWER 2 and 3-Saw Edgers, Improved. For mills cultung not to exceed 20,000 fert in 10 hours.

The TOWER EXTRA 3-Saw Edger. A larger and heavier edition of the TOWER, for mills cutting up to 30,000 feet.
These Edgers are pre-eminently simple -nd practical. They contain everything that is essential and nothing that is superfiuous. This enables us to offer them at extremely low prices.

Our claims for them are best substantiated by the fact that there are over izoo of them in daily use.


The TOWER One-man 2 -saw Trlmmer.

This is divinctly a one-man trimmer, catabug one man to eavily trm the ourput of a mill cutting up to $30,000 \mathrm{It}$. in to hours.
It does more work in a given thic than any other 2 -naw trimmer made, and that with less tatigue to the sperator. The reason is that "t smptifies and combmers she necersiry operations.

SEND FOR CATALOGUE D.

THOS. SONNE, Sr.,. "wat
TENTS AND TARPAULINS, all sizes
OIL SKIN CLOTHING AND CANVAS GOODS of all descriptions. ROPES, TWINES, Etc
Price List on Application 193 Commissioners St., MONTREAL

## Galt Machine Knife Works



MACHINE KNIVES
OF EVERY DESCRIPTION
$\sigma^{-r o r}$ Woodworking Machines ... Send for Price Liat... The ${ }^{\top}$ Peter Hay Knife Co., Limited - Galt, Ont.

## RUBBER BELTING



Robber
H05
for
Wator
Steam
Dir
Saction

Piro
Protecti. 1

THE CUTTA PERCHA \& RUBBER MFG. CO. OF TORONTO. LIMITED.

45, 47 AVD 49 WEST FRONT STREET, TORONTO, GANADA Branchea: Montreal, Winniper.

# The Kniaht Míaco. <br> GANTON, OHIO, U. S. A. <br> Manufacturers of . . . <br> <br> Saw Mills, <br> <br> Saw Mills, Mill Dogs, Mill Dogs, Set Works <br> and Edgers 



THE A．H．ANDREWS CO． 1ヶ4－1\％゙ゥ Wubash Ave．－Chicu！！o，Ills．，U．S．A．

[^0]
# Heavu Lumber Wagons LOO Trugh Sawdust Dinmp Wagons Sleighth 

Write to Us.
We Can Supply Just What You Want.

## DUNCAN ® McLENNAN,

IRON AND BRASS FOUNDERS AND MACHINISTS

## ENGINES, BOILERS,

GANG EDCERS, SHINGLE MACHINES, MILL MACHINERY, MACHINERY REPAIRS

## ELECTRIC PLANTS, ETC.,' ETC.

CASTINGS OF ALL KINDS, ETC., ETC.
CAMIPBELITON, N. B.



## Improved "Swing" Shingle and Heading Machine

Works easier than any other Swing Machine in the market. Self-tilting device is positive. Any number of butts or points may be cut from either end of block as operator mav desire. The Swing carriage frame is made of Steel Angle bars-light and strong.

Set works are easily adjusted for thick or thin shingles or heading. Jointer may be driven from pulley on Saw Arbor if desired.

I am cutting prices lower than ever on these machines. You will save monev by getting my reduced prices before placing your order. Catalogues.
F. J. DRAKE

## CHAMPION SAW \& GAS ENGINE COMPANY

Solld and Insepted-Tooth Gifgulap Saws, Gang, Drad and Gross-Gut Saws
 GAS OR GASOLINE ENGINES


## OHAMPION CAS ENGINES



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

## Sond for Circulars

- Beaver Falls, Pa., U.S.A

HUTHER BROS. PATENT GROOVER OR DADO HEAD For cut:iag any whdich groove from 36 -inch 102 2: ches or , ver Portable and Stationary



The Robt. Bell Engine \& Threshep Go, Limited SEAFORTH, ONT, CAN.


Can be used on any Clicular Sew saudrol. W. 11 cat a perfoct groove with or acrosa the erano. This is the only Dado Ifead on the market that gives entire satisfaction on all clasecs of work No screw adjustment For different width grooves simply remove or add inside cutlers, Sold by
buiders and dealers of wood worklng machluery in all paris of the United States. Whll sead on ap proval. in competilion with any olher make on the parket: if not the best return ai our expense. HUTHER BROS., Platt Street, Mochnsr8a, N Y., manufacturers of Circular Saks, Morgan Pattern
Zock-Corner Box Euters, Conciv: Sars, ete.


Our Celebrated

## Rotary Cutting <br> Veneer <br> Machines

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


The product is high grade.
The output is great.
The cost of operating and maintenance is reduced to a minimum.
Quite a combination, is it not?

Timber and mill owners should get in early.
Buy a Coe Veneer Cutting and Drying outit and prepare to supply thin lumber and vencers which have a healthy growing demand. More money in it than sawing your logs into lumber.
excellence is paramount.
THE

-OF-
Shoe Packs, Larrigans and


TO THE TRADE
I confine myself exclusively to the manufacture of this line of goods, having an up-to-date innnery, also years of ex-
perimie myself. I am preparcd to fill all orders promptly and guarantec to give satisfaction at lowest possible prices.
WM. A. HOLT, ST. ANDREWS, N. B.

IM ADH INT OANADA STITCMED
COTTON
DUCK
BELTING


SURERIOR TO ALL UTHERS -FOR-
Agricultural Machines, Elevators, Pulp and Papor wills, Cotton, Woollen, Cement and Saw Mills, Machine Shops and Electric Powers. manupacturid by


HAMILTON, CANADA USE OUR
"maple leaf beli dressing"

## Gomandil \& Denglife Maching 60.



## Box Makers' and <br> Planing Mill Machinery



Heavy 25 Inca Diviced Roll Plager and Yat hor with 8 Fcod Ro is.


A Mumford Standard internally fired boiler reyuires frum to to 25 per cent. less fuel than a return tubular boiler.
A saving of only to per cent. will cover the cost of the boiler in five or six years.
A Mumford boiler will therefore pay for itself several times during its lifetime.

## ROBB ENGINEERING CO., Limited,

## Amherst, N. S.

William McKay, 320 Ossington Avenue, Toronto.
Agents: $\left\{\begin{array}{l}\text { Watson Jack \& Company, } 7 \text { St. Helen St., Montreal. }\end{array}\right.$ (J. F. Porter, 355 Carlton Strect, Winnipeg.

## "The Best in the Land"

Comes only to the man whu gets the "best in the land" to help him. Whether as men-whether its material-or whether its machinery. Its a hard road to the millionaire's bill of fare to its machincry. Its a hard road to the millionaire s bill of fare to
irv to get shingle profits with an old style, out-ot-date machine. try to get shingle profits with an old style,
There's only one sure wav. That is to use

## The Golumbia Shingule Maghine

Absolutely the fastest cutting; easiest operated, safest and strongest machine for producing shingles now on the market. The only machine with point regulation-the only one with standard butt and standard poini-the only one on which you can make 1,000 additionat shingles from every 1,000 feet of logs. Write for cata: logue and testimony of what others think of this unrivaled shingle machinc.



## WHEN WRITING <br> Also Ask Their Opinion of

The Waterous Cast Steel Carriage
Which Many of Them Have in Use.
It is LIAHT, ACCURATE, SOLID
Practically Unbreakable.
Will Stand the Hardest Nigger Pounding.
Frames of Oak. Bolts do not Work Loose.
The Several Sizes Open 42, 50, 60, 72 and 84 Inches.
Note our No. 2 Set Works, 4 inch Face Cut Steel Ratchet, Pawls Full Width of Wheel Face •


AGAIN--Over Half of These Up-To-Date Lumbermen Have

## OUR STEAM SETTER

Another Time Saver.
It Increases Daily Cut 5 to 8 - Relieves Setter of Heavy WorkHe Can Dog-Dispensing with Third Man on Carriage.

Investigate the New

## WATEROUS BIG CHAMPION EDCER

With Working Space 54 to 96 Inches, 4 to 8 Saws, and Cluster Collar if ${ }^{r}$ for Ripping Small Cants.
Order Early and Avoid Delay in Startiss vext Spring

## NATURAL DRAET DPY MERS MOIST AIR . DIS

## LUMBER TRUCKS and

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

## SHELDON \& SHELDOÑ, GALTI, ONT.

formerly mgeaghren heating \& ventilating co.

$\mathrm{NO}^{-}$-the ordinary dry kiln truck doesn't cost as much as the THE STANDARD Channel Steel, Roller Bearing DRY KILN TRUCK does.

No. You see, the ordinary truck hasn't got
 the unbreakable malleable iron Wheels.

It hasn't got the sharp-pointed "anti-friction" steel roller bearings, either.
We have some printed things on the subject that you might like to read. A request for Catalogue "D" will fetch them.

THE STANDARD DRY KILNCO. Indianapolis, Ind.

## 16.

## Do You Need a Turbine?



Now is the best possible time for replacing your old, worn-out wheel with a new Turbine that will save Worry; save Time, and make Money for you. If you want a well built wheel, a wheel that will give you steady reliable power every day, a wheel that will save water, a wheel that will last you a lifetime, and that is sold at a reasonable price, then write us for catalogue and prices on the

## Standard Leffel and Vulcan Turbines.



They are petter developers to-day than ever before, and are growing in popularity, as cur order books show.

We have now for distribution our new SAW and SHINELE MILL MAGHINERY GATALOGUES, with engravings and descriptions of our machines with their latest improvements. We will be glad to send you one on receipt of your address. You cannot buy a better Portable Mill than the "Lane Improved".

## MADISON WILLIAMS, port perry, ont.

## FROZEN TIMBER

Makes no difforenco when using a Robertson Saw

| ${ }_{\substack{\text { For Heavy } \\ \text { Berango }}}$ | "What |  |
| :---: | :---: | :---: |
| $\underset{\substack{\text { and } \\ \text { journats }}}{ }$ | *. ... | For orall nary and |
|  | Ser |  |
| velo. |  | ${ }^{\text {Theme min }}$ |
| Roberrot | 4 4 | ${ }_{\text {Eabit }}^{\text {Meral }}$ |
| $\begin{aligned} & \text { SON'S } \\ & \text { MONARCH } \end{aligned}$ | Cre |  |

The James Robertson Company, Limited

RIGE LEWIS \& SON,
Kimited
Lumbepmen's Supplies

| $\begin{aligned} & \mathbf{S} \\ & \mathbf{A} \\ & \mathbf{W} \\ & \mathbf{S} \end{aligned}$ | Chain <br> Bolts <br> Files | Sted <br> Iron <br> Horse Shoes | $\begin{aligned} & \mathbf{A} \\ & \mathbf{X} \\ & \mathbf{E} \\ & \mathbf{S} \end{aligned}$ |  | Boot Calles <br> Lumber Leads Timber Grips |
| :---: | :---: | :---: | :---: | :---: | :---: |

TORONTO.
Write tor Prices


MONTHLY STOOK LIST
 TOAONFO, CANADA


We call your special attention to
STEEY STAMPS Our product is first-class in every particular, and prices are satisfactory.
HEHILTON STEMP \& STBNCIE YORXS,
Hamilion, One. H. Barnard, Prop.

Panki Ijenton, K C. Herabit I. Dive W. Mulock Boultseg.

DENTOH, DUNK \& BOULTBEE Barristers, Sollcitors, Notaries, etc.
National Trust Chambers. TORONTO

Watchman's Time Detectors That Cannot Fall.


Contala all the modern improvements. War.
ranted in every way. Cannot be tampered with ranted in every way. Cannot be tampered War:
without detection. Sanafactured by
E. IMHAUSER \& CO., 205 Sroaatuay Nev York. Write for Catolpue. Higkest Anvard Pan.


THOMAS PINK
Pembiolxe, Ont.
Send for Catalogue and Price List.

## PINK LUMBERING TOOLS

## The Standard Tools

In Every Province of the Duminion, $+* * * *$
$* * * * * * * N e w$ Zealand, flustralla. Etc.

Pink Round Bill Peavey, Handles in Split Maple



# Lloyd Mañufacturing Go'y poens luovenememe Saw M쓰 Outfits 

Pulp Machinery, Belting, Etc.

## J．S．MITCHELL \＆CO． <br> Importers and Jobbers <br> Hardwape．Mill Sunodics．Lumberfing Tools

Cant Dogs and Handles，Boom Chain，Wire Rope，Cordage， Circular Saws（Inserted and Solid Tuoth），Belting（Rubber and Leather），Dodge Wood Split Pulleys，Cold Rolled Shafting，Ma－ chine and Cylinder Oils（XXXX Brand），Camp Furnishings， Tents，Blankets，Etc．

## agents <br> AGENTS

Sherbrooke，Que．
Stores ： 69 and 71 Wellington Strect． Warehouses ：Lansdowne Street． （Near G．T．R．Station）．
＂Maine＂Cant Dogs
111．VII．ES
H00に，
いじにS

# Whitehead \＆Turner 

 WHOLESALE GROCERS Lumber and General MerchantsQUEBEC，P．Q．


## LUMBERMEN＇S SUPPLIES A SPECIALTY

Pork
Beans
Teas

Evaporated Apples
Canned Goods
Molasses

Rice
Peas Matches

Raisins
Tobacco

Sugar Rope

# WOODS LIMITED <br> Ottawa, Canada <br> WHOLESALE SUPPLIES AND MANUFAGTURES FOR LUMBERMEN AND CONTRACTORS .... 

Our reputation for High-Class Goods in our particular lines has been established and maintained by the quality, workmanship and appearance of our goods. To-day we excel all jesterday's efforts-tomorrow will see us attaining still higher planes of excellence. Progress is our watchword.


Tents, Awnings, Tarpaulins and Flags. "Woods " non-absorbent Duck or "Woods" water-repellent, mildew proof Waterproof. We are making a specialty of large Stable Tents, "non-absorbent" Duck-get quotations on these. Our House Tents, Cook Tents and Cookery Sheets are in use by all Canadian Lumber Firms and Contractors. Get Catalogue and Discounts by return mail.
The very liberal and appreciative patronage you have extended in past is solicited for the future.
Careful attention and prompt shipments is assured.


[^0]:    THE E．LONG MANUFACTURING COMPANY
    ORILLIA，ONTARIO，CANADA
    

    The above cut represents our new No．O Sawmill，Capacity 5，000 to 8，000 ft．per day，to carry up to a 56 m aw．

