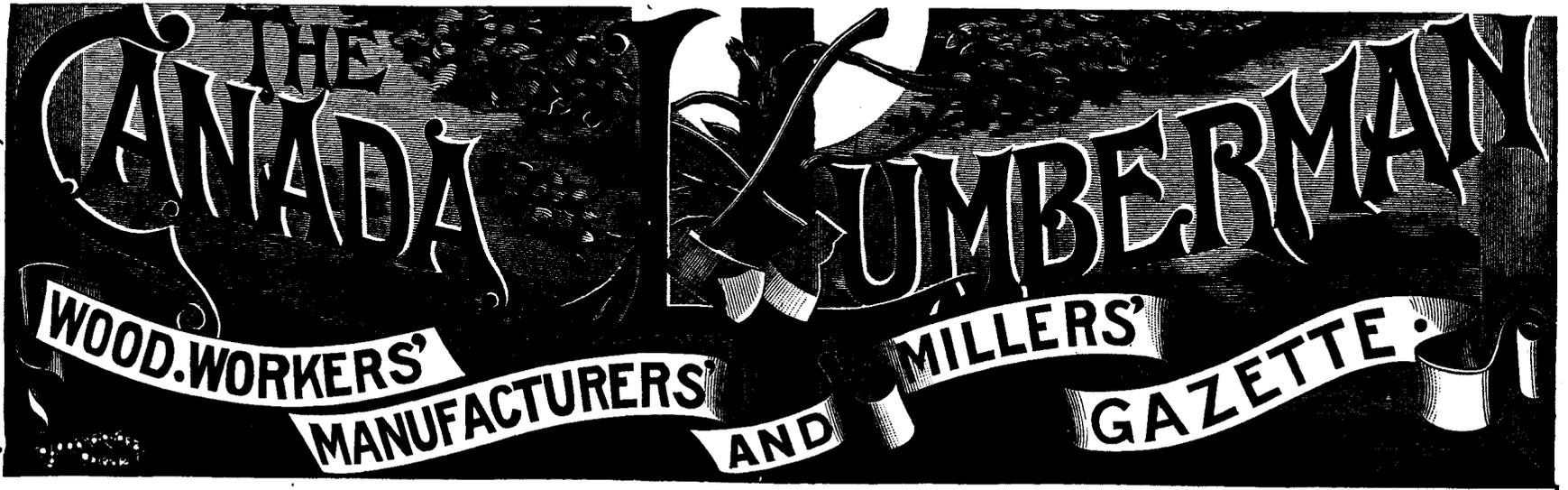


R. Bell

Annual Trade Review Number



VOLUME XIX.
NUMBER 2.

TORONTO, ONT., FEBRUARY, 1898

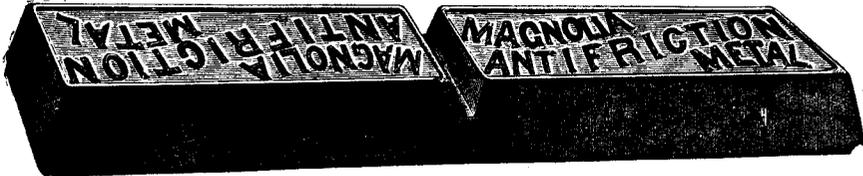
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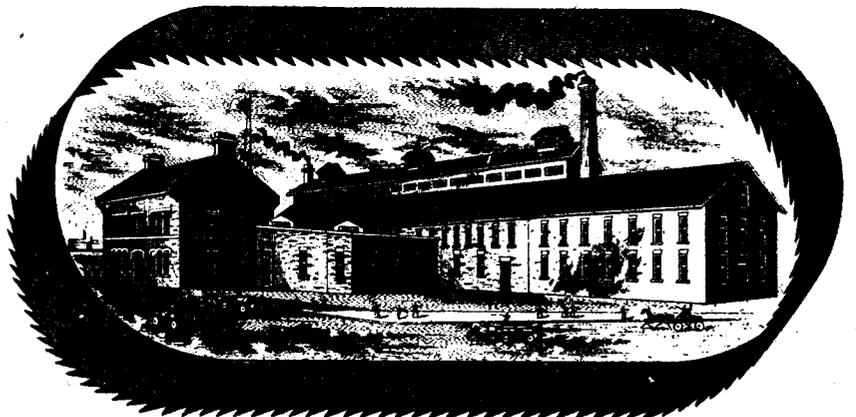
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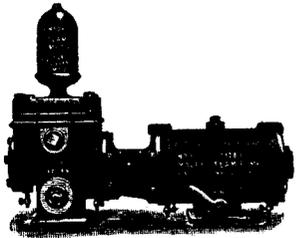
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All above Goods of Approved Quality and Make, suitable for Klondyke wear, and most of which we supplied the Mounted Police, and Hon. Mr. Sifton and Major Walsh's parties. Manufactured by.....

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"I have been sawing for the last twelve years, and have used a great many different makes of saws, but for the past two years I have used one of your make in Davidson & Hay's mill at Cache Bay, and have found it to be the best saw I ever cut shingles with."

RICHARD McGRATH.

"I am running one of your large solid tooth saws, and a better saw never went into timber."
J. R. GETTLER, Fullerton, Ont.

"I can recommend your work. The lumber saw you fixed for me is the best running saw I have had in twenty-five years."
D. THORPE, Egerton, Ont.

We have Hundreds like these. Our Work is the BEST and Prices are Right.

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We manufacture a
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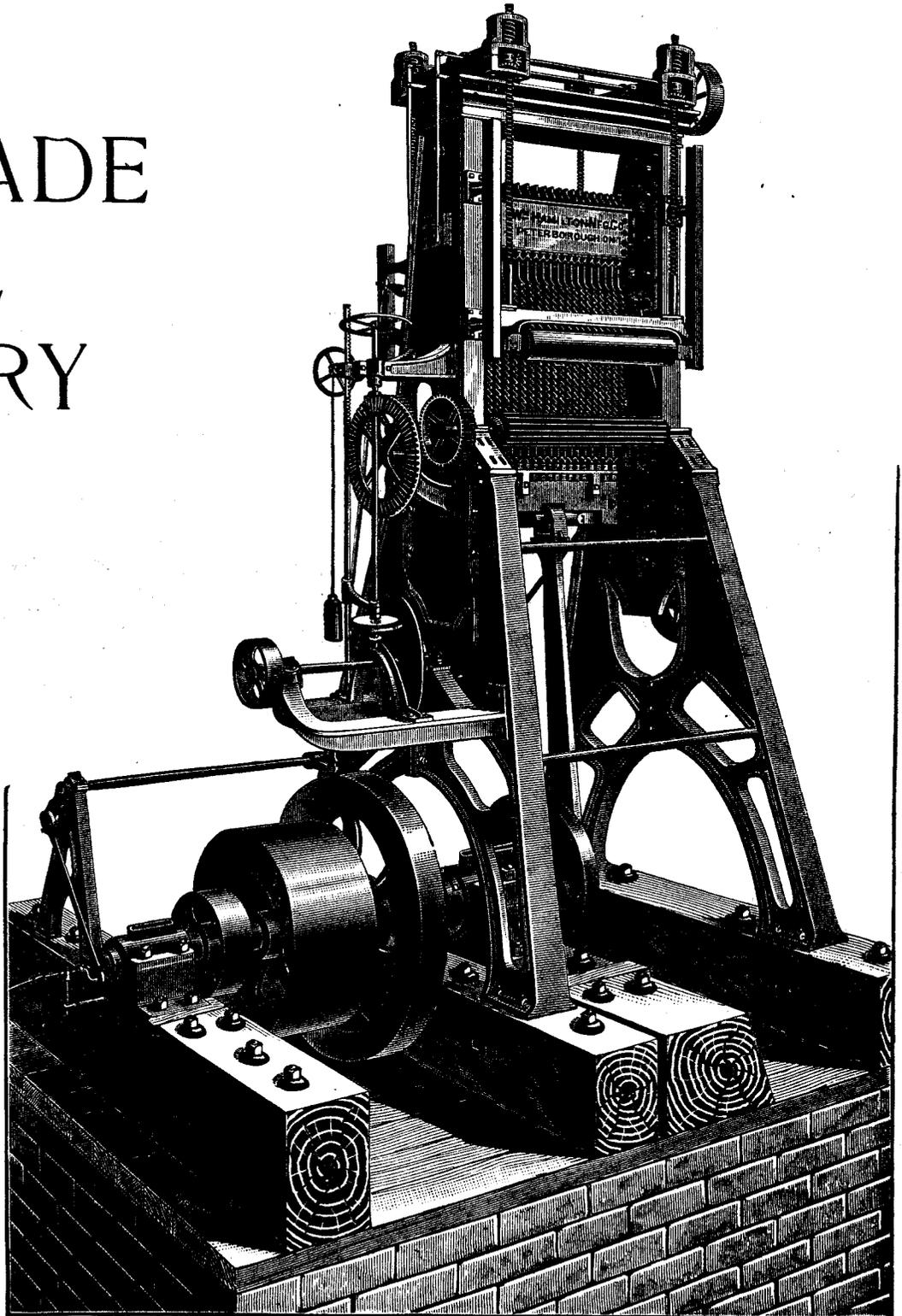
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Covel's Tools for the care of
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specifications, and build mills
complete of any capacity, or to
remodel old mills.

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your requirements are.



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PETERBOROUGH, ONT.

THE CANADA LUMBERMAN

VOLUME XIX.
NUMBER 2.

TORONTO, ONT., FEBRUARY, 1898

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

SPECIMEN OF CANADIAN DEALS.

CANADIAN pine deals have, for many years, been favorably known in foreign markets, and especially in Great Britain, to which country immense quantities have been exported annually. Nowhere in the world are deals manufactured which surpass, either in quality or dimensions, those produced in the Ottawa Valley. From a photograph sent us by Messrs. Gilmour & Hughson, Limited, of Hull, we reproduce the accompanying illustration, showing a pile of deals manufactured by this company, and which stand as proof of the huge timber and modern saw mills to be found in Canada.

These deals were manufactured at the steam saw mill of the above company at Hull, and were selected from those sawn only since September. They are all first quality, three inch, and, as will be observed by the figures thereon, range in width from 25 to 41 inches, giving an average width of 30 inches. They were manufactured from timber cut on the firm's limits on the Gati-neau river, and make one of the finest piles of lumber ever seen in Canada.

When we consider the size and quality of timber required to yield such deals, bearing in mind that they are all from the sides of logs, and square edged, then only can we properly appreciate their excellence and the value of our timber wealth. Only modern machinery of the highest type would manufacture such. The band mill that cuts them, the chain that hauls the logs into the mill, the double edger that edges them, and, in fact, the whole mill equipment, must of necessity be massive in character and of modern design. That such mills are found in Canada speaks well for the enterprise of the lumbermen of this country.

The proof of the excellence of a saw mill is the manner in which its product is turned out. The writer can say positively from experience and from personal knowledge of both Canadian and Michigan saw mills, that the Canadian lumber is far superior to the product of United States mills in every point of manufacture. Neither can it be gainsaid that nowhere on the continent do they build as good saw mills as in Canada, nor of as great capacity.

The B. C. Mine at Greenwood, B. C., has ordered a complete development plant from the Jenckes Machine Co., Sherbrooke, Que.

AN IMPORTANT SHINGLE CASE.

AN important case, establishing a precedent in the fulfillment of shingle contracts, was recently decided by a jury in Judge Benson's court, Seattle, Wash., and is reported by the Pacific Lumber Trade Journal. Briefly stated, Roy & Roy, wholesalers, on May 29 gave Ferguson & Taylor, shingle manufacturers of Blaine, an order for 20 car loads of shingles, consisting of 16 inch 6 to 2 Extra *A*'s at 95 cents, 16 inch 5 to 2 "Clears" at \$1.10, 16 inch 5 to 2 Standard A's at 50 cents, 16 inch Choice A's at 50 cents, fancy butt dimension shingles at 90 cents per 1,000 extra, and some plain butt dimension shingles at 45 cents per 1,000 extra. Prior to June 25 the defendants

shingles had advanced not more than 5 cents per 1,000, and that the defendants were entitled to about \$50 underweights on the cars already delivered, which would about off-set the claim of the plaintiffs; that the contract of sale was modified and changed the conversation of June 25, and that the plaintiffs had not sued upon the modified contract but on the original one, and therefore should fail; that the defendants should have judgment against the plaintiffs for \$50 for underweights on the cars delivered.

On the trial of the case two disinterested witnesses swore that shingles had advanced during the month of July to about \$1.25 for *A*'s and other grades in proportion, and two disinterested

witnesses swore, on behalf of the defendants, that shingles had advanced for the month of July not more than \$1.07½.

The jury returned a verdict allowing the plaintiffs \$500 damages, and the defendants \$31.50 for underweights, and gave a verdict against the defendants for \$468.50.

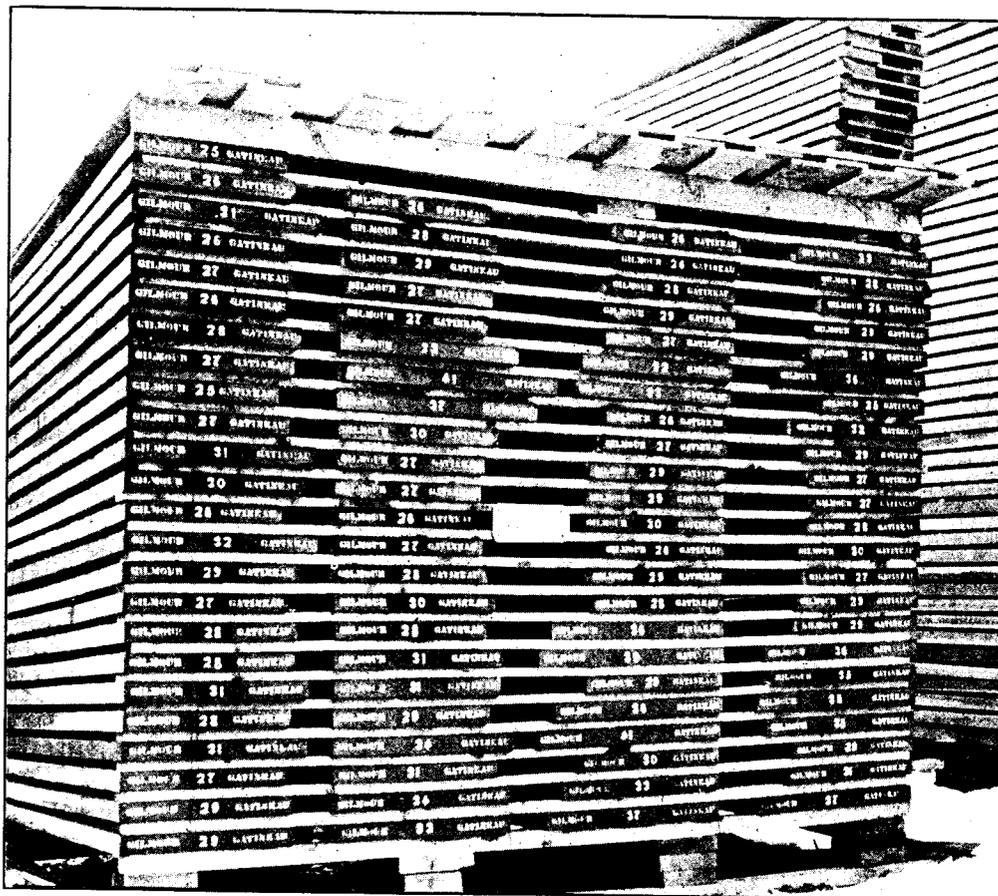
Without going into the merits of the case, it may be stated that should the verdict be sustained, it will do much to lessen an evil that has threatened the shingle industry the past four years. A number of mill men—happily few—have in the past taken contracts at a fixed price and refused to fill same when the price advanced. The same applies equally to a number of wholesalers. It has been the custom of a number of eastern buyers of late to place orders for a number of cars at a fixed price, and then when the market declined

simply cancel the orders without any explanation or upon the most frivolous pretexts. It is wrong and unjust in either case and the practice should be frowned upon. The decision will do much to prevent the mill men from accepting contracts at low prices during the winter months at a stated price for future delivery, and it will also make eastern buyers chary of cancelling orders when the market declines.

USEFUL AND UP-TO-DATE.

Mr. W. H. Smyth, Midland, Ont., in renewing his subscription, writes: "I consider THE CANADA LUMBERMAN a very useful and up-to-date paper."

Cassidy & Co. have leased the saw mill of the Burrard Inlet Red Cedar Lumber Co., at Port Moody, B.C.



SPECIMEN OF CANADIAN DEALS—MANUFACTURED BY MESSRS. GILMOUR & HUGHSON.

delivered five cars of the contract. At that time the price had advanced to \$1.10 for *A*'s. Ferguson & Taylor then asked to be relieved from filling the balance of the order. This Roy & Roy refused to do, but would allow the manufacturers to fill the entire order with *A*'s at \$1.00 per 1,000. This was agreed to, but after filling one more car the manufacturers again refused to go ahead. Roy & Roy then went on the market and bought enough *A*'s to fill the order, paying therefore \$1.35 per \$1,000. The latter then brought suit against Ferguson & Taylor for \$900, and the case was tried before a jury.

In substance Ferguson & Taylor alleged that the term "immediate delivery" meant within a reasonable time, which was, according to the capacity of the mill of the defendants, 10 days, and that on or about the 10th day of June

1897

Review of the Lumber Trade of the Year.

GENERAL SURVEY.

In some respects the year 1897 marks one of the most important periods in the history of the lumber trade. Viewed from a Dominion standpoint, there is evidence that, notwithstanding trade obstacles and uncertainties, a steady advancement has been made. New markets have been found, and the foundation laid in new fields of what promises in early years to become an extensive and profitable business. That the year was not satisfactory in every respect cannot be disputed.

There was reason to expect, early in the spring, that trade with the United States would show a considerable expansion, and that prices would improve. The disturbance caused by the Presidential election had become settled, and with the resulting general improvement in business, a heavy consumption of lumber by the United States was looked for. But the industrial establishments had felt the depression seriously, and were not disposed to contract too heavily in advance of requirements until the stability of the much-talked-of improvement was thoroughly tested. The demand for lumber continued fair until the summer months, when there was a sharp falling off. At that time indications pointed to the imposition by the McKinley government of a duty on lumber, and Canadian manufacturers, to avoid payment of the duty, shipped large quantities of stock to the Eastern States, to be piled in yards until it could be marketed. The expected happened, and before the close of the month of July the Dingley bill had become law, imposing a two-dollar duty on lumber. For the balance of the year the shipments to the United States market were of little account. Excellent crops in the Western States created an active demand for lumber, and this provided an outlet for much stock which would otherwise have been thrown upon the eastern states. In turn the eastern market improved, and stocks of Canadian lumber were well consumed before the close of the year. But storage and commission charges and other expenses had wiped out much of the profit to the Canadian manufacturer. It will thus be seen that the United States trade was not altogether satisfactory.

To the extent that the United States trade was curtailed, the European demand widened. Increased shipments were made from Ontario, Quebec, New Brunswick and Nova Scotia, and where deals a few years ago included almost the total export, large quantities of thin lumber were exported in 1897 to Great Britain, France, Spain, Australia, China, Japan, and other countries. This trade is referred to in detail in the review of the provinces following. The bulk of the foreign shipments were sold at good prices. This cannot be said of the United States and local trade. Prices during the year were low, and profits to manufacturers less than was hoped for.

Only one important sale of timber limits was

held by the Ontario government during the year. Some 150 miles in northwestern Ontario were sold at fair prices. Perhaps the most important feature of the year was the passing of an act by this government compelling the manufacture of timber within the province.

The outlook for 1898 is not altogether promising. There are gleams of sunshine and clouds of darkness. A better feeling seems to exist among the lumber trade generally, based largely upon improved local conditions, decreased production, and the expansion of foreign business, whereby our manufacturers will be less dependent upon the United States.

ONTARIO.

The conditions surrounding the manufacture of lumber in Ontario were not favorable to a profitable business. The production of logs last winter in the Ottawa and Georgian Bay districts, the two pine centres of the province, was greater than in the previous season. Many manufacturers looked forward to a good year's trade, but it soon became evident that the United States market was to be partially closed by a two dollar duty. This was the means of reducing the cut by Georgian Bay manufacturers, who are largely dependent upon the United States market. The Ottawa Valley manufacturers were less seriously affected, having disposed of a large portion of their output in the fall of 1896 to representatives of British houses. As will be observed by the figures given below, the production of the Ottawa valley exceeded that of the previous season by 114,000,000 feet.

So far as western Ontario is concerned, pine manufacturers done business on a smaller margin of profit than in 1896. Low grade lumber was difficult to dispose of even before the duty was imposed, and since then there has been little demand from the United States for anything but high class stock, for which a market can always be found. The local trade has shown a gradual improvement, but collections during the year were slow.

In the Georgian Bay section many mill owners are turning their attention to the manufacture of deals for the British market, and their experience during the past season in this direction is said to have been very satisfactory. Pine stocks at the mills are not excessive, although quite ample and consisting chiefly of the lower grades.

The hardwoods were not affected by the duty to the same extent as pine. Birch and basswood were dull of sale early in the year, but improved towards the fall. Ash, elm and oak advanced in price to the extent of the duty, and dry stocks were well sold out before the close of the year. Some complaint is heard that present prices do not leave an ample margin of profit for the manufacturer. An instance of this may be found in the case of hemlock, which sold throughout western Ontario at \$6 per thousand feet.

Very few shingles were manufactured last year, and a strong demand late in the season resulted in a scarcity of stock. There is likely to be an increased production in 1898.

The cut of several mills in western Ontario is given below. These figures are not intended to represent the total production of the district, as up to the time of going to press the particulars

of the cut of a number of mills had not come to hand:

CUT OF SOME WESTERN ONTARIO MILLS.

	Feet.
Georgian Bay Lumber Co., Waubaushene	26,000,000
Victoria Harbor Lumber Co., Victoria Harbor	23,000,000
Jas. Playfair & Co., Midland (21,000,000 for Arthur Hill & Co.)	24,000,000
Mickle, Dymont & Son, Barrie	15,000,000
Spanish River Lumber Co., Spanish River	14,600,000
Robert Thompson & Co., Hamilton	12,000,000
Ontario Lumber Co., French River	10,000,000
A. McPherson & Co., Longford Mills	6,750,000
Collins Inlet Lumber Co., Collins Inlet	5,000,000
Mossom Boyd & Co., Bobcaygeon	6,000,000
A. Tait, Orillia	3,000,000
Loveland, Roys & White, Midland	7,000,000
Charles Newton & Sons, Midland	5,000,000
Huntsville Lumber Co., Huntsville	4,500,000
Wm. Laking, Hamilton	3,000,000
Whaley Lumber Co., Huntsville	2,500,000
John Harrison, Owen Sound	3,000,000
Blind River Lumber Co., Blind River	2,000,000
Snider Lumber Co., Gravenhurst	3,000,000
Cockburn & Sons, Sturgeon Falls	3,000,000
D. Davidson, Penetanguishene	2,800,000
Keeling & Bower, Warren	1,500,000
Mitchell Bros., Berkeley	2,000,000
Warrell & Howard, Powassan	1,000,000
Craig & Austin, Kinmount	1,500,000
John P. Newman, Wiarton	3,500,000
Vigars & Co., Port Arthur	2,000,000
J. E. Murphy, Hepworth Station	2,200,000
Thomson & Avery, Sharbot Lake	3,000,000
Goderich Lumber Co., Goderich	3,500,000
W. D. Vansickle, Barrie	1,250,000
W. Wenger & Bros., Ayton	1,000,000
Sadler, Dundas & Flavell Milling Co., Lindsay	2,000,000
C. Beck Mfg. Co., Penetanguishene	1,000,000
Reid Bros., Hepworth Station	800,000
J. A. Shaver, Ancaster	750,000
Kidd & Morrow	700,000
Pickard & Rowan, Owen Sound	800,000
W. A. Gillespie, Bracebridge	750,000

The mills of several of the largest companies were not operated last year. Among these might be mentioned the Parry Sound Lumber Company; Cook Bros., Cooks Mills; Conger Lumber Company, Parry Sound; Longford Lumber Co., Longford Mills; J. & T. Conlon, Little Current, and the Dickson Company, Peterboro'. The output of Chew Bros.' mills at Midland was 15,000,000 feet of lumber, 4,000,000 lath and 3,000,000 shingles. This was cut under contract for Loveland, Roys & White, Chas. Newton & Sons and Wm. Laking. James Playfair & Company's mill at same place manufactured for Arthur Hill & Co. The C. Beck Mfg. Company, of Penetanguishene, operated their mill only for a short time, sawing about one million feet.

The lumber production of the Ottawa valley in 1897 was 728,000,000 feet, against 614,000,000 feet in 1896 and 627,000,000 feet in 1895. The individual cuts for two years appear below.

OTTAWA VALLEY PRODUCTION.

	1896—Feet.	1897—Feet.
J. R. Booth, Ottawa	115,000,000	130,000,000
Gilmour & Co., Canoe Lake	55,000,000	60,000,000
Hull Lumber Co.	54,000,000	70,000,000
McLachlin Bros., Arnprior	52,000,000	50,000,000
Bronsons & Weston Co., Ottawa	52,000,000	55,000,000
Hawkesbury Lumber Co.	43,000,000	50,000,000
W. C. Edwards & Co., Rockland	40,000,000	70,000,000
St. Anthony Lumber Co., Whitney	35,000,000	50,000,000
Gillies Bros., Braeside	30,000,000	40,000,000
Gilmour & Hughson, Hull	25,000,000	18,000,000
Shepherd & Morse Co., New Edinburgh	20,000,000	12,000,000
Canada Lumber Co., Carleton Place	16,000,000	12,000,000
R. & W. Conroy, Deschenes Mills	15,000,000	12,000,000
Wm. Mason & Son, Ottawa	12,000,000	15,000,000
Pembroke Lumber Co.	12,000,000	11,000,000
Ottawa Lumber Co., Calumet	11,000,000	
Ross Bros., Buckingham	10,000,000	12,000,000
McLaren Estate, Buckingham	8,000,000	14,000,000
R. H. Klock & Co., Aylmer	3,500,000	3,000,000
J. R. & J. Gillies, Arnprior	3,250,000	5,000,000
A. Hagar & Co., Plantaganet	2,500,000	4,000,000
A. & P. White, Pembroke		
Total	614,250,000	728,000,000

It will be observed that in the estimate for last year a cut of 55,000,000 feet is credited to Gilmour & Co., of Canoe Lake, while their cut of 1896, which was somewhat smaller, is not taken into consideration. This, and increased cuts by the St. Anthony Lumber Co., J. R. Booth, Mc-

Lachlin Bros., and one or two others, account for the increased production.

The export of forest products from the consular district of Ottawa to the United States, as furnished by the United States Consulate General, shows a gain over 1896 of about \$500,000. The detailed figures for three years are as follows:

EXPORTS FROM OTTAWA CONSULAR DISTRICT FOR YEAR ENDING DECEMBER 31, 1895.

ARTICLE	Qr ending March 31.	Qr ending June 30.	Qr ending Sept. 30.	Qr ending Dec. 31.
Bark.....	\$ 1,704.00	\$ 3,572.20	\$ 6,528.00	\$ 4,215.00
Lath and Shingles.....	6,447.70	28,102.29	24,908.55	23,027.84
Logs and Timber.....	159.95	1,587.26	1,717.25	1,717.25
Lumber.....	351,751.30	586,114.47	625,745.15	597,903.64
in bond for expt.....	3,585.69	17,232.95	35,341.07	47,046.93
Match Blocks.....	1,420.20	18,239.39	14,478.94	19,309.10
Pulp, Sulphite.....	17,570.57	3,090.73	3,406.72	6,254.64
Pickets.....	450.00	5,950.10	3,307.30	4,828.40
Railroad Ties.....				
Total.....	\$381,254.66	\$659,489.88	\$715,303.99	\$704,312.80

EXPORTS FROM OTTAWA CONSULAR DISTRICT FOR YEAR ENDING DECEMBER 31, 1896.

ARTICLE	Qr ending March 31.	Qr ending June 30.	Qr ending Sept. 30.	Qr ending Dec. 31.
Bark.....	\$ 1,704.00	\$ 3,572.20	\$ 6,528.00	\$ 4,215.00
Lath.....	3,572.20	27,497.94	27,415.38	22,283.65
Lumber.....	297,205.15	658,803.82	514,979.02	505,229.43
Pulp, Sulphite.....	16,078.95	12,332.28	8,039.53	3,763.12
Cordwood.....	30.00	14.75	14.75	14.75
Shingles.....	2,160.95	6,651.19	6,957.48	15,178.25
Railroad Ties.....	6,591.82	5,469.84	888.20	636.00
Logs.....	129.00			
Timber.....	425.89	1,960.50	5,245.82	154.32
Pickets.....	5,391.96	749.97	964.74	
Curtain Sticks.....		3,583.73	3,704.92	
Match Blocks.....		2,729.25	731.25	900.00
Posts and Poles.....		93.00		30.00
Pulpwood.....		357.50	297.00	
Total.....	\$333,349.02	\$720,228.95	\$569,223.34	\$543,401.52

EXPORTS FROM OTTAWA CONSULAR DISTRICT FOR YEAR ENDING DECEMBER 31, 1897.

ARTICLE	Qr ending March 31.	Qr ending June 30.	Qr ending Sept. 30.	Qr ending Dec. 31.
Bark.....	\$ 520.00	\$ 10,466.28	\$ 3,069.47	\$ 14,097.42
Curtain Sticks.....	7,379.99	24,351.24	14,163.22	14,097.42
Lath.....	467,151.05	1,334,069.79	364,050.63	191,648.80
Lumber.....	220.00	27,880.83	288.33	594.00
Logs.....	966.60	3,823.13	1,979.62	
Match Blocks.....	6,894.39	1,232.65		495.05
Pickets.....	146.50	12,600.02	15,225.90	2,746.61
Posts and Poles.....		228.00		132.00
Pulp, Sulphite.....		14,641.81	8,134.17	5,475.51
Pulpwood.....	5,724.01	4,738.80	8,203.42	2,712.24
Shingles.....		220.20	3,259.77	1,001.50
Railroad Ties.....				
Timber.....				
Total.....	\$489,002.54	\$1,434,360.65	\$418,374.53	\$218,813.13

Grand Total, 1895.....	\$2,460,352.23
" " 1896.....	2,170,990.80
" " 1897.....	2,560,550.85

It will be observed that for the quarter ending June 30th, 1897, lumber was exported to the United States to the value of \$1,334,069.79. This is the heaviest quarter's shipments on record, and was induced by the approaching import duty on lumber.

Work in the woods this winter in the Georgian Bay district is being carried on moderately. Canadian firms are operating in a limited manner, but any falling off in this direction is counterbalanced by the extensive operations of Michigan firms. In the Ottawa valley a slight curtailment of the log input is reported.

QUEBEC.

The export trade from the province of Quebec was exceedingly active up to September. Then an advance in freight rates and a weakening of the British market checked shipments to some extent. Those who rushed their goods forward early in the season were the more fortunate, and closed the year with large profits. Others have had a fairly successful season, but have suffered somewhat from the immense production of spruce deals by the maritime provinces. As a result of heavy stocks shipped to South America in late years, that country took very little lumber in 1897. From the port of Montreal there were shipped to the River Platte only 417,505 feet, a decrease of 7,372,661 feet as compared with the previous year. There are indications, however, that this market will revive in the near future, provided the policy of restricting shipments is adhered to. The exports from Quebec ports were chiefly to Great Britain, which continues to consume an increasing quantity of pine and spruce deals. Manufacturers who cater to the United States trade report an unsatisfactory year. The margin of profit was small, and stock sold after the imposition of the duty was, in a measure, sacrificed.

From the port of Montreal the exports show a gain over the previous year of over 100,000,000 feet, the total being 320,802,733 feet, valued at \$5,272,164. Much of this was the production of the Ottawa valley. The following table shows the exports of timber made by the principal shippers from the port of Montreal for the season 1897, with a comparison with the previous year:

	1897—Feet.	1896—Feet.
Dobell, Beckett & Co.....	98,000,000	54,000,000
W. & J. Sharples.....	56,829,640	44,869,840
R. Cox & Co.....	38,125,185	26,117,300
J. Burstall & Co.....	36,319,608	24,521,007
McArthur Bros.....	32,786,506	19,192,515
Watson & Todd.....	30,359,130	25,642,000
E. H. Lemay.....	8,000,000	4,932,000
Sundry shippers.....	3,000,000	21,828,927
Total.....	300,420,069	221,003,609

The figures below give the quantity and value, in detail, of timber, deals and sawn lumber, etc., exported from Montreal during the season of navigation ending 30th November, 1897:

Description.	Quantity.	Value.
Battens.....		\$ 2,784
Deals, pine, standard hundreds.....	70,569	3,478,843
Deals, spruce and other, standard hundreds.....	13,683	432,148
Deal ends, standard hundreds.....	7,157	353,346
Palings, standard hundreds.....	30,502	590
Planks and boards, million feet.....	35,510,726	739,031
Scantlings, million feet.....	289,190	6,676
Staves, etc.....		34,004
All other lumber.....		51,884
Timber, sq. ash, tons.....	1,787	16,920
" sq. birch, tons.....	5,801	55,951
" sq. elm, tons.....	1,808	18,507
" sq. maple, tons.....	97	1,111
" sq. oak, tons.....	395	5,781
" sq. white pine, tons.....	4,460	57,723
All other, tons.....	643	26,865
Total.....		\$5,272,164

The following statement shows the quantity, in standard hundreds, and value of wood exported from the ports named:

PORTS.	ARTICLES.	QUANTITY.	VALUE.
Three Rivers and Bastiacan.....	Pine Deals.....	2,065 Std. H.	\$23,940
	Spruce Deals.....	3,122 " "	105,995
	Deal Ends.....	122 " "	4,638
	Planks, Boards, Etc.....	15,837 M. ft.	149,429
	Pulp Wood Spruce.....	51,922 " "	193,482
	Other Headings.....		5,419
	Total value.....		\$528,813
Sorel.....	Pine Deals.....	154 Std. H.	\$ 6,327
	Spruce Deals.....	3,502 " "	108,532
	Planks, Boards, Etc.....	2,280 " "	20,005
Total value.....		\$134,864	

The timber trade of Quebec is reviewed by J. Bell Forsyth's annual circular, which is now recognized as an authority on the subject:

The business of the port has shown a marked increase in the shipment of lumber over recent years, and spruce deals have been heavily exported. The shipment of pine deals from Montreal, which is largely in the hands of Quebec houses, has been unprecedented in extent. Continued dullness in the United States market, with the imposition of a tariff duty by that country on sawn wood goods, has induced increased shipments of boards and sidings, both pine and spruce, to the United Kingdom.

Prices have been well maintained, except in spruce deals, which have fallen heavily in value in the United Kingdom, owing to excessive shipments from the maritime provinces. Producers of Ottawa and other pine deals should give timely consideration to the lesson, and by keeping manufacture within limits, prevent a similar result in their goods.

A comparative statement for three years of the timber measured and culled by the Supervisor of Cullers at Quebec is as follows:

	1895. Cubic Ft.	1896. Cubic Ft.	1897. Cubic Ft.
Waney white pine.....	3,086,469	2,870,879	4,311,340
Square white pine.....	273,771	316,093	832,589
Red pine.....	108,601	50,609	211,217
Oak.....	1,006,139	1,139,155	1,448,960
Elm.....	596,137	416,625	666,577
Ash.....	149,077	83,749	132,435
Birch.....	240,818	252,424	262,297

WHITE PINE.—With a larger supply and heavier shipment, the stock shows some increase over the unprecedentedly light one of last winter, but is by no means excessive and is largely in merchants' hands. The production of waney pine will be considerably under that of last year, and a marked improvement in the United States would at any time cut off the Michigan supply.

	Supply.	Export.	Stock.
1897 { Square 832,589 } { Waney 4,311,340 }	3,733,040	{ 482,849 Square. 2,288,249 Waney.	
1896 { Square 316,093 } { Waney 2,870,879 }	4,251,800	{ 537,013 Square. 1,474,168 Waney.	

RED PINE.—The stock is sufficient for reduced requirements of trade, and little is being made, as the price is too low to induce manufacture, and the demand is only for superior wood, which is scarce.

	Supply.	Export.	Stock.
1897.....	211,217	168,760	183,552
1896.....	50,609	139,160	82,069

OAK.—Shipments have been very heavy as compared with recent years. The stock is not excessive for business on a similar scale, as production will be diminished.

	Supply.	Export.	Stock.
1897.....	1,448,960	1,412,200	694,111
1896.....	1,145,564	1,382,880	637,348

ELM has been in good demand all the season, but the difficulty of securing suitable wood will prevent an over-supply, and eventually bring about a scarcity.

	Supply.	Export.	Stock.
1897.....	662,577	587,080	163,835
1896.....	416,625	501,000	78,374

ASH is not wanted in the United Kingdom, and stock is probably more than ample for next season's requirements. Even large average wood of first-class quality and good white color is sold with difficulty.

	Supply.	Export.	Stock.
1897.....	132,435	76,200	92,766
1896.....	3,749	113,680	42,694

BIRCH is not in demand, as cheap African mahogany has to some considerable extent taken its place. Manufacturers should restrict production, especially of short wood under ten feet long.

	Supply.	Export.	Stock.
1897.....	262,297	214,080	24,712
1896.....	251,430	319,200	9,470

PINE DEALS.—Quebec business is small and quite secondary to the heavy and increasing one carried on in Montreal by Quebec houses. Twelve months back it seemed that the prompt completion of short rail connection through Hawkesbury with the Ottawa district might bring a large portion of the business this way. The delay, in all probability, has been finally fatal to the realization of these hopes.

	Supply.	Export.	Stock.
1897.....	601,864	49,716	168,885
1896.....	657,264	400,343	142,410

SPRUCE DEALS are in a most unsatisfactory condition, and unless the excessive increase of production, especially in the maritime provinces, is curtailed and brought within previous bounds, there can be no improvement.

The business in pulp-wood continues to increase, but business in sawn spruce lumber with the United States is restricted by the recently imposed duty.

	Supply.	Export.	Stock.
1897.....	3,049,322	1,738,107	1,071,313
1896.....	3,915,455	3,828,258	573,413

SAWN LUMBER.—There has been very little demand for spruce for River Platte. Towards the end of the season owing to the light shipments a few cargoes were sold at a slight advance on last year's prices, and the stock wintering being very short as compared with former years, an improvement is looked for next season.

FREIGHTS have followed the same course as last year, though the advance towards end of season came earlier, and was more marked, ton-

nage at one time in the Fall being scarcely obtainable even at extreme rates. Sail for Quebec loading at seventeen shillings for Clyde, and nineteen shillings for Liverpool throughout season. Deal freights by steam for Montreal loading to leading ports in the United Kingdom opened at forty shillings, and from early September till close of season were unsettled at advanced and at times at extreme figures.

COMPARATIVE STATEMENT OF SAILING VESSELS CLEARED AT THE PORT OF QUEBEC, FOR SEA (LUMBER LADEN), 1882 TO 1897, FROM THE OPENING TO THE CLOSE OF NAVIGATION.

Vessels.	Tons.	Vessels.	Tons.
1882.....	426 359,925	1890.....	250 238,162
1883.....	487 416,169	1891.....	205 182,615
1884.....	366 291,398	1892.....	244 225,008
1885.....	369 294,789	1893.....	177 146,970
1886.....	325 250,635	1894.....	136 115,639
1887.....	271 206,172	1895.....	86 70,960
1888.....	227 195,928	1896.....	103 82,622
1889.....	275 240,892	1897.....	99 84,233

For the year ending 1st November, 1897, there were brought to Quebec by the Quebec and Lake St. John Railway, 3,406 cars of deals and lumber, 299 cars pulp, 389 cars ties, 2,235 cars cordwood, 158 cars square timber and 576 cars pulp-wood.

THE MARITIME PROVINCES.

Manufacturers in New Brunswick and Nova Scotia entered upon the year's business with promising prospects. The winter of 1896-97 was one of the most favorable on record for getting logs out of the woods, and the large cut which had been induced by the improved outlook for foreign trade reached the mills with little difficulty at a slightly earlier date than usual. The result was a very heavy production of lumber. Spruce, the chief lumber manufactured in these provinces, was exported extensively to the British market, owing to the depression that existed in the United States. The result was that later in the season the markets of the United Kingdom became overstocked, and prices suddenly collapsed. Early shipments of New Brunswick spruce deals sold in the British markets at £7 per standard c.i.f. During the summer prices dropped to £6 10s. to £6 15s., and late fall shipments only realized £5 15s. to £6 per standard. Nova Scotia deals brought prices slightly below those manufactured in New Brunswick. Local prices, of course, were governed by the foreign demand, and weakened accordingly, until late in the fall quotations at St. John and other leading ports were nominal, and shipments were confined to contract requirements. The result of this was that large stocks of lumber which were intended to be marketed in 1897 were held over for spring shipment.

The import duty on lumber practically closed the United States market, and the shipments to that country after August 1st were of little account. A few cargoes of laths were sold at very low prices. Dullness prevailed in the shingle trade, and some of the mills ceased manufacturing before the close of the season.

Manufacturers report that, taken as a whole, the year's business was more profitable than that of 1896. The demand from South America and the West Indies assisted in placing the balance on the right side of the ledger. Large quantities were exported to these countries from Nova Scotia, while increased shipments were also made to France and Spain. In point of volume the lumber trade of the maritime provinces exceeds all previous records. The exports of spruce from all ports, excepting Miramichi, Richibucto and Sackville, show a marked increase. Interesting statistics will be found below. The total shipments from New Brunswick were enormously large. These figures represent the exports for four years :

Year	Feet.
1894.....	322,170,039
1895.....	302,126,536
1896.....	367,438,149
1897.....	531,628,162

From the consular district of St. John, which includes the port of Fredericton, the exports of lumber and shingles to the United States were

valued at \$304,163.61, showing a decrease as compared with the previous year of, approximately, \$108,000. The following are the totals, by quarters, for the two years :

	1897.	1896.
1st quarter.....	\$132,742.85	\$ 73,199.01
2nd ".....	507,459.33	555,999.29
3rd ".....	308,603.58	440,101.74
4th ".....	304,163.61	287,071.86
Total.....	\$1,252,969.37	\$1,356,371.90

It may be noted that the lumber exports (exclusive of firewood and bark) for the last half of 1895 were valued at \$956,078.29, compared with \$727,173.60 in the last half of 1896 and \$612,767.19 in the last half of 1897. That is, the exports for the last half of 1897 to the United States were \$343,000 less than in the like period of 1895.

Coming to trans-Atlantic shipments, we find, according to Hon. J. B. Snowball's wood circular, a total of 494,204,195 feet, an increase in 1897 of over 100,000,000 feet as compared with the previous year. Much larger quantities were shipped to Ireland, Belfast showing a gain of 18,000,000 feet, and Dublin of 5,000,000 feet. The Manchester canal was the destination of 27,000,000 feet, while in 1896 only 5,000,000 feet found a market there. Particulars of shipments follow :

SHIPMENTS FROM MIRAMICHI FOR 12 YEARS, FROM 1886 TO 1897, INCLUSIVE.

Year	Sup. Feet.	Year	Sup. Feet.	Year	Sup. Feet.
1886—	72,000,000.	1890—	88,000,000.	1894—	96,000,000.
1887—	68,000,000.	1891—	72,000,000.	1895—	82,000,000.
1888—	73,000,000.	1892—	95,000,000.	1896—	106,000,000.
1889—	110,000,000.	1893—	83,000,000.	1897—	102,000,000.

SHIPPERS FROM THE PORT OF MIRAMICHI, SEASON 1897.

Shippers.	No. Vessels.	Tons.	Sup. ft. Deals, Scantling, Ends and Boards.	Palings Pes.
J. B. Snowball.....	31	30,572	27,240,447	1,209,000
W. M. Mackay.....	30	28,482	33,523,310	
D. & J. Ritchie & Co.	19	12,619	12,570,000	149,700
E. Hutchison.....	10	10,769	10,553,562	20,000
G. J. Vaughan.....	4	4,988	7,071,004	
Wm. Richards.....	2	3,386	4,140,101	
G. Barclay & Sons.....	2	3,767	3,737,000	
F. E. Neale.....	2	2,761	2,883,653	
Clark, Skillings & Co.	2	3,161		
Total.....	102	100,595	101,719,077	1,378,700

Spool Wood—J. B. Snowball, 227,023 sup. ft.; Clark, Skillings & Co., 2,574,169 sup. ft. Timber—J. B. Snowball, 3,521 cubic ft.

DISTRIBUTION OF MIRAMICHI SHIPMENTS.

Country.	No. Vessels.	Tons.	Sup. ft. Deals, Scantling, Ends and Boards.	Palings Pes.
Great Britain.....	49	56,931	59,680,988	1,229,775
Ireland.....	40	34,416	33,605,287	148,925
France.....	6	4,862	4,564,312	
Spain.....	5	3,172	2,839,363	
Africa.....	2	1,124	1,029,127	
Totals.....	102	100,595	101,719,077	1,378,700

Great Britain, spool wood, 2,801,192 ft.; timber, 3,521 cubic ft.

ST. JOHN, N.B., SHIPMENTS OF DEALS, &C., TO TRANS-ATLANTIC PORTS, DEC. 1ST, 1896, TO DEC. 1ST, 1897.

Shippers.	Sup. ft. Deals, &c.	Timber. Pine.	Birch.
Alex. Gibson & Sons, Limited.	114,113,178		2,613
W. Malcolm Mackay.....	106,678,912	92	6,744
Geo. McKean.....	16,070,521		97
Watson & Todd.....	7,530,455		
Total.....	244,399,066	92	9,454

DISTRIBUTION OF ST. JOHN, N.B., SHIPMENTS, DEC. 1ST, 1896, TO DEC. 1ST, 1897.

Ports.	Sup. ft. Deals, &c.	Timber. Pine.	Birch.
Avonmouth Dock.....	3,002,118		
Ayr.....	598,783		
Bristol.....	9,361,836		
Barrow.....	2,346,300		
Clyde.....	1,195,920		
Fleetwood.....	16,712,852		
Glasgow.....	13,721,614		684
Garston.....	1,799,189		
Liverpool.....	59,650,519	92	8,670
London.....	4,311,963		
Manchester.....	26,984,593		
Preston.....	397,132		
River Mersey.....	732,155		
Sharpness.....	15,051,211		
Ireland.....	54,013,083		100
Wales.....	25,804,998		
France.....	7,824,204		
Spain.....	406,572		
Holland.....	484,024		
Total.....	224,399,066	92	9,454

SHIPMENT FROM ST. JOHN TO TRANS-ATLANTIC PORTS FOR THE PAST 12 YEARS.

Year	Total Sup. ft. Deals, &c.	Timber (tons) Birch.	Pine.
1886.....	138,934,392	7,354	4,313
1887.....	118,450,590	5,197	1,587
1888.....	153,184,187	4,721	457
1889.....	180,167,488	7,221	487
1890.....	132,608,516	1,311	4,317
1891.....	122,242,682	5,004	
1892.....	146,529,309	10,200	
1893.....	156,653,334	5,294	
1894.....	153,473,076	5,015	
1895.....	126,449,707	8,374	324
1896.....	167,246,442	9,892	128
1897.....	244,399,066	9,454	92

TOTAL TRANS-ATLANTIC SHIPMENTS OF NEW BRUNSWICK, 1897 COMPARED WITH 1896.

Ports.	No. Vessels.	Tons.	Sup. ft. Deals, &c.	Timber.
Miramichi.....	102	100,595	101,719,077	880
St. John.....	188	284,603	244,399,066	9,546
Outports of Harvey Alma Hillsboro Hopewell.....	38	53,574	58,187,304	962
Sackville (Bay Verte).....	27	14,147	14,419,134	
Dalhousie.....	44	27,722	24,185,011	323
Campbellton.....	16	14,375	14,960,267	
Bathurst.....	13	13,058	13,864,133	29
Richibucto.....	21	8,800	7,489,438	
Shediac.....	31	15,711	14,980,765	
Total.....	480	532,495	494,204,195	11,740

Ports.	No. Vessels.	Tons.	Sup. ft. Deals, &c.	Timber.
Miramichi.....	133	108,118	106,147,420	
St. John.....	"	"	167,246,442	10,020
Outports of Harvey Alma Hillsboro Hopewell.....	22	20,246	25,614,039	
Sackville (Bay Verte).....	36	19,843	19,996,978	
Dalhousie.....	60	41,631	36,600,980	195
Campbellton.....	8	7,518	8,188,078	
Bathurst.....	26	11,374	11,191,062	
Richibucto.....	23	11,545	11,054,978	
Shediac.....	308	220,275	386,039,977	10,215

The trans-Atlantic shipments from the Province of New Brunswick for the past ten years were :

Year	Sup. ft.	Year	Sup. ft.
1888.....	277,000,000	1893.....	312,000,000
1889.....	309,000,000	1894.....	326,000,000
1890.....	293,000,000	1895.....	291,000,000
1891.....	253,000,000	1896.....	386,000,000
1892.....	325,000,000	1897.....	494,000,000

SHIPMENTS FROM NOVA SCOTIA, 1897.

Ports.	No. Vessels.	Tons.	Sup. ft. Deals, &c.	Timber.
Halifax.....	71	50,111	84,060,000	500
Parrsboro.....	33	40,598	44,397,133	
Outports of Amherst.....	35	31,322	24,485,560	
Bridgewater.....	23	10,873	10,749,000	
Pictou.....	13	12,937	10,872,360	3,184
Hubbard's Cove.....	6	5,887	5,659,000	
Yarmouth.....	3	2,927	2,684,061	
Liverpool.....	1	528	495,260	
Mahone Bay.....	3	1,522	1,478,000	
Jordan River.....	1	528	482,188	
Total.....	189	157,233	185,362,562	3,684

The shipments of deals from Nova Scotia to trans-Atlantic ports for the past eleven years were :

Year	Sup. ft.	Year	Sup. ft.
1887.....	82,959,589	1892.....	87,861,398
1888.....	85,070,005	1893.....	109,252,930
1889.....	92,605,488	1894.....	106,327,250
1890.....	99,512,924	1895.....	109,324,393
1891.....	78,603,742	1896.....	123,116,389
		1897.....	185,362,562

The disappearance of sailing vessels is marked by the larger average tonnage of vessels visiting St. John. In 1895 the traders averaged 774 tons, in 1896 813 tons, and in 1897 985 tons. Sailing vessels are said to be favored by both shippers and receivers of lumber cargoes.

In view of the fact that the lumber business was overdone last year, the cut of logs this winter is being greatly curtailed, and the output will be little more than half the quantity produced last year. The wintering stocks, however, are heavy, so that there is certain to be an average supply available for shipment next season. The strength of the market will depend upon the course pur-

sued by shippers. A similar overstock to that of last year should be carefully guarded against.

BRITISH COLUMBIA.

For many years the lumber trade of British Columbia has been depressed. The year 1896 showed a slight improvement, and indications pointed to greater prosperity in the year covered by this review. These hopes were to a certain extent realized. Although foreign shipments do not represent as large an export as the previous year, the local and eastern trade was much more active, and the mills were kept busy throughout the year. Competition was felt from the Washington manufacturers, who unloaded much low grade stock on the local market. Cedar lumber and shingles were shipped extensively to the Northwest and Ontario, while the construction of the Crows' Nest Pass railway accounted for several large orders. The consumption of lumber by new cannery buildings and box making also created a good local demand. The following table shows the distribution of the foreign trade:

BRITISH COLUMBIA LUMBER SHIPMENTS, 1897.

Vessel.	From	Destination	Feet.	Value.
Clairmont	Vancouver	Delagoa Bay	511,327	\$ 7,648
Port Adelaide	Vancouver	Delagoa Bay	982,762	9,687
Crown Prince	Vancouver	Volgaster, Ger.	776,772	13,181
City of Delhi	Vancouver	Valparaiso	1,059,446	8,730
Trowbridge	Moodyville	Greenock	972,600	13,917
Rosalie	Chemainus	Geraldton	505,820	4,063
Ariadne	Vancouver	Valparaiso	1,369,000	11,985
Khorasan	Vancouver	London	801,165	10,449
Wythop	Vancouver	Algoa Bay	1,096,468	9,246
Addenda	Chemainus	Tientsin	810,472	8,477
Speke	Moodyville	Sydney	2,118,421	18,933
Province	Moodyville	Freemantle	1,593,922	11,467
Katie Flickinger	Vancouver	Yokahama	580,000	6,836
E. K. Wood	Chemainus	Tientsin	668,451	5,367
Lyderhorn	Chemainus	Sydney	2,270,931	19,453
Melrose	Chemainus	Santa Rosalia	750,000	4,000
Blairlogie	Vancouver	Delagoa Bay	1,280,168	11,564
Arnold	Vancouver	Cork	649,025	7,465
Oread	Vancouver	Port Natal	629,568	5,015
Verbena	Vancouver	Adelaide	1,394,497	12,022
Alexandra	Vancouver	Geraldton	1,007,700	8,82
Dudhope	Chemainus	Liverpool	1,570,378	15,378
Pass of Melfort	Vancouver	Delagoa Bay	1,945,479	15,618
Argowan	Vancouver	Valparaiso	1,207,192	10,361
Kingora	Vancouver	United Kingdom	1,598,761	23,375
Crown of India	Chemainus	Cork	1,559,594	14,886
Eva	Burrard Inlet	Yokahama	1,938,954	14,314
Eivion	Vancouver	Cape Town	933,000	10,580
Robert Sudden	Chemainus	Shanghai	705,335	9,089
King Cyrus	Vancouver	Shanghai	869,531	7,221
Wachusett	Chemainus	Sydney	1,135,900	11,350
John Smith	Vancouver	Algoa Bay	611,658	4,500
Dunboyne	Vancouver	Cork	1,672,568	10,725
Hawaiian Isles	Vancouver	Shanghai	1,835,543	16,981
Comet	New Westminster	Shanghai	443,000	3,544
Wrestler	New Westminster	Valparaiso	575,000	4,600
Waterloo	Moodyville	United Kingdom	1,530,801	11,453
Honolulu	Br. Columbia	Santa Rosalia	245,000	5,145
Annie Thomas	Moodyville	Port Pirie	1,530,979	17,640
Fantasi	Vancouver	Cork	945,649	12,575
Allette	Vancouver	Yokahama	1,044,259	15,730
St. Katharine	Chemainus	Shanghai	1,065,650	8,881
Pomona	Chemainus	Freemantle	966,696	7,845
British Yeomn	Chemainus	Liverpool	1,546,849	12,136
Inca	Chemainus	Port Pirie	1,299,940	8,610
Echo	Chemainus	Tientsin	895,337	10,086
Florence Stella	Vancouver	Freemantle	952,311	7,838
Eliza	Chemainus	Antofagasta	1,270,170	10,507
Golden Sho e	Vancouver	Shanghai	875,000	10,790
Astracana	Burrard Inlet	Cork	1,196,386	15,177
Lou-iana	Chemainus	Melbourne	1,092,573	8,032
Carrier Dove	Moodyville	Adelaide	810,930	7,539
Patterdale	Vancouver	Freemantle	756,007	6,315
Robert Sudden	Moodyville	Sydney	671,298	6,192
King Cyrus	Chemainus	Sydney	889,454	7,508
Gen. Fairchild	Moodyville	Adelaide	1,150,756	9,940
Amarapoora	Moodyville	U. K.	1,252,642	9,735
Erin's Isle	Vancouver	Sydney	1,278,299	18,755
North Riding	Moodyville	Sydney	1,067,604	9,473
Melrose	Salt Spring, Ild.	Santa Rosalia	750,000	4,000
Ensenada	Moodyville	Buenos Ayres	831,500	6,424
J. M. Griffith	Salt Spring, Ild.	Santa Rosalia	700,000	3,500
Guardian	Salt Spring, Ild.	Santa Rosalia	850,000	6,102
Catusa	Chemainus	Melbourne	935,971	6,551

The above returns show that there sailed during the year 65 vessels, carrying, approximately, sixty-eight million feet of lumber, valued at \$600,000. The bulk of the lumber was shipped to Australia, the United Kingdom, China and South Africa, as the following figures of the value of the shipments will show:

SHIPMENTS BY COUNTRIES.

Australia	\$188,955
United Kingdom	154,684
China	87,934
South Africa	71,246
South America	49,227
Japan	30,084
United States	25,602
Total	\$607,732

The demand for British Columbia shingles last year was about equal to the output. The erection of any more mills, however, would at once glut the limited market and cause an overproduction. In this connection it is stated that the immense output of red cedar shingles of

Washington and Oregon stands as a menace to the British Columbia shingle manufacturers, and will continue so until the Dominion Government restores the tariff against United States shingles coming into Canada.

The price of shingles remained very low during the year, notwithstanding the fact that the demand was fairly good, and the price of timber has advanced 10 to 15 per cent. since the spring of 1897. There is every indication at the present time of a further advance in the price of timber. It is also expected that labor is going to be scarce and high priced next spring. Cedar timber available at anywhere near the present prices is certainly becoming scarce, and if eastern lumber merchants want British Columbia shingles they will have to pay at least 25 per cent. in advance of present prices.

MANITOBA.

The year 1897 was, it is believed, the beginning of a new era of prosperity for Manitoba and the Northwest Territories. The farmers sold their grain at good prices, which placed them in a position to erect new buildings and make necessary improvements. Throughout the summer and fall seasons there was experienced a brisk demand for lumber, and stocks at the mills were well sold out before the close of the year. Retail dealers and manufacturers alike are hopeful of 1898 trade. To such an extent is this the case that the log production this winter is being greatly increased, and it is probable that the cut of lumber next year will exceed the past season's output by fifty per cent.

CORRESPONDENCE

Letters are invited from our readers on matters of practical and timely interest to the lumber trades. To secure insertion all communications must be accompanied with name and address of writer, not necessarily for publication. The publisher will not hold himself responsible for opinions of correspondents.

IMPORT DUTY ON LUMBER.

PORT ARTHUR, ONT., Jan. 11th, 1898.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR,—Permit me to say a few words regarding a subject of much importance to Canadian lumbermen. Under the existing duty of \$2.00 per thousand feet on lumber entering the United States, the whole of the lumber trade of Canada is handicapped. The Georgian Bay section are unable to ship the lower grades to the United States, and when they attempt to sell at home they are met by the Michigan man, who sells his better grades at home and dumps the common grades into Canada at a price that Canadians cannot compete with, for the reason that the American gets a fair price at home for the better class of stuff, and must find a market for his lower grades, which forms quite a large percentage of the whole.

During the year 1897 the Americans sent into our market of Manitoba about 15,000,000 feet, with all the freedom and facilities that we have and at prices which we were scarcely able to compete with. If the American manufacturer had to pay a \$2.00 duty, then the Manitoba market would be open to the Georgian Bay trade, as the difference would carry lumber from the latter point to Thunder Bay, and at that point he would be on an equal footing with the manufacturer at Thunder Bay.

We would much prefer to see Georgian Bay lumber in Manitoba than the product of American mills; and in that case the grades would be maintained, whereas now the American grade is below ours. The farmer, who is the chief consumer in the west, gets the American lumber somewhat cheaper, and fails to realize that he

does not get the grade. He figures that, if by driving twenty or thirty miles for a load of lumber he can save \$3.50, he gets his 2,000 feet of lumber for that much less, but in reality he has more than earned the difference by driving to some distant point that is touched by the Northern Pacific system; besides he gets an inferior grade.

In British Columbia we find the same handicap. Living, and consequently wages, are cheaper in the district of Washington than in British Columbia; therefore the Washington mill man is able to manufacture cheaper than the British Columbia man, and send his product into British Columbia at prices that cannot be competed with, while he himself stands behind the shield of a \$2.00 duty. To finally sum up the whole situation, we find the Michigan lumberman captures the trade of Ontario; the Minnesota lumberman captures the trade of Manitoba; the lumberman of the district of Washington captures the trade of British Columbia, and we simply become hewers of wood without any protection. As lumbermen, we have the same right to protection from Ottawa as the American manufacturer has from Washington. We are not afraid of open and fair competition, and would only say "Canada for Canadians" as far as our neighbors say "America for Americans."

Yours truly,

RICHARD VIGARS.

PRODUCTION OF PULP WOOD IN QUEBEC.

DEPARTMENT OF CROWN LANDS,

QUEBEC, Jan. 11th, 1898.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR,—Duly authorized by my Minister, permit me to offer explanations regarding the output of pulpwood in this province, as the comment and comparison drawn in your last issue on the Commissioner's report for 1897 may have an erroneous construction put upon same. The greater part of the pulpwood produced in Quebec province has of late years been got out in log lengths and has been returned as spruce logs, consequently it appears under the heading of "Spruce Logs." Only the small quantity cut in four foot lengths and returned as in cords appears under the heading of "Pulpwood."

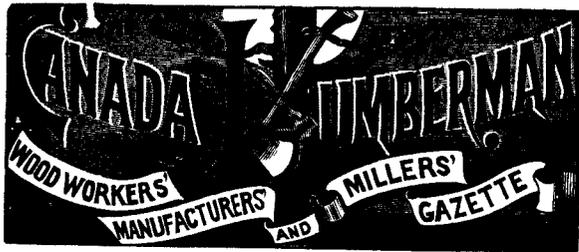
In view of the increase in volume of the pulpwood trade, it is probable that my Minister will cause such alterations to be made as will enable the department to show the total output of pulpwood (in cords and logs) combined in one and the same column, and quite distinct from the spruce log column.

Thanking you for inserting the above in your paper, I am, dear sir,

Yours faithfully,

W. C. J. HALL.

A case which has been in the courts for over three years was finally decided last month in the Court of Appeal at Huntsville. It was entitled Dunlop vs. Whaley Lumber Co. Three years ago Judge Mahaffy gave judgment against this company for \$578.32. The case was appealed to Judge Ferguson, who reversed the former decision. The plaintiff then appealed to the Court of Appeal, where four judges confirmed the decision in favor of the Whaley Lumber Company. A local paper states that the case should never have been before the courts, and had it not been for the blundering of a government official, the suit would never have been entered.



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THE OUTLOOK FOR LUMBERMEN IN ONTARIO.

Now that the Ontario Government has passed the restrictive legislation asked for by the lumbermen, in almost the exact terms of their request, and placed the saw mill owners of the Georgian Bay on a footing of equality with Michigan owners of Canadian stumpage, it remains to be seen what the immediate future of the lumber trade will be. The action taken of preventing the export of logs cut from Crown lands, whether the license was held by an American or a Canadian, was one which could not well have been avoided; it would have been an acknowledgement of utter helplessness to have permitted Americans to come here, ~~and~~ ~~down~~ our forests, raft the logs to their mills in the United States free of export duty, while our own mills were closed down, our workmen idle, and the demand lost for all the subsidiary work and supplies required in running a saw mill.

We have never yet heard Canadian lumbermen say that they were afraid of any fair competition; but to quote the words of the lumbermen when before the government on the 10th of December last, "under present conditions of free logs for export and a duty of \$2.00 per thousand feet, sawing in the Georgian Bay for the American market could not be continued; the business of sawing lumber would, of necessity, be transferred to Michigan." This state of things would have been established by the action of the Dingley bill. That famous measure, which became the law of the United States on the 24th of July, 1897, has been a great disappointment to many of its promoters. When President McKinley was elected in November, 1896, a determined effort was made to boom the lumber business, and for two or three weeks great activity prevailed, especially at Michigan mills on the lake shore, shipping out lumber to wholesale centres; but the extraneous demand soon collapsed, and the same dreary listless condition of trade came back again.

A large trade like that of selling forest products has so many ramifications and is subject to so many different forces, near and remote, that the mere passing of a tariff bill is often a small factor in determining the price. Take, for example, the Wilson bill, which was passed in 1894 and gave Canadian lumber free entry into the United States; it was naturally supposed that it would be a great boon to Canadian producers; whereas

in the years immediately following, lumber, even with the benefit of free entry into that country, was sold lower than it had been at any time for nearly twenty years. The international problem of the lumber and log trade is not so difficult a matter after all. It will be remembered that an agreement was reached between Sir John Macdonald and Mr. Blaine in 1890, that in consideration of the American government reducing their duty on lumber to \$1 per thousand feet, Canada would abolish her export duty on logs. This was done by the McKinley bill in the United States and by order-in-council for Canada, and the state of things continued until 1894, when the American government placed lumber and most forest products on their free list.

When Mr. McKinley was elected President, with his high tariff policy, the lumbermen of the United States lost no time in demanding that the old duty on lumber should be restored; this was accomplished by the Dingley bill last summer, and no Canadian has offered an objection, considering it entirely a matter to be dealt with by the United States. But meantime affairs in Michigan had changed; a number of mill owners had cut out their holdings of pine, had purchased standing timber in Canada, and were floating over large quantities of logs to supply their mills. They were naturally afraid that now a duty had been again imposed on lumber, the Dominion government would revert to their old policy of placing an export duty on logs to even up matters; so with that astuteness for which they are famous, they sought to outwit their slow-going Canadian neighbors, and make it impossible for them to again place an export duty on logs, by adding to the duty on lumber the amount of whatever export duty might be imposed by the Dominion government. This was intended to work beautifully, and place the remaining white pine in the Georgian Bay district entirely at their disposal. Like a great many more people, however, who are too clever, they have been caught in their own trap, and after this season's logs are disposed of, they will either have to stop cutting or move their mills over to the Canadian side.

The policy of the Ontario government by which the export of logs will be stopped has the approval of a large majority of the manufacturers, both of pine and hardwood. What the effect may be on future prices it is, of course, difficult to foretell; meantime common lumber and mill culls of white pine have already advanced sufficient to pay the duty and give Canadian sellers nearly as high a price as could be obtained last spring. Good lumber can always find a market either abroad or in the United States, where the duty on high grades is of little consequence. Hardwood is to-day a better price and in better demand than it has been for years.

It may be said further, that anything that will help to curtail the undue haste with which our forests were being cut down of late years, and give the younger growth a chance to mature, will be of permanent benefit to the province. We have still a large area of untouched white pine, mixed with hardwoods, which we need be in no hurry to cut; it will all be wanted and at a good price.

In conversation with lumbermen generally, we find them quite satisfied with the recent legis-

lation, and not at all disposed to make any overtures to their confreres in the United States, but rather to meet hostile legislation by what is necessary to protect their own interests. We may therefore look forward with some complaisance to what the future has in store for us, feeling certain that the ownership of forests on this continent is a position of advantage which we occupy and should seek carefully to retain.

DEVELOPMENT OF OUR EXPORT TRADE.

Lumbermen in all parts of the Dominion are encouraged by the prospects for foreign trade. Greater attention is now directed to the wood products of Canada than ever before. This is in a measure due to the action of the Dominion government in sending special trade commissioners to foreign countries to report upon the possibilities of finding a market for our goods. These commissioners, almost without an exception, have reported that they found a general disposition in favor of dealing with Canada, and that it would require only persistent effort on the part of our manufacturers to capture a fair share of the trade. The Government and its agents, the commissioners, having fulfilled their duty, it remains for the manufacturers to profit by the advice which has been given.

Are the lumber manufacturers of this country exerting their utmost efforts to develop the foreign trade? When we say "foreign trade," we do not include the United States, which though our nearest market, is yet one of the most unsatisfactory, owing to frequently recurring tariff disturbances.

Some might point to the fact that our foreign trade is increasing annually as an evidence that no opportunities are being neglected. But it must also be said that foreign buyers have met the manufacturers more than half way. Were it not for the desire on the part of foreign houses to secure Canadian lumber, we believe we are within the limit of truth in saying that the volume of our trade in this direction would be of smaller proportions. No united effort on the part of lumbermen has been made to secure accurate information regarding the requirements of many of the markets, and to place this information in the hands of the trade generally. The particulars furnished by commercial agents are necessarily lacking in details, and steps should be taken by the manufacturers themselves to supplement them.

The sending of a representative to foreign countries to study the markets and negotiate for shipments would probably entail an expenditure greater than many of our manufacturers would feel disposed to risk. More especially would this apply to our hardwood manufacturers. A proposition looking towards some united effort ought, therefore, to be considered.

Such a step was discussed at a recent meeting of the Furniture Manufacturers' Association of Ontario. Some of the members pointed out that they had already more orders for furniture from Great Britain than could be turned out in their factories, and a committee was appointed to deal with the matter. It is probable that a large company will be formed to control the export furniture trade, and that a representative will be sent to England to promote its interests. Could not the lumbermen, with advantage, copy the example of the furniture men in this matter?

EDITORIAL NOTES.

THE report of the Ontario Forestry Commission, published elsewhere in this number, should be carefully studied by every lumberman in the Dominion. It contains valuable suggestions as to the methods of lumbering, as well as the course which should be adopted to perpetuate our timber supply. The work already accomplished has demonstrated the wisdom of appointing the Commission. In our next issue we hope to refer at greater length to this important subject of forestry.

THE lumber manufacturers of British Columbia have taken steps to secure the imposition of an import duty on lumber. At a meeting held at Vancouver on December 24th, and reported in our weekly edition, resolutions were passed favoring such a measure, and setting forth the unfair conditions now existing, as a result of which one manufacturer has already removed to the United States, and others promise to take similar action unless given some redress by the Dominion government. Elsewhere in this issue Mr. Vigars, of Port Arthur, also refers to the question. He points out that Western Ontario, Manitoba and British Columbia are flooded with low grade lumber from the United States, which is very inferior in quality and sold at a price which will not permit of fair competition. Having a wide market for their good lumber, the United States manufacturers can afford to sell their low grade stock at cost of manufacture. Canadian manufacturers are debarred from the American market by a two-dollar duty, while American manufacturers are allowed free entry to the Canadian market. Until conditions are equalized it becomes the duty of the Dominion government to protect the Canadian lumbermen, and at the next session of Parliament we look for some legislation along this line.

THE LATE T. W. WALKER.

THOMAS W. Walker, a gentleman widely known in lumber circles, died at his home in Toronto on Friday, January 14th. For about a year he had not enjoyed good health, having suffered from heart trouble, which finally resulted fatally.

Deceased was born in Toronto on June 12th, 1852. He was the second eldest son of Sar-



THE LATE T. W. WALKER.

geant James Walker, who came to Canada from England with the 27th Royal Artillery, and had charge of the Magnetic Observatory established in Toronto for 27 years.

At the age of 15 years the subject of this sketch entered the employ of Joseph Davidson, who at that time had a large retail lumber yard. There he received his first experience in the business which he followed during the remainder of his life. After a few years, in 1872, he accepted a position as inspector with the late S. R. Briggs, wholesale lumber dealer, and while thus engaged

was associated with Mr. Joseph Oliver, now manager of the Oliver Lumber Company. His next position was with the late Wm. Latch, wholesale and retail dealer, with whom he remained only a short time, resigning to accept a more responsible position with the Rathbun Company, as their Toronto agent. In this capacity he purchased all the lumber for this company on the Northern and Midland divisions of the Grand Trunk Railway, handling as much as 30,000,000 feet of lumber and 5,000,000 shingles in one year. He remained with the Rathbun Company until 1894, when he formed a partnership with Mr. J. Watson, as wholesale dealers, under the name of Walker & Watson. Owing to the retirement of Mr. Watson, the partnership was subsequently dissolved, and since that time he had been engaged in buying and selling on his own account and for other parties. At the time of his death he had about concluded arrangements to accept a position with Messrs. Kingsford & Sons, starch manufacturers, of Oswego, N.Y.

The late Mr. Walker was a thorough lumberman, an excellent judge of lumber and a shrewd buyer. He enjoyed a reputation for fair dealing, and had many intimate friends. He was a great reader, well educated, and possessed a thorough business knowledge. In military circles he was also well known, having fought with the Queen's Own Rifles at Ridgeway in 1866. His funeral was attended by members of the Veterans' Association.

REPORT OF THE ONTARIO FORESTRY COMMISSION.

THE first report of the Ontario Forestry Commission was presented to the Legislature early in January. It treats of many subjects of interest to lumbermen and readers of this journal, and is therefore printed below in full :

TORONTO, Dec. 20th, 1897.

TO HIS HONOR THE LIEUTENANT-GOVERNOR :

The Royal Commission appointed in June last for the purpose of investigating and reporting on the subject of restoring and preserving the growth of white pine upon lands in the province which have been cleared or partially cleared by lumbering operations or by fire, and which are not adapted for agricultural purposes or for settlement, held its first meeting in the Parliament Buildings on July 7th. All the members of the Commission were present, viz., Messrs. E. W. Rathbun, Chairman, President of the Rathbun Company, Deseronto, lumberman; John Bertram, President of the Collins Inlet Lumber Company, Toronto, lumberman; J. B. McWilliams, Peterboro', superintendent of Forest Rangers; Alex. Kirkwood, chief clerk land branch, Crown Lands Department; and Thomas Southworth, clerk of forestry, Parliament Buildings. Mr. Rathbun was elected chairman of the Commission, and Mr. Kirkwood vice-chairman, Mr. Southworth having previously been appointed secretary by order-in-council. The organization meeting of the Commission was attended by the Attorney General and the Acting Commissioner of Crown Lands. The Attorney General gave his views as to the scope of the enquiry to be undertaken, and defined the object of the government in appointing the Commission to be the submission of a scheme for the reclamation of large areas of non-agricultural land now unproductive, and such suggestions for the carrying on of future lumbering operations as the information obtained by them would indicate to be desirable as a means of preventing similar land now wooded from becoming waste. It was thought advisable that members of the Commission should personally visit and investigate as large an extent of the forest area of the province as possible. During the summer and fall the members of the Commission visited the townships of Smith, Harvey, Galway and Burleigh, in the county of Peterborough; the territory along the north shore of Lake Nipissing and down the Vermillion River, in the township of Louise; the country round Thessalon, Algoma Mills and Killarney; the townships of Carlyle and Humboldt, and other points on the north shore of the Georgian Bay and in the neighborhood of Sault Ste. Marie. Your Commissioners also inspected some of the territory on the north shore of Lake Superior and the country along the line of the Port Arthur & Duluth Railway west of Port Arthur, in addition to taking a somewhat extensive trip through the Rainy River country, visiting also portions of the northern parts of Minnesota and Michigan in the United States.

FUTURE TIMBER SUPPLY.

As your Commissioners are anxious, as speedily as possible, to acquire some general knowledge of the conditions existing in different parts of the province, they did

not make that minute examination into the silvicultural conditions and habits and rate of growth in the particular localities that will be necessary before submitting detailed plans for the care and management of the respective areas visited, and which may hereafter be put under systematic treatment. Their investigations, however, were of a sufficiently technical character to warrant them in coming to the conclusion that with sufficient areas set aside for the purpose, and with reasonable care and protection of the young and growing timber now upon them, the supply of merchantable timber in the province of Ontario will be vastly augmented. In most of the places visited, a forest growth was found in all stages of development, with the exception of some territory in the neighborhood of Port Arthur, where conditions seemed to be somewhat different from those observed in other localities. Wherever the original growth was pine, or pine mixed with other trees, the natural tendency is towards the reproduction of the same species. Unfortunately, however, this reproductive faculty in many instances has not been allowed free play. The former apparently limitless forest wealth of Ontario has led to careless and somewhat extravagant methods on the part of our lumbermen; a belief that so far as the timber supply of the future was concerned it made no practical difference how our forests were exploited owing to their immense extent, has resulted in wasteful and incautious practices. Large quantities of waste material and litter, consisting of the tops and branches of trees, were left lying on the ground to feed the destructive fires that almost invariably followed, and which, until a comparatively recent period, no effort was made to check. The action of these fires in sweeping away the trees left by the lumbermen had the effect of retarding the reproduction of the original forest growth, and sometimes resulted in a crop of other varieties, that for various reasons were more readily propagated. It is found, however, to be the case that where any of the original trees survived the fire and produced seeds, the forest has eventually, though perhaps slowly, assumed the characteristics of the growth indigenous to the locality.

QUICK REPRODUCTION.

The widely entertained theory that the white pine on being cut away is invariably and permanently succeeded by a crop of inferior varieties was completely disproved by the frequent instances observed in which tracts of flourishing young pine trees are growing up on cut-over land, and the prevalence of the idea can only be accounted for on the ground that fire has in so many cases completely exterminated the pine in all stages of growth. In most of the burned over territory examined, pine was found intermixed with other trees, and gradually, as was no doubt the case with the original forest, is asserting the supremacy and dominating the surrounding trees of the young generation. There is every reason to believe that with the exclusion of fire, and the adoption of more intelligent and provident methods of lumbering, having regard to the abundance of seed at the time of cutting, there would be no difficulty in securing a quick and sure reproduction of the varieties of trees desired. As previously stated, these conditions have not hitherto prevailed. In most of the territory inspected forest fires, sweeping over the country after the lumbermen had removed the more valuable pine trees, have destroyed what was left. Sometimes the fire was not so severe as to destroy all the dormant seeds that may have been on the ground, protected by the leaves and forest debris awaiting favorable conditions to germinate, but in many cases these were destroyed, and few, if any, of the parent trees left to provide seeds for a future crop. In the case of such trees as the pines, this latter circumstance was an effectual bar to the speedy reproduction of the trees. Although the seeds of the pine are winged they will not, in falling from the cones, scatter very great distances from the trees, and where only a very few parent trees remain more time is required to seed a given area than if the seed trees stood more thickly and shed a more profuse and better distributed yield of seed. The question of how far the seeds of the white pine may be conveyed from the parent tree in falling is a point still being investigated by the Commission. In the meantime the seeds of the aspen poplar, the birches and cottonwoods, which from their downy appendages are capable of being carried great distances by the wind, soon cover the burned-over area, and a vigorous crop of these varieties springs up and speedily occupies the ground. In most cases, however, a few pines have managed to survive the fire, and where this is the case, their seeds are scattered among the young poplars and take root and grow in their shade. If a forest fire has completely bared the ground the presence of the young broad-leaved trees is essential for the successful growth of a pine forest. The young pine plants, particularly *pinus strobus*, or white pine, are extremely sensitive to strong sunlight, and if exposed to the sun are almost certain to be killed in the first ten days of their growth. Hence the cover afforded by the poplar affords the shade conditions needed for the young. If there were no fire, however, the cover afforded by the trees left by the lumberman would doubtless provide the shade required for the successful propagation of the pines, but after the forest fire the quick growth of the poplar is a favorable condition for restocking the burned area with the original and most valuable trees.

GROWTH OF THE PINE.

In looking casually at a young forest on one of these devastated tracts, the first impression conveyed is that poplar and other desiduous trees form the sole vegeta-

tion, but a closer inspection will reveal the presence of a large stock of young conifers growing in the shade of the poplars. The young pines shoot up straight and slim, reaching for the source of the light that filters through the leaves of the poplar. In the course of time the pines, which develop slowly at first, overtake and outgrow their competitors. The growth of the pine during the first two or three years is slow, but after that time the rate of growth increases in a very marked degree. In such a forest of about 20 or 25 years' standing the pines will be observed here and there protruding their crowns above the leaf canopy. The poplars, being gradually crowded out by the sturdier evergreens, die and decay, adding to the soil nutriment for the now dominant pines. The dense shade furnished by the poplars has in the meantime killed the lower branches of the pines, which consequently rise straight and free of limbs to the height of the crowns of the desiduous trees. The next and final stage reveals the forest as it originally stood, displaying a mixed growth, with the tops of the giant pines visible from a distance, reaching above the general level of the leafy canopy of the forest.

The township of Burleigh, in the county of Peterborough, comprising an area of 124 square miles, may be considered a typical sub-division of what was at one time an extensive lumbering district. The cutting of square timber and saw logs in the township began about fifty years ago. The original forest was principally pine of excellent quality mixed with hardwoods. A colonization road opened the way for settlement about 33 years ago, but owing to the outcrop of rock, settlers are confined to small districts. Lumbering operations continued active for forty years, and even yet there is a small quantity of merchantable pine standing. The usual result followed, where mixed operations of settlement and lumbering were carried on together; nearly the whole country was ravaged from time to time by forest fires.

As showing what the actual conditions may be in a cut-over and burned-over area, a portion of the township around Burleigh post office, on the west side of Eels Creek, where the creek runs alongside of the colonization road, was selected for investigation. There are but few settlers in this part of the township; the soil is rocky and unfit for settlement, except in patches, and is not far from the contact between the granite and the limestone. On the west side of the creek the country is a veritable wilderness; it has been burned over repeatedly, the last fire occurring in 1896, and, judging from the size of the charred remains of the young growth, another fire had swept over it three years before that time. The frequent fires have burned a large part of the soil and killed any pines that may have been left by the lumbermen, so that any natural reforestation would here be a very slow process.

The east side of the creek presents altogether a different aspect. Viewed from the Burleigh road, it has the appearance of a thrifty young poplar forest, with a few young pine trees appearing on a level with the poplar. On closer examination it was found that the young forest was largely composed of white and red pine, poplar, white birch, balsam and spruce, with cedar, black ash and spruce in the lowlands, as well as an odd pine tree standing here and there that had been left by the lumbermen—relics of the original forest that had survived the fires. From information, given by the postmaster, who was formerly a lumber foreman and is an old resident of the district, your Commissioners were able to fix the exact date of the last fire that swept over this territory. It occurred twenty-three years ago.

The trees were of various ages and showed different degrees of growth according to situation. A fair average of the older poplars would be $3\frac{3}{4}$ inches in diameter at two feet from the ground, with 20 annual rings of growth at this point, making the tree, say, twenty-two years old. As a rule, the poplar was taller and with smaller diameter than the pine. The white and red pine stood thick on the ground, of various ages, vigorous and healthy, and will, in a short time, if protected from fire, overtop the poplars and assert the supremacy of the species as some few of the trees have already done.

The older white pine average 6 inches in diameter, two feet from the ground, with 19 annual rings of growth, showing them to be about the same age as the poplars. Red pine was the same age, but the average diameter of the trees examined was half an inch less than the white pine. The average height of the pines was about 26 feet, and showed by the branches a varying height growth of one to two feet yearly. Black ash in the swamps average 5 inches in diameter in twenty-two years, cedar $3\frac{3}{4}$ inches in twenty-six years, and spruce in these swamps which had not been burned at the last fire, standing amidst a very thick growth, averaged only four inches.

PROSPECTIVE VALUE.

The conclusion arrived at was, that within thirty-five years lumbering operations in this locality could be profitably resumed, the larger pine trees taken out, producing timber of merchantable quality and giving the younger trees a better chance to grow. Reasonably good forest conditions could, under proper regulations for cutting, be induced, and a continuous supply kept up. The one great requisite for preserving this valuable asset to the province is the absolute prevention of fire. The foregoing statement as to the condition in the Township of Burleigh may be taken as fairly typical of the course of natural forest regeneration in nearly all the fire-swept lands which came under examination—the only exception being where forest fires have been too frequent to allow the young vegetation to make headway. Throughout many of these tracts, popularly supposed to be of no value,

the second growth is springing up in profusion, and though the trees may be of little present value, their prospective value is very great, though difficult to estimate, as the time when these forests will be available depends very much on the question of adequate fire protection. Any estimate of their existing value must necessarily be on the basis of what they will be worth at such time as the timber becomes marketable to good advantage. On this point, Dr. Rethrock, Commissioner of Forestry for Pennsylvania, says in a report on Forest Fires in 1896:

"For example it is fairly within bounds to assert, that if all the unproductive lands now vacant and uncared for, which exist within the limits of the state, were protected from forest fires, for say 40 years, the timber then growing would be worth not less than one billion, two hundred million of dollars (\$1,200,000,000). It is quite certain that if this growth were destroyed by fire when but a year old, the loss to the Commonwealth directly would be absolutely unimportant. The same might be said if we were to see it destroyed at two, three, four or even five years of age. But when we remember that in burning these seedlings, which are but a year old, we destroy a crop which in point of time is one-fortieth of its way to a money value of \$1,200,000,000, the damages are consequential or indirect in character and if expressed in figures must equal not less than thirty millions of dollars as the loss to the Commonwealth."

If these figures be correct for Pennsylvania, and they are not disputed, how much greater would be the loss to Ontario by the destruction of our much larger area of second growth forest? As in the case of the Burleigh township woodlands, many of these young forests will be sufficiently far advanced to be cut long before 40 years. These considerations inevitably lead to the conclusion that the main factor in reclothing the burned-over lands is the question of fire protection. While there have been even within recent years extensive and devastating fires destroying large amounts of timber, the saving to the province effected by the system of fire-ranging adopted in 1886 has nevertheless been very great. During the course of their investigations your Commissioners had brought to their notice a great many instances in which incipient fires that, unchecked, would have been disastrous in their consequences, were successfully fought and suppressed by the rangers. Wherever the system has been employed by the various limit-holders the results have been very marked. It is to be noted, however, that as the employment of fire rangers is optional with limit-holders, some of them have failed to take advantage of the system, at the risk not only of their own limits, but of those of their neighbors in addition. During the summer your Commissioners made a short trip north of the Height of Land, on the headwaters of the Missinavi river, flowing into the Hudson Bay. It was found that the Indians in this territory are to some extent careless in regard to fires, with the result that considerable territory along the borders of the streams has been from time to time burned over. This is due largely to want of knowledge on their part that the immense forests of that country have any particular value. The Commission was advised by a gentleman of the Hudson Bay Company that if the matter were brought to the attention of the Indians, most all of whom are able to read their own language, a great improvement in this respect might be effected. The Hudson Bay officials expressed a willingness to co-operate with the government in any effort that might be made to educate the Indians as to the importance of looking after their camp-fires and extinguishing any incipient fires that might be started.

It was found that in most cases burned-over areas growing up to small timber are on lands not suited for agricultural settlement, and in order that the Government should reap the full benefit of the annual increment by the protection of these lands, they should be exempt from the possibility of settlers squatting on them, ostensibly to cultivate them, but really to secure and dispose of the growing timber.

METHOD OF LUMBERING.

Though, possibly, it may be regarded as somewhat beyond the scope of the enquiry specifically assigned to them, your Commissioners desire to draw the attention of the Government to the great loss of revenue and the detriment to the standing forests occasioned by the practice pursued by some lumbermen of taking out trees in the beginning of the most profitable period of their growth. Whereas, at an earlier stage of the lumbering industry, few trees of smaller diameter at the butt than 14 inches were taken out, it is now not unusual to see some drives largely made up of mere poles—sticks as low in diameter as six inches. No doubt this improvident method of lumbering is to some extent to be believed that these young trees, if left standing, would probably be burned, and to the expectation that the land might be needed for settlement.

It must be admitted that under former conditions the fear of fire was to some extent justified, but since the danger has been so greatly minimized, the conditions are altogether different. The small revenue derived by the Province from these half grown trees renders it desirable that the practice should not be followed unless under very exceptional circumstances indeed.

RATE OF GROWTH.

Your Commissioners, after close investigation, conducted under varying circumstances and covering a wide area, with different conditions of soil and density of growth, endeavored to arrive at an average rate of growth and consequent commercial value of young white pine, from a period at which a tree would make an eight

(8) inch butt log 16 inches long, and produce a butt log 14 inches in diameter and 16 feet long, and submit the following conclusions, which are very conservative:

A young tree which would cut only one log 8 inches in diameter and 16 feet board measure, would, if allowed to stand for thirty years, grow in diameter at the rate of one inch in five years, (in some cases the growth is as rapid as an inch in two years) and hence would give a butt log of 14 inches diameter, 16 feet long, or 100 feet of lumber, board measure. In addition to this, however, this tree would have grown in height sufficient to give two more logs, one say of 11 inches and one of 8 inches diameter, both 16 feet long, measuring respectively 49 feet and 16 feet B.M., or a total for the tree of 164 feet B.M. Thus a tree that required 40 years to make its first 16 feet of merchantable timber, would in 30 years more have increased to 164 feet. This may be considered the period of greatest relative growth. After attaining a diameter sufficient to make a 14 inch butt log, your Commissioners estimate that the tree would continue to gain at the rate of $3\frac{1}{2}$ per cent. per annum. This bare statement of the case shows the necessity of protecting the young growth of the pine in the interests of the Province. The advantage to the lumberman in holding his trees till they have reached the larger diameter is still more marked because of the greater price per 1,000 feet commanded by lumber cut from the larger logs.

But this is not all—pine trees do not begin to bear fertile seed in profusion until they reach nearly the age required to produce a diameter of six inches, and the process of forest reproduction is likely to be retarded by the removal of the seeding trees.

MARKET FOR WASTE MATERIAL.

As previously intimated, your Commissioners, in consequence of a comparatively limited amount of attention they have been able to devote to the matter, do not feel themselves justified in making a final report, especially as the important lumbering region of the Ottawa Valley has not been inspected by them. They are desirous, moreover, before concluding their labors, of making a full investigation into one phase of the question which has hitherto been but slightly considered, viz., the possibility of securing a remunerative market for the waste and refuse of lumbering operations, as well as for those of our forest trees not now commercially valuable. In economic forestry practice it frequently happens that the development of a young forest can be greatly enhanced by the thinning out of the trees where they stand too thick, and the cutting down of less valuable varieties. At present the difficulty of disposing of these thinnings to any advantage makes this practice impracticable in Canada. Could such a market be found it would be a decided advance towards the adoption of more economical and less dangerous methods of lumbering, and would of itself do much to decrease the extent and frequency of forest fires.

From inquiries thus far made, your Commission are inclined to believe that much of this apparently useless forest material, particularly in the old lumbered-over districts, can be utilized in the manufacture of pulp and small wood goods, or for the production of charcoal for smelting ores, etc. Further investigation will no doubt assist in coming to a more definite conclusion on this most important part of the subject. A prolific source of forest fires in some parts of the Province is the carelessness of many mining prospectors in the matter of their camp fires. Some plan of lessening this danger by regulations that will make the prospector more responsible to the authorities would seem advisable, and is under consideration.

Thus, while it is obvious that the work of the Commission is far from complete, yet deeming that some phases of the situation require present action, your Commissioners make this brief but preliminary report, and beg to recommend:

1. That the present system of fire-ranging inaugurated by the Government in 1886 be extended so as to be compulsory on all the holders of timber berths, and that all unlicensed timber lands contiguous thereto be also protected by rangers employed by the Government. That all fire-rangers be subjected to the inspection and control of the Department of Crown Lands.

2. That the officials of the Hudson Bay Company be asked to co-operate with the Government in preparing and printing fire proclamations in the language of the Indians of the northern districts, to be posted along the canoe routes throughout the territory.

3. That for all unworked limits on which the ground rent shall be two years in default on the termination of the present license year, the licence shall not be renewed, but that the berths be held by the Crown as forest reserves.

4. That license-holders be not allowed to cut any trees for logs smaller than will measure twelve inches across the stump two feet from the ground, unless under special forest conditions, with the sanction and under the supervision of the district forest ranger.

5. That the Government take power by order in Council to withdraw from sale or location and set aside, to be kept in permanent Crown forest reserves, such areas of territory as are generally unsuitable for settlement and yet valuable for growing timber.

All of which is respectfully submitted.

E. W. RATHBUN.
A. KIRKWOOD.
JOHN BERTRAM.
J. B. MCWILLIAMS.
THOMAS SOUTHWORTH.

THE NEWS.

—A. S. Young has opened a lumber yard at Nelson, B. C.

—Chappell Bros. are erecting a wood-working factory at Windsor, N.S.

—Malcolm McDonald has started a shingle factory at H 1 River, Ont.

—A. Stewart, of Foxmead, Ont., has recently added a saw carriage, boiler and engine.

—John Wilson, lumber dealer, Rathwell, Man., has disposed of his business to C. Caswell.

—During the season of 1897 Baillie's and Ritchie's mills at Aylmer, Que., cut 14,000,000 feet of lumber.

—The Rathbun Company's factory at Deseronto, Ont., turned out last year 26,000 doors more than in 1896.

—G. Niebergall & Son have purchased the saw mill and property at Camp Palmer, Ont., formerly owned by H. M. Misener.

—A factory for the manufacture of sash and doors is being erected at Eastman, Que., by Thos. Armstrong and E. Schilson.

—The executors of the estate of the late Thos. Willing, of Martintown, Ont., are offering for sale the grist and saw mill at that place.

—J. Cousineau, chief government bush ranger, of Gatineau, Que., returned early in January from a three month's tour of inspection.

—Edson Fitch is having one of his mills at Etchemin, Que., reconstructed for the manufacture of match wood to be exported to England.

—Hon. J. B. Snowball, of Chatham, N. B., is having extensive repairs made to his mill, including four new boilers and a furnace.

—An act was recently passed by the Ontario Legislature to amend the Woodman's Lien Act, making it include pulp wood, cord wood and all forest produce.

—Alex. Watson and R. Davis, stave and heading manufacturers, Kinmount, Ont., have dissolved partnership, the former continuing the business.

—S. Parkin, who has a contract to cut 20,000 ties for McCormack & McLeod, of Orillia, is building a small saw mill adjoining his shingle mill at Lindsay, Ont.

—Mr. F. T. Papscott, missionary at Rat Portage, Ont., states that there is a scarcity of reading matter for the men engaged in the lumber camps in that vicinity.

—Information has reached the Department of Trade and Commerce at Ottawa that there is an excellent market for Canadian inch planed boards in Cape Colony.

—Extensive improvements are being made to the plant of the Royal City Mills, New Westminster, B. C., which will involve an expenditure of \$20,000. The Brunette Mills are also being repaired.

—The Canadian Pacific Railway Company is said to have decided to build a steam saw mill, 307 feet long, at the Crow's Nest Pass. The mill will be fitted up by Isaac Kendall, of Ottawa, and will cost over \$50,000.

—Hugh Silver, of Lindsay, Ont., who is managing the grained lumber department of the Pacific Coast Lumber Co., of New Westminster, B. C., recently received an order for 13 car loads to be shipped to Rat Portage.

—A large raft containing 5,000,000 feet of lumber is being constructed by the firm of Inman & Poulson, of Portland, Oregon. It will be 396 feet long and 53 feet wide, and will be towed from Portland to San Francisco.

—James Smith & Co., of Liverpool, Eng., report that, notwithstanding the opposition directed against the import of American and Canadian doors, they last year imported into Liverpool and sold considerably over 100,000 doors.

—Owing to increased business, J. Pigget & Sons, of

Chatham, Ont., have been compelled to erect an addition to their planing mill. They have also purchased an adjoining lot, which will double the capacity of their piling yards.

—J. C. Graham, manager of the Winnipeg branch of the Rat Portage Lumber Co., reports an active demand for sash and doors. Twelve car loads of British Columbia cedar were recently purchased for working up in the factory.

—Twenty-three Canadian lumbermen were thrown out of employment by the assignment of the Canton Lumber Company, an American concern. They were compelled to walk over one hundred miles to their homes in the vicinity of Ottawa.

—James McNair, of the Hastings Shingle Mfg. Co., Vancouver, B. C., has removed to Whatcom, Wash., having obtained possession of the Cooper shingle mill in that city. Mr. McNair hopes to thus retain his extensive American trade.

—The ownership of 3,000 saw logs recently engaged the attention of the judge of the County Court at Ottawa. Cyprien Charron entered an action to recover 3,000 logs lying in the Nation river from W. H. Barry, but the court decided that Mr. Barry was the proper owner.

—Richard Lockhart, of Riversdale, Ont., has sold his saw mill and timber limits at that place to Zimmer & Kempel, of Formosa. Mr. Lockhart has removed to Emo, in the Rainy River district, where he has joined his father, Mr. John Lockhart, in the saw and flour mill business.

—It is said that doors can be shipped to England and then re-shipped to South Africa for less money than they can be shipped direct from this country. The reason given is that there is no regularly established trade between this company and South Africa, hence the difference in the expense.

—The estate of the late Martin L. Russell, the well-known Ottawa Valley lumberman, of Renfrew, Ont., reference to whose death was made in the January number of the LUMBERMAN, is valued at \$100,000, and includes three timber limits on Sturgeon river and valuable water powers at Renfrew and Sturgeon Falls.

—The employees of the Morris, Field Rogers Co., piano manufacturers, of Listowel, Ont., and large consumers of lumber, recently presented their manager, Mr. R. B. Andrews, with a complimentary address, accompanied by a gold-headed cane, in appreciation of the pleasant relations existing between the company and employees.

—The Fredericton Boom Company, which handles all the logs from the upper waters of the St. John river, in New Brunswick, has declared an annual dividend of 12 per cent. Directors of the company have been elected as follows: A. F. Randolph, president and treasurer; H. J. Olive, secretary; C. F. Woodman, W. H. Murray, Chas. W. King, E. L. Jewett and E. G. Dunn.

—The Columbia River Lumber Co. have, after two months of negotiations, purchased the plant, limits and proprietary interests of the Golden Lumber Co., of Golden, B. C. Mr. Carlin, formerly manager of the Golden Lumber Co., will be manager of the combined concern, and W. C. Neilson secretary-treasurer. The company have half a dozen camps in the woods this winter.

—Prof. Wilson, of St. Catharines, has submitted to the Ottawa lumbermen a scheme for utilizing sawdust and other refuse for the manufacture of calcium carbide. The process converts the refuse into carbon, which is then powdered and mixed in equal quantities with limestone, the whole being subjected to the heat of an intense electrical current. When cooled the mass is broken into small lumps and shipped to consumers in tin cans, for conversion into acetylene gas.

—The Nova Scotia Lumber Company, of Sherbrooke, N.S., whose saw mill was destroyed by fire last summer, have erected a new mill situated about one and a half miles below the village. The machinery therein consists of gang, rotary, lath, planing and shingle machines, requiring about 140 horse power to operate them. The company expect to manufacture about 10,000,000 feet of lumber this year. The bulk of the lumber manufactured at this mill is towed in rafts a distance of about 20 miles, to the harbor of Liscombe, for shipment.

TRADE NOTES.

The plant of the Phelps Machine Co., of Eastman, Que., has been bought out by the Jenckes Machine Co., of Sherbrooke, who will continue the manufacture of the Dake engine in their Sherbrooke works.

The renowned LeRoi mines, of Rossland, B.C., are extending their pumping system, and have placed an order through the Rossland branch of the Jenckes Machine Co., Sherbrooke, Que., for a large size special Knowles sinking pump.

The Pembroke Lumber Company, manufacturers of red and white pine lumber, dimension timber, joisting, etc., have issued their new stock list, which shows a wide variety of stock. The company are prepared to dispose of much of this stock at reduced prices, and intending purchasers might find it advantageous to write for quotations before placing orders.

The Virginia mines at Rossland have passed the preliminary stage, and will now enter the list of shippers. An order for a large hoisting plant, with boilers, has been placed with the Rossland branch of the Jenckes Machine Co., of Sherbrooke, and is now on the way from the east.

The Three Rivers Iron Works Co., of Three Rivers, Que., are building a new iron foundry, brass foundry and machine shop. The company is branching out into a new department, namely, the manufacture of paper and pulp machinery, in which line they hope to build up a profitable business. The establishment is now lighted by a private electric light plant.

A circular from Glasgow, Scotland, announces the formation of a new firm of timber brokers, Messrs. Calder, Henderson and Livingstone. For the past 20 years the members of the above firm have been actively connected with Messrs. Allison, Cousland & Co., timber brokers, of that city, during which time they have obtained such experience as should ensure for them a fair share of patronage. They will handle Canadian timber.

Messrs. Wickes Bros., of Saginaw, Mich., have issued a new stock list of second-hand machinery, which is larger than any heretofore issued. Their stock is shown to consist of all classes of boilers and engines, saw mill, shingle mill, cooperage, filing room and woodworking machinery, fans, blowers, etc., as well as the equipment of complete mills which have not been dismantled. The company state that they have engines from 2 to 660 h.p., and saw mill outfits from the plantation style that can be loaded on a lumber wagon to a mammoth plant with six band saws and three gangs, capable of cutting over twenty million feet of lumber in a season.

The Dodge Wood Split Pulley Company, of Toronto, have issued a most complete catalogue of their patent wood split pulleys and power transmission appliances. It contains nearly 300 pages, in which are to be found many valuable tables and numerous illustrations. The preface says: "Our aims and efforts are constantly directed towards the perfecting of power transmitting machinery and the advancement of the practice governing the usages of this very important branch of mechanics. The present age is one of practice and economy; it therefore behoves every owner, or prospective owner, of a power plant to familiarize himself with the best practice in transmission engineering. Money saved at the coal pile means larger dividends for the stockholders."

Two Canadian Saw Mills for Sale Cheap

One, a Lumber Mill with Gang, Band and two Circulares, driven by Water Wheels, with two Edgers, two Trimmers, one Slasher, Lath Mill, Bolter, three Log Jackers, Shafting, Pulleys, Belting, Saws, etc. Also an Electric Light Plant.

One, a Timber Mill with Stearns' Circular, one Edger, one Trimmer, one Slasher, one Log Jacker, all Shafting, Pulleys, Belting, Saws, etc.; also Water Wheels. Georgian Bay Delivery.

FULL PARTICULARS ON INQUIRY

WICKES BROS., Saginaw, Mich.

TRADE NOTES.

A good lumber dryer is an important and necessary adjunct to modern saw and planing mills. See what the Standard Dry Kiln Co., of Indianapolis, Ind., have to offer in this line, as set forth in their advertisement on upper right corner of 3rd cover page of this issue. By writing them, making mention of the CANADA LUMBERMAN, you will receive further particulars.

The attention of our readers is directed to the announcements in our advertisement pages of the following American firms, who are desirous of extending their business relations with Canadian lumber manufacturers:—Messrs. W. B. Mershon & Co., manufacturers of band re-saws, Saginaw, Mich.; Messrs. Baldwin, Tutbill & Bolton, makers of saw-fitting machines and tools, Grand Rapids, Mich., (who offer to send free a 200-page catalogue to persons who write them mentioning the CANADA LUMBERMAN); Messrs. Wickes Bros., makers of new and dealers in second-hand saw and wood-working machinery, Saginaw, Mich.

The Waterous Company, of Brantford, Ont., are very busy with orders, which keep their staff of 300 employees working full time. The following shipments were made during the month of January: 9 cars to Tracadie Lumber Co., Tracadie, N. B.; complete band mill, with steam acting machinery throughout, pulp-wood cutting-off plant, with 8 barkers, to the Maritime Sulphite Fibre Co., Chatham, N. B.; band mill carriage, heavy edger and band saw tools to Hull Lumber Co., Ottawa; 10 and 20 x 14 tandem compound marine engine, with 84 x 108 Clyde boiler, shell all in one sheet, for 156 lbs., to Capt. A. Campbell, Nelson, B.C.; Clyde marine boiler to Capt. Sanderson, Nelson, B.C.; portable engine and wood-working machinery to Courtney & Raworth, Sackville, N.B.; 30 h.p. engine and boiler to James F. Templeman, Burk's Falls, Ont. The Rathbun Company, of Deseronto, have just closed with the company for an Allis band mill, steel girder carriage and steam acting machinery. The Allis band mill appears to be growing in favor, over 50 being in operation in Canada.

PERSONAL.

Mr. W. H. Winnett, lumber and coal merchant, of London, Ont., was re-elected to the City Council at the late elections, this being his fourth term. He has been elected chairman of the Finance Committee. Ald. Winnett was one of those on the platform in the City Hall disaster, but fortunately came out without serious injury.

It is with pleasure that we observe that Dr. Robt. Bell, L.L.D., B.A.Sc., F.R.S.C., of the Geological Survey, Ottawa, has been elected a Fellow of the Royal Society of London. This is considered the greatest honor of the scientific world, yet one which is well deserved by Dr. Bell. He has made a careful study of zoology and botany, and more especially of the forestry question, having issued such valuable publications as the following: "The Forests of Canada," "Forest Fires in Northern Canada," and "The Geographical Distribution of Forest Trees in Canada." The last named report will be reviewed at greater length in a future issue.

CREDIT OMITTED.

In connection with the story published in our January number, entitled "Dour Davie's Drive," it should have been stated that the author thereof is Mr. E. W. Thomson, and that it first appeared in the Youth's Companion, of Boston. Our apologies are due Mr. Thomson for the omission.

WOOD PULP DEPARTMENT

EXPORT OF PULP AND PAPER.

THAT the manufacture of pulp and paper in Canada will, in the near future, become one of the most important industries of the country, will scarcely be disputed. This is daily exemplified by the reports which come to hand of new mills being erected or contemplated throughout the Dominion, but more especially in Quebec and the maritime provinces, where excellent shipping facilities to the European market, and an abundance of the best spruce wood, offer advantages not elsewhere obtainable. Two propositions for the erection of pulp mills are now before the City Council of St. John, N.B., one from Messrs. A. Cushing & Co., and the other from Mr. Julius Spiro, of New York. In the interests of the country it is very desirable that these proposed mills should be erected, and the city council will act wisely by giving such concessions, provided they are within reason, as will insure the location of the mills in the vicinity.

The paper making industry is also growing, but less rapidly. The energetic efforts of Lord Strathcaine, the Canadian High Commissioner in London, promise to greatly assist in extending this industry. The United Kingdom offers a large market for Canadian paper, the consumption there being valued at over a million dollars per month. In a letter to Sir Richard Cartwright, the High Commissioner says: "England imports more than £200,000 worth of paper every month, and during this year there has been a decline in the imports from all countries except America. This is very suggestive, for Canada makes paper of similar characteristics to the American make. One is therefore naturally confronted with the question, 'Why should not Canada use her pulp in making paper for the Mother Country, instead of supplying her neighbor with the material to do so?'" The High Commissioner adds that he intends to come to Canada soon to interview the pulp and paper manufacturers regarding the opportunities afforded by the British market.

Mr. George Mawson, a London paper dealer, arrived in Ottawa recently bearing letters of introduction from Lord Strathcaine to Sir Richard Cartwright and other members of the Dominion government. His object is to work up an export trade in paper between Canada and England. He points out that Canada is a large seller of pulp wood and pulp to the United States, from which country England buys a considerable quantity of paper, the product of Canadian material. He thinks that there is no reason, therefore, why Canada should not do a large paper trade with Britain.

PULP AND PAPER MAKERS' FELTS.

Hamelin & Ayres, Lachute Mills, Que., manufacturers of pulp and paper makers' felts, are rushed with orders, and to keep up with the demand they have ordered two more 260 inch looms. The following are some of the orders filled by this firm during the six weeks ending 30th December, 1897: The Acadia Pulp & Paper Co., Halifax, 35 felts; Chicoutimi Pulp Co., Chicoutimi, Que.,

16 felts; Dominion Pulp Co., Chatham, N.B., 8 sulphite felts; the Maritime Sulphite Fibre Co., Chatham, N. B., four; the Nova Scotia Wood Pulp & Paper Co., Mill Village, N. S., six; the Sissiboo Falls Pulp Co., Weymouth Bridge, N.S., nine; National Paper Co., Indian Lorette, four; Messrs. Jos. Ford & Co., Portneuf, Que., eight; the Maple Card & Paper Co., Portneuf, four; the Portneuf Paper Co., six; the Montreal Paper Co., Portneuf and Basile, twelve; Laurentide Pulp Co., Grand Mere, twelve; Canada Paper Co., six; the Royal Paper Mills, East Angus, Que., four; Alex. McArthur & Co., Joliette, Que., two; W. B. Gifford, Sault au Recollet, four; Messrs. J. C. Wilson & Co., St. Jerome, Que., eight; J. C. Wilson & Co., Lachute, four; Toronto Paper Co., Cornwall, two; Jas. Stutt & Sons, West Flambora, four; Taylor Bros., Toronto, eight; Riordan Paper Mills, Merriton, Ont., 24; Jas. Davy, Thorold, Ont., six. Orders for January are said to have exceeded those of November and December. Hamelin & Ayers started into the felt business about twelve years ago, and the quality of their goods, together with fair dealing, has brought them a very large trade in that line. The different lines that are manufactured by the firm are quite numerous, and give employment to upwards of 100 employees, and what was a wilderness 15 years ago is now a progressive town and a regular bee hive of industry; but, as Mr. Ayers says, a bee hive without drones, all workers, hence the prosperity.

PULP NOTES.

The Royal Paper Mills Company, of Montreal, will erect a paper making plant adjacent to its pulp mill at East Angus, Que.

The St. Croix Paper Mills are erecting a building at Hartville, N.B., in which to manufacture tar paper. In the spring a large stock house will be erected.

Two carloads of screens from the Jenckes Machine Co., Sherbrooke, Que., were recently received at the mills of the Chicoutimi Pulp Co., Chicoutimi, Que.

The total quantity of wood pulp imported into England last year was 327,080 tons, more than three-fourths of which was from Norway and Sweden, Canada only supplying 2,714 tons.

The new pulp mills of the Royal Paper Mills Co., at East Angus, Que., are rapidly nearing completion. The contract for the entire tank work has been awarded to the Jenckes Machine Co., Sherbrooke, Que.

The Lake Bouchette Pulp Company is applying for incorporation, to manufacture pulp, paper, lumber, etc. The head office will be in the city of Quebec, and the capital stock is placed at \$200,000. Among those interested are J. I. Lavery, of Quebec, and Damase Galbert, of Lake Bouchette.

Work on the new pulp mills of Hamelin & Ayers at Erlesville, near Lachute, Que., is being pushed to completion, and from present appearances will be in full operation before spring, with 8 two-pocket pulp grinders. This mill will have an output of 20 tons dry weight per day of 24 hours, all of which has been contracted for in the European markets.

Water was let into the penstock at the pulp mills of the Chicoutimi Pulp Company, Chicoutimi, Que., on the 15th December last. The development of the water power in connection with the mill was undertaken by the Jenckes Machine Co., of Sherbrooke, Que., who used four of their special Crocker wheels for the purpose. The wheels give excellent satisfaction under a head of 70 feet.

FELTS FOR PULP MILLS

capacity 1,000 lbs. per day. All our Felts are woven endless, without a splice. Our Felts will last longer and make dryer Pulp. All up-to-date mills use our Felts. New mills, when in need, write for samples and prices.

HAMELIN & AYERS, Lachute Mills, P.Q.

20 years in the business—the first to make Felts in Canada;



WATEROUS

IMPROVED PULP WOOD BARKER

Frame of large size and circular shape. No clogging with shavings---built in two pieces, with planed and fitted joint. Knife Disc 52 in. diameter, very heavy, held by steel band shrunk on edge; turned and perfectly balanced; takes four knives 11½ in. long.

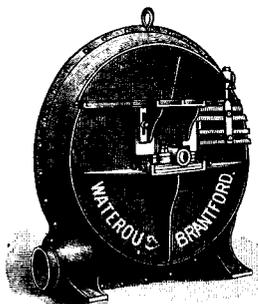
Capacity 7 to 10 cords per day. Speed 600. Shipping weight 3,600. F. & L. Pulley 16 in. x 5½ in.

Adjustable Tightener---adjusted by screws and one crank---enables 16 x 12 Pulley to be used on Barker. Considered better for fast heavy work than tight and loose pulleys.

BUTTERFIELD'S AUTOMATIC BARKING ATTACHMENT can be applied to the Waterous or any Barker. It increases capacity 80 to 100 per cent., and saves 5 to 8 per cent. of the wood---that is, when this attachment is used you get 5 to 8 per cent. more Pulp Wood from the same unbarked logs.

A large number of Barkers and Barker Attachments sold during 1897. References on application.

WATEROUS, Brantford, Canada



IMPORTANT INJUNCTION SUIT.

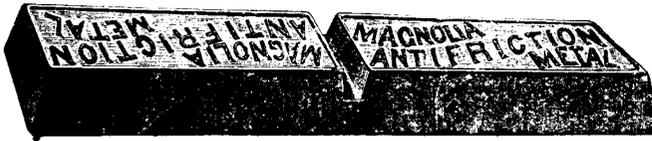


THE Magnolia Metal Co., whose trade extends to every part of the United States and Canada, and to every civilized country in the world, has had, during the last two or three years, numerous suits with parties infringing their trade marks and patents. An injunction was granted on December 15th, 1897, by Lord Chief Justice Russell, in the Queen's Bench Division of the High Court of Justice, London, England, enjoining the Tandem Smelting Syndicate, Ltd., and restraining them from passing off their metal for Magnolia Metal, it being made up so as to counterfeit Magnolia Metal.

Another case is as follows: A few months ago the Globe Engineering Co., Ltd., of Manchester (now in liquidation), shipped a quantity of metal to a firm in South Africa that had ordered Magnolia Metal. The metal sent to fill this order was made up into ingots as near as possible to represent the well-known ingots of Magnolia anti-friction metal. They bore the words,

"Magnolia Anti-Friction Metal," but the trade mark, the Magnolia flower, which is shown herewith, and the words, "Patented June 3rd, 1890," were not imprinted upon them. The purchaser brought an action in the High Court of Justice, at the Manchester assizes, against the sellers, and judgment was given in his favor by the arbitrator to whom the matter was referred.

The Magnolia Metal Co. desires to warn the public against fraudulent imitations. Genuine Magnolia Anti-Friction Metal is made up into bars, of which the cut below is a fac-simile, and the trade mark and name are



always stamped on bars and boxes; and besides this the words, "Patented June 3rd, 1890," and "Manufactured in U. S." are stamped on the under side of each bar. The Magnolia flower trade mark is registered in every civilized country in the world.

The Magnolia Metal Company, of 266 West street,

New York, advise us that similar frauds are being committed in this country at this time, and they offer one thousand dollars reward to any party causing the arrest and conviction of any individual or firm infringing their trade marks or patents.

UTILIZING PINE STUMPS.

IN a recent issue of THE LUMBERMAN a short article was reprinted from the Manufacturers' Gazette, referring to a method of utilizing pine stumps for the manufacture of pyroligneous acid. It was stated that a plant for this purpose could be built in the shape of retorts, each retort of sufficient size for one-half cord of wood, at an outside expense of \$300, and that a good profit could be made with a small outlay. We have since received numerous inquiries regarding the method referred to, but have been unable to obtain any further information. Should any of our readers be in a position to furnish particulars, or state where such a retort may be obtained, they are asked to communicate with the publisher of this journal.

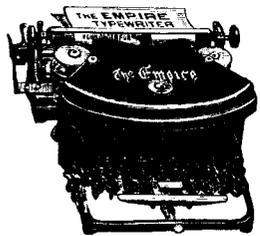
William Carson, a millionaire lumberman, died at Eau Claire, Wis., on January 5th, at the age of 80 years.

SHANTY BLANKETS

Best Value in Canada

Write for Prices and a Free Sample Blanket.

HAMELIN & AYERS
Lachute Mills, P.Q.



Equal to the Best
HALF THE PRICE
of other
standard machines.
THE EMPIRE
Price \$55.00.
Send for testimonials
The
WILLIAMS MFG. CO.
Montreal, P.Q.

**Lumberman's....
Ready :: SAVES TIME
Reckoner.**

In Use Everywhere.

Handiest Thing
Known for
figuring up Lumber
Measurements.

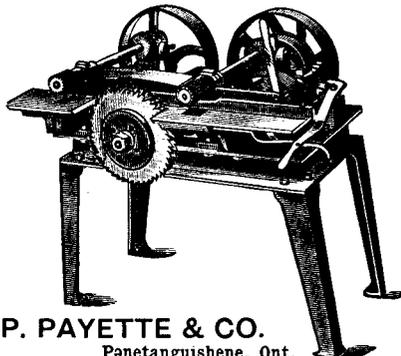
PRICE 25 CTS., POST PAID.

BRENNAN & CO. - Sault Ste. Marie, Ont.
MANUFACTURER'S AGENTS.



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

PAYETTE'S PATENT LATH MILL



P. PAYETTE & CO.
Penetanguishene, Ont.
SAW MILL MACHINERY



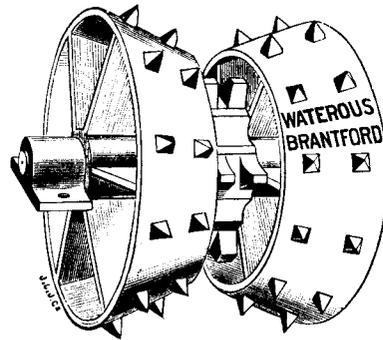
FINE BANK OFFICE, OFFICE, SCHOOL, PRESTON ONT.
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LDBUG STORE FITTINGS. SEND FOR CATALOGUE

.. WATEROUS ..

Automatic Cutting Off Machinery

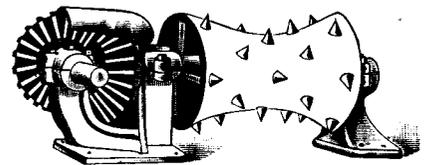
FOR PULP WOOD

THIS Machinery enables two men to take from the pond and cut into 16 to 24 inch lengths 50 to 90 cords of Pulp Wood per day, delivering it to Barkers, or when shipped unbarbed delivering to car.

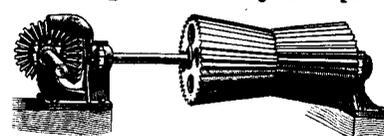


SPIKED LOG JACK ROLL.

One Double Plant is handling 200 cords of 4 foot wood per 10 hours, delivering to 4 cars at once, and two men to each car load it.



LIVE SPIKED ROLL.



LIVE CORRUGATED ROLL.

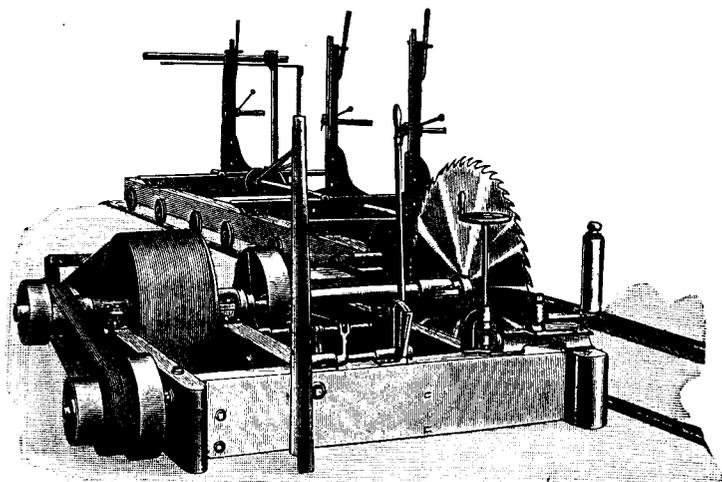
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Stationary and Portable Saw-Mill Machinery; Engines and Boilers; Shingle Machines; Bolters; Lath Machinery, &c.

Several 2nd hand Stationary and Portable Engines at Very Low Prices... Send for Catalogue.

ROBT. BELL, JR.
HENSALL, ONT.

PUBLICATIONS.

The Wood, Barker Company, wholesale lumber dealers, Boston, have sent us an artistic calendar. The illustration is a view of the Common, showing entrance to subway, with state house in the distance.

The nineteenth annual special issue of the Tradesman, of Chattanooga, Tenn., does credit to the publishers. It contains 240 pages, in which the various industries of the south are reviewed in an able manner. There is also abundant evidence that the journal is appreciated by its advertisers.

A copy of the proceedings of the American Forestry Association at special meetings held at Asheville, N. C., and Nashville, Tenn., September 17-22, 1897, has reached our desk. Among the many valuable papers printed therein are the following: "Effect of Forest Denudation on Water Courses and Water Supply," by Mr. D. W. Baird.; "Forest Finance," by Dr. C. A. Schenck; "Forest and Rain-fall," by Mr. H. A. Hazen; "Stream Flow in Relation to Forests," by George S. Rafter.

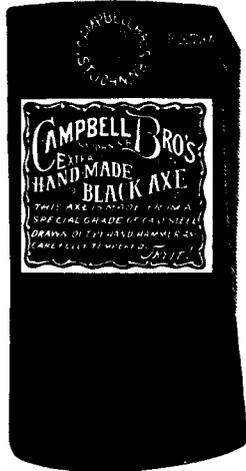
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- R.H. No. 1 Waterous iron Frame, 6 in. frictions, takes 60 in. Saw, 3 Block Double Steel Girder Saw Carriage opening 40 in., spaced 9 and 6 ft., overhead friction Set Receder, 50 ft. "V" and Flat Track. (Practically as good as new).
- One heavy Carriage, 3 Double Steel Blocks, opening 50 in., spaced 9 and 6 ft., 4 wheel and 2 axles under each block, Boss Dogs, cut steel Rack and Pinion, double action Set Works Receder, 50 in. "V" and Flat Track. (Used short time).
- One Reliance two block Carriage, opening 40 in., Cast Blocks and Knees faced with Steel, Reliance Dogs centre of Knees, Reliance Set Works, Receder, 4 axles and 8 steel wheels, 40 ft. of "V" and Flat Track, Planed. (New, very cheap).
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One Prescott Direct Acting Steam Feed, Allis make, and Allis double Valves, Cylinder 8 x 36 in. (New).

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- One No. 2 Waterous Steel Post Band Mill with 8 ft. wheels, suitable for any size Saw 10 to 12 in. Similar Mill can be seen running at R. Thompson's, Gravenhurst, Davidson & Hay's, Cache Bay, Messrs. Conroy Bros., Aylmer, Que., and Rat Portage Lumber Co., Rat Portage.
- One Egan Band Resaw, 60 in. wheels, takes 7 in. Saw. (Suitable for Saw Mill or large factory).
- Circular Resaw, 36 in. Saw.

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- 4 Mould Dry Press Machine.
- Centennial Tile and Brick Machine with 12 brick Automatic Cutting-Off Table and Patent Lubricating Die.
- One Potts Disintegrator.
- One Williams " "
- One Pennsylvania Power Repress Brick Machine.
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- One pair of Engines on one Shaft, 22 x 36, Box Bed Slide Valves.
- One pair of Tangybed 18x24 Engines on one Shaft, with two Fly Wheel Pulleys—our own make.

- One 12 1/2 x 18 Left Hand Tangybed Slide Valve, 5 in. Shaft, 8 ft. long, with Fly Wheel and 60 x 16 in. Pulley.
- One 12 x 14 Box Bed Slide Valve, with 4 3/8 Fly Wheel Pulley.
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- One 11 x 10 Double Crank Leonard Engine.
- One 10 x 10 " " Waterous "
- One 8 x 10 " " " "
- One 7 x 10 " " " "
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- One 2 3/4 x 6 " " Engine.

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- Two 54 x 12, 60-3 x 12 Tubes. One 48 x 12, 50-3 x 12 Tubes.
- One 44 x 10, 6-43-3 x 9 ft. 6 in. Tubes.
- 30 h.p. Open Bottom Fire Box, Ring Connection Locomotive Boiler.
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and Our **Lancashire Hair Belting** **D. K. McLAREN**

A LIVE PAPER.

Mr. John Stanford, Chester, Ont., in re-mitting his subscription to THE LUMBERMAN, writes: "It is a live paper; am much pleased with it, and think every wood-worker in the Dominion should take it."

W. W. Carter, of Fesserton, has purchased the mill and limits of A. McPherson at that place.

The Jenckes Machine Co., Sherbrooke, Que., are furnishing the Canadian Rand Drill Co., Halifax branch, with one of their 20" Crocker special turbines, to be used in connection with the extensive hoisting plant being installed by the Drill Company at the Torquoy mines.

ARE YOU LOOKING FOR A CHANGE IN LOCATION?

If you are not satisfied with your present site, or if you are not doing quite as well as you would like to, why not consider the advantages of a location on the Illinois Central R. R. or the Yazoo & Mississippi Valley R. R.? These roads run through South Dakota, Minnesota, Iowa, Wisconsin, Illinois, Indiana, Kentucky, Tennessee, Mississippi and Louisiana, and possess

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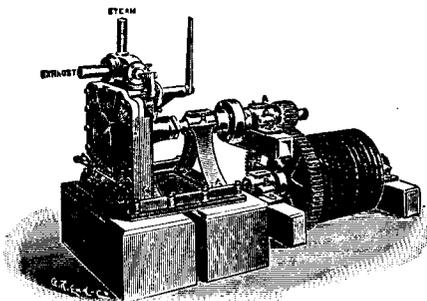
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This will give you the population, city and county debt, death rate, assessed valuation of property, tax rate, annual shipments raw materials, industries desired, etc.

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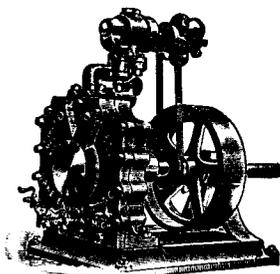
The movement of the engine in either direction is under the absolute control of the sawyer, thus accommodating the speed of the feed to the size of the logs.

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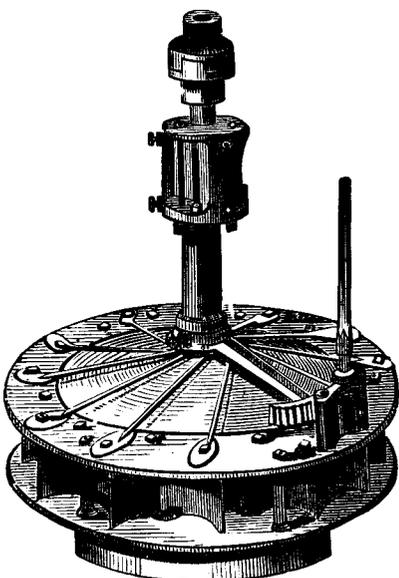


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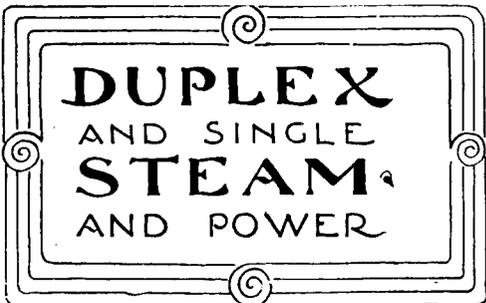
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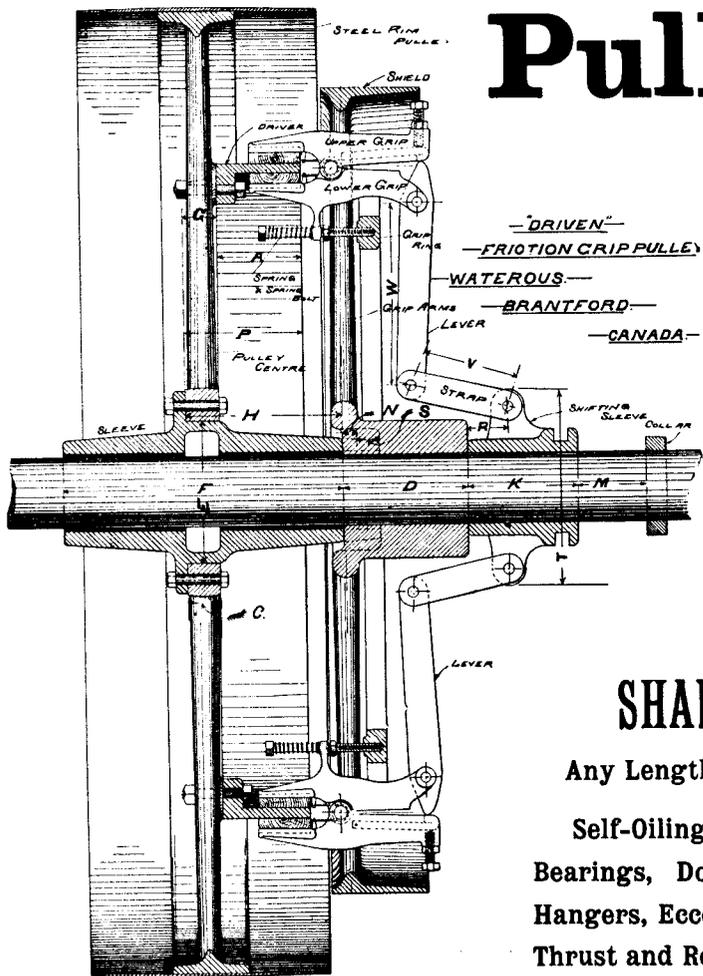
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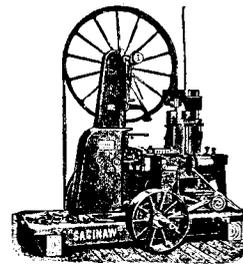
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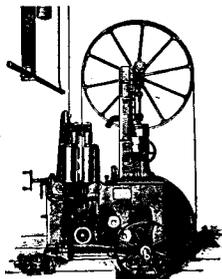
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are Running in the Mills in the Saginaw Valley.



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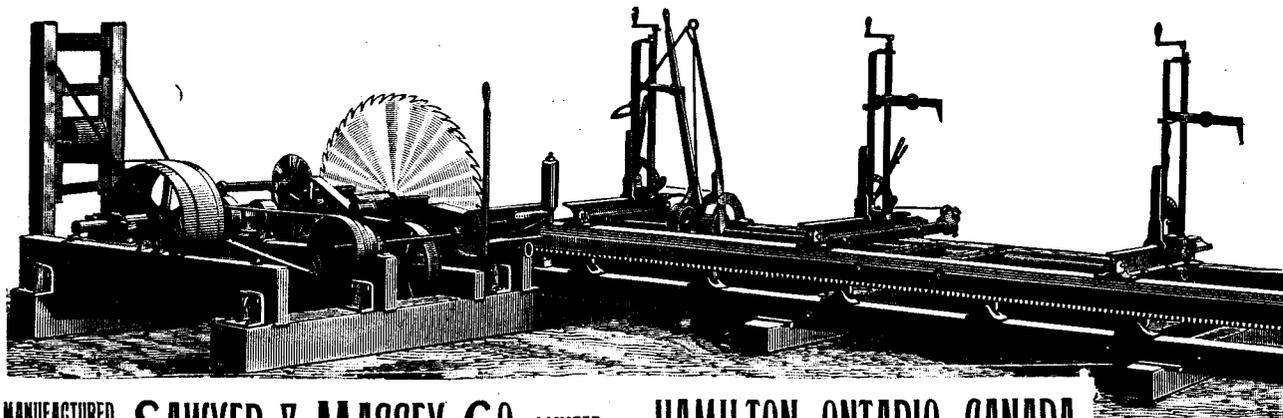


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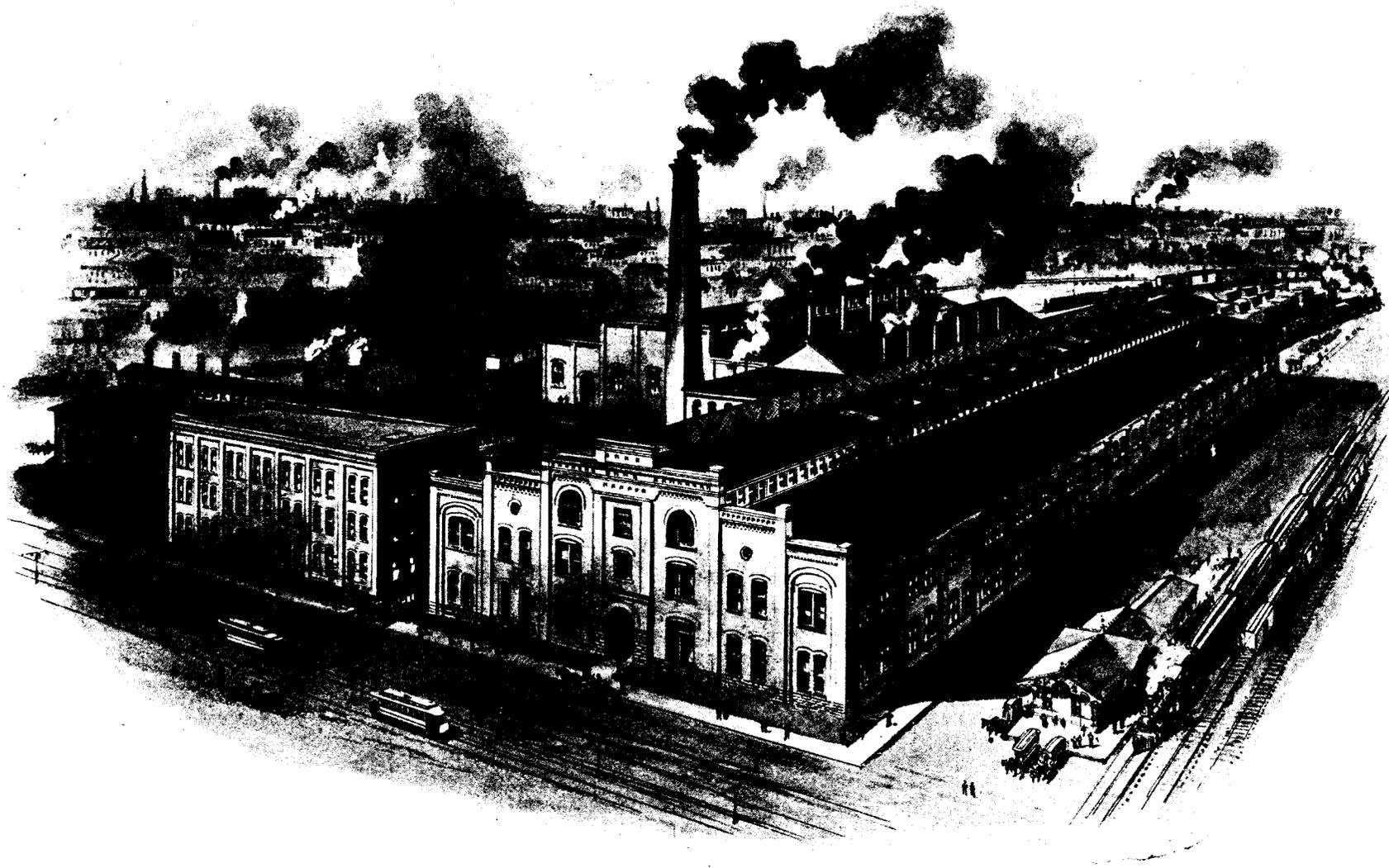
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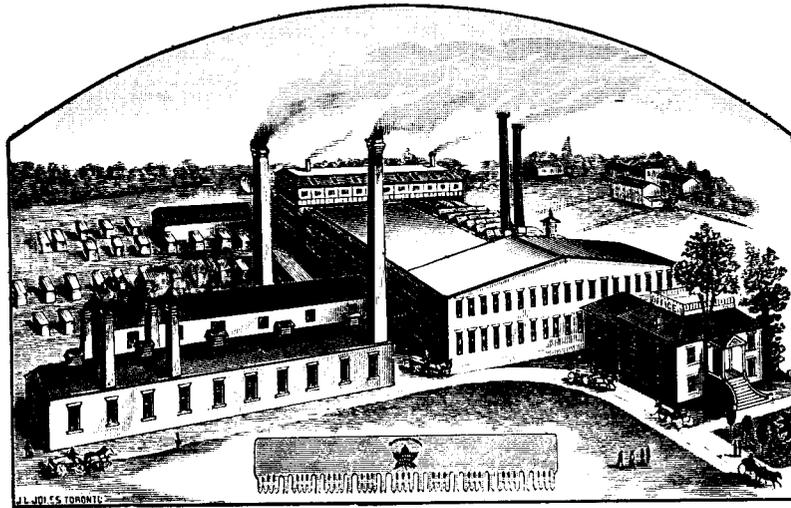
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This Saw Stands Without a Rival

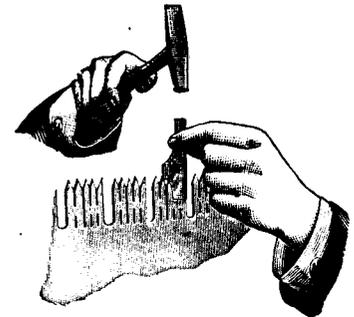
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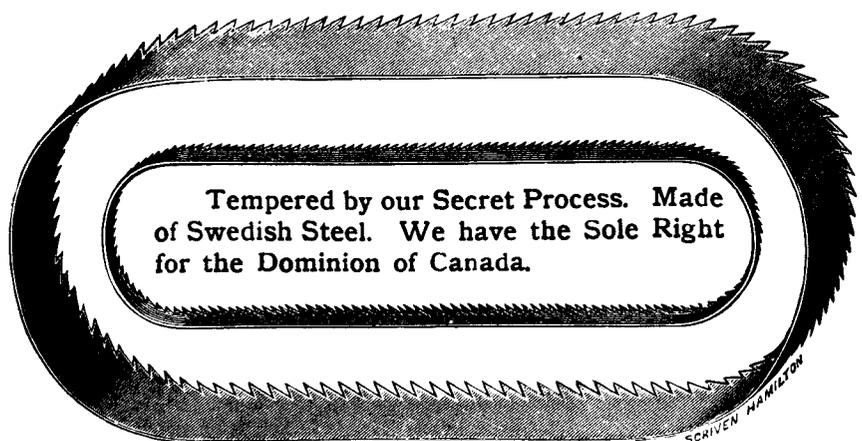
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 If you follow directions you cannot make a mistake. Be sure and not strike too hard a blow, and it will set the hardest saw. On receipt of 40 cents we will send one by mail.



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There is only one Right Way to dry Lumber.

That way is to dry it from the Centre to the Surface—begin on the Inside and work out. That's the method employed in

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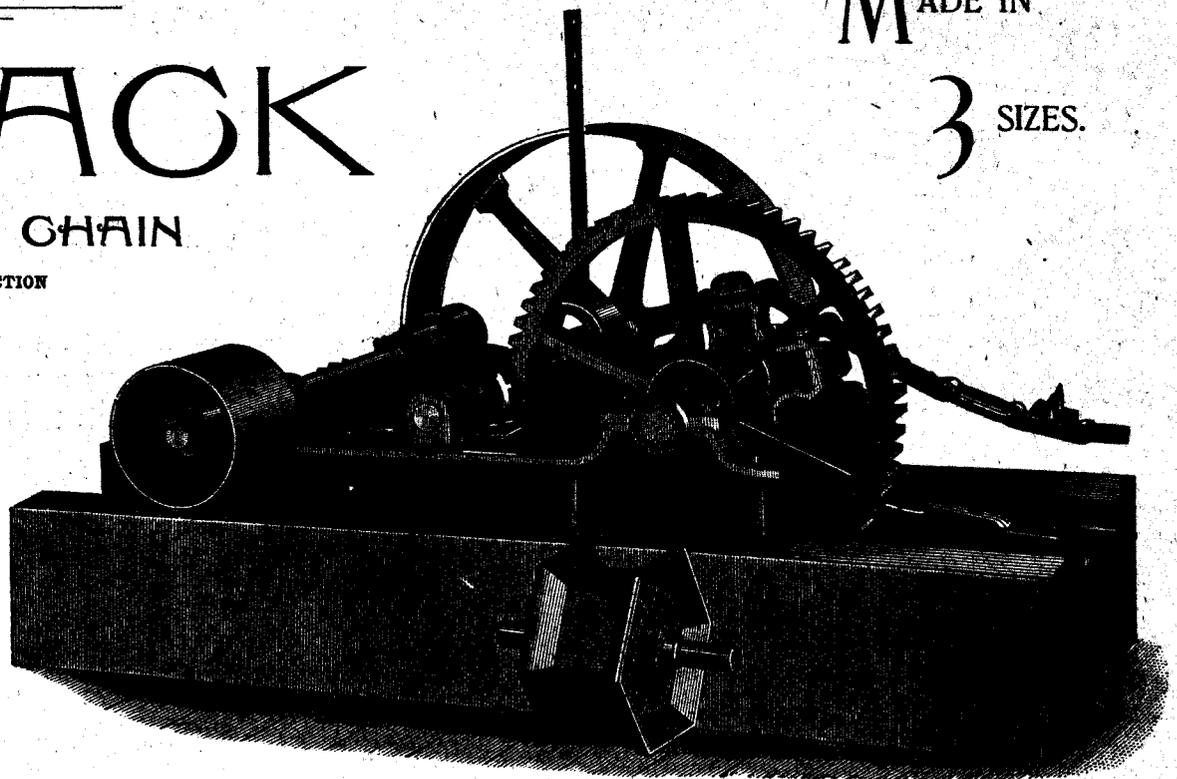
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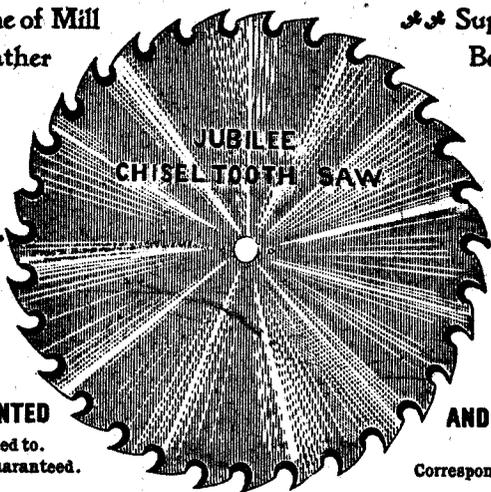
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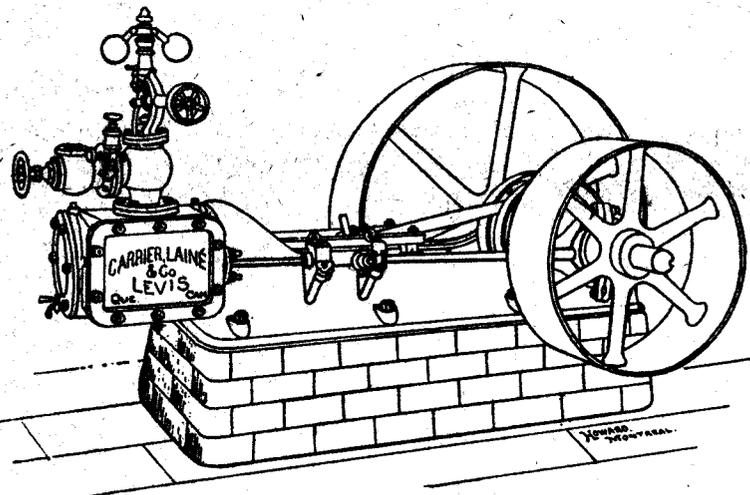
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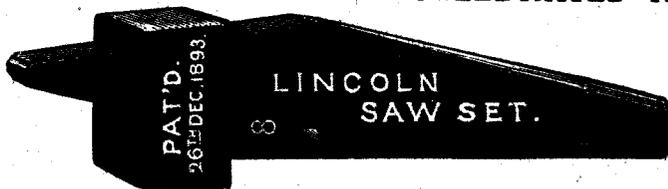
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