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Wood-Workers', Manufacturers' and Millers' Gazette

VOLUME XXIII.
NUMBER 9.

TORONTO, CANADA, SEPTEMBER, 1903

TERMS, \$1.00 PER YEAR
Single Copies, 10 Cents.

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BALATA
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CAMEL BRAND
BELTING**



NOT AFFECTED BY DAMPNES
THE BEST FOR MAIN DRIVES
MOST DURABLE

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SANDVIK SWEDISH STEEL

The Ottawa Saw Co.
LIMITED
Middle Street, OTTAWA, ONT.

Sandvik Swedish Steel
Band, Gang and Circular Saws
P. M. FEENY, Manager.

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It isn't the price, it's what
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Wholesale Manufacturer of

LUMBERMEN'S SUPPLIES

Tents and Tarpaulins made of our special non-
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For High Duty Bearings.
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Always
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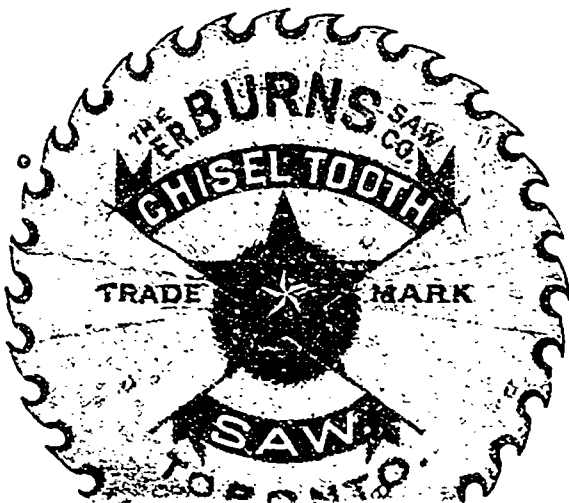
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THE
WM. HAMILTON MFG. CO., LIMITED,
PETERBOROUGH, ONTARIO.



**Designers and
Builders . .**

of

**New and Modern Saw Mills and
Machinery for same**



WE ALSO BUILD

Pulp Mill Machinery,
Samson Leffel Turbine Water Wheels,
Tools for the Care of Saws,
Shingle Machinery, Engines,
Boilers, Etc.



The Wm. Hamilton Mfg. Co., Limited

Branch Office: VANCOUVER, B. C.

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THE

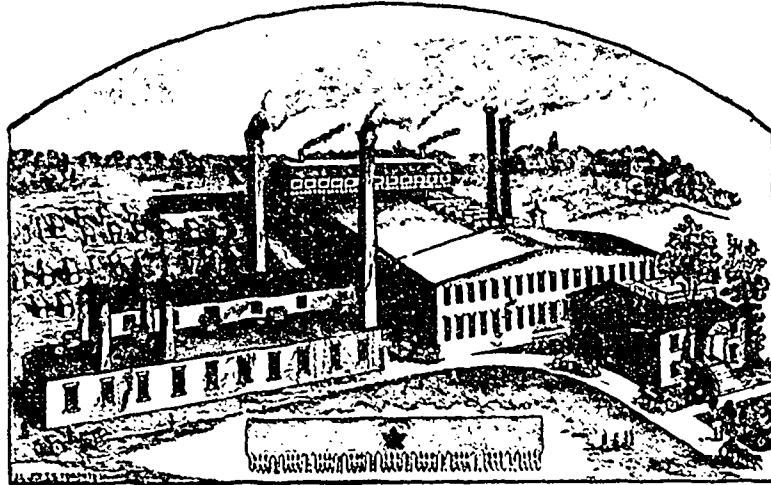
MAPLE LEAF SAW WORKS



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Manufacturers of

- CIRCULAR SAWS
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- HAND SAWS
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GROUND THIN ON BACK

- Save Labor
- Save Time
- Save Gumming
- Save Files

This Saw Stands Without a Rival

AND IS THE

FASTEST CUTTING SAW IN THE WORLD!

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 steel which no other process can approach.

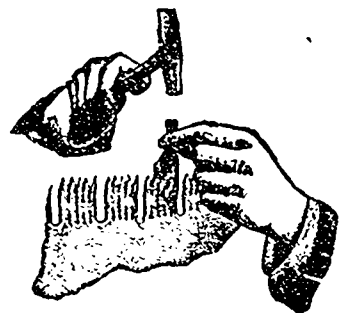
Maple Leaf Saw Set

MANUFACTURED BY

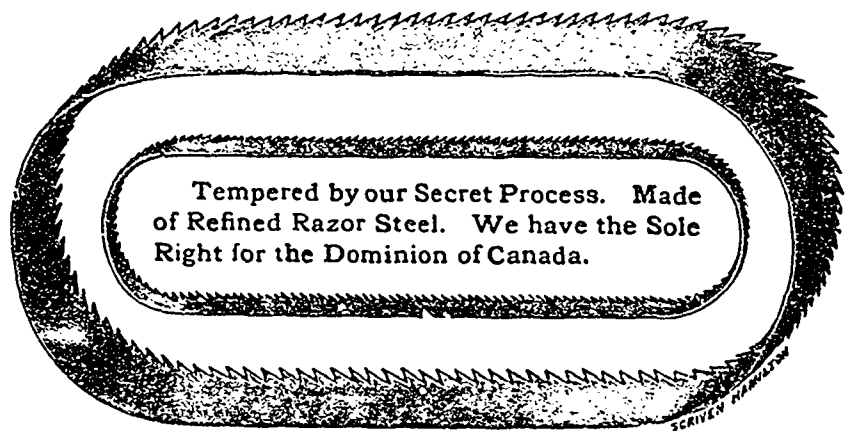
SHURLY & DIETRICH, Galt, Ont.

Directions.—Place the set on the point of tooth, as shown in the accompanying cut, and strike a very light blow with a tack hammer. If you require more set, file the tooth with more level.

If you follow directions you cannot make a mistake. Be sure and not strike too hard a blow, and it will set the hardest saw. On receipt of 40 cents we will send one by mail.



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



Tempered by our Secret Process. Made of Refined Razor Steel. We have the Sole Right for the Dominion of Canada.

We Manufacture

HIGH 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.

YOU ARE INVITED

to attend the opening of my new warehouse and inspect a line of modern machinery. Any of the following list in stock for immediate delivery.

AUTOMATIC ENGINES

- 8 x 24 Wheellock.
- 15 x 34 " "
- 11 x 24 Corliss, new
- 1 x 10 Ideal Engine
- 10 x 10 Peerless.
- 11 x 10 " "
- No. 1 to 10 Jewel Engines, New.
- 70 H P. Osborne Kelly Condensing Engine.

PLAIN SLIDE VALVE ENGINES

- 4 x 5 Dutton, Centre Crank, New.
- 5 x 7 1/2 " " " "
- 6 x 7 1/2 " " " "
- 7 1/2 x 8 " " " "
- 8 x 10 " " " "
- 10 x 12 " " " "
- 10 x 15 " " " "
- 4 x 5 Upright, New
- 5 x 7 1/2 " " " "
- 7 1/2 x 8 " " " "
- 7 1/2 x 10 " " " "
- 4 1/2 x 8 Horizontal Waterous
- 9 1/2 x 12 " Northey
- 9 x 12 " Brecht, New.
- 9 x 14 " " " "
- 12 1/2 x 18 " Rocking Valve, Waterous
- 10 1/2 x 16 " Slide Valve, Goldie & McCulloch.
- 8 1/2 x 12 " " Buffalo.

MARINE ENGINES

- 3 x 5 Dutton, New.
- 6 x 7 1/2 " " "
- 7 1/2 x 8 " " "
- 7 1/2 x 10 " " "
- 5 1/2 x 5 with shaft and wheel.
- 10 1/2 x 12 re-bullt.
- 1 x 18 re-bullt.
- 3 and 5 1/2 x 1 1/2 Fore and Aft Compound, New.
- 4 and 5 1/2 x 4 " " "
- 7 1/2 x 14 x 12 Steeple, Compound, New.

ENGINES AND BOILERS ON WHEELS

- 10 H. P. Cornell.
- 16 H. P. Russell & Co., Traction.
- 12 H. P. on skids.

GAS AND GASOLINE ENGINES

1 to 25 H. P., complete with tanks and batteries.

BOILERS

- 8" x 120" - 28-3" Tubes, Hor. Tubular.
- 36" x 120" - 33-3" " " "
- 38" x 163" - 36-3" " " "
- 44" x 132" - 39-3" " " "
- 44" x 132" - 45-3" " " "
- 41" x 156" - 43-3" " " "
- 42" x 116" - 30-3" " " "
- 44" x 166" - 46-3" " " "
- 44" x 142" - 42-3" " " "
- 48" x 154" - 53-1" " " "
- 48" x 192" - 33-1" " " "
- 60" x 163" - 84-3" " " "
- 71" x 189" - 95-3 1/2" " " "
- 60" x 210" - 54-3" " " "
- 6 h. p. Portable Fire Box Boiler, new.
- 35 h. p. " " "
- 45 h. p. " " "
- 19" x 44" - 13-2" Tubes, Vertical, new.
- 25" x 44" - 37-3" " " "
- 37" x 65" - 70-2" " " "
- 20" x 49" - 19-2" " " "
- 24" x 50" - 31-2" " " "
- 30" x 60" - 43-2" " " "
- 30" x 72" - 43-2" " " "
- 24" x 60" - 31-2" Tubes, Submerged, new.
- 30" x 72" - 54-2" " " "
- 30" x 84" - 54-2" " " "
- 30" x 60" - 54-2" " " "
- 50" x 134" - 21-4" " " "

WOODWORKING MACHINERY

- 10-24" Pony Planers, new
- 10-12" Buzz " "
- 8-30" Pedestal Band Saws, new
- 32" Pedestal and Bracket Band Saws, new
- 36" Pedestal Band Saws, new
- 40 inch Band Re-Saw, new.
- No. 6 Heavy Band Re-saw.
- 10 Variety Saw Tables, new.
- No. 4A, and 6H, Fox Universal Wood Trimmers.
- No. 2 Defiance Self Feed Rip Saw Table, new.
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- 36 in. Circular Re-Saw.
- All Iron Swing Cut-off Saws, new.
- Railway Swing Cut-Off Saws.
- Double Spindle Wood Top Shaper.
- Single Spindle Frizzer, new.
- 24 inch L. Mitchell & Co. Surfacers.
- 24 inch Jackson, Cochrane Planer and Smoother, new.
- No. 6 Goldie & McCulloch Single Surfacers
- 24" Jackson, Cochrane Revolving Bed Planer.
- 13 inch Nicholls Planer, Mather and Moulder
- 24 inch Major Harper Planer and Mather.

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- 3 x 2 x 3 Duplex Steam Pump, new.
- 4 1/2 x 2 1/2 x 1 " " " "
- 6 x 4 x 7 " " " " new.
- 8 x 5 x 12 " " " " "
- 16 x 10 1/2 x 30 Special Cameron Pump, new.
- 6 x 9 x 9 Condensing Pump.

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- 12 in. Archimedian Brass, Waterous.
- 12 in. Right Hand Farrar, new.
- 21 in. Little Giant.
- 23 in. Right Hand Leffel.
- 25 in. Right Hand Farrar, new.
- 30 in. Left-Hand
- 36 in. Right-Hand Perfection.
- 48 in. " Vulcan.
- No. 12 Tuerk's Water Motor, 4 to 6 H. P.

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- 6 1/2 x 8 Double Cylinder, Single Drum, new.
- 6 x 8 Double Cylinder, Double Drum, new.

Prices and Descriptions of the above machinery, also Catalog of Mill and Engineers' Supplies, sent on request. I carry a very large line of iron working tools and am prepared to make close prices on same.

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131-145 Front Street West, TORONTO
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THE BEST IN THE WORLD

There is no doubt about the fact that the

RODGERS

Adjustable Log Siding Machine

is without a peer.

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



A MONEY MAKER

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Gentlemen:—Replying to yours of recent date and referring to your adjustable log siding machine, must say it has given us general satisfaction, and we have done good work with it. Any one desiring a machine of this style for the purpose of slabbing small logs, we would recommend yours. Respectfully,

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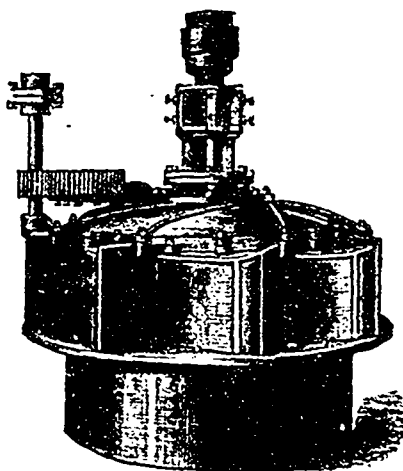
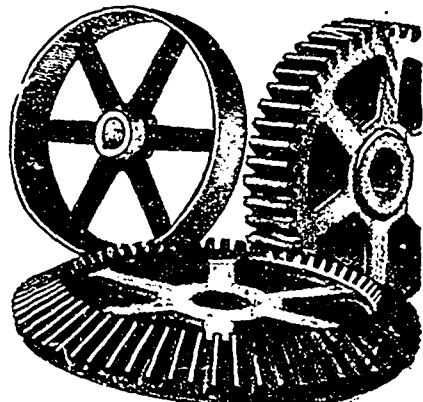
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Hydraulic and Mechanical Engineers, &c.

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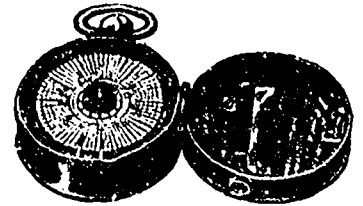
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Heavy Machine Dressed Gearing, Iron Bridgetrees, Rope or Belt Pulleys, &c., for Mills or Factories. Swing Shingle Machines. Superior Steel Castings. Iron or Steel, Sectional or Solid Propeller Wheels for all purposes.

Watchman's Time Detectors
That Cannot Fail.



Contain all the modern improvements. Warranted in every way and cannot be tampered with without detection. Manufactured by

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Write for Catalogue. Highest Award Pan-American Exposition

We Sell Typewriters

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According to the style of machine desired.

We can safely say that our rebuilt typewriters are the best on the market. We use genuine factory parts and employ the best workmen in the business. We also guarantee every typewriter we sell for one year

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ALL WOOD

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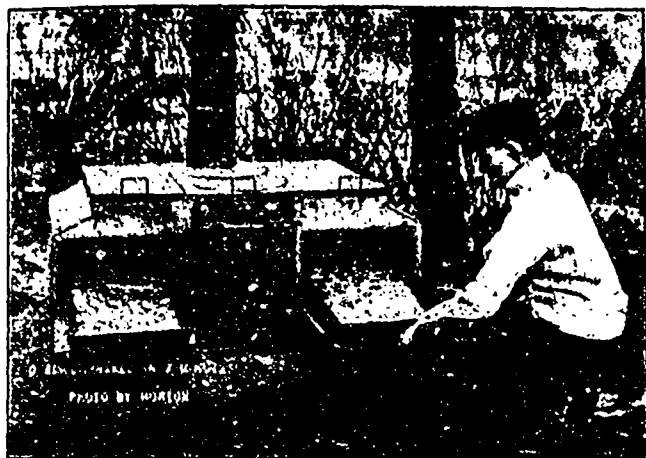
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Watson's Portable Air Tight Baker



The most convenient stove ever constructed for use in the Woods, on the Drive, in the Camps Bakes as perfectly as the finest range.

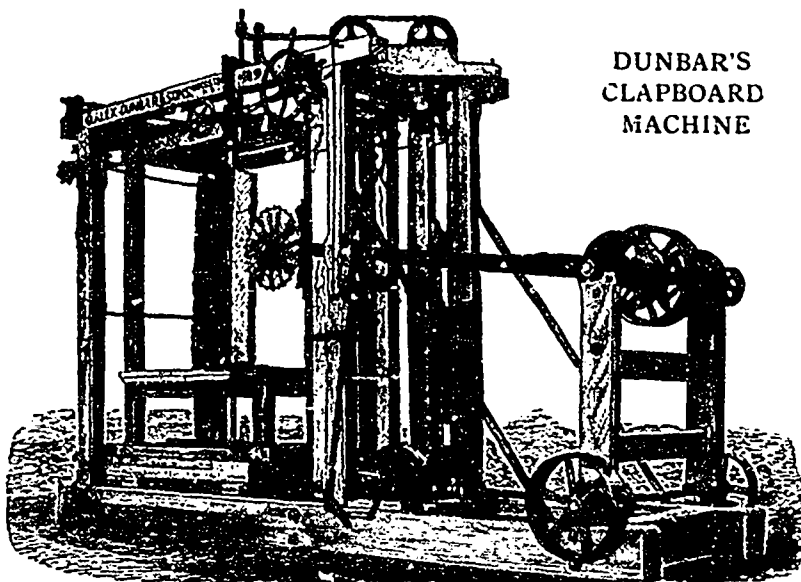
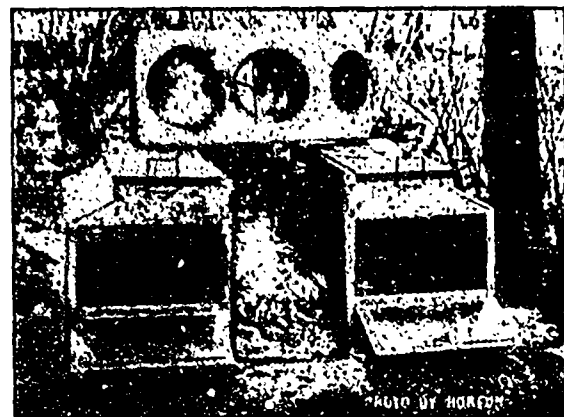
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The cooking is not affected by rain or weather and can be used outdoors or in a tent.

Yours truly,
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Per Wm. H. Stephenson, Genl Supt.

We make these stoves in three sizes. Our No. 10 will cook for ten men, our No. 20 for twenty men, and No. 30 for from fifty to one hundred persons. We want those interested in a stove of this kind to write us for full description and prices.

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ALEX. DUNBAR & SONS

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Including ROTARY SAW MILLS (3 sizes), CLAPBOARD SAWING MACHINES, CLAPBOARD PLANING AND FINISHING MACHINERY, SHINGLE MACHINES, STEAM ENGINES, Etc.

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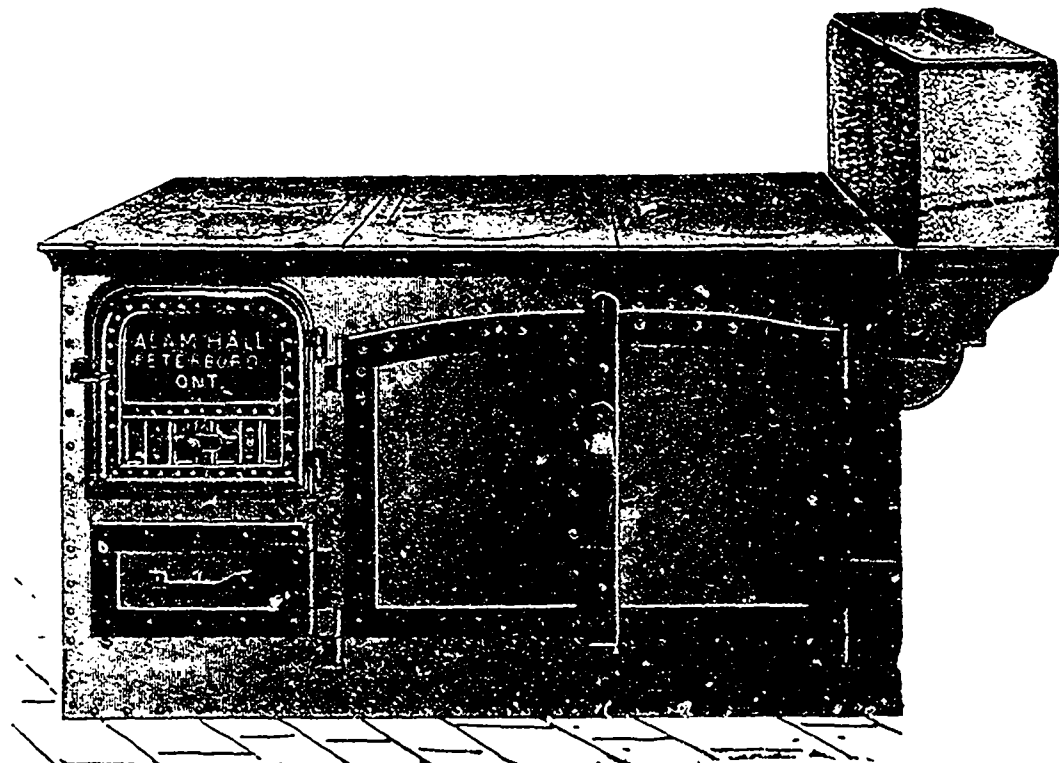
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For Lumbermen's and Railway Camps, Boarding Houses and Hotels.



Lumbermen's Six Pot Kettle Range with Reservoir.

The Lumberman Heater

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This Heater is used in heating Lumbermen's Camps, Boarding Houses, School Houses and large buildings.

The body of the Heater is made of Heavy Boiler Plate. The ends are made of Heavy Cast Metal, with a large Fire Door.

It is a perfect Heater, and very durable.

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This No. 10-25 Range with 25 Gallon Copper Reservoir is the one we sell the most of, owing to the convenience of having a supply of hot water at all times. Will cook for 50 to 60 men. Weighs 450 pounds.

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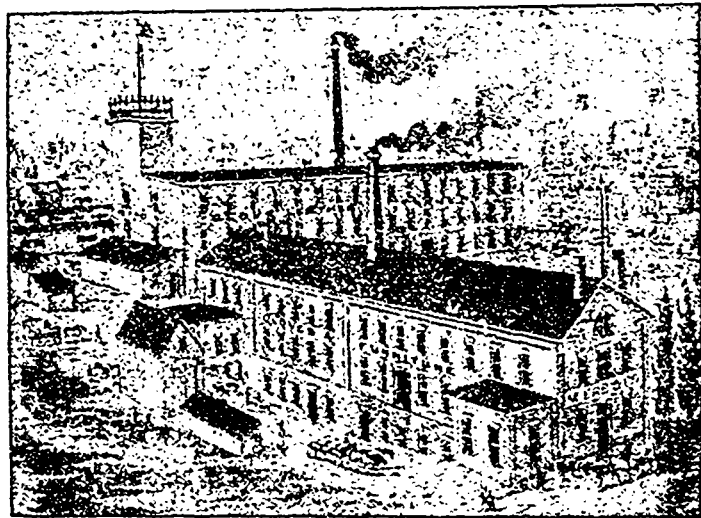
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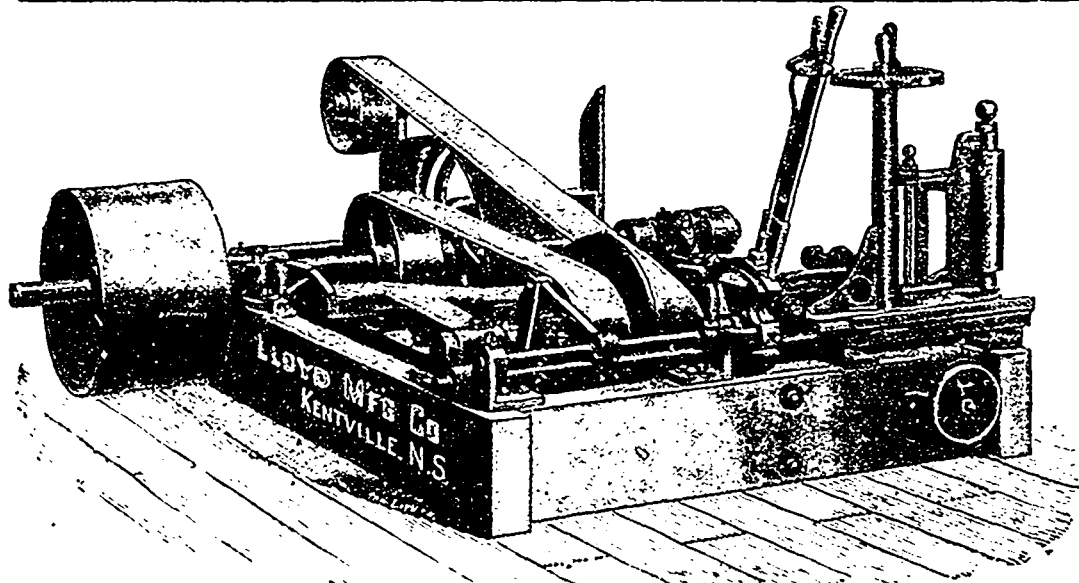
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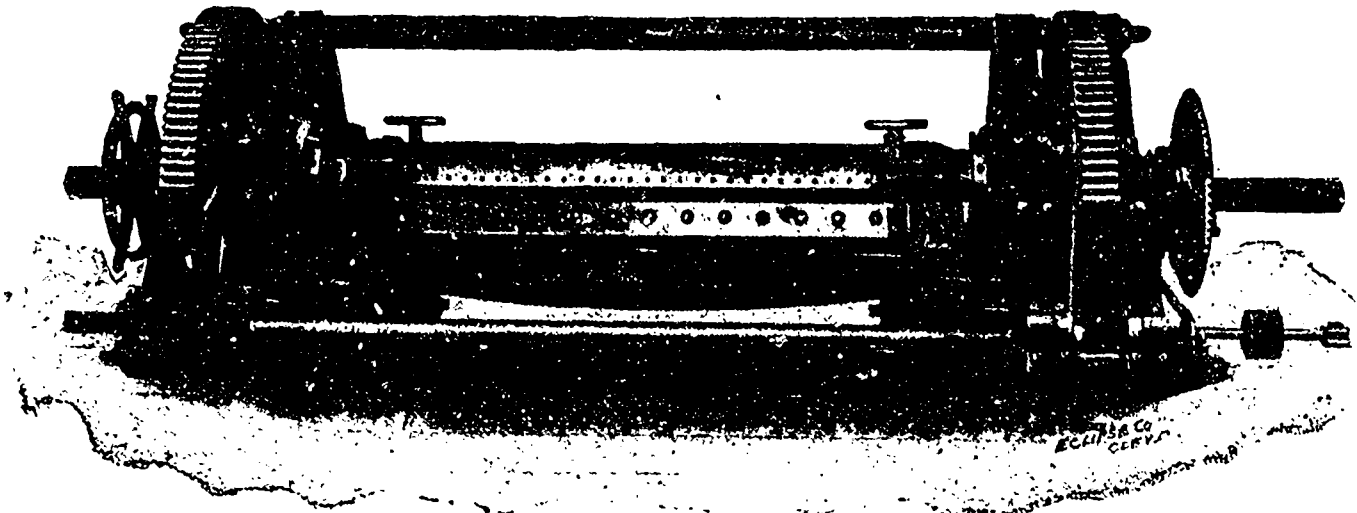
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made in over sixty sizes, have stood the test and proved equal to any proposition to reduce logs into thin lumber and veneers.



The product is high grade.
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 The cost of operating and maintenance is reduced to a minimum.
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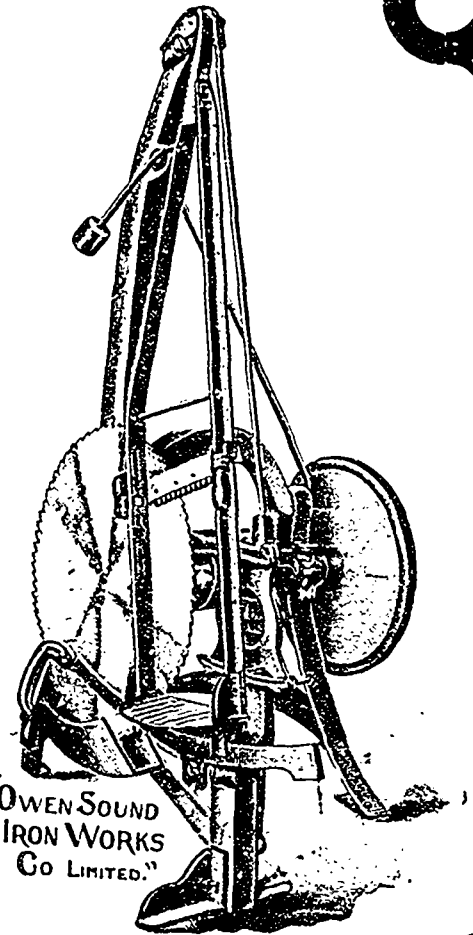
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Fitted with our Automatic Trip.

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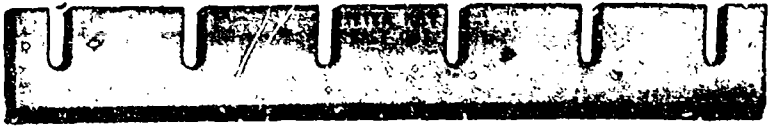
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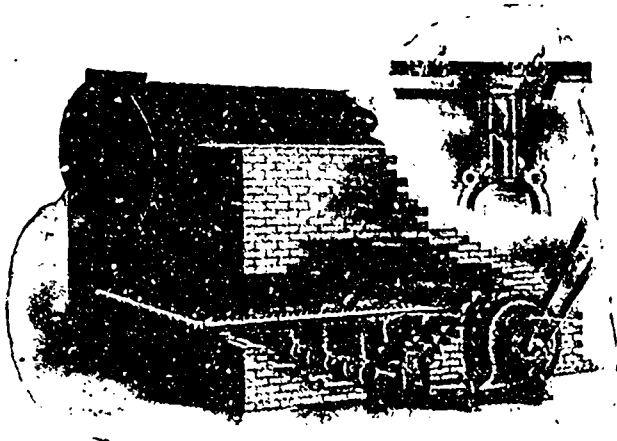
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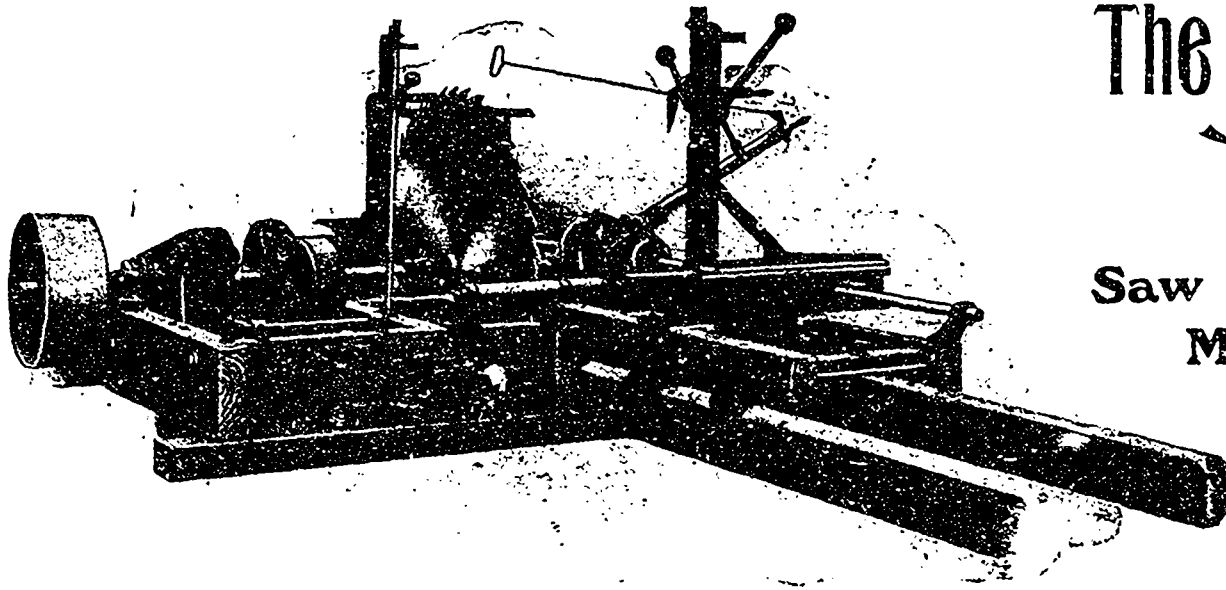


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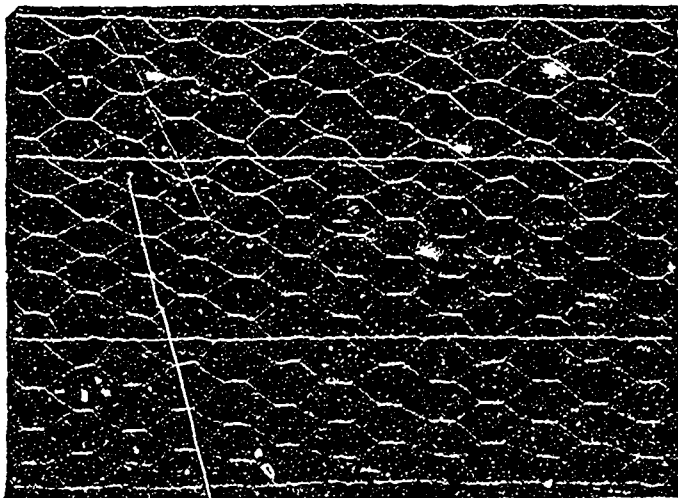
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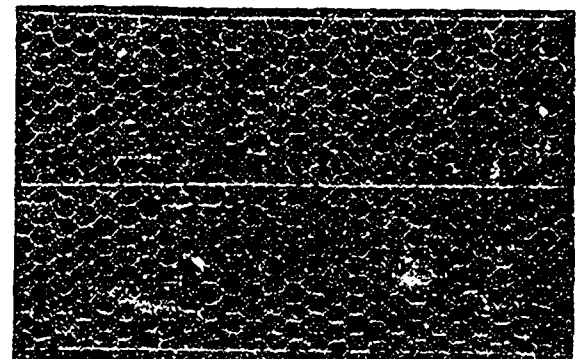
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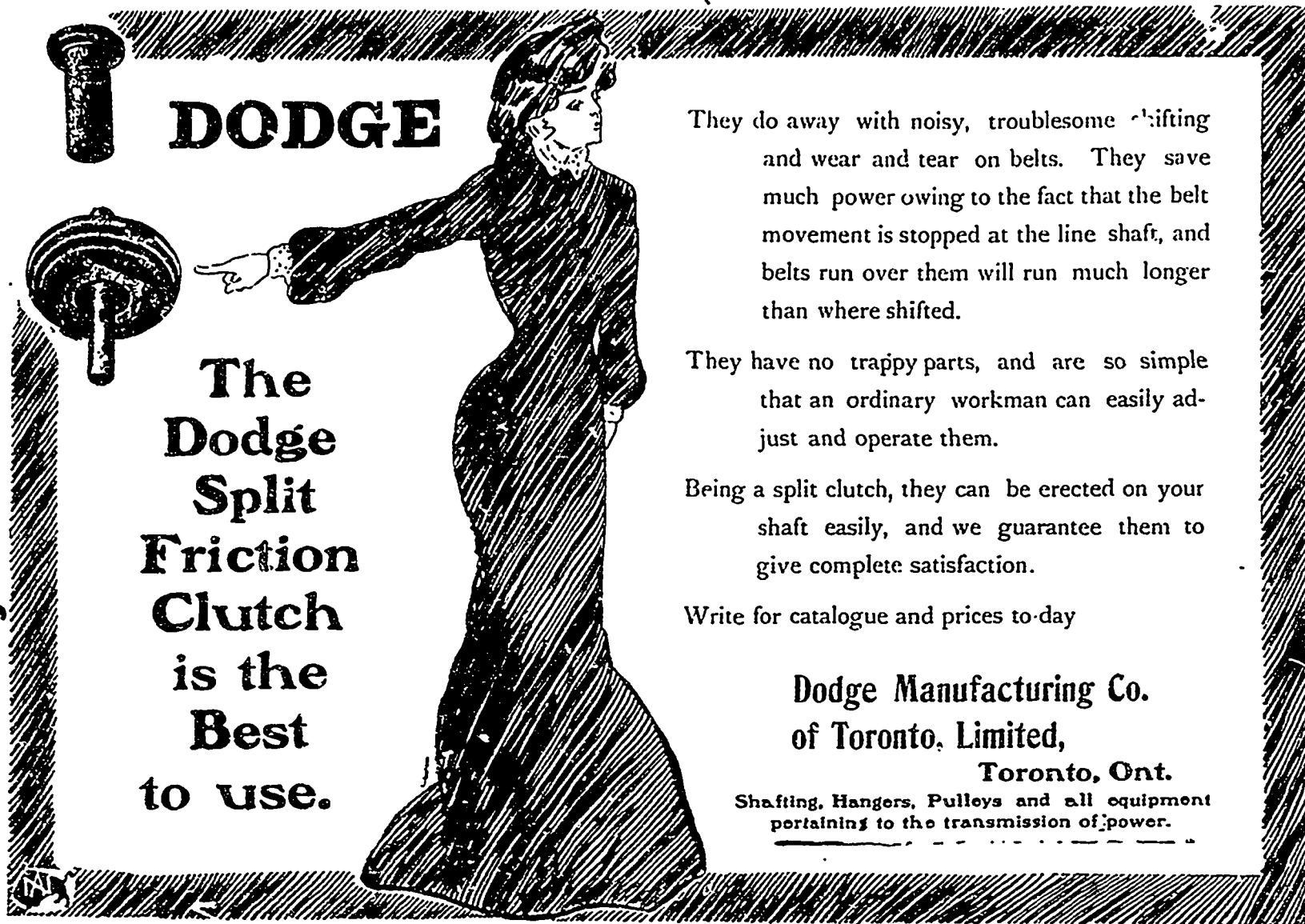
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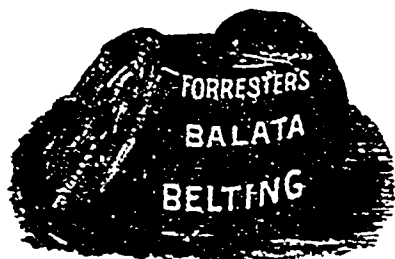
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THE CANADA LUMBERMAN

VOLUME XXIII }
NUMBER 9 }

TORONTO, CANADA, SEPTEMBER, 1903

TERMS, \$5.00 PER ANNUM
(Single Copies, 10 Cents)

CONFERENCE OF NEW BRUNSWICK LUMBERMEN

The Question of Stumpage and Reforestation Discussed with the Government. Dues to be Increased.—Formation of a Limit Holders' Association.

Upon the invitation of Hon. A. T. Dunn, Surveyor-General of New Brunswick, a large number of the leading lumbermen of the province assembled in Fredericton, on August 5th, to discuss with the Government certain matters having an important bearing upon the lumber industry. Those in attendance included the following :

Premier Tweedie.
M. Welsh, Bristol.
A. H. F. Randolph, Fredericton.
R. A. Estey, "
Donald Fraser, jr. "
Timothy Lynch, "
John A. Morrison, "
James Robinson, M.P., Millerton
Hon. Allan Ritchie, Newcastle.
E. H. Sinclair, "
James M. Scott, Dumsfries.
A. J. Beveridge, Andover.
Charles Miller, St. John.
Henry Hilyard, "
Fred D. Miles, "
M. F. Mooney, "
Fred M. Anderson, St. Martins.
F. W. Sumner, Moncton.
W. B. Snowball, Chatham.
R. A. Lawlor, "
A. H. Hilyard, Dalhousie.
A. E. Alexander, Campbellton.
David Richards, "
H. F. McLatchey, M.P.P., Campbellton.
J. D. Irving, Buctouche.
Jacob Hazleton, Fredericton.
Hon. George F. Hill, St. Stephen
W. H. Murray, St. John.
G. F. Burden, M.P.P., Pokiok.
Hon. Geo. A. Murchie, Celan.
F. E. Sayre, St. John.
Kilgour Shives, Campbellton.
N. Currie,
D. J. Buckley, Rogerville.
Geo. C. Culler, Boston.
F. E. Blackhall, Campbellton.
W. P. Lowell, Bangor.
Daniel Lynch, Buctouche.
Charles I. White, Apple River, N.S.
Thomas McWilliams, Ward's Mills.
W. F. Barnhill, St. John.
H. W. Woods, Welsford.
James Russell, Newcastle.
Robert Connolly, Salmon River.
A. McIntosh, Chatham.
Senator King, Chipman.
R. D. Richardson, Chipman.
D. A. Vickery, Chatham.
Daniel DeWitt, Blackville.
D. Sullivan, Blackville.
H. Lamont, Douglastown.
S. H. White, Sussex.
C. O. Miller, Queens county.
A. J. Gregory, Fredericton.
Frank Todd, St. Stephen.
Charles Smith, Burton.
A. H. Hilyard, St. John.
George McKeen, "
J. Banks, Burton.
W. B. Berry, St. Stephen.
J. D. Irving, Buctouche.
C. H. Miller, Millerton.
B. McCormick, Blackville.
J. D. Phinney, Fredericton.
Arthur Glasier, Lincoln.

Preliminary to the conference the lumbermen formed themselves into an association, to be

known as the Lumbermen and Limit Holders' Association of New Brunswick. Senator King was appointed chairman and R. A. Lawlor secretary.

After organisation and discussion committees were appointed to formulate the views of the association on the lumber industry of New Brunswick and to draft by-laws and a constitution.

At a subsequent meeting R. A. Lawlor sub-



HON. A. T. DUNN,
Surveyor-General of New Brunswick.

mitted a draft of the constitution which was taken up section by section and adopted. It provides that the organization will be composed of a president, a vice-president, a secretary-treasurer, who with one member from each county, represented in the association, will constitute the executive.

H. Hilyard moved that the office and place of meeting be at St. John. Hon. Allan Ritchie moved in amendment that Fredericton be chosen. The meeting decided in favor of St. John by a vote of 21 to 14. The membership fee was fixed at \$15, and it was decided to assess limit holders according the number of miles held by them. The annual meeting is to be held on the first Tuesday in August. The following officers were elected for the ensuing year :

President—H. Hilyard, St. John.
Vice Pres.—Hon. Allan Ritchie, Newcastle.
Secretary-treasurer—R. A. Lawlor, Chatham.

The following, with the above named, constitute the executive :

Northumberland—W. B. Snowball.
Restigouche—Kilgour Shives.
Gloucester—T. M. Burns, M.P.P.
Kent—J. D. Irving.
York—A. H. F. Randolph.
Charlotte—John E. Moore.
Albert—C. T. White.
St. John—George McKeen.
Kings—H. White.
Madawaska—R. A. Estey.
Queens—Senator King.
Victoria—T. Lynch.
Sunbury—F. E. Sayre.
Carleton—M. Welsh.
Westmorland—F. W. Sumner.

Messrs. Henry Hilyard, K. Shives, E. Hutchison, John E. Moore, E. F. Vickery and Senator King were appointed a committee to present a memorial to the government on the stumpage question.

THE CONFERENCE.

The conference with the Government commenced at 10.30 a.m. on Wednesday, 5th ultimo. Hon. A. T. Dunn, Surveyor-General, occupied the chair, and opened the proceedings with the following address :

GENTLEMEN,—

It affords me very great pleasure to greet so many of you, who are deeply interested in the great lumber industry of the province, an industry which, both from the standpoint of the revenues derived therefrom, and the large number of people to whom it affords employment, is of the greatest possible importance.

The reasons which actuated the Government in calling you together are set forth in the following circular :

Crown Lands Office,

Fredericton, N.B., July 15, 1903.

Sir,—As you are aware, during the last session of the Legislature, it was announced by the Premier in the budget speech that it was during the present season. In view of that fact and considering the many very important questions connected with the administration of the crown timber lands of the province, such as protection against fire, re-afforestation, etc., after consultation with my colleagues, I have considered it advisable in the interest of the Department, as well as of licensees, that a conference of lumbermen and those interested in crown timber lands should be held at Fredericton for the purpose of considering these questions with a view to more fully protect and promote the interests of all concerned. I have therefore decided to fix the fifth day of August now next, at the Departmental building, Fredericton, at 10 o'clock a.m., for the purpose of such conference, and trust that you may find it convenient to attend, as I deem it most important that the meeting should be as large and representative as possible, it being my intention to secure the attendance of an expert in forestry, who will doubtless be able to furnish valuable information on this important subject.

I have the honor to be,

Your obedient servant,

ALFRED T. DUNN,

Surveyor General.

I beg to assure you that the Government, while desirous that the crown lands shall yield a fair revenue to the province, is most anxious that the stumpage shall be fixed at such a rate as will not bear hardly upon the lumber interests, or prevent those engaged in this important business from deriving an adequate return upon the capital invested.

As you are all aware, the demands upon the provincial treasury are very heavy. The grants required for roads and bridges, education, agriculture, maintenance of the Asylum, aid to hospitals, protection of the forests and the various other public services are constantly increasing, and in order to meet the pressing needs of our people in these respects, it is necessary to avail ourselves of all possible sources of revenue, and



MR. HENRY HILYARD,
President New Brunswick Lumbermen's and Limit Holders' Association.

we have therefore felt it to be our duty to consider carefully the question of an increase of stumpage, and as a result of our enquiries we have concluded that the time has arrived when a reasonable increase can properly be made.

You will, I think, agree with me that the policy of issuing long leases, which was adopted ten years ago, has resulted in material benefit to the lumbermen, while by reason of the greater inducement thereby given to the lessees to preserve and protect the forests, our timber lands are steadily increasing in value. In the larger areas of crown timber lands it is noticeable that during the last ten years fires have not proved so disastrous as formerly. The improved state of the lumber market has, of course, materially benefitted those engaged in the industry, and all will admit that it is in a much more prosperous condition than when the reduction of stumpage was made some years ago. Private land owners are reaping the benefit of this improvement by charging higher rates, and the government would be recreant to its duty if it did not proceed, though to a lesser extent, along the same lines.

In connection with this subject we have necessarily been called upon to consider whether we shall continue to exact a uniform rate of stumpage in respect of all crown lands, or whether there should be a difference in the rate, dependent upon the locality, the accessibility of the lumber, the facilities for shipment at all seasons, the nearness to markets, etc.

Your experience, gentlemen, as practical business men, will enable you to express a valuable opinion upon this question, and I shall be glad of any suggestions in reference thereto which you may be pleased to make.

The government has under consideration the appointment of permanent scalers, making them fire, game and fish wardens. My opinion is that this change will prove of public benefit. The department will be pleased to receive any suggestions which you may desire to make regarding this.

I shall also be glad to learn your views upon other subjects mentioned in my circular, and also upon any other matters connected with the lumber industry which you may think worthy of consideration by the government.

HON. A. T. DUNN,
Surveyor General.

THE PREMIER'S REMARKS.

Premier Tweedie, who spoke next, thought it was very gratifying to have such a large and representative meeting of the lumbermen of the province. He referred to the introduction of a few years ago of the long term lease, which he thought had been of great benefit to the lumber interest. Since this policy had been adopted by the government lumbermen had taken greater precautions against fires and the result had been beneficial all round. The lumbering industry was by far the most important in the province, and a kind of partnership existed between the lumbermen and the government in regard to the industry. It was the duty of the government to give it every protection and encouragement. Lumbermen might say that they were not making any money at the present time, but it is a well known fact that the price of lumber is as high as ever it was, indicating that the industry is in a flourishing condition. Private owners of lands have reaped a benefit from the prosperity of the lumber industry by increasing the stumpage rate, while the government rate had remained stationary. Now it is proposed to make a change by making a slight addition to the stumpage rate. The industry he contended was in a much better condition than it was ten or fifteen years ago, and the lumbermen will be able to stand an increase of stumpage. It might be that in the future the industry would again become stagnant, and if so the government would be prepared to give relief by reducing the stumpage, as it had done on a former occasion. He hoped they would go into the question in a business like way. They were all interested in the welfare of the country, and were well aware that money contributed by them in increased stumpage would be for the benefit of the people. It was not the desire of the government to cripple any industry, but rather to encourage and assist all. He was very glad that the conference of lumbermen had been called, as it would furnish an opportunity for the discussion of other matters of interest in addition to the stumpage question.

THE FORESTRY QUESTION.

Mr. Frank C. Parker, of the New York Forestry Association, was next introduced by the surveyor-general, and addressed the meeting on reforestation. He spoke of the pleasure which it gave him to be present and meet the representative lumbermen and discuss with them the question of reforestation, in which he had been much interested for the past twenty-five years. He explained the methods employed by the New York Forestry Association for the preservation and promulgation of trees. The association planted a quantity of seed each year, and after a year or two's growth the trees are taken up and transplanted. The Association had, a short time ago, set out five hundred thousand trees in one tract and every one of them had shown good results. The question of reforestation is becoming of greater importance year by year, and he hoped the lumbermen of New Brunswick would become interested in it.

Mr. Parker answered a number of questions by Premier Tweedie, Hon. Mr. Hill and others, and gave evidence of possessing an immense

fund of practical information on the subject.

On the subject of stumpage dues, Mr. F. Mooney said that he thought that under the terms of twenty-five year leases, the government had a right to increase the stumpage whenever they saw fit.

Mr. T. M. Burns thought that some allowance should be made to the lumbermen of Bathurst on account of the difficulties in shipping at that point. He did not favor a general increase of stumpage.

Mr. Sumner was of opinion that the government could not afford to discriminate in the matter of stumpage in favor of any locality.

The section of the surveyor general's address relating to the appointment of scalers and fire wardens was briefly discussed. Mr. Sumner thought the government should take the forest fire question in hand very strongly. It should be made an indictable offence for settler or sportsman to set bush fires. Fires set with the object of clearing land should be only under the supervision of the warden for that district.

Mr. Mooney did not think the proposal in regard to scalers and fire wardens went far enough. He advocated the adoption of a system like that in vogue in Norway, where men were employed in summer to go through the woods and mark all the trees that were fit to cut. With some such plan here he thought it would not be necessary to increase the stumpage.

Mr. Shives was glad to see the pulp industry



MR. R. A. LAWLOR,
Secretary New Brunswick Lumbermen's and Limit Holders' Association.

represented at the meeting. He was under the impression that the pulp men could find sufficient material in New Brunswick without cutting down a tree. He thought an arrangement could be made whereby they could use the slabs for pulp.

Mr. Mooney said he had tried that plan with the St. John mill men and it had not been a success.

The conference was looked upon as being of much benefit to both the Government and the lumbermen. It is understood that a memorial on the subject of stumpage dues is being prepared by the Association for presentation to the Government at an early date. It is also learned that the Government have decided to increase the dues, but the amount of the increase is still under consideration.

NEW BRUNSWICK TIMBER LICENSES.

St. JOHN, N. B., August 24, 1903.

Editor CANADA LUMBERMAN:

DEAR SIR,—Referring to the recent conference of New Brunswick lumbermen with the Government, it may be of interest to your readers to learn some facts regarding stumpage and perpetual leases.

In the first place the stumpage charged is one dollar per thousand superficial feet, which

cut heavily until the end of the term and then resold to the highest bidder.

Yours truly,
A NEW BRUNSWICK LUMBERMAN.

PULP WOOD OPERATIONS.

The Lake Superior Timber Company, of Port Arthur, Ont., are conducting extensive operations in pulp wood on their property situated along Nepigon straits and adjacent

shipped by the company this year, aside from piles or cordwood taken to Port Arthur and Fort William.

The past season has been very dry, but only trifling obstacles were encountered. Considerable summer cutting was done along the shores. This is the last season, we are informed, that the company will attempt summer cutting, and next season with four camps, containing about 400 men, it is expected to get out and ship at least 20,000 cords of pulp wood and 25,000 tamarac and spruce piles. Mr. Edwin F. Bishop is manager of the company.

COMPARATIVE STATEMENT OF NEW BRUNSWICK, QUEBEC AND ONTARIO (SURBNER) SCALES AND STUMPAGES PAID IN RESPECTIVE PROVINCES.

(Submitted by the N. B. lumbermen at the conference with the Surveyor General)

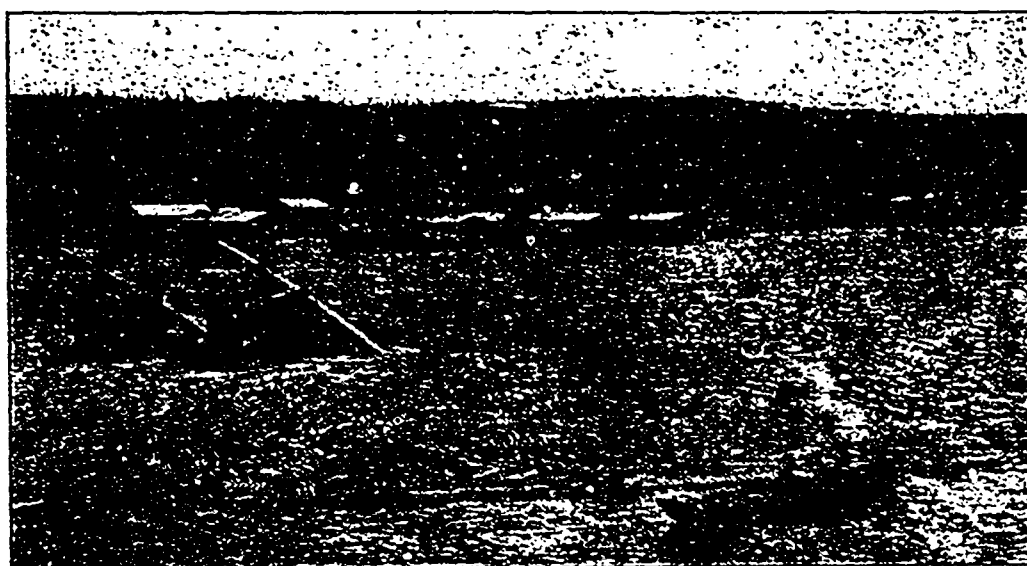
16 Feet Log.	SUPERFICIAL FT. PER LOG.			PIECES PER 1000 S. FEET.			STUMPAGES PER LOG.		
	New Brunswick.	Quebec.	Ontario.	New Brunswick.	Quebec.	Ontario.	New Brunswick, \$1. per M.	Quebec, 65c. per M.	Ontario, \$1.30 per M.
8 inches	40	32	16	25.	21.25	62.5	.04c	.02c	.02c
9 inches	48	45	25	20.85	22.22	40.	.048c	.029c	.032c
10 inches	64	59	36	15.62	17.	27.77	.067c	.038c	.046c
11 inches	86	67	49	12.5	14.95	20.3	.08c	.043c	.063c
12 inches	96	80	64	10.41	12.5	15.62	.096c	.052c	.083c
13 inches	112	100	81	8.93	10.	12.34	.112c	.065c	.105c
14 inches	130	120	100	7.69	8.33	10.	.13c	.078c	.113c

100 Logs 16 Feet.	CONTENTS 100 LOGS.			STUMPAGES 100 LOGS.		
	New Brunswick Scale.	Quebec Scale.	Ontario Scale.	New Brunswick \$1. per M.	Quebec, 65c. per M.	Ontario, \$1.30 per M.
8 inches	4000 s ft.	3200 s ft.	1600 s ft.	\$4.00	\$2.08	\$2.68
9 inches	4800 s ft.	4500 s ft.	2500 s ft.	\$4.80	\$2.92	\$3.25
10 inches	6400 s ft.	5900 s ft.	3600 s ft.	\$6.40	\$3.83	\$4.68
11 inches	8600 s ft.	6700 s ft.	4900 s ft.	\$8.60	\$4.35	\$5.37
12 inches	9600 s ft.	8000 s ft.	6400 s ft.	\$9.60	\$5.20	\$6.32
13 inches	11200 s ft.	10000 s ft.	8100 s ft.	\$11.20	\$6.50	\$8.53
14 inches	13000 s ft.	12000 s ft.	10000 s ft.	\$13.00	\$7.80	\$10.10

the Government wish to increase to one dollar and fifty cents per thousand superficial feet. The lumbermen of New Brunswick claim that under the present scale they are actually paying more stumpage per thousand superficial feet to the Government than either Quebec or Ontario, as you will plainly see by the accompanying comparative statement.

In regard to the advantages of perpetual leases to the licensee, you are no doubt aware that the timber limits now held by lumbermen of this province were bought at a general sale at Fredericton, N.B., in 1893, and in some cases a number of miles have been purchased since for a term of twenty-five years, all of which expire at the end of the twenty-five years' term beginning at 1893. Now, if the holders of these limits are forced to give them up at the end of the above term, which has but fourteen years more to run, would it not be reasonable to believe that they will cut all the timber they possibly can, in many cases regardless of size, and they will not be so particular in protecting same from fire, etc., as they would if they had perpetual leases. I would further state that if they held the said limits under perpetual leases they would see that only the large trees would be cut, and that the forests in general would receive such protection that they would become of more value to the Government for the annual revenue derived therefrom than if allowed to be

islands. Their lands are held in fee simple and therefore the wood can be exported to the United States. The illustration herewith shows camp No. 1, with two loaders in the centre of the storage boom. The wood shown



CAMP NO. 1 OF THE LAKE SUPERIOR TIMBER COMPANY, SHOWING TWO LOADERS.

is all in the main boom, and is a fair sample of the size and quality of the spruce they are cutting. They have about 8,000 cords held up on the creeks by lack of rainfall, which is expected out this month. This will make a total of 20,000 cords, or approximately 70 cargoes,

tributor to scientific literature. In 1884 he obtained the Telford medal from the Institute of Civil Engineers for a paper on "The Antiseptic Treatment of Timber." He is 73 years of age and Deputy Lieutenant of the county of Hertfordshire.

A number of other prominent delegates at the Congress were connected with the timber trade.

J. R. H.

CHAMBERS OF COMMERCE CONGRESS.

[By our Special Representative]

The sessions of the British Board of Trade and Chambers of Commerce held in Montreal were of especial interest to the lumber trade.

A large number of the Imperial delegates were directly interested in Canada's timber resources, representing the largest corporations in Great Britain.

Both Lord Brassey, the President of the Congress, and Lord Strathcona, were present throughout the proceedings.

Amongst those noticed in attendance was Mr. Shen Paget, a delegate from the Keighley Chamber, and a member of the firm of Smith & Paget's Crown Works, Keighley, machinery manufacturers. This firm has been established over fifty years and largely consumes Canadian maple, pine, spruce and birch timber. Mr. Paget is not only an ex-Mayor but an alderman and a justice of the peace.

Mr. J. C. Batley, who attended the Congress as a representative of the Heckmondike Chamber of Commerce, was up to recently a joiner and timber merchant.

Mr. S. B. Boulton, J. P., F. R. G. S., etc., of Totteridge, Herts, was the delegate representing the Timber Trade Federation of the United Kingdom. Mr. Boulton is of the firm of Burt, Boulton & Haywood, Ltd., of London, Paris and Riga, with the management of which business he has been actively connected for fifty years. The firm is engaged in the importation and sale of timber. He was vice-president of the London Chamber of Commerce for five years, and President of the West Ham Board for many years. His son, Mr. Harold E. Boulton, represented the latter board at the Congress.

Mr. Boulton was the founder of the Timber Trades Federation of the United Kingdom as well as the Federated Merchants' Freighters' Association (also connected with the timber trade), of both of which he was the first president. He advocates arbitration in labour difficulties and the closest practicable union between the colonies and the Mother Country.

Mr. Boulton is a well-known author, and a great con-

THE BURSTING OF EMERY WHEELS.*

Several years ago the writer was consulted regarding some points of a case in litigation occasioned by the bursting of an emery wheel and the resulting death of a workman. The question to be decided was whether the wheel was unsafe at the speed recommended by the makers, or whether the accident was due to the carelessness of the operator.

As it was just then an "off" year for experiments on fly-wheels there seemed to be no good reason why the same medicine could not be tried on emery wheels. The apparatus already described in former papers read before this Society, with some slight alterations, was adapted to the new requirements, and in the spring of 1902, fifteen wheels of various makes were tested to destruction.

TABLE

No of Test.	Grade Mark.	No of Hurry.	WORKING SPEED.		BURSTING SPEED.		Factor of Safety.
			Revs. per Minute.	Feet per Minute.	Revs. per Minute.	Feet per Minute.	
1	4-5	20	1,200	5,030	3,100	13,000	6.67
2	4-5	20	1,200	5,030	3,200	13,400	7.14
3	4-5	20	1,200	5,030	3,350	14,030	7.53
4	Q	10	1,250	5,236	3,750	15,700	4.00
5	Q	10	1,250	5,236	3,750	11,500	4.84
6	II	10	1,400	5,570	4,550	19,950	10.46
7	II	10	1,400	5,570	4,700	19,200	10.76
8	O	10	1,750	6,710	4.1	17,100	10.74
9	O	10	1,750	6,710	4.1	17,350	10.74
10	2-5	60	1,150	4,810	2,700	11,400	5.71
11	2-5	60	1,150	4,810	2,700	12,100	6.31
12	M-11	14	1,300	5,010	3,100	12,970	6.66
13	II	21	1,300	5,010	3,300	15,700	10.00
14	II	10-12	1,200	5,010	4,100	17,200	11.70
15	II	1-12	1,200	5,030	4,300	15,300	13.10

Tests 6 and 7; wheels made with wire netting. Tests 14 and 15, with vulcanized rubber.

The object of the experiment being to determine the bursting speed of such wheels as are actually on the market, emery wheels were obtained through various outside parties without indicating to the agents or manufacturers the use to be made of them.

In this way wheels of six different makes were obtained, the label on each wheel showing usually the maker's name, the grade number or letter, the quality of emery, and the speed recommended for use. As shown in the table of results, the working speed varied in the different wheels from 1,150 to 1,400 revolutions per minute, the average being about 1,200 revolutions per minute. For a diameter of sixteen inches this corresponds to a peripheral velocity of about 5,000 feet per minute. The table also shows that the fineness of the emery varied from ten to sixty, the average being about thirty.

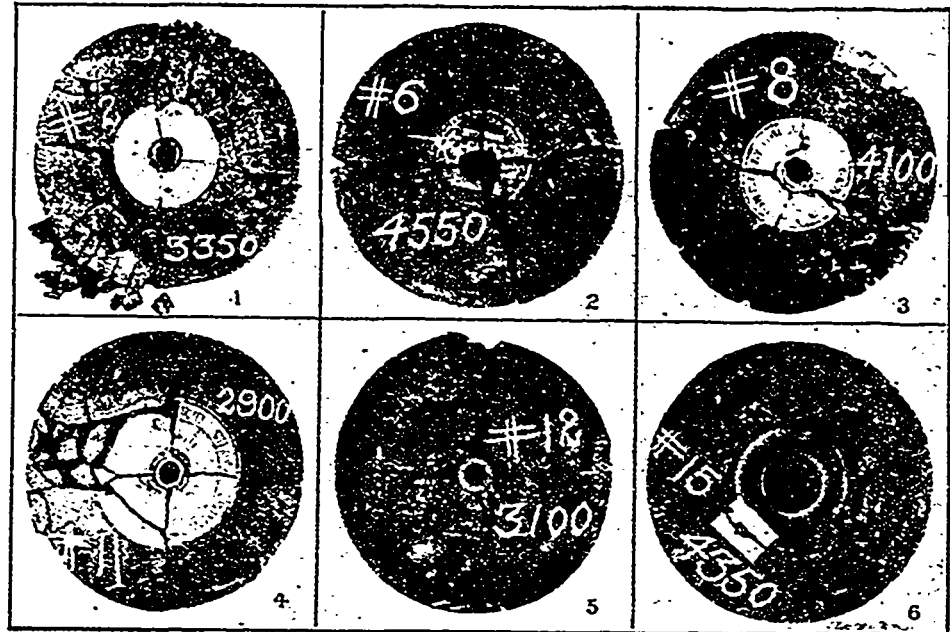
The wheels were held between two collars, each six and one-eighth inches in diameter and concaved, so as to bear only on a ring three-

apparent factor of safety of between five and six. (Fig. 4.)

Nos. 12 and 13, of still another make, burst at about the average speed. (Fig. 5.) Wheels Nos. 14 and 15 were so-called vulcanized wheels, containing rubber in the bond, and intended for particularly severe service. These showed, as was expected, rather more than the average strength. (Fig. 6.)

An examination of the last two columns in the table shows that the wheels burst at speeds varying from two and one-quarter to three and three-quarters the working speed, and accordingly had factors of safety varying from five to thirteen.

It is then apparent that any of these wheels were safe at the speed recommended, and would not have burst under ordinary conditions. At the same time, considering the violent nature of the service and the shocks to which they are exposed, it would seem that the factor of safety for emery wheels should be large. In comparison with those generally



RESULTS OF EXPERIMENTS ON EMERY WHEELS.

For the actual details of the work credit is due to Messrs. Chandler and Krueger of the class of 1900, Case School of Applied Science. Most manufacturers of this class of wheels test them for their own information, but the results are not generally given to the public; the writer knows of no published data on this subject. At the Norton Emery Wheel Works, all wheels are tested before leaving the shop at a speed double that allowed in regular service, and occasionally wheels are burst to determine the actual factor of safety.

Emery-wheel accidents are not uncommon, but can usually be traced to the carelessness of the operator. One common cause of failure is allowing a small piece of work to slip or roll between the wheel and the rest. The writer was once present on an occasion of this kind, and although he fortunately was not in the plane of rotation, he has never forgotten his sensations.

The wheels selected for the experiments were all of the same size, being sixteen inches in diameter by one inch thick, and having a hole one and one-quarter inches in diameter.

*Paper read before Saratoga Convention of A. S. M. E., by Prof. C. H. Benjamin.

fourths of an inch wide at the outer circumference.

The method of testing, and the apparatus used, were precisely similar to those described in the paper on "The Bursting of Small Cast-iron Flywheels," by the author at a previous meeting, to which reference is made for illustrations of the apparatus.

The table shows the results of the experiments in detail, and needs but little explanation. The illustrations, Figs. 1 to 6, show characteristic fractures, and the appearance of various wheels after bursting.

Wheels numbered 1, 2, and 3 were of one make, and show a remarkable uniformity in strength. (Fig. 1.)

Nos. 4, 5, 8, and 9 were all made by one firm; the two latter wheels were of finer grain than the others, and show a correspondingly greater strength. (Fig. 3.)

Nos. 6 and 7 contained a layer of brass wire netting imbedded in the emery, and were about one-third stronger than the average of the ordinary wheels. (Fig. 2.)

The wheels numbered 10 and 11 were the weakest among those tested, but have an

used in machines, a factor of eight or ten would seem small enough.

It may also be said that such a variation in strength between wheels of the same make and grade, as for instance that between Nos. 4 and 5, indicates a lack of uniformity which causes distrust.

The fractures were in the main radial, as may be seen from the cuts, the wheel splitting in three, four or five sectors as might chance.

It may be assumed that these radial cracks started from the rim where the velocity and stress were greatest, but it is a fact worthy of notice that in nearly every instance the cracks radiated from points where the lead bushing projected into the body of the wheel.

Burglars recently made a successful raid upon the office of the Keewatin Lumber Company at Portage la Prairie, Man., breaking open the safe and securing \$56 in cash.

Probably the largest stick of oak timber ever cut in the North American continent was manufactured by Messrs. Fowler & Kelsey, of Wallaceburg, Ont., the present season. It is white oak, fifty-one feet eleven inches in length and squaring forty-one by forty inches, making nearly six hundred cubic feet.



WHO'S WHO IN THE HOO-HOO?

Another grand concatenation of the Lumbermen's Hoo-Hoo order was held in Toronto on July 7th. The biographical degree of the Great Black Cat was given precisely at nine minutes past nine in the ninth storey of the Temple Building. Nine expert cats assisted by nine playful kittens escorted the chosen few through the mysteries of the onion bed.

Lumbermen mistake if they imagine this order is simply one of fun. It is a very serious order and one destined to be a great factor in the lumbering interests because of its secrecy and fraternal power in business.

The concatenation was a grand success. The frenzied wailing of the purblind kittens and the frantic waving of the tail of the Great Sacred Black Cat caused more emotional feeling than the Queen City ever saw or heard of. The high fences of the gardens were worse than the lung-tester even when the full moon shone brightly.

The most High "muck-a-mucks," in the shape of trained Buffalo black cats, were again on hand. Vice-gerent Snark Hubbard made the arrangements and they were complete.

The officers who conferred the degrees were as follows:—

- Snark - - - Harlan P. Hubbard
- Senior Hoo-Hoo - A. R. Riches
- Junior Hoo-Hoo - H. "Slabslaster" Munro
- Bojum - - - Wm. J. Hetherington
- Scrivenoter - - - W. C. Laidlaw
- Jabberwock - - Orson E. Yeager
- Custocation - - J. "Rip-saw" Feist
- Arcanoper - - - Geo. W. Nickels
- Gurdon - - - Richard "Pad" Locke

Those invited were:—

- Wm. Jno. Shortreed
- Samuel R. Higgins
- Gil. S. Lay
- C. Max Beck, Jr.
- J. Reg. Hooper
- Colin C. Wallace

After the beautiful instruments made sweet music "the cats came back" and enjoyed the following luxurious repast given in the supper room:—

M E N U
B T T O T G S B C

oup
Oriental Fleas

O. that a man might know the end of this day's business ere it come.—Julius Caesar I'

Dry Cornmeal
(ad. lib.)

Fish
Cat o' nine tail

Confess yourself to heaven: Repent what's past, avoid what is to come.—Hamlet III, 4.

Beef
(cross cut)

Rolls (From the Gang Edger)
Ham (bored)
Pommes de Terre (a l'Arsuppus)
(grooved) Tongue

Salad
"Picked in the Gardens East and West."

Dessert

"Lungtester" Dressing

Cigars (From the Onion Bed)
Coffee (saw-dust)
Liquid Joy (As you like it)

Addresses were given by Messrs. O. E. Yeager, J. Feist, W. C. Laidlaw, H. P. Hubbard,

J. R. Hooper, W. J. MacBeth and others. The following telegram was read from J. M. Diver, of the Cleveland-Sarnia Saw Mills Co., Sarnia Ont.: "Regret my inability to be present. Hold Lay up close and let him get all the fragrance of the Onion Bed. See that Higgins is elevated in proper shape. Make him bow his head to the instrument of torture."

Also the following from Jas. Playfair, Midland: "Yours of 5th received, but as there is one "Kitten" in the family now, think I had better stay out, for, as it is at present, have all I can look after and if two kittens in the family would have to close up. Wishing the new members all success." Regrets were received from other candidates unable to be present.

It was the expression of the members present that Toronto should have another Concatenation before September 9th, and the date of August 28th was suggested, so as to insure a good attendance of Canadian members at the Yearly Meeting at Buffalo, Sept. 9th.

"God Save the King" was sung standing, and "On the Roof" closed with "Auld Lang Syne."

HOO-HOO ANNUAL AT BUFFALO.

There will be something doing in the Concatenated Order of Hoo-Hoo on the ninth day of September, when the twelfth concatenation will open in Buffalo.

That nine times as much pleasure and profit shall result from the coming concatenation as former conventions of the order have afforded, elaborate preparations have been made by the local committee having in charge the arrangements. July 28 the general committee met in the Builders' Exchange, and though the programme of entertainment is not yet complete, it is far enough along to justify the prediction that this Buffalo Concatenation will eclipse anything held in former years.

The following is a list of the committees that will have the affair in charge:

Ways and Means—John Feist, chairman; Curt M. Treat, C. H. Stanton, A. J. Chestnut, I. N. Stewart, O. E. Yeager, Walter Betts, D. H. Harper, A. J. Elias.

Entertainment—J. B. Wall, chairman; C. H. Stanton, M. S. Tremaine, F. W. Vetter, F. B. Emery, Curt M. Treat, E. B. Holmes, Frank Reilly, Fred Blumenstein.

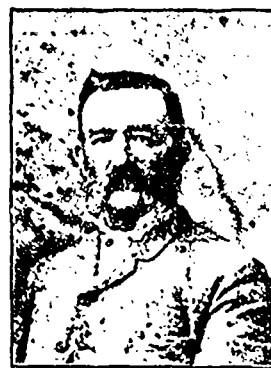
Ladies—Angus McLean, chairman; John W. Henrich, Henry M. Feist.

Reception—J. J. Mossman, chairman; M. M. Wall, Henry E. Boller, A. J. Miller, Arthur Kreinheder, Fred Sullivan, J. M. Briggs, C. R. Shuttleworth, C. H. Seymour.

—It is reported that Richard Keay & Company, who have purchased the Hanbury timber limit in Duck Mountains, Manitoba, will build a saw mill with a daily capacity of 30,000 feet.

—McFadden & Malloy, lumbermen, who are operating back of Garden River, found difficulty in securing men to work in the woods. Accordingly they went to the jail at Sault Ste. Marie, Ont., and secured the liberty of six prisoners by paying the fines that had been imposed upon them as an alternative when being sent to jail. The fines were paid, of course, upon the condition that the men would go to work in the camps.

THE LATE MR. P. C. CAMPBELL.



THE LATE MR. CAMPBELL.

A faithful officer of the Crown and a prominent and esteemed citizen of Sault Ste. Marie, Ont., has passed to the great majority, in the person of Mr. P. C. Campbell, Crown Timber Agent for Algoma district. Mr. Campbell, accom-

panied by his wife, came to Toronto on August 8th, and the following night was stricken with paralysis. He was removed from the Rossin House to the general hospital where he received every care which kind friends and medical aid could provide. He never regained consciousness, however, and passed away on the 14th ultimo.

Mr. Campbell was born in Aldborough, county of Elgin, on December 2nd, 1833, his parents being among the pioneer settlers of that township, having emigrated from Argyleshire in 1818. He, with the rest of the family, experienced and went through all the vicissitudes and hardships incidental to a pioneer life at that time, when the only roads were blazed paths and there were no mills, no churches, no schools. His education was such as could be obtained at home, with occasionally a few weeks at a school which his father and two neighbors maintained at their own expense. Higher education was out of the question, as it could not be obtained nearer than Little York, and neither the time nor the money could be spared for that purpose. Though largely self-educated, he filled many positions of trust and importance in the community in which he lived.

From 1853 to 1860 Mr. Campbell's time was divided between farming and lumbering. From 1860 to 1868 he was engaged in lumbering in conjunction with Mr. George Campbell, of Windsor. From 1868 to 1872 inclusive he was employed as overseer of colonization road building in Muskoka and Parry Sound, being for the last three years acting inspector, and during the winters of these years engaged in wood ranging. Resigning his employment under the Crown Lands Department in 1872, he again engaged in lumbering, meeting with heavy disaster in 1873, in common with all engaged in the lumbering business that year. In 1876 he opened a conveyancing, loan and insurance office in Wardsville, in the county of Middlesex, combining with it next year the purchase and shipping of all kinds of produce, and from 1878 to 1881 he also managed a private bank in the same village for Fawcett & Livingstone, of Mitchell, Ont. Towards the close of the latter year he went to Winnipeg, along with many others, and was one of the victims of the collapse of the boom of 1881 and 1882.

Mr. Campbell was always a pronounced Liberal, and took an active part in political life. He was elected Reeve of his native township in 1867 by a large majority. He was at the front with the volunteers as ensign of the Wardsville Infantry Company in 1865-6, being stationed at Sarnia during the Fenian Raid. In 1883 he was offered the position of Crown Timber Agent for the district of Algoma, which he accepted and occupied up to the time of his death. He was an enthusiastic Highland Scotsman and an ardent Freemason.

THE Canada Lumberman

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ADVERTISING RATES ON APPLICATION.

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

Special pains are taken to secure for publication in the WEEKLY LUMBERMAN the latest and most trustworthy market quotations throughout the world, so as to afford to the trade at home and abroad information on which it can rely in its operations. Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

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

ASSESSMENT OF LUMBER.

By some persons the basis upon which lumber may be assessed does not seem to be clearly understood. There is prevalent a idea that it is an injustice to assess all the lumber on land at the time the valuation is taken, inasmuch as the quantity may include almost the entire season's cut, the bulk or all of which may be shipped out within a comparatively short time.

It is doubtless within the rights of the assessor to tax all lumber in stock. Even if the lumber should be sold at time of assessment it is still assessable, for there must have been received for it the equivalent in cash or other asset which would be equally liable to assessment under the heading of personal property. If, however, there is any indebtedness against the lumber the amount of that indebtedness must be deducted from the valuation thereof.

Assessments are made upon personal property, representing the assets less liabilities. If, for instance, the assets of a particular company were twenty thousand dollars, and the liabilities fifteen thousand dollars, the amount upon which taxes would have to be paid would be only five thousand dollars. This regardless of the quantity of lumber on land.

According to the Assessment Act "Personal property shall include all goods, chattels, interest on mortgages, dividends on shares or stocks of banks and other incorporated companies, money, notes, accounts and debts at their actual value, income, and all other property except land and real estate." The person to be assessed is requested and can be compelled to furnish a statement of assets. If when received it is not satisfactory, an appeal

is taken to the Court of Revision, where both sides are given an opportunity of verifying their claims. On several occasions lumbermen have succeeded, through the Court of Revision, in obtaining a reduction of their lumber assessment, especially where it has been shown that the amount carried at time of fixing the valuation was exceptionally large. More can be accomplished in this direction by diplomacy than by antagonizing the Assessment Department, particularly in view of the admitted right to assess all lumber on hand.

BAD DEBTS IN THE LUMBER TRADE.

It would be interesting to learn what percentage of earnings is set aside by the lumber trade each year as representing uncollectable debts. Though of late there have been few business failures, it is safe to say that the losses still approximate a considerable sum, as legitimate failures are not the most destructive agencies to be contended with. The suggestion, recently made to the publishers of this journal, that a "Black List" of lumber buyers be compiled, is significant.

There are a large number of responsible lumber dealers in Canada—men who have earned the confidence of the trade, and even though their resources in some cases may not be large, the manufacturer assumes little risk of loss in selling his lumber to them. Unfortunately, there are always to be found a few persons presuming to call themselves lumber buyers who possess neither money nor honesty, but who seek to profit by sharp practice. The character of the lumber business renders it susceptible to the unscrupulous acts of these so-called dealers, and during the past few years they have not decreased in number. It seems that no sooner has one of these polished individuals been brought to account and his plans thwarted than another appeared to take his place. Hence it is difficult to rid the trade of their existence. It is against this class of buyers that the lumber manufacturer would welcome some protection. Honest, energetic business men will sometimes become financially involved, but the person who is willing and anxious to meet his obligations is a source of small loss as compared to the trickster whose main object is to deceive.

The large manufacturer suffers very little through bad debts. His trade is concentrated and he is dealing usually with large firms whose standing is at all times readily obtainable. The manufacturer who ships in carload and broken lots is more liable to accept accounts of questionable character. He frequently has not the facilities for investigating promptly the financial responsibility of the prospective customer, and is also more disposed to overlook this necessary duty.

How to minimize the loss attributable to bad debts is a question that cannot readily be answered. Probably the formation of an association of the lumbermen of Canada would do much in that direction. Many mill men might also exercise greater discrimination in accepting orders from buyers. There are so many well known dealers in the country that there is little excuse for selling lumber to a person who cannot promptly give assurances

of his responsibility. Mill men should not hesitate to request the buyer of whose standing he knows nothing to satisfy him that settlement for the material will be made in due course.

EDITORIAL NOTES.

Apropos of our remarks in last issue, congratulations are due to the newly-formed Government of British Columbia upon the stand taken on the timber question. The refusal to abrogate the law prohibiting the export of timber in the log will surely be found in the long run to have been in the best interests of the country. The province of Ontario stands as a notable example of the advantage of home manufacture.

It is gratifying to learn that more determined steps are being taken to punish persons guilty of stealing logs, a crime which is altogether too prevalent. It is strange that persons whose characters are above reproach in other respects, will confiscate timber as if it were of no value. On the other hand, the fact that the owner's marks are often defaced indicates a recognition of the gravity of the act. It is hoped that the punishment for the offence will be more severe in future.

The result of the sale of timber limits to be held by the Ontario Government in December next will be of more than usual significance. It will be the largest sale since 1885 and the fourth largest since Confederation. In the neighborhood of 900 square miles will be offered. The prices which buyers are willing to pay for these limits will in some degree reflect public opinion as to the value of pine timber as an investment as well as for lumber-producing purposes. During the past few years of prosperity in the lumber trade, many lumbermen have increased their holdings of timber limits. Will they continue to add to their holdings is the question which will be determined in part by the sale of December 9th. The licensees are to be allowed only ten years in which to cut the timber on some of the berths, while the ground rent has been increased to \$5 per square mile and stumpage dues to \$2 per thousand feet board measure. These increases mean additional revenue for the Government, at the expense of the lumbermen.

The buying power of Canadian lumbermen is steadily on the increase. The sawmilling and woodworking establishments have doubled in number within a comparatively few years. Statistics of the aggregate value of machinery and lumbering appliances purchased each year are not obtainable, but if they were the showing would doubtless create surprise by reason of its magnitude. Settlements which a few years ago were almost unknown can now boast of thriving manufacturing industries, the existence of which is due in a large measure to the growth and development of the lumber industry. A considerable quantity of imported machinery is also purchased each year, and our advertising pages bear witness to the extent to which the manufacturers across the border

are looking to Canada for trade. Several firms have established Canadian branches, and keep one or more representatives on the road here. Such manufacturers have usually met with success. In order to obtain business it is first necessary to gain the confidence of the prospective buyer, and the creation of a branch factory or show-room within the territory to be exploited is a long step in that direction. Backed by up-to-date goods, success is then assured.

BY-LAWS OF THE WESTERN RETAIL LUMBERMEN'S ASSOCIATION.

Below will be found the full text of the by-laws of the Western Retail Lumbermen's Association as approved at the last meeting in Winnipeg. These by-laws form the basis of the action that has been taken against the Association on the ground of trade restriction:

QUORUM.

1. Four members shall be a quorum of the Board of Directors, and three of the Executive Committee.

MEETINGS.

2. The Secretary-Treasurer may at any time call a meeting of the Board of Directors or of the Executive Committee, and fix the place of such meeting. Notice of the meeting of the Board of Directors or Executive Committee must be mailed to each person entitled to attend the same at least one week prior to the date fixed for holding the same.

HONORARY MEMBERS.

3. Honorary members shall not be eligible for office, but shall have the right of speaking and voting at all meetings of the Association.

SPECIAL MEETINGS.

4. The President may at any time call a special meeting of the Association, notice of which shall be mailed to each member ten days prior to the date fixed for holding the same.

LIST OF MEMBERS.

5. The Secretary-Treasurer shall, every three months, in case changes have taken place, send to each member a list of the members of the Association in good standing, both active and honorary.

PRICE LISTS.

6. Whereas it is deemed expedient and proper that all members of this Association make a price list for the point for which membership has been granted and that all lumber and timber usually sold in a retail lumber yard be charged for at not more than twenty per cent. over wholesale cost.

WHERE LUMBER MAY BE SOLD.

7. An active member may ship in carload lots or less quantity, lumber, timber or other material, to points other than that for which such dealer has membership providing the sale is made at the price governing at the point where shipment may be sent to, except that lumber, timber or other material usually sold in retail yards may not be sent on consignment for sale by him, or stored for sale at any other point than that for which membership has been obtained.

CONTRACTING NOT ALLOWED.

8. Whereas it is considered advisable to avoid any undue advantage as between active dealers, no member of this Association may be a contractor for doing work, or become security for the due completion of work contracted for, except as provided in the next section, and that specified detailed prices be given to all consumers or contractors asking for tenders.

THE EXCEPTION.

9. The Executive Committee or Board of Directors, at such points where there is only one active member established, may allow such member to enter into contracts, provided that no interference with the business relations of other members is likely to arise therefrom.

WHEN HONORARY MEMBERS MAY SELL.

10. Honorary members may sell lumber, timber or

other material for building elevators, flouring mills, mining companies for their own use, the several governments of the Provinces and the Dominion in any work they may control, and to railway companies for their own use, on any terms or conditions they desire.

SELLING WHERE MILLS ARE SITUATED.

11. Honorary members operating mills in a city, town or village, may sell to contractors or consumers at the locality where the mill is situated, at the retail prices fixed for such locality.

INVESTIGATION OF COMPLAINTS.

12. All complaints as to violation of the Constitution and By-Laws of this Association, by active or honorary members, may be reported to the Secretary-Treasurer, who shall investigate the same and report to the Executive Committee or Board of Directors.

HOW COMPLAINTS MADE.

13. All complaints as to violation of the Constitution or By-Laws shall be made in writing, by an active or honorary member, to the Secretary-Treasurer, accompanied by a deposit of \$5, which shall belong to the general funds of the Association if the complaint is not substantiated. If such complaint is sustained, then said sum of \$5 shall be returned to the complainant.

INVESTIGATION AND EXPULSION.

14. In case any member refuses to observe the decision of the Secretary-Treasurer upon investigation of complaints or violations of the By-Laws within two weeks after being served with a written intimation thereof, the matter shall be brought by the Secretary-Treasurer before the Executive Committee or Board of Directors who shall investigate the complaint and may reaffirm or vary or set aside the decision of the Secretary-Treasurer. In case the decision of the Secretary-Treasurer is affirmed, the offending member may be expelled forthwith. In case the decision of the Secretary-Treasurer being varied and the offending member neglects or declines to comply with the rulings made by the Executive Committee or Board of Directors within two weeks thereafter upon written notice by registered mail of the same, then such offending member may be expelled from the membership of this Association.

POWERS OF SUSPENSION.

15. The Board of Directors or the Executive Committee may suspend or expel any member, active or honorary, for violation of the Constitution or By-Laws.

SUSPENSION BY SECRETARY-TREASURER.

16. The Secretary-Treasurer may suspend a member pending the decision of the Executive Committee or Board of Directors.

MAJORITY VOTE REQUIRED.

17. At all meetings of the Association the majority of the members present shall be necessary to a decision.

CESSATION OF MEMBERSHIP.

18. Whenever any active member of the Association shall cease to comply with Article 3, Sec. 1, of the Constitution, the Executive Committee or Board of Directors may, by resolution, declare him to be no longer a member of the Association, and his membership shall thereupon cease.

WITHDRAWAL.

19. Memberships shall not be transferable, but any member may withdraw from the Association.

APPLICATIONS FOR MEMBERSHIP.

20. Applications for membership shall be made to and decided by the Secretary and upon a form furnished by him. Applicants must also send the fees with the application.

FEEES.

21. Membership fees for active members shall be \$25 for the first year or portion of a year, and \$7.50 per annum thereafter for each yard carried on by a member. Fees for honorary members shall be \$10 for the first year or fraction of a year, and \$7.50 per annum thereafter. The first fee shall be payable with the application, and the annual fees thereafter on the 15th day of January in advance. No member shall be entitled to vote at the annual or special meeting unless all fees are paid.

21 (a.) That any party opening a new yard shall be required to pay to this Association the prescribed fees and dues, but that in cases where one member in full standing buys out a lumber yard from another member in good standing no membership fee be charged, and only the annual dues shall be payable for such yard so transferred. This clause shall apply only to members transferring their business from one point to another.

HOW FEES APPLIED.

22. The fees shall be paid into the general fund of the Association, and all expenses properly incurred shall be paid out of said fund.

REINSTATEMENT.

23. Any member who has been suspended or expelled may be reinstated upon such terms as the Executive Committee or Board of Directors may determine.

PURCHASES BY ACTIVE MEMBERS.

24. Active members shall make their purchases of lumber, timber and other material from honorary members only.

REPORTS TO SECRETARY.

25. Any member of this Association having knowledge of a sale by an honorary member or his agents to a non-member may notify the Secretary of this Association in writing, giving full information in reference thereto as practicable, such as date or dates of shipment and arrival, car number and initials, original point of shipment, names of consignor and consignee, the purpose for which the material was or is to be used, and such other particulars as may be obtainable.

Such notice, if filed at all, must be sent, with or without information in detail, within thirty days after receipt of shipment at point of destination, and no notice shall be filed of any such sale or shipment occurring within fifteen days after date of membership, said membership to date from the first notice of the membership succeeding the acceptance of his application.

Upon receipt of such written notice the Secretary shall immediately verify such report so far as practicable and under the direction of the Board of Directors shall notify the members of the Association of such sale or shipment by such honorary member.

NOTIFICATION OF SUSPENSION.

26. It shall be the duty of the Secretary-Treasurer to forthwith notify all interested members by mail of all suspensions, expulsions, reinstatements, and new applications accepted.

WHOLESALE COST.

27. The wholesale cost of lumber, timber or other material shall mean the wholesale cost delivered at the point in question, including freight and other charges.

28. All By-Laws heretofore in force are hereby repealed.

29. These By-Laws to come into force on and after passing them.

NATIONAL HARDWOOD LUMBER ASSOCIATION.

The Secretary of the National Hardwood Lumber Association, in a recent communication, says regarding the progress of the society: As you know, at the last annual meeting the Association was nearly \$4,500 in debt. Within three months we have reduced that indebtedness to \$1,800 and have at this time about \$1,200 cash on hand, so that we now only lack \$600 of being out of debt. The members have paid up cheerfully and promptly and we have added twenty-two new members to our list. The work of the Inspection Bureau is growing enormously and in every department the Association is making remarkable progress. Considering the objects and work of this Association, it should have many more members than it now has and we have reached a point where our work is a demonstrated success and where we can offer inducements to new members. This Association should have at least 1,000 members and it is the intention to make an earnest attempt to increase our membership. There has been such a demand for our "Year Book" that the Board of Managers have instructed me to issue a very large edition, sufficient to cover this country and Europe thoroughly. Under this advice it is my intention to issue an edition of 20,000 copies October 1st, and all the new members that we get in previous to that time will have their names published in this edition, which publication alone will be worth more than the cost of a year's dues.

IEWS AND INTERVIEWS

The forests of India are all Government property, and for the past 28 years the greatest care has been exercised to preserve what is considered a most valuable asset. Reforesting is carried on most extensively, and a very large staff is employed to look after these forests. Recently Mr. R. C. Milward of the Indian Imperial Forest Service was getting pointers on forestry, and had long interviews in Toronto with Mr. Southworth and others. Mr. Milward has been granted one year's leave of absence for inquiries into the protection of forestry, and has already visited Japan, the United States and part of Canada. He will visit Germany, Russia, Norway and Sweden before returning to report. Mr. Milward has his headquarters at Derhahdun, where the Indian School of Forestry is located. He has charge of a district about 260 miles square, and has 60 natives under him, but in the dry season, when danger from fires is greatest, he has 100 additional men. They are paid from \$2 to \$4 per month. They can live on a few cents weekly. The Government fixes the minimum price for all classes of timber, and then calls for tenders for, or sells by auction such trees as are marked for sale.

* * *

An experienced agriculturist writing to a Winnipeg paper urges that the Dominion government extend its forestry operations in Manitoba to take in a strip of light sandy soil, about ten miles wide and thirty long, along the Assiniboine river east of Brandon. He then continues to write of the changes he has noticed in Manitoba timber limits as follows: The last thirty years have changed our timbered limits very much in Manitoba. To the east of the Red river, by cutting wood, ties and timber and then allowing fires to burn up small trees that would in thirty-five years be another forest we have driven the forest line back for miles. Again the forest line on the south side of the Riding mountains has gradually receded from ten to twenty miles until a new line of railway is projected through a settled district,

whereas the Manitoba & Northwestern railway when constructed actually skirted the timber belt from Minnedosa to Newdale, Strathclair, Shoal Lake, Birtle on to Russell. It is well known that the fine timber belts along the shores of Pelican lake, Rock lake and the Pembina river have almost disappeared. The Turtle mountains, which at one time, thirty years ago, were covered with timber down to the edge of the prairie, present to-day a strange change to one who has not been that way for a quarter of a century. The forest line has receded from one to six miles and farm houses are dotted all along the edge of the mountain, in many places apparently half way up the mountain. These encroachments on our timber belts have given us land for cultivation, but we have a surplus of prairie land in Manitoba and the territories for cultivation and we are short of forests. Timber reserves are now set apart on the Turtle mountains, as well as on the Riding mountains, and there is to be no more homesteading done. This is right, but as so many acres have been cut down the more reason there is for trying to reclaim our open sandy plains above referred to.

THE SPRUCE SUPPLY.

Hon. E. E. Ring, of Bangor, State Commissioner of Forestry, does not consider that there is any danger of an early extinction of spruce and other pulp woods at the present rate of cutting, giving it as his opinion that there is enough spruce timber in North America to last forever if properly cared for and intelligently cut. He says:

Right here in Maine there are thousands of square miles of virgin spruce forests and if they are properly cared for, and destructive fires kept out, the supply is practically inexhaustible. When I was a very young man people used to stand around, just as they do to-day, and tell, with wise shakes of the head, that the spruce would be all gone in ten or twenty years. To-day we are cutting more spruce in Maine than ever before and there is a great plenty left. But, not stopping there, visit the sorting gaps along the Penobscot and the Kennebec rivers and you will find that the logs are just as big

as they were a dozen years ago. The standard remains the same.

To be sure, a large amount of small spruce is cut in these times, but it is cut for the pulp mills, which can use smaller timber than the saw mills require. Conditions have changed in the harvesting of the log crop. No longer are the land owners willing to have trees cut so as to leave a stump anywhere from four to six feet high. They insist that all trees shall be cut close to the ground. This results in a closer cutting of lots than formerly. Again, the tops of the trees are not left in the woods, as was the case before the day of the pulp mill, but are trimmed and driven down to the pulp mills to be made into paper. How many stop to think what this means? Very few. But it means this: That the amount of timber scaled in the cutting of a certain number of trees to-day is much greater than it was twenty years ago, and we get a far greater yield of timber per acre than formerly.

People, or at least the majority, when they talk about the great increase in the amount of timber cut in Maine do not stop to think that the gain is due in no small way to the discontinuance of the wasteful practices of other days. Yet that is the truth of the matter. To-day the saw is taking the place of the ax and by its use a great saving is effected. Only a man who has owned timber lands and operated upon them can realize what it means to save a foot or two on each tree felled.

In discussing the spruce supply it should be kept in mind that this tree grows much more rapidly than any other timber except, possibly, the pine. Under ordinary conditions a spruce will grow in twenty-five years from a seedling to a good pulpwood size, and five years more will put it in the saw log class. This, with the proper care of the forest, means that, as I have already said, the spruce forests of Maine are practically inexhaustible.

But in order properly to care for these vast timber tracts, so as to preserve them for the future, it is necessary that the State and all interested shall keep a watchful eye upon them. This means that an efficient corps of fire wardens must be maintained for the protection of these lands. These men must be trained in the work of preventing and extinguishing fires; they must be constantly on the watch for the first incipient blaze, in order that it shall be stamped out before making any headway. The land owners must do their part, too. They must see to it that the timber is properly cut and not wasted. They will do this—it is for their interest to do so.

Advertisement for Pennsylvania Lumbermen's Mutual Fire Insurance Co. featuring a check for \$27,000.00 payable to Gillies Bros Ltd. The check is dated Philadelphia, Pa. February 27th 1903. The check number is 188. The company is located in Philadelphia, Pa. The advertisement includes the company name, address, and a signature of the First Vice President.

THIS IS THE WAY WE SAVE MONEY FOR LUMBERMEN. THERE ARE OTHERS—WRITE US

BUYERS OF
Young Hyson, Japan and Ceylon Teas
 SHOULD WRITE US.

WE HAVE EXTRA VALUES—

BEANS, RAISINS, CURRANTS, EMPIRE SYRUP, ETC.,
 IN FULL SUPPLY.

LUCAS, STEELE & BRISTOL, - HAMILTON, ONT.

FIRST AMERICAN BAND MILL IN CHINA.

W. E. Whitney, mechanical expert, of the J. A. Fay & Egan Company, the well-known woodworking machinery manufacturers of Cincinnati, Ohio, has just returned from a trip to China, where he has been for a year operating some of their machines for the Foo Chow Saw Mill Company, Foo Chow, China. One of these mills was the first which has ever run in China, and has met with great success. There are two band mills. Mr. Whitney reports that the Chinese are much more clever people than he expected them to be in the way of handling machinery. One of his most singular experiences while in China was that in attracting the attention of the men he employed it was necessary for him to use numbers, on account of the difficulty of pronouncing the Chinese names. He also states that in the city of Foo Chow there are only about 700 Europeans, the balance of the 350,000 population being entirely Chinese.

Up and Down.—“I saw a board to-day in which the grain ran both ways.”
 “Nonsense! That’s impossible.”
 “Not in this case. I refer to the Board of Trade.”

TRADE NOTES.

Incorporation has been granted to John Ballantyne & Company, Limited, Preston, Ont., to carry on the business of manufacturing wood and iron working machinery. The capital is \$80,000.

The business of the Winnipeg Machinery & Supply Company has been purchased by the A. R. Williams Machinery Company, of Toronto, by whom it will be conducted as a branch establishment. Mr. W. H. Young is in charge.

The A. H. Andrews Company, manufacturer of dry kilns, Chicago, have opened a branch office at 334 Lumber Exchange Building, Seattle, Wash., in charge of Mr. H. Johnson, who will look after their dry kiln sales on the Pacific Coast.

Mill managers and power transmission engineers should visit the exhibit of the Dodge Mfg. Company at the Toronto Exposition, where a representative line of power transmission equipment, which this company makes, will be shown. Recently the company received an order from abroad for about 5,000 of their Standard wood split pulleys in sizes from 5 inches to 5 feet. It required 5 large box cars to transport this order to the seacoast for shipment across the water. This order is not spoken of merely for its size but to show the favor with which Dodge wood split pulleys are held abroad.

We notice that a drug firm in Collingwood is making a bid for the trade in liniments, colic medicines, nitre and condition powders for horses, and all the necessary medicines for the men in the lumber camps. We

refer to Mr. A. H. Johnson, wholesale druggist. Mr. Johnson has for years been catering to the lumber trade, and has succeeded in marketing a number of preparations which we learn are filling a long felt want in the camps. The horses of a logging outfit cost a large amount of money, and an investment of a few dollars in several well-tried remedies is, we think, a judicious one when stocking the camps and vans, and one that very few lumbermen fail to make. Attention is drawn to Mr. Johnson’s advertisement on page

The daily newspapers again have a lumber trust under way. The Bulletin of San Francisco says: F. H. Harriman and James J. Hill are uniting in a great timber deal whereby they with a number of associates will control the lumber market of the world. They are securing large tracts of forest land in Northern California and Oregon through their agents who have been for some time quietly buying property on the coast. Among the associates of the two railroad magnates are Frederick Weyerhaeuser of Minneapolis, T. B. Walker of Minneapolis, Jacob Blodgett of Grand Rapids, and a number of other men of influence in the various timber sections of the western states.

The Lumberman’s Diet
 Clark’s Corned Beef and Clark’s Pork and Beans are the best produced in Canada and equal to the finest imported. Get quotations from your jobber.
W. CLARK, Manufacturer, MONTREAL

P. PAYETTE & CO.
 Manufacturers of Saw Mill and Engine Machinery, and all kinds of Marine Machinery.
 PENETANGUISHEN, ONT

No agents.
 All business transacted direct.

Fire Insurance
On Lumber Only..

20%
 reduction
 off tariff
 rates.

We accept lines ranging from \$10,000 to \$40,000 on lumber piled 100 ft. or more from mill. Describe conditions and rates will be quoted promptly.

Lumber Underwriters, 66 BROADWAY, NEW YORK



Sole Canadian Agents :-: Prices Reduced
WATEROUS BRANTFORD, CANADA.

DIRECT - GONNECTED
ELECTRIC LIGHTING UNITS
RELIABLE - EFFICIENT - AUTOMATIC

THE FOLLOWING SIZES ARE NOW READY
 3½ K. W. — 50 to 60 Lamps. Weight 600 lbs.
 10 K. W. — 150 to 175 Lamps. Weight 1450 lbs.
 Catalogue and Price List on request.

The **SLEEPER ENGINE COMPANY, Limited, Montreal.**
 'Phone, East 2403. Office and Works, Cor. Darling and Notre Dame Street

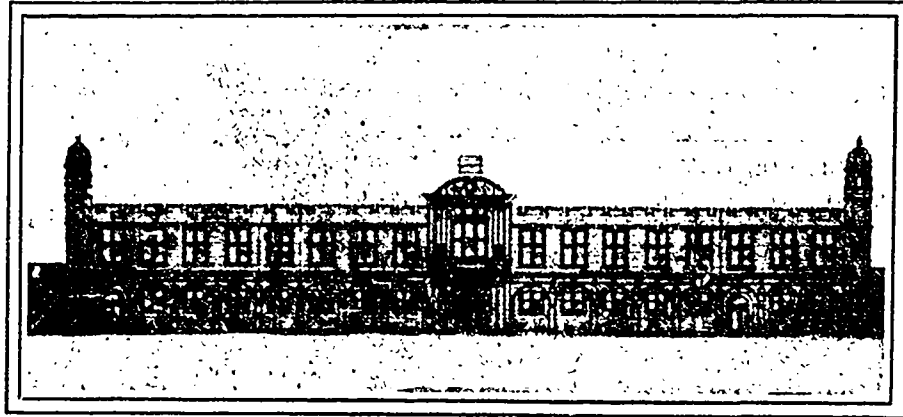
A VISIT TO THE WORLD'S FAIR AT ST. LOUIS.

[BY OUR TRAVELLING REPRESENTATIVE.]

After going through Wisconsin I made a rapid journey through Beloit to Peoria and Galesburg, Illinois. From the latter place I went direct south to St. Louis, striking the Mississippi river at Alton.

Crossing the famous Eads bridge I saw the waters of the great Mississippi and Missouri rivers rolling their mighty flood onward to the Mexican gulf.

St. Louis is wide-awake at any ordinary time, but it was more especially so when I saw it. Thousands of workmen were there helping to put up hundreds of buildings destined for the



HALL OF INTERNATIONAL CONGRESS, ST. LOUIS WORLD'S FAIR.

great Exposition.

The formal dedication of the grounds took place on the 30th of April. The exposition will open on the 30th of April next. The approximate cost will be over forty millions of dollars, it will be built upon a 1200 acre site. To grasp St. Louis one must know that it is spread out over an area exceeding by far that of New York city, an area of 62½ square miles, twenty miles of river frontage, 8000 factories, a population of over 600,000, with twenty-five railroads.

Speaking to one of the officials I asked if it would be larger than the Chicago World's Fair, and his reply was:—"This exposition will surpass all former expositions in the largest total fair ground area ever included, the biggest exhibit area ever held under one roof, and the largest sum of money ever available for an exposition."

The courts, avenues, terraces, artificial lakes and falls, etc., will surpass anything ever known. The big Atlantic liner "St. Louis" will be reproduced in wood, full size. A two-acre map of the United States will be shown with every state and town marked, and Jerusalem is to be reproduced intact with its famous wall.

Provision has been made for a splendid building in which to display the appliances and processes used in lumbering and the relations of lumber to the industry and progress of the world. This building will be known as the forestry building, and will be 600 feet long by 400 feet broad. It will include illustrations and models of lumbering operations, transportation, storing, drying and manufacturing.

One of the principal exhibits will be on forest destruction by fires, by sheep-grazing, by destructive lumbering and by natural causes, such as storms, diseases and enemies.

The regeneration of forests by natural seed-

ing and by forest cultivation will be shown. Under the various groups will be shown all the lumbering appliances, including saw mills, logging roads, dry kilns, storage yards, etc.

When I arrived at St. Louis the fair grounds presented an animated scene. Many of the larger buildings were already completed and ready for occupancy, whilst the rattle of hammers and machinery on all sides betokened the great enterprise being rapidly pushed forward.

Canada is expected to put forth her best efforts and as the eyes of all lumbermen are turning to our northern forests it is expected that her exhibit will be a representative one.

distance of about 4,000 miles east and west, with a breadth of some 700 miles. The trees consist principally of the following species: black and white spruce, banksian pine, white pine, red pine, larch, balsam fir, balsam poplar, aspen, canoe birch, bird cherry, white cedar. Black ash and mountain ash occur sparingly in the southern part of this belt.

"British Columbia is thought to possess the greatest compact reserve of timber in the world. The wooded area is estimated at 285,000 square miles and includes many kinds of timber. The Douglas spruce is the show tree of British Columbia and indeed of Canada.

"The forests of Canada contain pine, spruce, hemlock, oak, elm, maple, beech, birch, butternut, hickory, bass wood, etc. Nearly 38 per cent. of its whole area is forested.

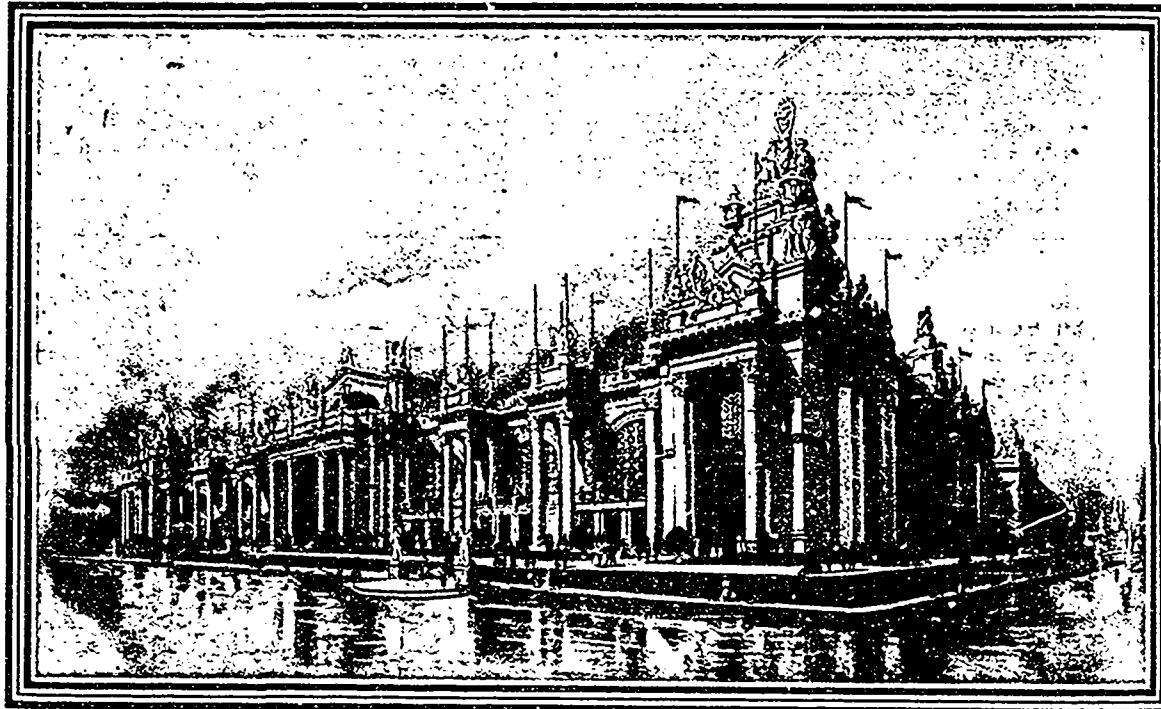
"In 1899 the capital invested in the pulp mills of Canada alone was about \$15,000,000. The capacity of the mills was over 1200 tons per day. The value of the forest products exported in 1901 was nearly \$33,000,000, and their total must have been at least three times that amount."

By this it will be seen that Canada will have something to show. The Canadian Commissioner, Mr. Wm. Hutchison, is now actively engaged in making preparations for a thoroughly representative exhibit of the timber and lumbering industry. British Columbia is to furnish a forest monster in the shape of the largest and longest piece of Douglas fir ever shown.

On making a tour of the World's Fair site I was struck by the remarkable number of carpenters and wood-workers actively engaged. It was an interesting sight to watch the hundreds of skilled workmen using the latest approved appliances putting up modern build-

"Canada will take part in the Louisiana Purchase Exposition as a Nation." Such was the answer given by Sir Wilfred Laurier from his seat in the House of Commons, to an inquiry made by one of the members of Parliament.

From all I could learn, the lumbering and forestry departments will be well represented



ONE OF THE WORLD'S FAIR BUILDINGS AT ST. LOUIS IN WHICH LUMBER PLAYS AN IMPORTANT PART.

by Canada's exhibits. Talking to one of our Canadian officials on the exhibit to be made, he said:

"Lumbering ranks third among the extensive industries of Canada and the forest wealth is very great. It is stated that 123 species of trees grow in that country, 94 occurring east of the Rocky Mountains, and 29 on the Pacific coast. The forest belt extends a

ings with a rapidity that was in itself startling.

Running through the grounds are many railway lines with an intra-mural electric service. The city and its surroundings looked very fine to me. Down on the levee were thousands of colored workmen, and innumerable stern-wheelers, like great floating palaces. Other parts of the city, with their French names and places, reminded me of our own historic Quebec. J. R. H.

NEW CANADIAN EMIGRATION OFFICES.

The remarkable growth of emigration from Great Britain to Canada has necessitated the erection by the Dominion Government of large new offices in London, England. These new offices, which were opened in April, are located at Charing Cross, in the centre of the

The office of Mr. T. R. Preston, the Canadian Commissioner of Emigration, is on the ground floor. All the fittings are of Canadian wood, comprising bird's-eye maple, cherry, ash, and oak, the fittings having been mainly supplied by the Office Specialty Company, of Toronto, and the Canadian Office and School Furniture

that raged last spring in Quebec, New Brunswick and Nova Scotia to send men in early to cut the damaged timber. Prompt action must be taken if the timber is to be saved from the ravages of the small white worm that preys on exposed wood in the Canadian limits. This parasite seemingly cannot get in its fine work when the tree is protected by its verdure, but once the trunk is charred or scarred in the slightest degree, it finds an opening. Cases have been known where the worm has attacked and worked on shanties which have been standing for a season or more. In other cases charred trees have escaped for a couple of seasons, while those on a nearby limit have, in a few months, been rendered unfit for the chopper's attention.



NEW CANADIAN EMIGRATION OFFICES, LONDON, ENGLAND.

Metropolis. They comprise a very imposing block of buildings of commanding appearance, and should provide adequate accommodation for the purpose for which they have been erected for many years to come.

The accompanying illustration shows a portion of the interior of the ground floor. It is partitioned off for various departments.

Company, of Preston. All the offices are admirably arranged to meet the work of this department, which now comprises quite a considerable staff.

BURNT TIMBER.

Arrangements are being made by several of the firms whose limits were swept by the fires

LUMBERMEN'S AXES.

One of the largest manufacturers of axes and edge tools for the use of the lumber trade is the James Smart Manufacturing Company, Limited, of Brockville, Ont. This well known company not only make axes, but a general line of metal goods.

In order to make the above it requires one of the largest plants in the country, and this the Smart Company have. Their special line, however, is lumbermen's axes, wood-splitting mauls, cedar wedges, hanging wedges, chopping axes, joiner's and framing axes, tom ahawks, lathing and shingle hatchets, etc.

These axes and wedges are manufactured from solid cast steel, polished bits and in a great variety of patterns, as used in the different sections of our Dominion.

Lumbermen and camp supply jobbers should send for illustrated catalogue of this firm's products. A visit to the works of this company at Brockville shows an immense staff employed in the developing of a great industry.

R. McDonald has sold his lumber business at Ronald, Man., to the Canada Lumber Company.

HENDERSON'S



**Ox Hide Brand
Oil Tan Footwear**



The Line That Sets the Pace

Absolutely the Best

Nine out of ten lumbermen are anxious for the very best when it comes to camp equipment. Quality is the important feature with them; a few cents in price is no object. If you want the grip on the Moccasin trade, buy OX HIDE and see the Larrigan end of your business go ahead with a bound.

The Best Equipped Moccasin Factory in Canada.

The J. S. HENDERSON CO., Limited
PARRSBORO, N.S.

LUMBERING IN THE EAST.

Almost each section of country develops its own peculiar features of lumbering, and the operators in one district take an interest in the conditions and methods which prevail in another. The American Lumberman gives a splendid account of lumbering operations in Maine, which are very similar to those in New Brunswick and Nova Scotia. Of logs and logging it is said that the differences in methods begin in the woods. Maine is, of course, the great lumber producer of New England. It is a state so well supplied with water courses that the logging railroad has seldom been employed, and the river driver still remains in control of log transportation. The western visitor to Maine mills is struck by the long and miscellaneous length logs that he will see in the woods and being put through the mill. The Maine logger does not bother much with a saw in the woods. The axe fells the tree, cuts off the top and trims it up, and then the stick goes undivided to the boom. Whatever length of log the tree will make is usually the way in which it reaches the mill.

It has been earnestly argued by some that trees should be sawed and not chopped down, as by that means a good deal of timber would be saved; but on the other hand most of the Maine logging streams are more or less rugged, and square butted logs would be more likely to be damaged by the rocks than those which are roughly shaped with the axe. An operator on Kennebec waters says that if he sawed down the tree he should probably roughly point them with an axe before putting them in the water. He gets a few million feet of logs each year out of a stream which has a fall of 1,200 feet in five miles. It is no greased slide, either, but is lined and bottomed with rock, which batters up the logs pretty badly.

There is one reform in felling, however, which meets with approval, and that is to cut the trees as close to the ground as possible. The average chopper likes to swing his axe at a convenient height, with the result that one to three feet of the best part of each tree are left in the woods. Forest Commissioner Ring is an earnest advocate of economy in this matter.

LENGTHS OF LOGS AND LUMBER.

When the logs reach the mill there is some cross-cutting done. Pine is usually cut to even lengths, somewhat in conformity with western customs, but spruce, if not cut for special bills, is sawed full length and trimmed to the nearest foot. It seems to be preferred in this shape by the majority of buyers, and a yard full of this stock presents a rough appearance, no matter how much care is used in piling. An exception is to be noted in the deal trade. Deals are cut to standard lengths, widths and thicknesses.

A curious thing which prevails to a considerable extent in all New England is the use of untrimmed and unedged lumber in pine. There are a good many small mills cutting second growth pine, or old growth when it can be found, which cut their logs up live, or practically so; or may flatten one side, if they use a circular saw, and then cut the log right up. This rough looking stock is bought by the factories, which find that it suits their

purpose just as well as though it were edged and trimmed.

NEW ENGLAND MILLS.

The result of sawing long logs and other peculiarities of the business of course have their effect on mill equipment. There are some fine saw mills in New England, but there is probably not one that at first glance would meet the entire approval of a man familiar only with methods in such states, for instance, as Wisconsin or Arkansas. For example, there are comparatively few shotgun feeds in use. There are some mill men who have adopted them and swear by them, but most of them of the better class use the twin-engine feed as better adapted to the long logs they have to handle. The spruce logs are usually cut full length, unless upwards of 40 feet long, when they may be cut in two; but so many logs run between 30 and 40 feet in length that the twin-engine steam feed is perhaps the most satisfactory tool for general use. In fact, any double mill would be equipped to cut 50 or 60 feet on one side.

Just beyond the decks and between the mills, whether band, circular or gang, is located a jump-up saw, which cuts a log as indicated by the orders in hand. The jacker chain ends at the top of the slide and there are live rolls between decks, fixed with a back-up arrangement so that after the logs are carried ahead to crosscut they can be run back to the deck. This same crosscutting saw also cuts bolts for the clapboard machine. Cutting lumber as they do, the Maine mills are seldom equipped with a gang trimmer. As the boards are trimmed full length, and any length that they will make, the old fashioned railroad or jump saw is used.

There are a few mills that still cling to the old live gang. Some of the Lumberman's readers may not know what a live gang is. It is simply a gang through which round logs are put. Most of them used in the eastern mills have no oscillation, but simply move in a straight line up and down, while the logs are dogged in place and fed by a ratchet and pinion device that feeds them forward when the sash is descending. The rate of feed varies from $\frac{1}{4}$ to 2 inches for each stroke. There are those who claim that this old-fashioned mill is still the best for cutting deals for the English market. The saw marks are straight across the board, the sawing is even and they claim that the back movement of the gang cleans away the cut so as to avoid the splintering at the bottom that is sometimes seen in the product of the modern gang.

While there are a good many relics of primitive saw mill days in Maine, New Hampshire and Vermont and even in New York, most of the larger mills are equipped with bands and probably turn out the finest manufactured lumber that is put on the market. They pay attention to the quality of manufacture, and are not so anxious for quantity as the mill men of the south and west. Yet a mill man said the other day that the English trade does not care for smoothly sawed deals; that if the surface were a little rough it seemed to improve the grade, but that it was important that they should be band or gang and not circular sawed.

CLAPBOARDS AND CLAPBOARD MAKING.

A feature of all the larger New England mills is the manufacture of clapboards. Now a clapboard may look like bevelled siding, but it isn't; it is a product which New England builders insist is in every way superior to the bevelled siding resawed from strips, and the easterners wonder why it is not introduced into all mills which manufacture siding.

The standard length for clapboards is four feet, though it could be changed to suit the requirements of any given market. The width is six inches. The method of manufacture is, briefly, as follows: Clean, sound logs are selected that are of about the right size. These are put in a rough lathe called a barker, which trims them down to the proper size with a knife which travels automatically back and forth. Then the bolt is put into the clapboard machine proper, being held in place by the chuck holes. The bolt is on a carriage which travels back and forth over a finely set circular saw. The bolt is turned a trifle at each stroke, so that each cut is made from the circumference toward the heart, leaving about three or four inches in diameter of the latter. The result is a perfectly rift sawed product bevelled to the right angle. These pieces are detached from the heart and run through planers which dress one side and the thick edge. Clapboards are made in four grades, the highest being absolutely clear, the next being sound and free of all defects except on about one inch of the thin edge; while the lowest grade must be sound, with tight knots.

SOMETHING ABOUT SPOOLWOOD.

The spool wood business is a minor branch of the trade which has given employment to a number of mills and a value to white birch timber. Spool wood is white birch cut in pieces from $\frac{1}{2}$ -inch to 2 9-16 inches square, and 2 1/2, 3 or 4 feet long. These pieces must be absolutely clear, with any defect cut out, while staining or twisting will ruin the stock.

The price alongside the vessel in Bangor used to be about \$20; now it is about \$27 a thousand feet, board measure, and both manufacturers and handlers say there is less money in the business at that price than there used to be at the lower figure. This is because stumpage is higher priced and the operators have to go further back for the timber. Most of this stock that is exported—and only about one-third of the Maine product is used at home—goes to Greenock, Scotland, and Hull, England. There are a half-dozen or so spool factories in the United States, but they get most of their stock from sections where the export business is not as well established as it is in Maine.

THE ITALIAN BOX SHOOK TRADE.

Another side issue of the Maine trade is the manufacture of shoeks for the Italian orange and lemon growers. It is estimated that the annual export of this material from Maine is about 3,500,000 boxes, of which this year Rowland W. Stewart, of Bangor, will ship about 2,225,000 boxes. These shoeks are made from beech, yellow birch and maple, and are produced by turning them from steamed bolts. The logs are cut into bolts of the required length, steamed about ten hours, peeled and

then cut by a heavy rotary veneering machine. The sheets of veneer are then cut into the shook sizes. For orange boxes the shook is 28 inches long, 10 inches wide and 1-6 inch thick. For lemons the sizes are the same except that the width is 11 inches. The shooks are put up 40 pieces, or ten boxes, in a bundle, and an ordinary cargo contains about 250,000 pieces. The box is made of four of these pieces with three thicker pieces at the ends and in the middle. The thick wood is mainly an Austrian product, though Mr. Stewart ships about 500,000 sets annually. One potent reason which induces the Italian shippers to buy boxes in this country is that the United States gives a rebate of 15 per cent. on re-impotation. The hoops or straps that bind the boxes are produced from an Italian chestnut.

Speaking of the export trade, it is reported that the shipments of American pine and spruce to Germany are being seriously interfered with by a new product which comes from Hungary. About 200,000,000 feet were secured from that source last year, it is said, all of which has cut out just so much pine of Swedish, Canadian or American origin.

MEDICAL ATTENDANCE IN LUMBER CAMPS.

Dr. H. P. Bryce, Secretary of the Ontario Board of Health, is working energetically to improve the sanitary condition of lumber camps. He is sending a circular letter to all lumbermen in regard to the matter and calling attention to the new Order-in-Council concerning medical attendance in lumbering and mining camps in the unorganized portions of New Ontario. The Order-in-Council is as follows :

Regulation 12 of Regulations for the Sanitary Control of Unorganized Districts be amended by the following section, known as sub-Section "A".

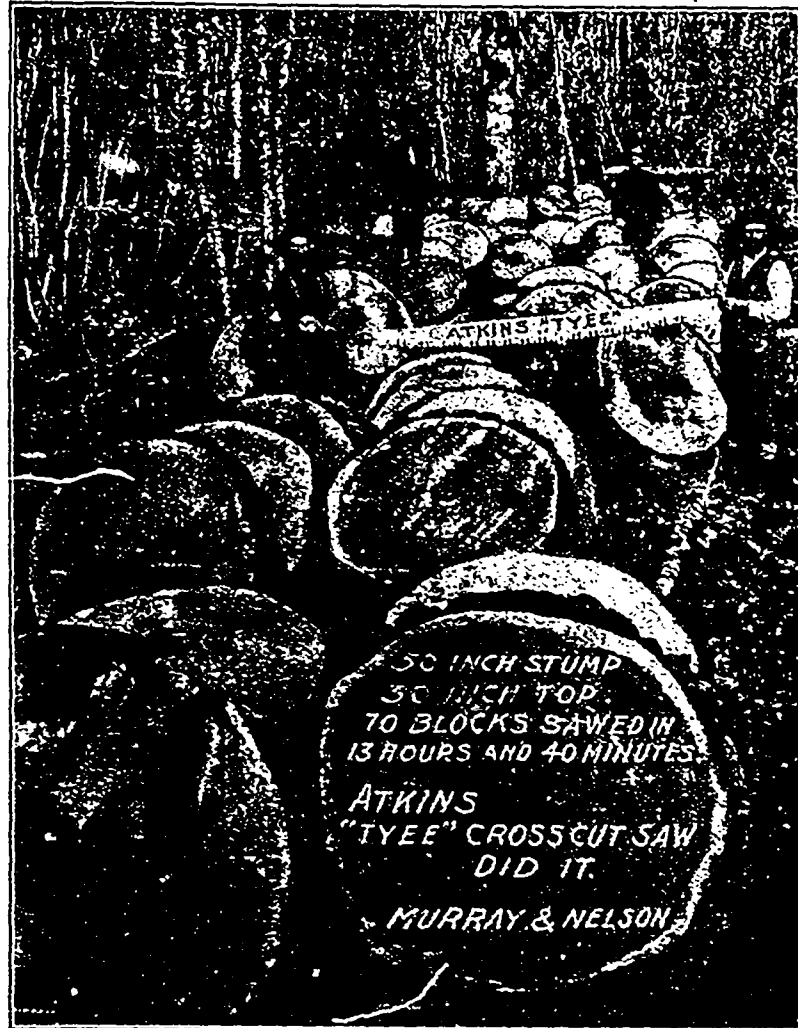
Employers of labor on all works in such districts shall transmit, at the time of the contract, to the secretary of the Provincial Board of Health, the name or names of the physician or physicians employed by them under the act, and of any subsequent change made in their physicians and of the contracts between the two contracting parties.

Should it appear to the Provincial Board of Health, owing to the distance of the residence of the physician employed from the camps of the company, that the best interests of the employees are not likely to be served, it shall be competent for the Provincial Board of Health with the approval of the Minister of the Department, to require any employer of labor in such

districts to contract with some physician residing at or near the works of the company.

Should it further at any time appear, owing to the distance of the physician from the camps, or to neglect or other cause on the part of the company or of physician employed, that employees have been put to expense to secure medical assistance for sickness or accident other than of Company's physician, the employer and physician shall be held responsible for the payment of a reasonable fee for such medical services,

spring and find that it does better work than any saw we have yet used. It is the "Hoo Hoo Tye," Four cutters and the Raker. We have taken a picture of some of the work this saw has done and we are sending you one of them. We are ready to do this work again with the Tye Saw. Have been the means of selling a good many of these saws and are ready to recommend them to anyone for use in large or small timber. The tree we cut was yellow fir, 50" on the stump inside the bark and 30" at the top, and we made 70 cuts in 13



the amount to be paid in such instances to be determined in case of dispute by the Minister of the Department, under Section III of the Act, Chapter 34 1 Edward VII.

A GREAT ACHIEVEMENT.

The following letter in connection with the illustration herewith is a voluntary testimonial to the superiority of Atkins Saws.

LANGLEY PRAIRIE, B. C., May 3rd, 1903.
E. C. ATKINS & Co., Portland, Ore.
GENTLEMEN,—We have used one of your saws this

hours and 40 minutes. Made about 20 cord of stove wood and have proof of same if asked for. This is the first of these Tye saws to be used in these parts, but we can promise you that it will not be the only one in a short time.

Yours truly
(Signed,) Wm. J. NELSON,
JOHN MURRAY.

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These Cuts Show a Right-Hand Machine

WOOD PULP ~ DEPARTMENT

PULP AND PAPER MANUFACTURE IN BRITISH COLUMBIA.

Mr. R. E. Gosnell, Secretary of the British Columbia Bureau of Information, is doing excellent work for the province by furnishing information calculated to develop its natural resources and increase its export trade. He has recently issued two important bulletins, entitled "The Timber Industry of British Columbia" and "The Markets on the Pacific for British Columbia Wood Pulp and Paper." The following extracts bearing upon the pulp and paper industry explain the situation:

No mills for the manufacture of wood pulp or paper are at present established in this province, but no portion of Canada can show greater advantages for these industries. Water-powers can be found on the coast of the mainland which afford unique facilities for industrial works, owing to their situation adjacent to deep water, to their ease of development, and to their being in the centre of the timber areas. In addition to the water-powers on the coast, there are numerous fine water-powers in the interior of British Columbia, where can also be found immense quantities of wood suitable for pulp; but at the present time the rate of freight to the coast would be a bar to successful competition in the outside markets.

Along the coast-line of the mainland of British Columbia and Vancouver Island practically inexhaustible areas of pulp wood can be found. South of Knight's Inlet the most abundant wood is the Douglas fir, which is successfully used for the manufacture of chemical pulp. Its suitability for mechanical pulp is not so certain. North of Knight's Inlet is the spruce and hemlock belt, affording enormous supplies of excellent pulp-wood—the Sitka spruce especially being unexcelled by any other wood for pulp purposes. These woods cover large tracts immediately contiguous to the sea-coast, so that logs can be landed at the mills at very low cost.

An important point in favour of the industries on the sea-coast of British Columbia is the mildness of the winters, which admits of operations being carried on throughout the whole year. The forests of this province are much more densely wooded than those of Eastern Canada, 500 cords per acre being not uncommon, while from 100 to 150 cords may be taken as a fair average of good timber lands. With proper husbanding the forests are practically inexhaustible for pulp-wood purposes. This is essentially a timber country. Atmospheric conditions are especially favourable to tree growth, which is very rapid, and the extent of otherwise valueless country along the coast that can be devoted to forestry is enormous. Owing to its wealth of raw material, excellent water-powers and geographical position, British Columbia occupies

a position of eminent advantage in competing for the pulp and paper trade of the Pacific.

An important factor bearing upon the future of British Columbia as the centre of the pulp and paper trade of the Pacific is the rapid depletion of the forests of the United States, and it is confidently anticipated that the importation of Canadian pulp and pulp-wood to that country, already large, will continue to rapidly increase. In conclusion, there is no industry, not even mining itself, which gives greater promise of commercial value and general importance than that of the manufacture of wood pulp and paper in this province.

The Legislature of British Columbia has passed an Act which authorizes the Government to enter into agreements with pulp companies, granting them leases of pulp lands on very favourable terms, both as regards rental and royalties, and to reserve areas out of which selections of pulp lands may be made.

The pulp companies with whom agreements have been made are: The Industrial Power Company, the Pacific Coast Power Company, the Cassiar Power and Industrial Company, the Oriental Power Company, and the Quatsino Power and Pulp Company. All of these have large limits and water-powers reserved.

A special feature of British Columbia timber areas is their density, the yield being greatly in excess of that obtainable from equal areas in Eastern Canada. The average cut in Ontario is about 10 cords per acre, while upon the lands secured by these companies the estimated cut is over 100 cords per acre. This density enables logging to be carried on to great advantage, and it is estimated that the cost of wood at the mills for many years will be at least one-third the average cost to Eastern American mills. Cheap coal of excellent quality can be obtained from Nanaimo or Union, and shipments can be made directly by water to the mills.

The markets that can, with special facility, be supplied from British Columbia are: British Columbia, Japan, Australia, China, New Zealand, Hawaii, the Philippines, Western Coast of South America, Western Coast of Mexico, and Asiatic Russia.

The home market is a rapidly-growing one, and with the steady growth of population a correspondingly rapid increase of the requirements in the way of paper may reasonably be anticipated. The long distance from the Eastern mills and the freight rates make competition from the East impossible.

Japan probably furnishes the greatest possibilities for the future, the imports of paper in 1900 amounting to over \$2,000,000, and that of pulp to about \$230,000. Both the demand for pulp and paper in Japan is increasing very rapidly, and the pulp mills of this province will be in the best possible position to supply it.

The Australian market is perhaps the most important at the present time. There are no suitable pulping woods on that continent, and no water-powers, so that Australia is almost wholly dependent upon outside sources for its supply of paper.

If preferential trade duties were arranged between Canada and Australia, as may be possible in the future, Canada (and British Columbia in particular) will occupy a position of great advantage as compared with other countries competing for this trade. It is to be noted that a considerable portion of the paper imported into Australia from Great Britain and the United States was manufactured from pulp shipped from Eastern Canada. The freight charges (and customs duties, in the case of the United States) on this must materially increase the cost, and can be entirely avoided by manufacturing the paper in British Columbia.

Mr. Gosnell's views as to the possibilities of the pulp industry have evidently become modified, as his last contribution on the subject says:

It has been established beyond question that a very large market for paper, and incidentally for pulp manufactured in the province, does exist, sufficient to justify the erection of one or more paper mills.

There are, however, one or more important considerations to be kept in mind. The market for pulp alone, apart from a paper mill, is not large enough for a large pulp mill. Japan is practically the only consumer of that product, so far as we are concerned. The output of pulp must be largely consumed in the local paper mills, for the products of which there are very exclusive markets in Australia, South America and other countries bordering on the Pacific Ocean. There is, too, in British Columbia and the Northwest a home demand, which is rapidly extending—not sufficient, perhaps, to absorb the entire output of a paper mill, but nevertheless an important market in that connection.

There are also to be considered the questions of labour and shipping facilities. Labour on the Coast is higher than in the East; but the other natural conditions are so favourable that careful estimates show that pulp can be manufactured several dollars a ton cheaper here than in Eastern Canada, on that account. The location of the timber reserves on the water's edge, with water carriage to the mills, is the explanation of that, and will compensate for increased cost of labour. Shipping facilities and competition in ocean vessels is more limited on the West than on the East Coast; but the development of ocean traffic on the Pacific is so rapid that any present disadvantages on that score will soon be overcome.

Another consideration of moment must not be overlooked. The market while it exists must be cultivated, and pulp and paper manufacturers will come into competition in the foreign market, in certain lines, with British, Canadian, United States, German and other manufacturers (principally British). To meet these on equal grounds and obtain a share of the market will take time and enterprise. The advantages on the side of the British Columbian manufacturer will be cost of production and

geographical situation. With abundance of raw material and water power, there is no reason why the latter could not, in the lines he would naturally undertake to manufacture, such as news, wrapping paper and certain grades of cheaper stationery paper, undersell all competitors, or at least successfully hold his own.

PULP NOTES.

It is expected that the new pulp mill of J. R. Booth at the Chaudiere, Ottawa, will be in operation within a month.

The Fraser River Power & Pulp Company, Limited, has been incorporated by the British Columbia Government.

Price Bros. & Company have built a card-board mill at Joniquieres, Que., for using up the product of the pulp mills at that place.

James Murray, of Vancouver, has been examining spruce timber limits on the Sound for the purpose of reporting to the British Columbia Government as to the extent of pulp wood in that district.

The Laurentide Pulp Company, of Grand Mere, Que., has just declared a half-yearly dividend of 4 per cent. on the capital stock. It has been decided to increase

the capital by \$1,200,000 in order to permit of making certain improvements to the mills.

The Menzie Wall Paper Company has recently been formed by Toronto capitalists. The charter gives the company power to build and operate pulp and paper mills and to develop water powers.

The E. B. Eddy Company, of Hull, Que., have installed two new grinders in No. 2 pulp mill and have built a new flume. The company have not sufficient ground wood for the amount of paper they were making, hence the increase in equipment.

There is a prospect of the pulp mill at Chatham, N. B., again resuming operations. Recently R. A. Lawlor asked the council for a fixed assessment of \$100,000 for ten years in the event of obtaining the necessary capital to again begin the manufacture of pulp.

The American Thread Company, of Willimantic, Conn., has begun the installation of a plant for the manufacture of pulp spools. This process has been in course of development for the past two years and many obstacles had to be overcome before the spool was perfected.

The Pacific Coast Pulp Company, Limited, has been granted incorporation by the British Columbia Government. The company have acquired large timber limits and rights on Powell river and propose to erect pulp and paper mills. It is agreed to spend \$50,000 before January 10, 1904.

Capt. Edward Partington, of Manchester, England, has recently been on a visit to St. John, N. B., in connection with the business of the Cushing Pulp Company at that place. He said that pulp wood had increased 50 per cent. in price, but that the Cushing mill

was paying and would be operated to its fullest capacity.

Advices from South America state that a new process for making paper from the leaves of the maize plant has been invented in Brazil. The specimens of paper produced, which were made with imperfect apparatus, are of excellent quality, though only of the rougher sorts of wrapping paper. Should the inventor's anticipations be realized it is clear that a new and important industry could be established in South America, where maize is extensively cultivated and the leaves are not utilized except to a small extent for feeding cattle. The inventor says that in the state of Bahia, to which he belongs, maize yields two crops per annum, and that three crops could be secured where irrigation is employed.

It is becoming more and more necessary, says Forestry and Irrigation, that a substitute shall be found for spruce in the paper-making industry, and it is probable that experiments will show many trees which can be profitably utilized, and thus serve the double purpose of keeping the industry alive and saving the spruce from total destruction. The possibilities of straw, corn stalks, and waste from sugar cane, have not yet been exhausted, and the prevention of waste has never had sufficient attention. Spruce has so far established itself as the pulp material par excellence, that most manufacturers will hear of no other. Nevertheless poplar, cottonwood, hemlock, and even pine are being used, and for the best paper a blend of other woods is used in connection with spruce. In spite of the present prejudice in favor of spruce pulp, there are signs which point toward the use of other pulps with no admixture of spruce at all.

CHAS. H. VOGEL

A. M. Can. Soc. C. E.

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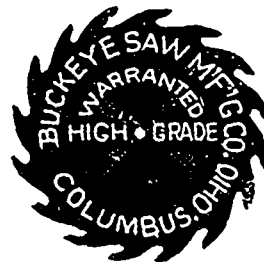
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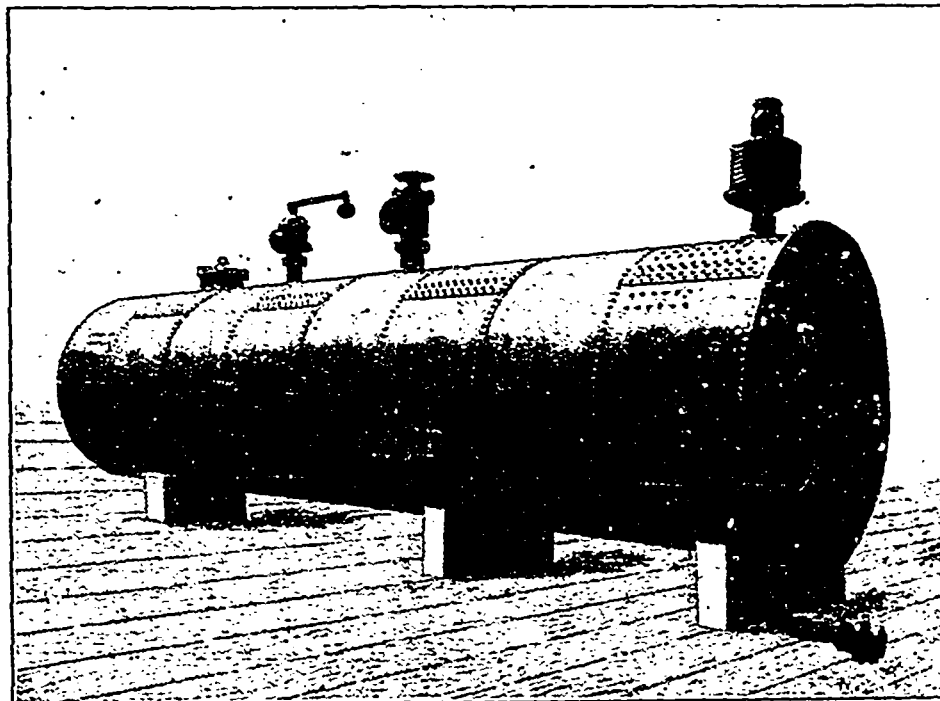
High-Grade Saws

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Horizontal tubular boilers for brick setting are our specialty, however, and our Catalog 112 gives 48 pages of information.

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THE JENCKES MACHINE COMPANY, SHERBROOKE, QUE., CANADA.

THE JENCKES MACHINE COMPANY, SHERBROOKE, QUE., CANADA.

THE NEWS

The Moose Mountain Hardware & Lumber Company has been incorporated at Alma, N. W. T.

—The bobbin factory at Party Sound, Ont., formerly owned by Ker & Harcourt, is being offered for sale.

—The Fernie Manufacturing Company, of Fernie, B. C., have their new sash and door factory nearly completed.

—At Roberval, Que., Col. B. A. Scott has built a mill for barking pulp wood and has increased the output of his saw mill.

—It is the intention of Colin A. Chisholm, who is in the shingle business at Cedar Cove, B. C., to build a saw mill at an early date.

—William Stuart has been admitted as a partner in the business of Van Wart & Company, lumber dealers, Calgary, N. W. T.

—The Boyd, Caldwell Company, Limited, are building an addition to their mill at Lanark, Ont., to accommodate shingle machinery.

—It is understood that further extensive improvements are contemplated at Chemainus, B. C., by the Victoria Lumber & Manufacturing Company.

—The Kennedy & Davis Milling Company, of Lindsay, Ont., have just installed throughout their mill and yard a very complete fire protection system.

—The P. R. Cumming Manufacturing Company, manufacturers of wooden handles, skewers, etc., are considering the removal of their factory from Clarksburg to Renfrew, Ont.

—The Crowther Lumber Company has been formed at Cranbrook, B. C., to operate limits located on Perry and St. Mary's rivers. The mill will be built about eight miles from Cranbrook.

—The growth of the lumber industry in the Kootenay district of British Columbia has been remarkable during the past year. According to John J. Billings the shipments this year will reach 200,000,000 feet.

—Frank Sheppard and Frank O'Reilly, of Nanaimo, B. C., have gone out to select the tracts of timber land which will be taken by James Dunsmuir in accordance with his recent purchase. The limits are located on Vancouver Island.

—The saw mill of the Cook Bros. Lumber Company at Spragge, Ont., is turning out upwards of 150,000 feet of lumber per day, by means of double and single cutting band saws. The mill is under the superintendence of J. A. Ansley.

—Some of the heirs of the late William Richards, of Boiestown, N. B., feeling that he divided his property in a rather peculiar manner, are taking steps to have the will set aside on the ground that deceased was not wholly responsible when the will was made.

—The Harcourt Lumber Company, Limited, of Woodstock, Ont., has been incorporated, with a capital of \$40,000, to manufacture and sell lumber,

lath and shingles. The provisional directors are M. S. Schell and W. S. Snell, of East Oxford, and Frank Mamdrell, of Woodstock.

—Moran Scelan and associates, who are operating a shingle mill at Erie, B. C., have decided to move their plant to Nelson, to which point the timber can be floated more cheaply. The site formerly held by the Fairview Lumber Company has been applied for.

—The Cleveland-Sarnia Saw Mills Company have entered into a five years' contract to furnish a supply of saw-dust to the Sarnia Gas & Electric Light Company to be used fuel. Automatic carriers on an endless chain will convey the saw-dust to the power station.

—The Crothers Lumber Company, Limited, has applied to the New Brunswick government for incorporation, with power to engage in lumbering in New Brunswick and British Columbia. James Chapman, of Gagetown, and T. B. Crothers, of St. John, are interested.

—A despatch from Tokio states that Korea has granted the Russian Lumber Company a twenty years' lease of 350,000 acres of timber land at Wongampho, with the right to purchase all the timber floated down the Yalu by Korean subjects, thereby conferring a practical monopoly of the timber in the Yalu valley.

—Application has been made to the New Brunswick Government for the incorporation of the Murray & Gregory Company, Limited, to acquire the mercantile and lumber manufacturing business heretofore carried on at St. John, N. B., under the name of Murray & Gregory. The capital stock is placed at \$150,000.

—The Elk Lumber & Manufacturing Company has been organized at Fernie, B. C., the officers being: President, O. A. Robertson; vice-president, J. C. Wood; treasurer, W. P. Dutton; manager, D. V. Mott. The company have acquired about 300,000,000 feet of standing timber and contemplate erecting a mill at Homer.

—W. E. Wilson, representative of Wilson & Company, of San Francisco, who has recently been buying timber limits on Vancouver Island, B. C., is making arrangements to have a railway built so as to bring the timber down to tide water. The road will be about four miles long. Mr. Wilson states that the timber which he has purchased will supply the mill at Fair Haven for the next fifty years.

—The Pigeon River Lumber Company, of Port Arthur, Ont., have been granted a charter for the construction of a railroad in Cook county, Minnesota, from near the international boundary to a point on Lake Superior, which will probably be Grand Marais. The company have for some years been getting out logs over the old Port Arthur, Duluth and Western Railway, which has practically been abandoned for years and is in such a state of repairs that it takes several locomotives to do the work of one on a good track and road-bed.

—Mrs. Louisa M. Gates, of Bay City, Mich., has begun suit against the Lake Superior Power Company, of Sault Ste. Marie, for \$15,000 in her own right,

as the holder of the Crown timber license berth 78, in the Township of Creighton, on the north shore of Lake Huron. She also claims \$15,000 damages from the power company for having trespassed on the property and for their having cut and removed timber from it, and \$786 which represent the Crown dues paid by her.

—Mr. Thomas Southworth, Chief of the Ontario Forestry and Colonization Department, returned last month from an extended tour of the Teniskaming district, where he found everything in a most satisfactory condition. Most of the settlers are from the older parts of Ontario, and he estimates the population of the district at from 8,000 to 10,000. From inquiries made he thinks the people realized about \$175,000 on timber which they had ready for sale last spring. There are several sawmills going up, and the class of houses being erected is very good.

—The Hunting & Lea Lumber Company have just put into operation a new shingle mill on the south shore of False Creek, Vancouver, B. C. The equipment was installed by N. Thompson & Company, of that city. There is a 66-inch x 16 feet tubular boiler, with Dutch oven, a 14x20 inch horizontal engine, and 4 Letson & Burpee shingle machines. Conveyors and all modern labor-saving appliances are used, including electric light. The capacity of the plant is 100,000 shingles in ten hours, while provision has been made for an additional machine when required. The company intend to add a cedar mill in the near future.

—A dispatch from St. Paul, Minn., says: Peter Provonost, a Canadian lumberman, was arrested by William Grimshaw, deputy United States marshal, near Grand Marais, where, it is charged, he was engaged in despoiling government land of its timber. Information of his actions was furnished the United States authorities by fishermen. Provonost is charged with having established a regular logging camp and having cut timber to the value of \$100,000 during the several months he has been operating. The timber cut was exported to Canada and only the choicest trees were taken. It is claimed that he cut the timber from territory covering many square miles. He was taken before the United States commissioner at Grand Marais, pleaded not guilty and was held under bond of \$3,000 for the federal grand jury.

CASUALTIES.

—W. A. Goddard recently met his death at Caswell's Mills, near Stanstead, Que. He was endeavoring to throw off a belt in the shingle mill, when he was caught and whirled into the shafting.

—S. Stevens, foreman of McIntyre's logging camp on Howard Harbor, up the coast from Vancouver, B. C., was drowned by slipping off a log. Deceased was an experienced lumberman and a native of the Maritime Provinces.

—A terrific cyclone swept through the Ottawa district on August 7th. At Deschenes, seven miles from Ottawa, it struck the large saw mill being erected by Fraser & Company, blowing down three walls of the power house and killing two workmen named James E. Campbell and James Valiquette, citizens of Ottawa. The funerals of the victims was attended by many of the leading business men of the city, who desired to pay a last tribute of respect to the unfortunate ones.

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



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

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

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

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

HART EMERY WHEEL COMPANY, Limited, Hamilton, Ont., Can.

WOODMENS LIEN ACT.

An important case under the Woodmen's Lien for Wages Act was argued before His Honor Judge Bole in the County Court at Vancouver, B.C., recently. It seems that some time ago the firm of Messrs. G. H. Finlay & Company established a logging camp up the Squamish river about twenty-five miles from its mouth. They had some twenty men employed and took out several booms. The men claim that their wages were arrears. The Woodmen's Act gives the logger or lumberman who has worked on the logs a lien for his wages for a certain time, and failing payment, the men appointed a representative to obtain counsel to protect themselves. As a consequence Messrs. Bowser & Wallbridge claimed a lien on behalf of Frank O'Toole, Charles Douglas, George Burns, C. V. Philpot, W. Miller, W. T. Miller, Charles Forn and Matt. Barreau, upon a raft containing 1,000,000 feet of fir and cedar logs lying in a boom near the mouth of the Squamish river, upon another of 500,000 feet in the river between its mouth and Finlay's camp, and upon 800,000 feet of timber in the woods near the camp. The amount claimed aggregates over \$3,000. The decision has not been learned.

EXPORTING WOOD PULLEYS.

Power users throughout the Dominion have, of course, come to recognize in the Dodge wood split pulley, manufactured by the Dodge Manufacturing Company, of Toronto, Limited, the acme of perfection in pulleys, and it will not be surprising for them to learn that other parts of the world have become familiar with the superiority of the Dodge products and are sending in orders for the same. However, the magnitude of this foreign demand for Dodge products will certainly open the eyes of those who have not watched the increasing export trade of this concern, and some idea of this foreign demand may be gained from the fact that among many orders for export recently booked are one for over 2000 wood split pulleys from Australia and one for over 4000 wood split pulleys for England.

Being strictly Canadian made goods, the work of Canadian artisans and the product of Canadian raw materials, it is a source of gratification that foreigners are appreciating the sterling worth of Canadian manufacturers. Every foreign order filled by Canadian institutions will but open the eyes of the buying world to the advantages of buying in the Dominion, and every export order must eventually lead to other inquiries along other lines.

PERSONAL.

Mr. John Taylor has resigned the management of the Taylor Mill Company, Victoria, B.C., a position which he has filled since the company was founded.

Mr. William Rutherford, a well known lumber manufacturer and contractor, of Montreal, died in that city on July 30th. He was past-president of the Caledonian Society.

Mr. William Lambert, timber merchant, of Manchester, England, sailed from Liverpool on July 31st on a business trip to the United States and Canada. He will likely visit Quebec, Montreal, Ottawa and Toronto.

Mr. T. B. Crothers, of St. John, N. B., has removed to Cranbrook, B. C., to engage in the lumber business with his brother, Mr. A. E. Crothers. Crothers Bros. were formerly in the lumber business at Gagetown, N. B.

Mr. John McLeod, manager of the Buffalo business of the R. Laidlaw Lumber Company, was married on August 5, the bride being Miss Tennant, daughter of Mr. F. N. Tennant, lumber merchant, of Toronto. Mr. and Mrs. McLeod will reside in Buffalo.

Mr. W. L. Calhoun, who has been manager for the Prescott Lumber Company at New Mills, N. B., for the past three years, has severed his connection with that firm. On the eve of his departure he was the recipient of a gold chain and dress suit case from the employees.

Mr. Blakeslee, senior member of Charles L. Blakeslee & Son, lumber merchants, Albany, N. Y., passed away last month. Deceased had been engaged in the lumber business in Schenectady and later in Albany for

nearly twenty-five years. He was a director of the Lumber Mutual Fire Insurance Company, of Boston, Mass.

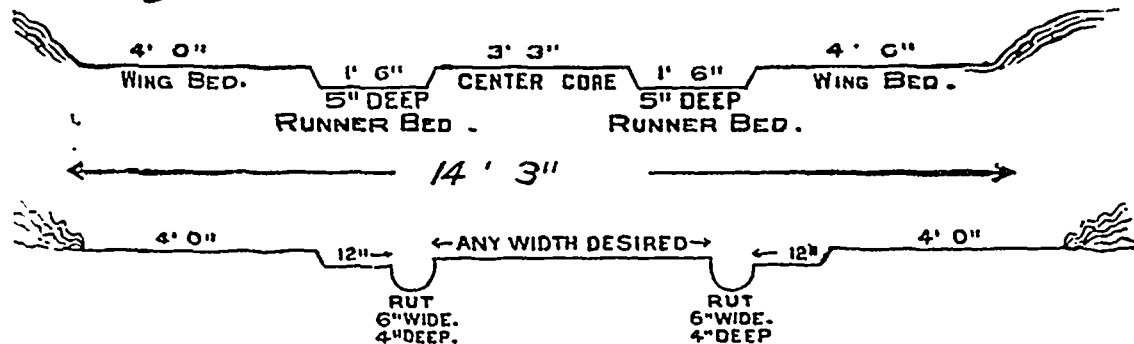
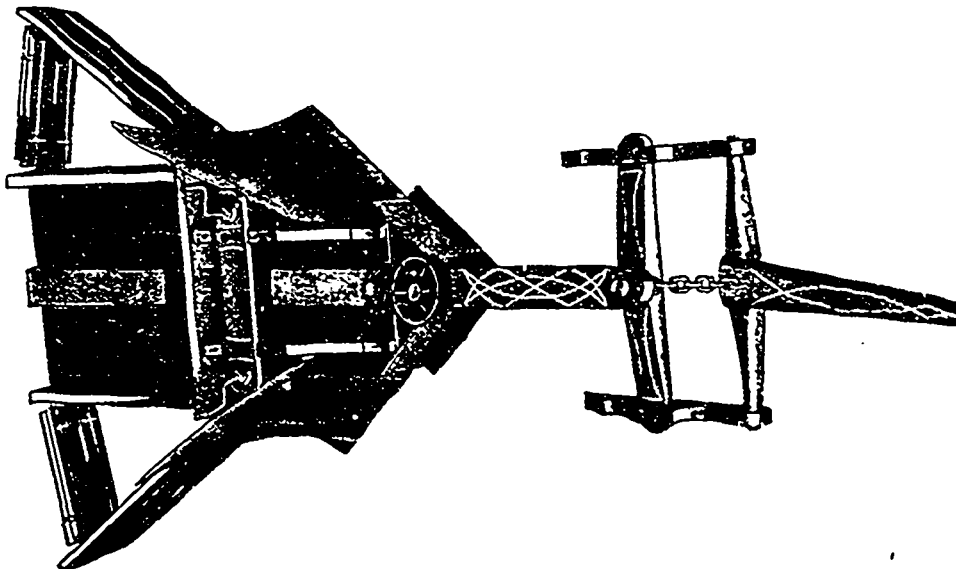
The following gentlemen from England, closely connected with the lumber trade, were representatives at the Congress of Chambers of Commerce of the Empire in Montreal last month: Mr. William Bennett Wilson (of Wilson Bros.), Barnsley; Major William Gradwell, of Barrow-in-Furness; Mr. William Kay, of Bolton; and Mr. W. F. Beardshaw and Mr. H. H. Bedford, of Sheffield.

Rev. Alfred Fitzpatrick, of Toronto, general secretary of the Canadian Reading Camp Association, recently spent a short time in British Columbia. While not proposing immediately to establish institutions in this province similar to those that have proved so successful in the lumbering and mining camps of Ontario, Mr. Fitzpatrick's visit was for the purpose of arousing an interest in the work. Should employers and employees promise sufficient support in the matter, it is altogether probable that an organizer will be sent to British Columbia.

Mr. Andrew McCormack, the veteran lumberman, who has for many years been a familiar figure in the Ottawa Valley, and who has been closely associated in business with the late Alexander Fraser, left recently on a tour of exploration. While away he will visit several new limits which he has recently purchased. His trip will be made largely with canoes with Indian guides as companions. Before he returns he expects to travel over four hundred miles in this way. The limits which he is going to visit are up on the Height of Land, towards Hudson's Bay. He went to Pembroke by train and from there will take the boat for a distance up the Ottawa, branching into the timber on the Dumoine river and on to Grand Lake and along the Mattawa river. His return will be made by the Quanz river, a stream running into the Ottawa far north. Almost his entire trip will be through virgin forest heretofore unexplored. It will take him about three months to complete the tour, and for a man of his years the trip is a big undertaking, as Mr. McCormack is seventy-four years old.

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Snow Plough and Road Maker



Not a Lumberman in Canada can afford to be without a Snow Plough, Rutter and Road Maker. The foremost and most enterprising men recognize this and have placed their orders.

For use in snow and ice roads. Saves sleighs and harness. Endorsed by all lumbermen who have used them. Cuts six inches wider than sleighs. Rolls snow clear of track. Cuts off knolls, fills up holes. Levels roads perfectly, prevents sleighs from sluing. Cuts off dirt and manure, leaving it on bank. Ploughs up, rolls out and pushes clear 12 inches of loose snow each time machine passes over road.

An attachment for extra team behind machine can be furnished when required. Made all widths.

The Wilkinson Plough Co., Limited, Toronto, control the rights of manufacture and sale. Write for price and description.

THE WILKINSON PLOUGH CO., LIMITED TORONTO

Ploughs of all kinds, Land Rollers, Drag and Wheel Scrapers, and all kinds of Cultivating and Stock Raising Implements

OVERLAPPING OF TIMBER CLAIMS.

What promises to be a lawsuit of some magnitude has developed from a dispute which arose regarding the ownership of a large tract of timber in Howe Sound, partly on Bowen Island, B. C.

Several years ago approximately 11,000,000 feet of timber were staked by Messrs. Ironsides, Rannie & Campbell, of Vancouver, who have been renewing the records annually since then, and last year Mr. George Magee staked an area of timber back of the other claim, and it is now alleged that in renewing their record Messrs. Ironsides, Rannie & Campbell have included the Magee claim.

Another similar case has occurred at Deer

Passage, where the Brunette Saw Mill Company five years ago staked timber valued at \$100,000. A couple of years ago it appears that Mr. Shannon staked and secured a record of the same property. He sold to McDougall & Cameron, who spent \$7000 in building a chute three-quarters of a mile long and building roads to open up the claim, when Mr. McDonald, representing the Brunette people, turned up and claimed it.

The Brandon Brick & Lumber Company, Limited, has been incorporated, with a capital stock of \$100,000.

The International Lumber Company, of Sault Ste. Marie, Ont., are making shipments of veneer to England.

LUMBER COMBINE INVESTIGATION.

The first sitting of the commission to take evidence in regard to the alleged lumber combine in Manitoba and the Territories was held at Winnipeg on August 17th. No evidence was submitted, as neither plaintiffs nor defendants were ready. The commission was adjourned for four weeks.

Advertising death is generally brought about through the existence of one or more of three distinct causes: 1, failure to maintain advertising long enough; 2, failure to take space enough to tell your story properly; 3, failure to give enough attention to such results as are brought to your notice through your advertisers.—Thomas Balmer, in an address before the Life Underwriters' Association of Chicago.



A MODEL KILN

The Kiln adopted exclusively by the Canadian Pacific Railroad Company at its new works at Montreal

Also used exclusively by the Pullman Company, The Brunswick Balke Collender Company and The Wheeler & Wilson Sewing Machine Company.

The most popular Kiln in North America to-day.

The first cost is less.

The building costs less.

It costs less to operate.

Requires less attention and yet dries faster than others with absolutely no injury to lumber.

Write for catalogue.

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174-176 Wabash Ave., Chicago, Ill, U.S.A.

**Reliable
Veterinary
Remedies**

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

Johnson's Veterinary Remedies are guaranteed never to fail when used as directed. You get your money back if they ever do.

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Johnson's Horse Liniment No. 1.
A penetrating Alcoholic Liniment. Put up in one gallon jugs, with full directions, per imperial gal. \$4.50

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A combination of the best oils used as liniments, imp gallon . . . \$3.00

Johnson's Horse Colic Remedy.
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Johnson's Veterinary Healing Ointment.

Positively the best all-round healing ointment made. In use by the largest owners of horse flesh in Canada. Put up in 7 lb tins, each . . . \$2.00 or in 1/2 lb tins, per dozen . . \$3.50

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

CAMP REMEDIES.

In addition to our Veterinary Remedies we make a line of medicines for lumbermen, including a strong, penetrating liniment, healing ointment, cholera cure, liver pills, cough syrup, in fact anything in the form of Camp Drug Supplies. We know that there are no better remedies made than those we offer. There may be others nearly as good, but they lack our guarantee. Satisfaction or money back. A trade discount of 10% allowed off all orders amounting to \$100.

Send postal for printed matter.

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For Saw or Planing Mill work “The Reeves” Wood Split Pulley is the favorite. A good, strong, durable pulley made honestly and made right.

Reeves Pulley Manufacturing Company, Limited

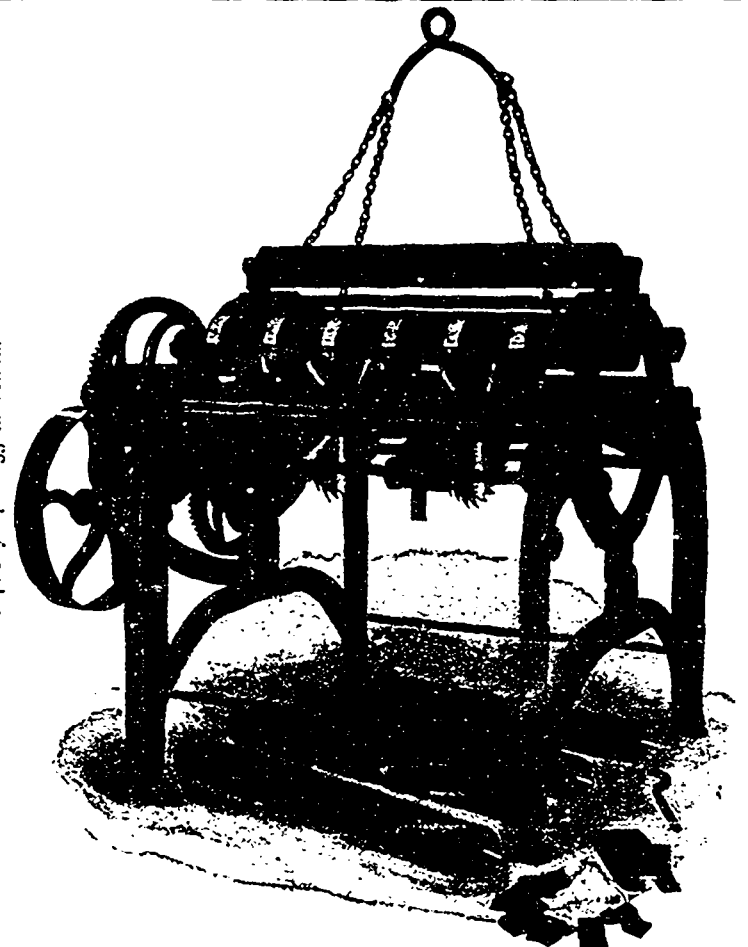
17 PEARL STREET,

TORONTO, ONT.

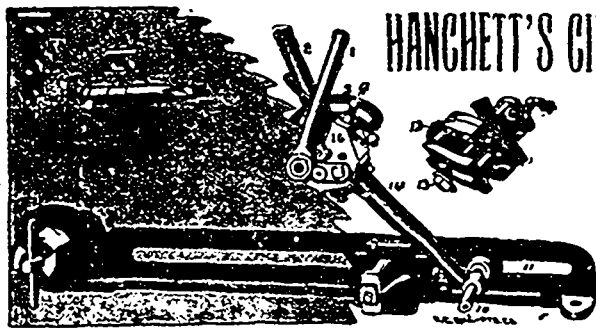
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They give the tooth a sharp cutting edge widest at extreme point; therefore, your saws will CUT FASTER, MAKE MORE PERFECT LUMBER, USE LESS POWER, and thus reduce the cost of manufacture. **DON'T YOU NEED ONE?**

The Hanchett Swage For Large and Small Circular Saws.

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HANCHETT SWAGE WORKS, Big Rapids, Mich.

Direct Acting Steam Feed, with D Valve, acknowledged the best. **Trimmers and Slash Tables**

Improved design. **Double and Single Geared Log Jack Works** with chain complete.

All other kinds of Mill Machinery. with prices and terms on application.

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with cast steel inserted teeth. **Lockport Swing Shingle Heading Machine** Complete Sawmill Outfits

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ALWAYS SOMETHING NEW.

The lumber manufacturer or logging operator who does not read carefully his trade journal is sure to miss many ideas which would be found useful to him in his business. The pages of the CANADA LUMBERMAN contain the advertisements of the most wide-awake manufacturers of saw-mill and wood-working machinery, logging appliances, etc. Every month some new and improved appliance is placed on the market. Keep up with the procession by investigating the adaptability of these appliances to your own particular case, and when the opportunity is presented tell the advertiser how interested you are in his announcements in THE LUMBERMAN.

"Roof Framing Made Easy," by Owen J. Maginnis, New York, is a work valuable to carpenters and planing mill men. The second edition has just been issued, and contains 150 pages and numerous illustrations. We can only give a partial synopsis of the contents: The Principle of the Roof and General Directions; Laying Out and Framing a Simple Roof; Hip and Valley Roofs; Roofs of Irregular Plan; Square Pyramidal Roofs; Pentagonal Roof; Hexagonal Pyramidal Roofs; Conical Roofs; Conical Roof Intersected by a Pitched Roof; Octagonal Roofs; Framing an Octagonal Roof of Gothic Section; Octagonal Molded Roof; Octagonal Roof with Circular Dome; High-Pitched or Church Roof; Mansard Roof; Hemispherical Domes; To Frame a Circular Elliptic Dome.

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RUBBER STAMPS
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Send for Quotations.



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This Axe stands better in frosty weather than any axe made. Send for sample. Can supply any pattern.

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Man. Western Canada, Toronto 10

The . . .

QUEEN CITY OIL CO.
LIMITED

Head Office: TORONTO.

HIGHEST GRADES OF

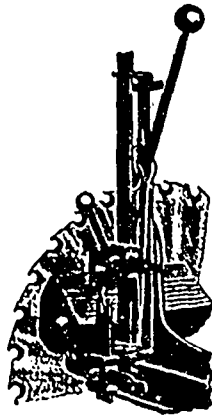
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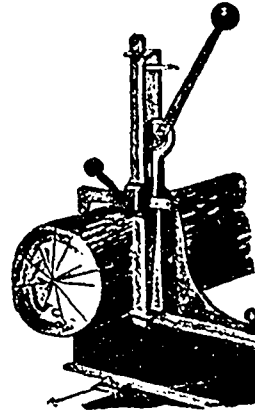
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Glass Patent Duplex Mill Dogs

These dogs have no springs, no ratchet, no pawls, nothing to get out of order, but have a positive grip so that no log can become loose or turn while being sawed. Dogs can be fastened on any head block knee and will hold small blocks on single head block if necessary to do so. Upper and lower dogs can be used together or independent of each other.



Right Hand Duplex Dog



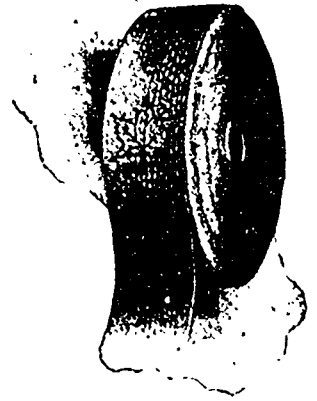
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THE CANTON SAW COMPANY

Manufacturers of Saws, Saw Mill Dogs and Supplies.

South Rex Street, CANTON, OHIO

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STITCHED COTTON DUCK BELTING



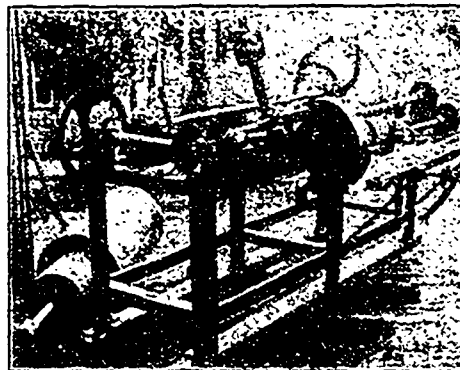
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Will pay your Subscription to the Weekly and Monthly CANADA LUMBERMAN for
ONE YEAR

Saw Grinders



The Kennedy Island Mill Co., Ltd., Riviere du Loup, Que., says—
"I might say to you that this Grinder is all right and has paid for itself twice over since I bought it. No Shingle Mill of any account should be without one."

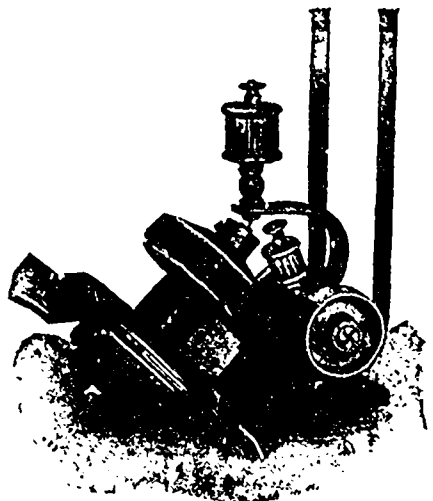
TRIMMERS

If the Board does not reach the quadrant the Saw stays down and trims, see cut. To cut off more than two feet, bad ends, etc., pull the cord, see dotted lines. The whole Board can be cut into two foot lengths or trimmed in any manner. The Saw frame is balanced, the Arbor pulleys are 8 in. x 8 in. We build several styles of Trimmers, also all kinds of Saw and Shingle Mill Machinery

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

B. R. Mowry & Sons, GRAVENHURST, ONTARIO

SHERMAN FLOORING MACHINES-PATENTED



SIDE BORING MACHINES

For attachment to any matcher to bore flooring run face up or face down.

FACE BORING MACHINES

Used as an attachment to any flooring machine to bore jointed flooring.

END MATCHERS

For end matching flooring strips.

Our Machines are the best in the market for the purpose.

Enquire about them. Write for circular with list of users.

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The Jas. Smart Mfg. Co., L't'd

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High-Grade
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IF YOU WANT TO KEEP
POSTED READ IT.

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\$2.00 per year

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wants to sell something sometime,
Constant Advertising Strikes that "Sometime."

Somebody always wants to buy what
wants to sell,
Constant Advertising Brings Them Together

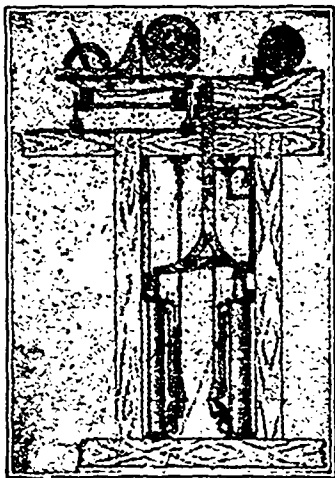
Nobody knows where to buy if
advertises what he wants to sell,
Constant Advertising tells the "Where."

Anybody nowadays must advertise,
nowadays reads advertisements.
Constant Advertising Strikes Constant Readers.

SEND FOR SAMPLE COPY AND ADVERTISING RATES

Plain Tales from the Hills

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Every thoughtful mill man knows that the best, particularly in the machine line, is none too good when a high grade product is desired. This is the reason why there are more of our stationary niggers in use than all the other types combined and explains why they are constantly replacing machines of other manufacture with ours. The people know the best and want it. Won't you get into the procession, increase your cut several thousand feet per day, and cut down your pay roll?

Just drop us a postal for our catalog B, and learn all about it.

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415 N. Rose Street, - KALAMAZOO, MICH.

BUFFALO TOOL AND MACHINE CO.

176 Terrace - BUFFALO, N.Y.

172 Front St. West, Toronto, Ont.

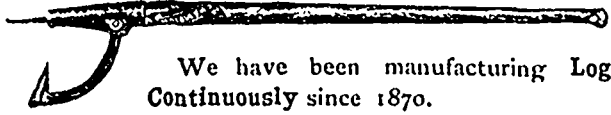
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Save your money. Save middlemen's profits.
Buy direct from factory. All goods fully guaranteed.

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Planers
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Planers and Matchers
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Turning Lathes
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all sizes
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We have been manufacturing Logging Tools Continuously since 1870.

Many of our 1870 customers still continue using Champion Tools.

You Know Why

Our illustrated catalogue and price list on application.

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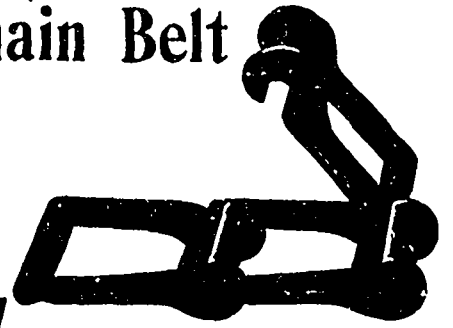


Detachable Chain Belt

—AND—

CONVEYING

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Manufacturers High-grade Cylinder, Machine and Sawmill Oils.

Calypsol Grease

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THE

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—OF—

Shoepacks, Larrigans and Moccassins

are unexcelled.



--TO THE TRADE--

I confine myself exclusively to the manufacture of this line of goods, having an up-to-date tannery, also years of experience myself. I am prepared to fill all orders promptly and guarantee to give satisfaction at lowest possible prices.

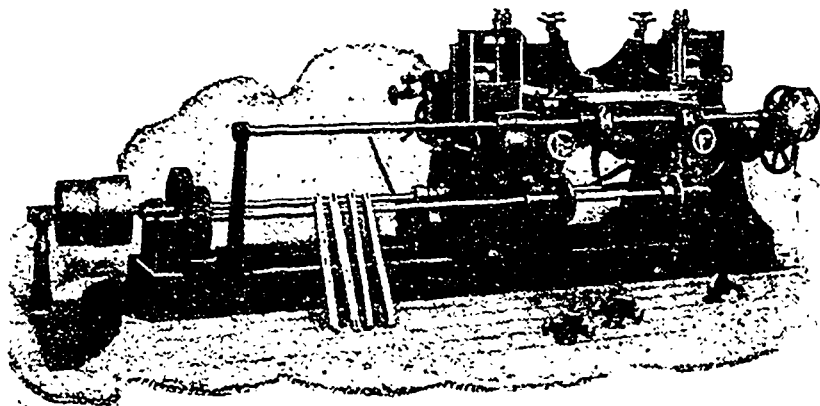
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R. HOE & CO'S CHISEL TOOTH SAW
PATENTED
35,000 RUNNING IN EVERY KIND OF TIMBER

MADE ONLY BY
R. HOE & CO.
NEW YORK

The first of its kind on the market. New and original and first introduced by us

E. B. HAYES MACHINE CO., Oshkosh, Wis.



When a new and improved machine that has great merit in it like this one is put onto the market, often times other machinery manufacturers will recognize the fact that it will be a good seller and they will try and start in to copy, of course providing they can do it. We expect it may be the case with this machine, but we know that all the mill men purchasing machines will want the Original, for many mill men in the past have met with great disappointment in buying copied machines. Write for full information.

Are You Looking For
 Heavy Lumber Wagons
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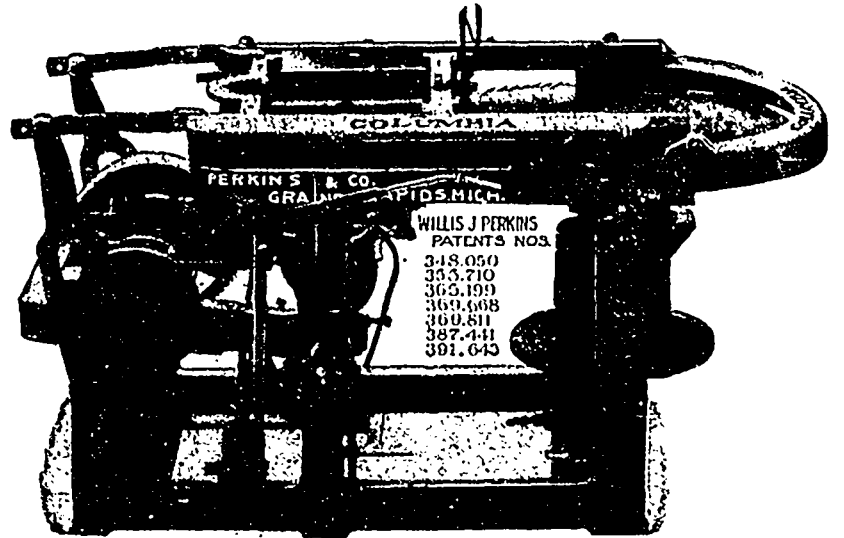
Write to Us.

We Can Supply Just What You Want.



Hand Feed Machine \$150.00 and over.
 Double Blockers - - \$550.00 and over.
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COLUMBIA
 HEADING AND SHINGLE MACHINES



THEY WERE WELL PLEASED.

PERKINS & CO. HAMPTON, N. B.
 DEAR SIR:—Replying to your favor of 18th inst., Mr. Shives has not called to see the Columbia as yet. Our man is feeding her on the fly now; he don't lose a clip. We are very much pleased with the machine.

Yours truly,
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WE ARE LEADERS. WILL INCREASE YOUR CUT AND SAVE YOUR MONEY. CATALOGUES ON APPLICATION.

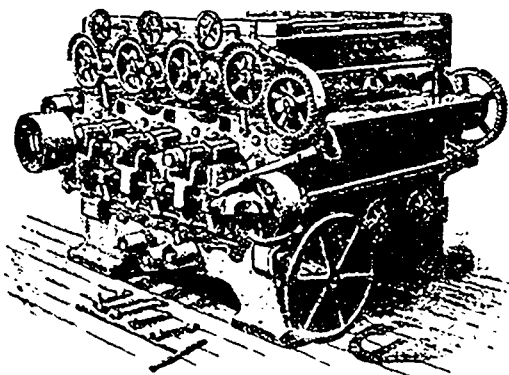
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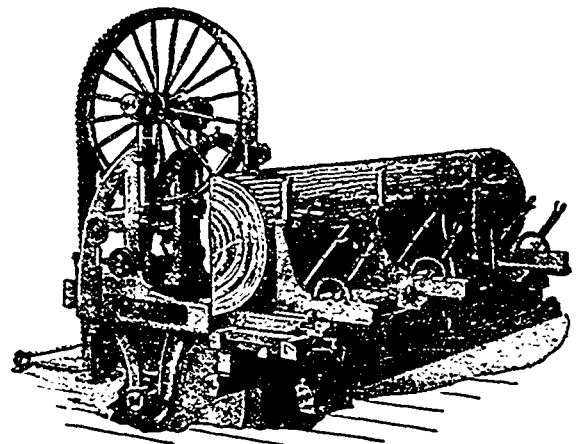
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of every description, in single tools or complete outfits. Complete catalogue free. Lumber Mill Machinery a specialty.



All interested in this machinery are invited to write us for particulars of any tools they may need. Illustrated matter, terms and information on demand.

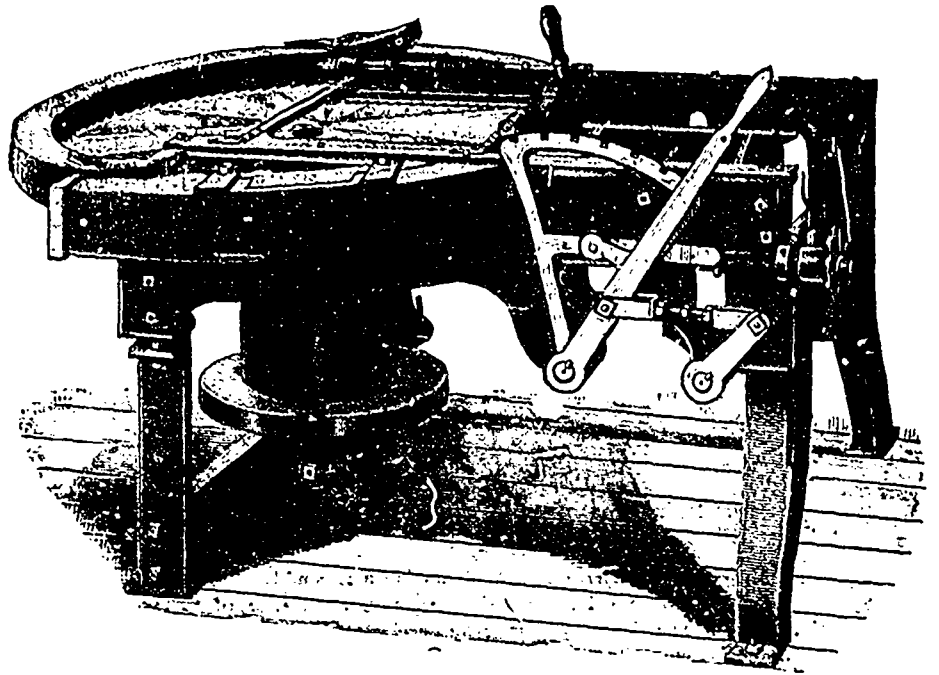
Send for new pamphlet on Care of Band Saws. Invaluable to all woodworkers.

F. H. BRYDGES & SONS, WINNIPEG,
 GENERAL AGENTS FOR MANITOBA AND N. W. T. OF
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"DAUNTLESS" SHINGLE AND HEADING MACHINE

The strongest, most durable and easiest working machine made. Any adjustment of set works made with one screw. Steel tubular carriage, takes blocks 18 in. wide and up to 20 in. long, or 22 in. long if specified in order. Can be easily fitted with maple dogs to cut up to the last shingle, or to cut four shingles from piece of board 1 in. thick.

This machine carries 40 in. or 42 in. saws.

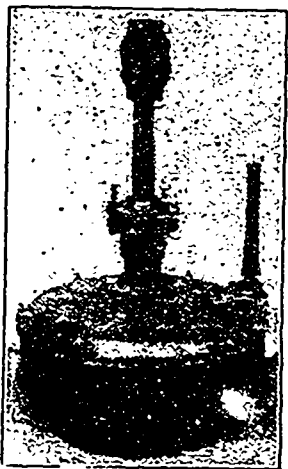


Capacity 25,000 to 50,000 per day.

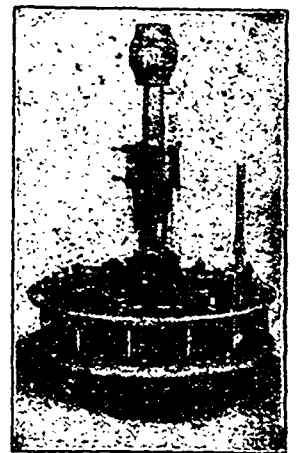
I furnish complete Outfits of Saw Mill, Shingle Mill and Lath Mill Machinery. Write for Catalogue.

F. J. DRAKE, - Belleville, Ont.

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 better developers to-day than ever before, and are growing in popularity, as our order books show.

We have now for distribution our new **SAW and SHINGLE MILL MACHINERY CATALOGUES**, 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".

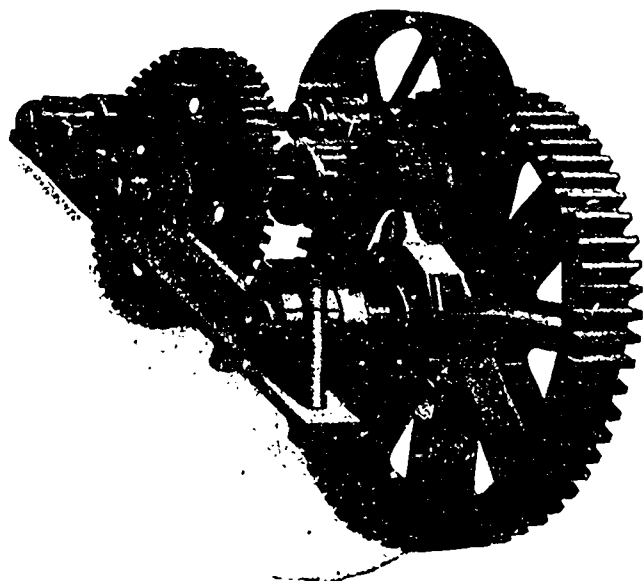
MADISON WILLIAMS, PORT PERRY, ONT.

H. E. PLANT, Agent,
Cor. Common & Nazareth Sts., MONTREAL.

SUCCESSOR TO
PAXTON, TATE & CO.

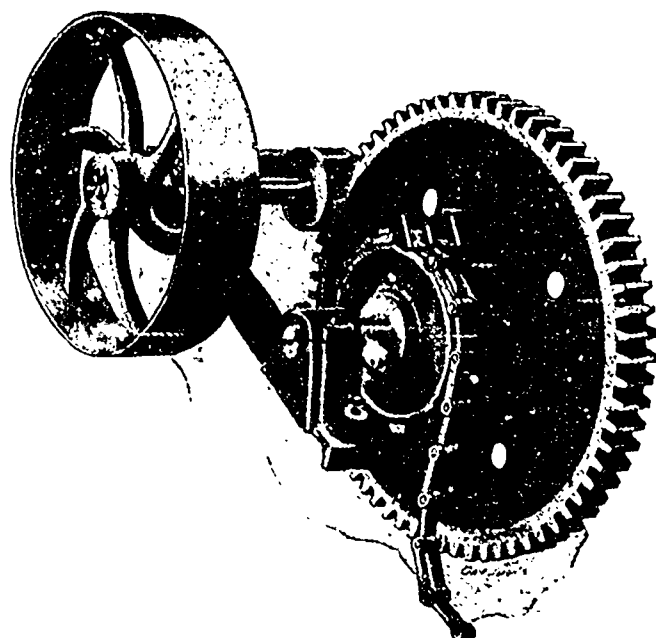
Winnipeg Machinery & Supply Co.
Western Selling Agents, Winnipeg

ENDLESS CHAIN BULL-WHEELS OR LOG JACKS



WATEROUS NO. 0 DOUBLE-GEARED LOG JACK

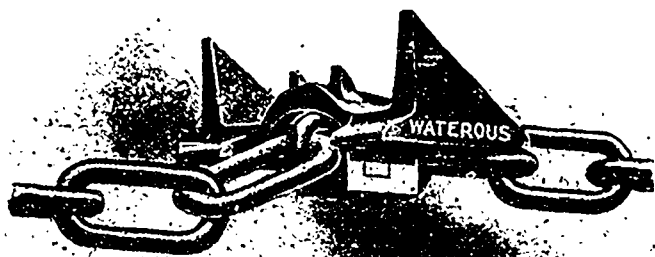
With spur gear to drive from shaft running across mill.
When needed to drive from shaft running lengthwise of mill, we replace smaller spur gears with bevel gears or frictions placed outside of iron frame.



WATEROUS NO. 1 SINGLE-GEARED LOG JACK

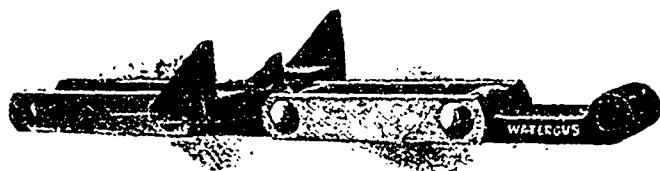
With No. 86 log chain. Cast steel spurs and centre links, steel side links, 6" pitch. No. 80 log chain is the same style but heavier with drop forged center links, 8" pitch.

PULLEYS CAN BE READILY REPLACED BY STRAIGHT FACE FRICTIONS.



Cable Chain with Cast Iron Log Spurs

Chilled wearing shoes 4x12" on each side round link. Made 10", 12", 14" wide for 1", 1 1/4" and 1 1/2" chain. Can't turn on chain.

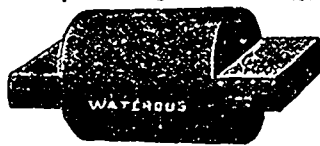


No. 86 Steel Chain (Cast Steel Log Spurs).

Rivets 3/4", side bars 1 1/4"x3/8", 8" pitch, center (cast steel) 2 1/4"x6" pitch. Spurs 9" point to point.

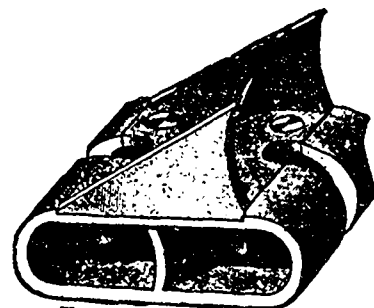
No. 80 Steel Chain

Is 8" pitch similar to above, except that solid link is a drop steel forging, the pin is 1 1/2" in diameter (like illustration) and is fixed in position connecting side bars, presenting a large wearing surface for solid link. Side bars 2x1 1/2"

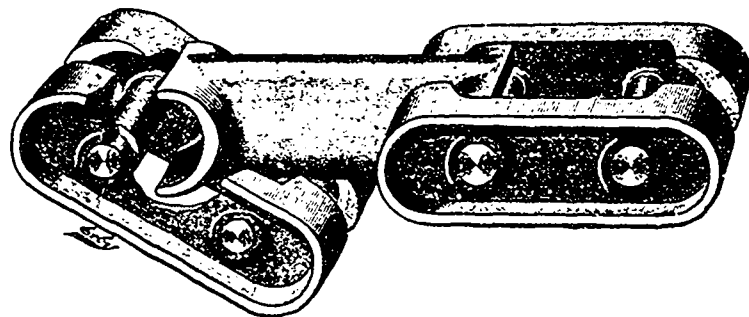


PIN OF NO. 80 CHAIN.

Taking a safety of 4 1/2" this chain gives a 10,000 lbs. working strain. Log spurs same as No. 86 or of heavy forged steel, any spread desired.



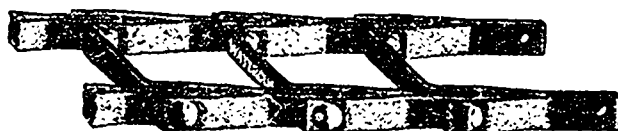
Malleable Log Chains—Detachable, readily applied.



No. 1050 and 1075—Giant Chains, Detachable.

Not recommended for salt water—but there is no better chain for fresh water.

Forged Refuse Chains



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Outside width 12 1/2 in.—Made of 1 1/2"x3/8 in.

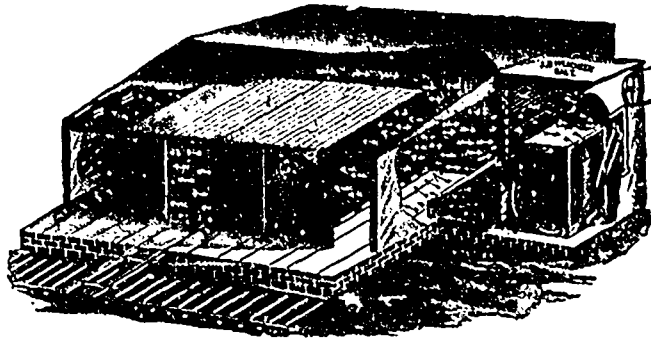
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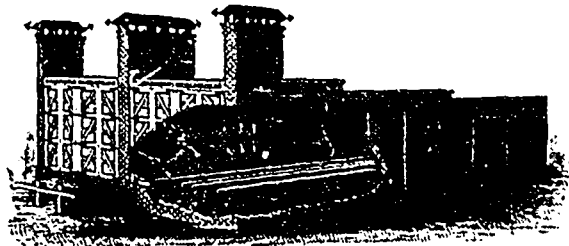
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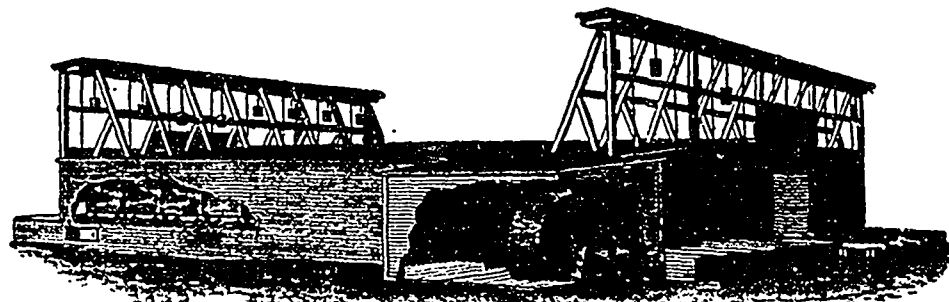
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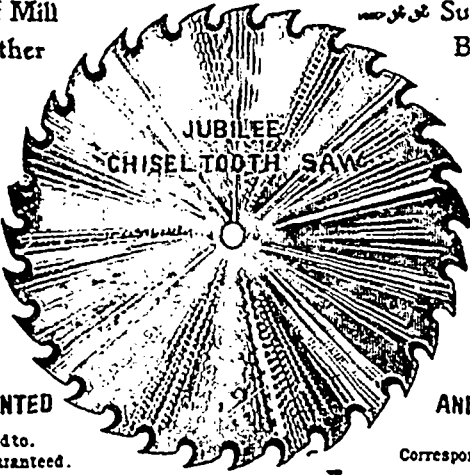
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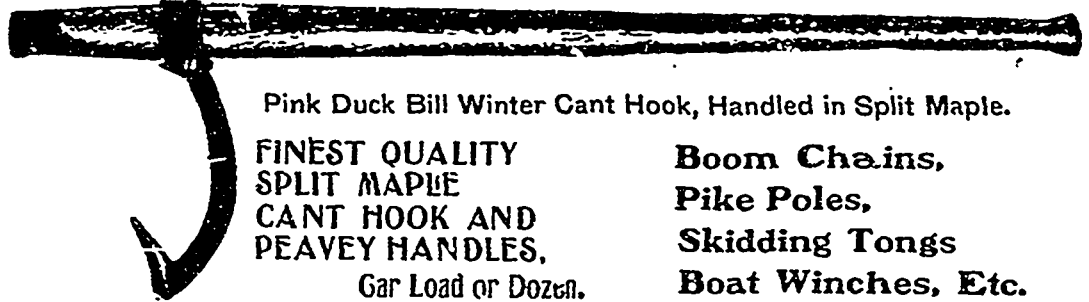
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