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Wood-Workers', Manufacturers' and Millers' Gazette

VOLUME XXIII
NUMBER 2

TORONTO, CANADA, FEBRUARY, 1903

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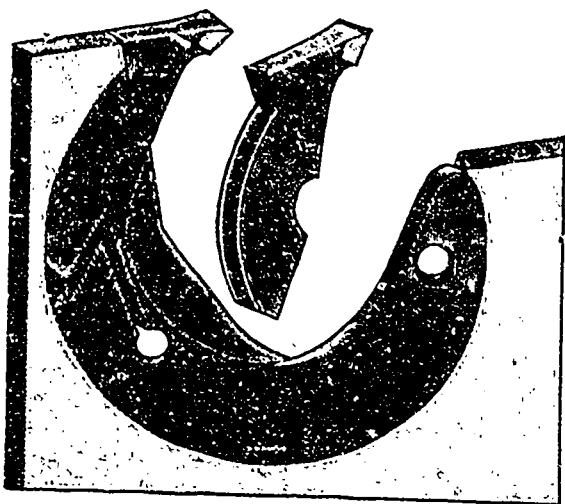
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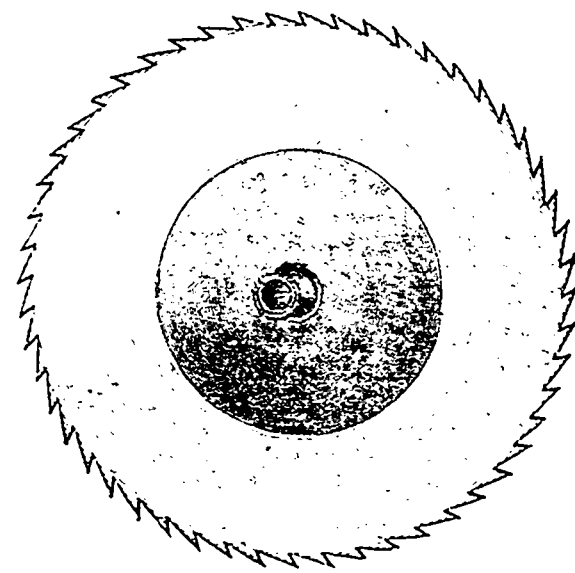
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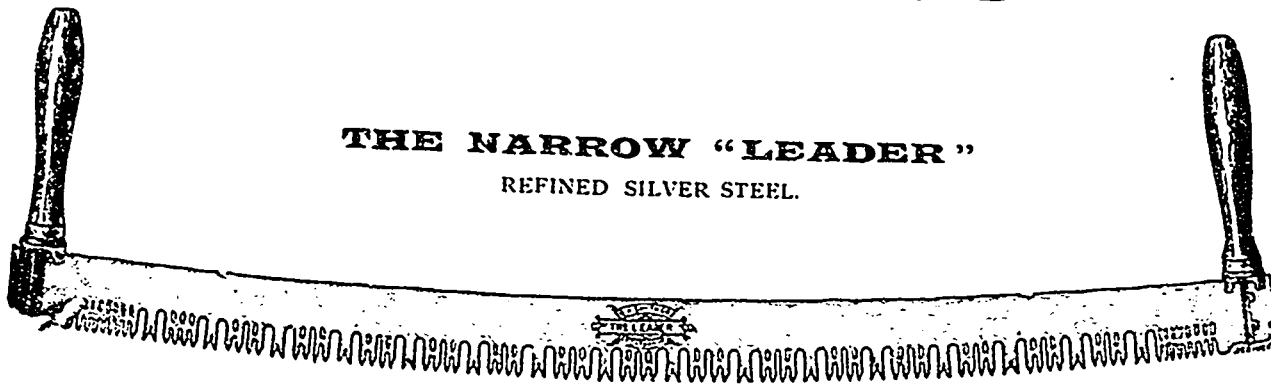
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- 7 1/2" and 14" x 12" Steeple Compound Marine
- 9" and 18" x 12" Vertical Tandem Compound Marine.
- 3 and 5 1/2 x 4 1/2 Fore and Aft Compound Marine
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- 4" x 5" " " " " " "
- 5" x 6" " " " " " "
- 6" x 7 1/2" " " " " " "
- 7 1/2" x 8" " " " " " "
- 9 1/2" x 12" Horizontal Slide Valve Engine, Northey Co. Make.
- 7" x 14" Horizontal Slide Valve Engine, Niagara Co. Make
- 16" x 24" Horizontal Slide Valve Engine
- 11 1/2" x 15" " " " " Goldie & McCulloch Make
- 9 1/2" x 11" Horizontal Slide Valve Engine
- 8" and 14" x 15" Tandem Compound, Osborne-Kelly Co.
- 4 1/2" x 6" No. 1 Jewel Automatic, Dutton Make, New.
- 5 1/2" x 8" No. 2 " " " " " "
- 7 1/2" x 8" No. 3 " " " " " "
- 9 1/2" x 10" No. 6 " " " " " "
- 10" x 10" Peerless " " " " " "
- 10 H. P. Portable Engine & Boiler Cornell Make
- 14 H. P. Champion " " " " " "
- 5 H. P. Vapor Engine Safety Co. Make
- 8 H. P. Gasoline Engine Toronto Co. Make, New
- 2 1/2" to 4 1/2" " " " " " "

BOILERS

- 10 H. P. Clyde Marine, Hertram Make.
- 60" x 163"-84"-3" Tubes, Hor. Tubular.
- 58" x 163"-84"-3" " " " "
- 55" x 165"-76"-3" " " " "
- 44" x 141"-45"-3" " " " "
- 60" x 210"-45"-4" " " " "
- 48" x 184"-52"-3" " " " "
- 38" x 131"-29"-3" " " " "
- 52" x 151"-29"-1 1/2" Tubes, Ret. Tubular.
- 40" x 74"-29" 2" " " Self Contained
- 40" x 131"-21" 4" " " Cornish Pattern.
- 40" x 201"-75" 2" " " Fire Box
- 72" x 102"-77"-1" " " " "
- 24" x 60"-31"-2" " " " "
- 26" x 70"-37"-2" " " " "
- 30" x 60"-43"-2" " " " "
- 36" x 84"-55" 2" " " " "
- 36" x 90"-55"-2" " " " "
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- 12 in. Archimedian Brass, Waterous Co
- 12 " Right Hand Farrar, New.
- 21 " " " Burnham.
- 23 " " " Leffel.
- 30 " Left Hand " " "
- 33 " Right Hand " " "
- 28 " " " Vulcan.
- Water Wheel Governor.

STONE CRUSHERS

- No. 2 Dodge Stone Crusher, capacity 1 to 3 tons.
- No. 4 Portable Stone Crusher, Sawyer & Massey Make
- Rotary Screen for Stone Crusher.

WOOD WORKING MACHINERY

- 36 in. Circular Re Saw, Cant Bros. Make.
- Champion Cut-Off Saw Table, Kalle Make, New.
- Gravity Swing Cut Off Saw Table, McGregor Make.
- 30 in. Pedestal Band Saw, Cant Bros. Make.
- 30 in. Bracket Band Saw, Goldie & McCulloch Make.
- 36 in. Pedestal Band Saw American Make, New.
- 28 in. Knife Veneer Machine, Merritt Make.
- Auto Clipping & Stamping Machine.
- Drag Saw Machine 4 foot saw
- 24 in. Pony Planer, Rogers Make
- 20 " " " Dundas Make.
- 24 " Revolving Bed Planer, Berlin Make, New.
- 24 " Planer and Smoother, Whitney Pattern, New.

DUPLEX STEAM PUMPS

- 4" x 2 1/2" x 3" Northey Co., 1 1/2" Suc., 1" Dis., New.
- 4 1/2" x 2 1/2" x 4" " " " " " "
- 5 1/2" x 3 1/2" x 6" Martin Co., 2 1/2" " " " "
- 6" x 4" x 7" " " " " " "

SINGLE ACTING PUMPS

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- 3 1/2" x 1 1/2" x 15" Vertical (Fly Wheel) 1" Suc., 1/2" Dis.
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- 5" x 3 1/2" x 6" Cameron Single Acting, 1" Suc., 1/2" Dis.
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- 7" x 2 1/2" x 6" American Make " " " "
- 7 1/2" x 4 1/2" x 10" No. 6, Northey " " " "
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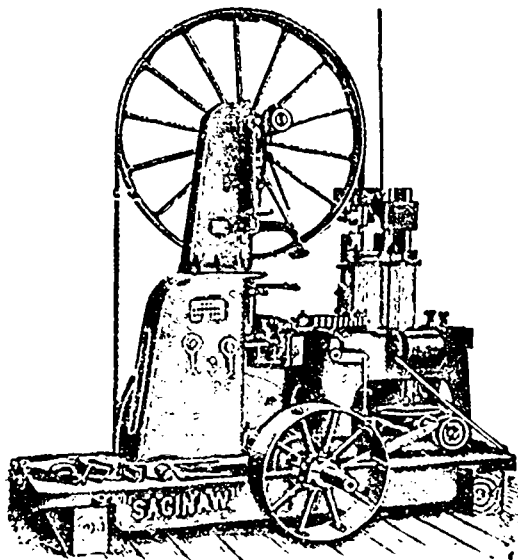
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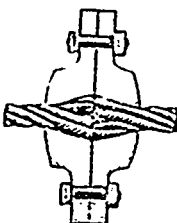
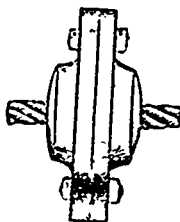
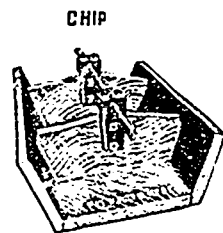
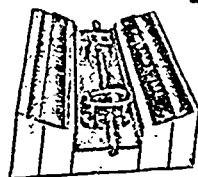
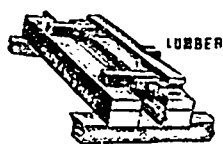


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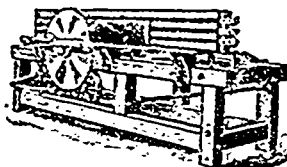
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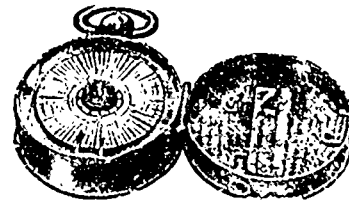


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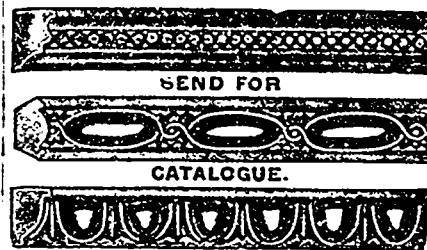
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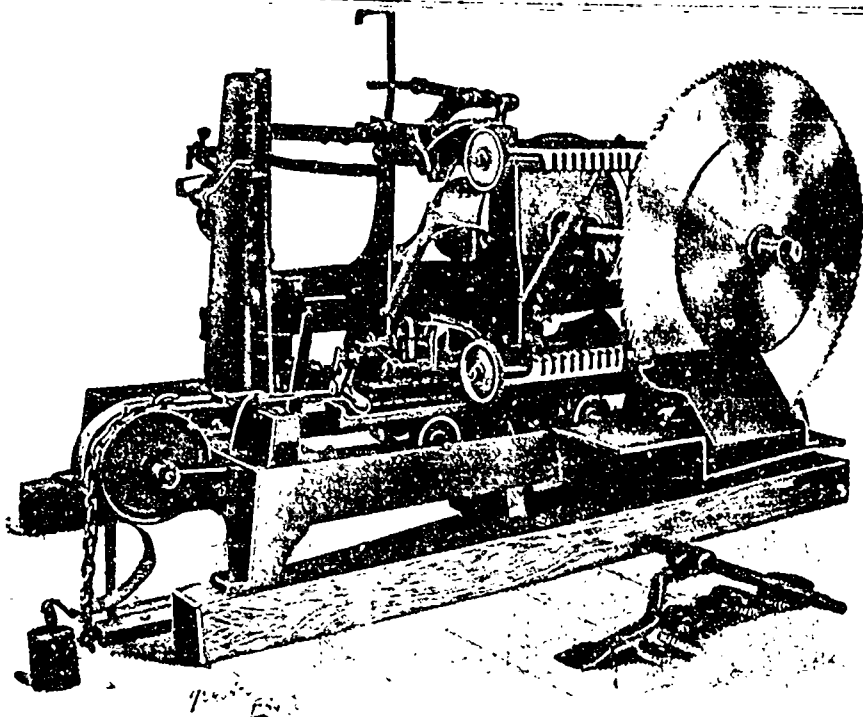
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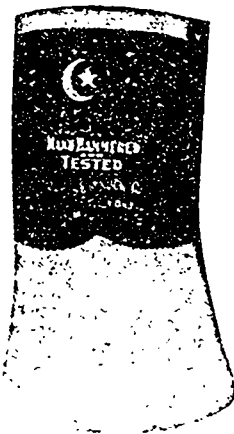
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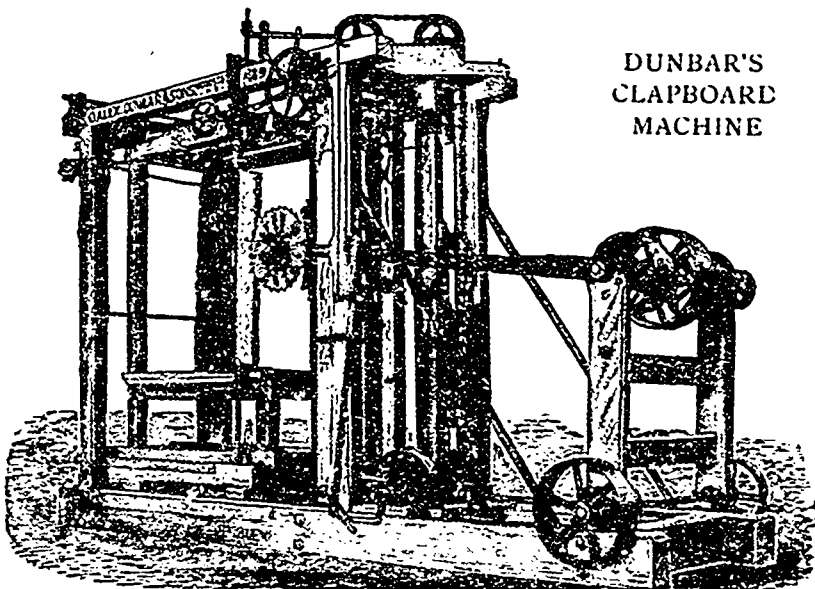


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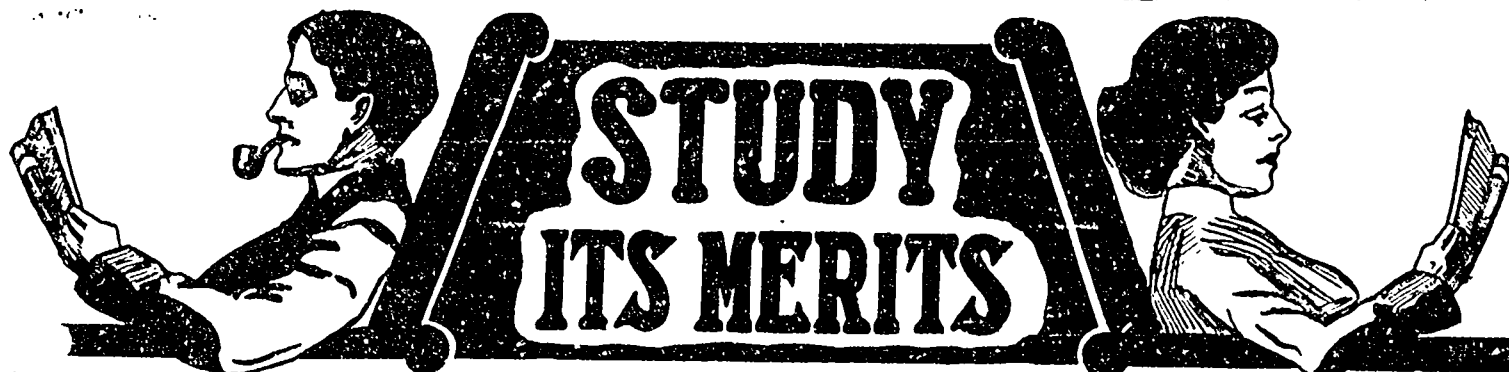
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Accidents from broken pulleys and fly wheels are unknown when Dodge Wood Split Pulleys are used.

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THE CANADA LUMBERMAN

VOLUME XXIII
NUMBER 2

TORONTO, CANADA, FEBRUARY, 1903

(TERMS, \$1.00 PER YEAR
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AN OTTAWA LUMBER FIRM.

One of the young but aggressive and progressive firms of lumber shippers in the Ottawa district is Messrs. Hurdman & Elmitt, whose offices are located in the Central Chambers, Ottawa. Established in 1898, the firm has enjoyed a remarkable growth of business. The members, Mr. G. Charles Hurdman and Mr. Thomas F. Elmitt, are young men, each possessing practical and full knowledge of the lumber business, and each giving its operations their personal attention. They buy direct from the mills. All lines of Canadian lumber, hardwoods, pine, spruce, lath and shingles, are handled, and in quantities that make exacting assortment and quick delivery possible. The firm has the very best of shipping facilities, and can handle stock in both barge and car lots.

Mr. G. Charles Hurdman is a born lumberman. He is the eldest son of the late George Hurdman of Ottawa, one of the founders of the original firm of Hurdman Brothers, afterwards Buell, Orr & Hurdman, and now the Hull Lumber Company. Mr. Robert Hurdman, the present well-known timber operator, is an uncle of the subject of the sketch. The late Mr. W. H. Hurdman was similarly related. On his mother's side Mr. Hurdman is connected with a prominent family of lumber operators.

The late Charles Tucker, one of the organizers and principal shareholders of the St. Paul and Tacoma Lumber Company, of Tacoma, Wash., was his uncle.

The first five years of Mr. Hurdman's career in the business found him "up river," the term commonly used to describe the timber limits as a base of operations. There he obtained a mastery of the details of the bush end of the business, which has stood him well in his present position. Determined to secure an all-round knowledge, and especially that relating to the mill and yard, Mr. Hurdman entered the services of the Shepard & Morse Lumber Company. He remained with that concern five years, and was advanced to the position of manager of the yard. He severed his connection with the firm to enter into partnership with Mr. Elmitt. He has a thorough knowledge of

selling, sorting and shipping. Hurdman & Elmitt have numerous customers who know the firm only through the mails and the stock they ship.

Few men in the business have a better or more thorough knowledge of the mill and manufacturer's end of the lumber trade than Mr. Thomas F. Elmitt. Years of study and service have enabled him to grasp every detail and apply to it a sound judgment, perfected by experience. In the mill, yard and office he is as much at home as the saw before the log. Mr. Elmitt is in close touch with the American and Canadian markets, and the firm's customers find in him a man who has the happy knack of filling every requirement of every order.



MR. G. CHARLES HURDMAN.



MR. THOMAS F. ELMITT.

His boyhood days found him in the employ of the old-time white pine house of Bronson & Weston, then conducting operations that included in their scope every branch of the lumber business as carried on in Ottawa and the Ottawa Valley. His keen discernment and intelligently applied industry earned him promotion, and ultimately advanced him to a more responsible position in the employ of the Shepard & Morse Lumber Company, of Ottawa. He was associated with their business in various capacities for a period of six years, severing his connection to accept the position of yard superintendent with the St. Anthony Lumber Company, with mill at Whitney Station, on the western branch of the Canada Atlantic Railway. His experience in this latter capacity might be termed a post-graduate course in

lumbering, and it rounded out a practical knowledge of every line of the business. Mr. Elmitt is an enthusiastic rifleman, and out of office hours often finds his way to the Rockcliffe Range, the Canadian "Sea Girt," where many a bull's-eye has been marked to his credit.

Hurdman & Elmitt handle a large quantity of hardwoods as well as their extensive pine trade, and are always in the market to buy either large or small quantities.

CANADIAN FORESTRY ASSOCIATION.

Arrangements are being rapidly completed for the third annual convention of the Canadian Forestry Association, which will be held in Ottawa on March 5th and 6th. It is hoped that there will be a large attendance, as the subjects to be discussed will be of very special importance at the present time. At the present practical moment to the future of the lumber industry.

The programme as already arranged will include the following papers: "The Laurentide National Park," by W. C. J. Hall, of the Crown Lands Department, Quebec; "The Fire-Ranging System of Ontario," by Aubrey White, Assistant Commissioner of Crown Lands for Ontario; "Tree Planting in Manitoba," by A. P. Stevenson, of Nelson, Man.; "Forest Conditions in New Brunswick," by His Honor J. B. Snowball, Lieutenant-Governor of New Brunswick; "The Growth of Forest Trees at the Arboretum of the Experimental Farm," by W. T. Macoun, Horticulturist; "Forestry in Relation to Irrigation," by J. S. Dennis, Irrigation Commissioner for the Canadian Pacific Railway Company in the North-West Territories. It is also expected to have papers from Nova Scotia and British Columbia, but final arrangements have not yet been made in regard to them.

A WELCOME VISITOR.

Mr. Jasper Martin, of Hillsdale, Ont., in renewing his subscription to the CANADA LUMBERMAN, writes: "The paper contains much valuable information and is a welcome weekly visitor."

ANNUAL LUMBER TRADE REVIEW

Statistics of the Production and Export in 1902.—A Year of Prosperity and Favorable Conditions.—Advance in Prices Partially Offset by Increased Cost of Labor and Supplies.

HE would indeed be a pessimist who could not find cause for congratulation in a retrospective glance over the lumber trade of the year 1902. From start to finish business was healthy. The lot of the salesman was an enviable one, inasmuch as lumber practically sold itself. From the Atlantic to the Pacific, and from the best grade of white pine down to the lowest grade of hemlock, the application of a steady demand, firm prices and liberal profits can fairly be made. As one reflects upon the prevailing conditions and volume of business, he is disposed to designate the past year as the "banner year" in the history of the lumber industry of the Dominion.

As long as logs were available the mills were kept in operation, but in some provinces, especially British Columbia, there developed a scarcity of raw material, which resulted in curtailing the lumber production. The high cost of timber, as well as of labor and supplies, was one of the distinctive features of the year, and had it not been for the abnormal expense in that direction, the profits of manufacturers would have been much greater. It is estimated that the cost of placing logs at the mill has increased 50 per cent. within three years. As matters stood, the lumber business of the year was conducted on a satisfactory margin of profit.

The domestic demand for lumber was heavy. Manufacturing industries using lumber as their raw material were operated to their full capacity, and there was an expansion in building operations, particularly in Manitoba and the Territories, where an abundant crop of grain was harvested. The figures of export trade make a favorable comparison with the previous year. Quebec and New Brunswick show increased shipments to Great Britain, Australia, South Africa and other distant countries, but the most substantial gain was doubtless made in the United States trade, of which complete statistics are not yet obtainable. The figures for the fiscal year ending June 30th, and for the eleven months ending November 30th, 1902, not only reflect the increased shipments, but also the advance in the value of lumber. In the following table of lumber exports to the United States for the past ten fiscal years, the valuation is based on the buying price in this country.

LUMBER EXPORTS TO UNITED STATES.

Year.	Quantity, feet.	Value.	Per M. feet.
1892.....	663,226,000	\$7,540,700	\$11.37
1893.....	742,351,000	8,217,331	11.06
1894.....	514,461,000	6,134,204	11.92
1895.....	600,790,000	6,859,078	11.41
1896.....	786,001,000	8,503,641	10.82
1897.....	883,770,000	9,073,312	10.26
1898.....	353,134,000	3,499,569	9.91
1899.....	423,720,000	4,186,664	9.88
1900.....	680,069,000	7,464,208	10.97
1901.....	490,570,000	6,343,836	12.93
1902.....	664,751,000	9,288,970	13.88

Excepting the year 1897, the shipments to

the United States in 1902 were the largest on record. It may be pointed out that the large trade in 1897 was due to the fact that the Dingley bill took effect on July 24th of that year, and every effort was made to get lumber across the border before that date in order to avoid the payment of a duty.

For the eleven months ending November 30th there were shipped from Canada to the United States 689,765,000 feet of lumber, of a value of \$9,988,630, and 725,453,000 shingles, of a value of \$1,451,713. The lumber business showed an increase in shipments over 1901 of 26 per cent., and in value of 40 per cent. The average price was \$14.51 per thousand feet, whereas in 1901 it was \$13.70. The average price of shingles was a trifle over \$2 per thousand, while in 1901 it was \$1.89.

The advent of the year 1903 found very light stocks in the hands of manufacturers, and the past month has given every promise that the prosperous conditions will continue throughout this year at least. The outlook for building and railroad construction, and the condition of foreign markets, offer little ground on which to base the hope of decreased demand and lower prices, although some slight recession may be witnessed in the price of special stocks which, on account of a temporary scarcity, have been advanced too rapidly.

ONTARIO.

It would be difficult to find a lumber manufacturer in Ontario who is not well satisfied with the trade of 1902. Both pine and hardwoods were in splendid demand, and in this respect the year differed from its predecessor, when hardwoods were inactive and depressed. Quick sales, high prices and fair settlements were the rule, but the cost of manufacture increased so enormously that only a small percentage of the increased revenue found its way into the pockets of the manufacturers. Mill stocks were held in strong hands and were difficult to obtain, so that the profits of jobbers were light.

Record prices were reached during the year for the best grades of white pine, which were in short supply. Clear and picks which in 1901 sold from \$25 to \$34 per thousand were readily saleable last year at from \$35 to \$45. In common lumber there was an advance of about \$2 per thousand, while mill culls remained about stationary. In the fall there was an advance of \$2 per thousand in red pine, which earlier in the year had been quiet. Hemlock was heavily bought, bringing about \$10 at the mill, a gain of \$1. Lath and shingles were in constant demand at an average advance of 1 and 25 cents respectively.

For well sustained and well distributed prosperity the year was about the best the hardwood trade has yet experienced. Price changes

were not erratic, but were in the direction of an advance and of such a nature as to create a belief in a further general appreciation in the price of hardwood lumber. Basswood, black ash and elm were the leaders, the former advancing in price about 15 per cent. The scarcity of white pine for siding and interior finish brought basswood to the front as a substitute, and for the past six months that lumber has been practically unobtainable.

Ontario exported an immense quantity of lumber to the United States, that market seemingly being more willing than Great Britain to pay the advanced prices. It is estimated that upwards of 200,000,000 feet of pine was shipped from the Georgian Bay district to the States of Michigan and Ohio and the city of Chicago. The Ottawa Valley production found an outlet in the usual channels, although a slightly larger quantity was marketed in the United States than in 1901.

The production of lumber was heavy. The mills were pretty well supplied with logs and continued in constant operation until late in the season. Nevertheless, the demand was sufficient to absorb the supply, and at the close of the year the quantity of unsold stock was exceptionally small. It is many years since the stock of all kinds of lumber has been reduced to such a low point.

It is difficult to obtain accurate statistics of the white pine production, but the following figures are believed to fairly represent the cut of mills at the places named, which include the leading pine producing points of what may, broadly speaking, be termed the Georgian Bay district:—

GEORGIAN BAY PRODUCTION.

Place.	Feet B. M.
Midland.....	70,000,000
Parry Sound.....	60,000,000
Sarnia.....	50,000,000
Byng Inlet.....	48,000,000
Little Current.....	40,000,000
Blind River.....	38,000,000
Waubushene.....	30,000,000
Sandwich.....	23,000,000
Collingwood.....	23,000,000
Penetang.....	23,000,000
Cutler.....	20,000,000
Gravenhurst.....	20,000,000
Spragge.....	20,000,000
Victoria Harbor.....	42,000,000
French River.....	18,000,000
John's Island.....	17,000,000
Spanish River.....	16,000,000
Bracebridge.....	14,000,000
Huntsville.....	15,000,000
Severn.....	10,000,000
Cache Bay.....	17,000,000
Callendar.....	6,000,000
Bobcaygeon.....	6,000,000
Warren.....	5,000,000
Powassan.....	3,000,000
Thessalon.....	7,000,000
Other Algoma Points.....	20,000,000
Total.....	661,000,000

NOTE.—The above figures apply exclusively to the production of pine at the points named, no account having been taken of the cut of hemlock lumber, shingles, lath, etc. In one or two instances where definite information was not forthcoming, it has been assumed that the cut was the same as in 1901.

Reliable returns go to show that the lumber cut of the Ottawa district last year was in the aggregate only slightly in excess of that of the previous year, reaching 614,000,000 feet, as against 611,000,000 for 1901. Ross Bros' mill at Buckingham was operated in 1902 by the McLaren Estate and the cut is accordingly included with that of the latter company's mill, making 25,000,000 in all.

The following are the figures for the different mills:

OTTAWA VALLEY PRODUCTION.

	1901—Feet.	1902—Feet.
J.R. Booth, Ottawa	125,000,000	125,000,000
Gilmour & Co., Trenton	25,000,000	13,000,000
Hull Lumber Co., Hull	35,000,000	40,000,000
McLachlin Bros., Arnprior	70,000,000	65,000,000
Hawkesbury Lumber Co., Hawkesbury	45,000,000	50,000,000
W.C. Edwards & Co., Rock- land and New Edinburgh	85,000,000	85,000,000
St. Anthony Lumber Co., Whitney	50,000,000	50,000,000
Gillies Bros., Braeside	40,000,000	40,000,000
Gilmour & Hughson, Hull	35,000,000	40,000,000
Pembroke Lumber Co., Pem- broke	14,000,000	14,000,000
G.H. Perley Co., Calumet	20,000,000	21,000,000
Ross Bros., Buckingham	10,000,000	
McLaren Estate, Buckingham	15,000,000	25,000,000
J.R. & J. Gillies, Arnprior	3,000,000	3,000,000
A. Hager & Co., Plantagenet	6,000,000	6,000,000
A. & P. White, Pembroke	8,000,000	5,000,000
McLaren & McLaurin, East Templeton	20,000,000	27,000,000
Rideau Lumber Co., Ottawa	5,000,000	5,000,000
Total	611,000,000	614,000,000

QUEBEC.

The year 1902 opened with the outlook for spruce lumber somewhat uncertain, but it was not long before the dark clouds on the horizon had disappeared and business was proceeding in a very satisfactory manner. Prices gradually strengthened, especially for export stock, and profits would have been much larger but for the increased cost of production. Labor was scarce and wages high. The cream of the year's business accrued to the manufacturers of spruce clapboards, which brought \$40 at the mill as compared with \$30 the previous year. In hemlock there was an advance of \$1, the average price being about \$10. Stocks at the close of the year are light in all grades, with the inferior grades predominating.

The total trans-Atlantic shipments from the province show a decline, in round numbers, of 39,000,000 feet. This is due chiefly to two causes, namely, increased exports to the United States, and the shipment of a large quantity of our lumber to Great Britain via United States ports. Boston furnishes a striking illustration of the latter, the figures of Canadian lumber exports from that port for three years being as follows:

Year.	Feet.
1900	7,343,000
1901	12,730,000
1902	25,847,000

There combines to be extreme difficulty in shipping through the St. Lawrence ports, and especially Montreal, owing to high insurance rates and inadequate loading facilities.

The record of Montreal lumber shipments shows an increase of 18,000,000 feet, while Quebec, Three Rivers and other St. Lawrence ports are credited with a decrease of approximately 56,000,000 feet.

In board measure the total trans-Atlantic shipments of timber, deals and sawn lumber from port of Montreal for the past two years were as follows:

Shippers.	1902.		1901.	
	Ft.	Bd. M.	Ft.	Bd. M.
Watson & Todd	51,311,775		66,107,435	
W. & J. Sharples	42,344,225		26,322,102	
Dobell, Beckett & Co.	40,711,000		36,695,912	
R. Cox & Co.	30,326,457		31,736,125	
J. Burstail & Co.	20,066,117		22,521,217	
The Charlemagne & Lac Oureau Co.	14,428,674		10,863,809	
McArthur Export Co., Ltd.	13,508,543		10,411,035	
McLaurin Bros.	7,000,000		5,348,000	
Cox, Long & Co.	4,997,726		4,653,236	
E. H. Lemay	2,335,000		2,472,000	
Railways, small shippers, etc.	11,442,596		4,293,979	
Total	240,472,113		222,424,850	

Only 353,492 feet of lumber was shipped from Montreal to South America.

The annual timber circular of J. B. Forsyth & Company, compiled by E. J. Dalkin & Company, gives the following particulars of the timber trade of Quebec:

WHITE PINE.—Square shows a diminished wintering stock, resulting from a decreased supply, as the export has been about same as the preceding year. In waney an increased supply has been more than counterbalanced by a larger export. In both the stock is again the highest on record, with no probability of an adequate production unless consumption is checked by the repeated advances in price.

	Supply.	Export.	Stock.
1902 { Square.. 384,440	2,445,548	{ 395,962 Square	{ 261,393 Waney
{ Waney.. 1,830,120			
1901 { Square.. 545,432	2,317,443	{ 589,561 Square	{ 361,488 Waney
{ Waney.. 1,446,889			

RED PINE.—The supply and stock continue to decrease, and it is quite evident that in a few more years the manufacture and export of this wood as Square timber will come to an end.

	Supply.	Export.	Stock.
1902	71,160	80,190	66,998
1901	89,917	86,535	78,084

OAK.—The wintering stock shows a moderate increase on the figures of last winter, which were the lowest on record. The demand for this wood is largely supplied by sawn scantling and cheaper hewn oak from United States ports. The present advance in price was necessary to enable producers to continue making, and is the first established for many years, but it must not be forgotten that any considerable increase in production would result in a reaction.

	Supply.	Export.	Stock.
1902	653,520	578,121	192,162
1901	498,261	516,437	126,874

ELM.—The supply has fallen to little more than half that of the preceding year. The stock figures are quite misleading, as they include a large quantity of soft elm that has remained unshipped over season. There is a light stock of first-class rock elm, and unless this wood is to go out of production the price must materially advance.

	Supply.	Export.	Stock.
1902	561,920	586,777	539,183
1901	1,023,372	548,869	594,922

ASH.—A decreased supply leaving an increased stock shows an absence of demand. Small wood is almost unsaleable, and even large wood is not readily placed. Production will certainly be very light.

	Supply.	Export.	Stock.
1902	79,902	49,970	49,818
1901	135,245	118,074	25,430

BIRCH.—A reduced production consequent on increased cost of manufacture and growing scarcity of readily available wood has resulted in a better demand at increased prices. It must be remembered that in addition to Quebec shipments considerable quantities are exported from Portland in winter and Montreal in summer, and that such wood is similar to that sent from this port.

	Supply.	Export.	Stock.
1902	260,200	247,390	57,399
1901	291,786	304,584	7,721

SPRUCE DEALS.—A large decrease is shown in production and export, not only on last year's high figures, but also on preceding years. Values have increased very materially, but do not more than meet increased values of stumpage and cost of production. The stock is about similar to the very light one of last year.

	Supply.	Export.	Stock.
1902	130,250,567	129,006,397	8,232,790
1901	189,768,122	185,303,399	6,958,820

PINE DEALS.—The Ottawa mill cuttings have been placed at an advance of about 10 per cent. over previous year, which States market demand fully justified. Culling generally appears

to have approximated to the old standard on the average, but will never return to the extreme level to which it was forced previous to the change. The figures given below are only for Quebec.

	Supply.	Export.	Stock.
1902	3,201,870	3,148,200	286,375
1901	10,550,512	10,448,295	331,705

SAWN LUMBER.—Local consumption has been very large, and the constantly increasing demand from the United States has advanced prices to such an extent that little or nothing has been shipped to River Platte, the market there being unable to respond to the advance demanded by shippers.

From ports east of Montreal the following shipments were made:

	Quebec Feet.	Three Rivers and Pierreville. Feet.	Other Ports. Feet.
Dobell, Beckett & Co.	30,281,500	20,782,200	5,180,200
W. & J. Sharples	27,557,640	7,100,800	
Price Bros. & Co.			50,200,000
McArthur & Co.	12,520,764		
J. Burstail & Co.	4,316,794		
H. R. Goodyard & Co.	22,683,404		
King Bros. Ltd.	11,000,000		
Harold Kennedy	7,879,000		
Total	116,189,102	27,882,200	55,440,200

THE MARITIME PROVINCES.

Without an exception the lumber manufacturers and shippers of the Maritime Provinces report that the past year was more satisfactory than its predecessor. Constant buying for local and export trade kept the market steady throughout the year, and the close of 1902 found prices of spruce lumber materially higher than twelve months earlier. Clapboards, which commenced to improve in the fall of 1901, continued to gain strength, and were easily the feature of the year, closing with the substantial advance in price of fully \$6 per thousand, the quotation for first quality on Boston rate of freight being \$43. The advance was due solely to the scarcity of stock.

Ordinary spruce lumber for the United States market made a gain for the year of about \$2 per thousand and hemlock lumber \$1. New Brunswick cedar shingles followed the lead of clapboards, extras ending the year with a gain of 50 cents per thousand and other grades from 10 to 20 cents.

Early in the year spruce deals for the British market took a sharp rise, which was maintained throughout the season. In 1901 the ruling price was \$10.50, whereas last year most of the stock realized from \$11.50 to \$12. Stocks held over are light and consist largely of 8-inch and under. South American specifications were active and brought \$1 per thousand more than in 1901.

Turning to the volume of trade, we find that New Brunswick shows an increase in trans-Atlantic shipments of 53,000,000 feet, while Nova Scotia is responsible for a decrease of 30,000,000 feet.

While New Brunswick shipments are more than those of 1901, they are 36,000,000 superficial feet less than in 1900 and 41,000,000 superficial feet less than in 1897, and only an average of the years 1897 to 1901 inclusively. One-half of the increase in the shipments from New Brunswick occurs in St. John, and is largely on account of logs left in the brooks during the spring of 1901, that could not be got to market on account of poor freshets. The demand made last winter for lumber to fill up the winter port liners induced the rotary mills to saw all the available stock within easy reach of that port which also accounts to some extent for this increase. Considerable increases also appear in Dalhousie, Campbellton and Sackville.

Miramichi shows a decrease of over 2,700 standards, and as the stock wintering on the river this season is 7,500 standards less than last year, and the operations not any greater than last winter, which was all the mills could

saw, some falling off in the shipments for 1903 is looked for.

A considerable portion of Nova Scotia shipments consists of hardwoods, such as birch, beech and maple, with considerable hemlock; and without these woods the present volume of New Brunswick exports could not be maintained.

In the distribution of the lumber there was little change, Great Britain continuing to be by far the best customer for our eastern spruce. France and Australia took less lumber than in 1901, probably owing to the ruling high prices. The shipments of Canadian lumber from the consular district of St. John to the United States were greater by \$20,331.58 in value, made up of an increased export of shingles and lath. American lumber, the product of Maine forests sawn at St. John and shipped to the United States, shows a falling off in value of \$268,071.73. The United States Consul furnishes the following statement of St. John shipments:

LUMBER EXPORTS FROM ST. JOHN TO UNITED STATES, 1902.

Table with 3 columns: Lumber Type, First Half Year Total, Second Half Year Total. Rows include Long lumber, Laths, Shingles, and a Total row.

AMERICAN LUMBER.

Table with 3 columns: Lumber Type, 1902 Total, 1901 Total. Rows include Lumber, Laths, Shingles, and a Total row.

The J. B. Snowball Company, of Chatham, N. B., furnish the following figures of trans-Atlantic shipments from New Brunswick and Nova Scotia:

SHIPMENTS FROM MIRAMICHI FOR 10 YEARS FROM 1893 TO 1902 INCLUSIVE.

Table with 2 columns: Year, Sup. ft. deals. Rows for 1893-1902.

Table with 4 columns: Shippers, No. Vessels, Tons, Sup. ft. deals. Lists various shipping companies and their statistics.

Total. 90 114,200 122,017,741

DISTRIBUTION OF MIRAMICHI SHIPMENTS.

Table with 3 columns: Country, No. Vessels, Tons. Lists destinations like England, Ireland, France, Spain, and Africa.

Total. 90 114,200 122,017,741

DISTRIBUTION OF ST. JOHN SHIPMENTS FROM 30TH NOVEMBER, 1901, TO 30TH NOVEMBER, 1902.

Table with 3 columns: Ports, No. Vessels, Tons. Lists various ports including Liverpool, Birkenhead, Manchester, etc.

Table with 3 columns: Ports, Sup. ft. deals, Tons Timber. Lists various ports like Glasgow, Ayr, London, etc.

THE SHIPPERS FROM THE PORT OF SAINT JOHN WERE:

Table with 3 columns: Shippers, Sup. ft. deals, Tons Timber. Lists individual shipping companies.

SHIPMENTS FROM ST. JOHN TO TRANS-ATLANTIC PORTS FOR THE PAST 10 YEARS.

Table with 4 columns: Year, Total sup. ft. deals, Timber (Tons) Birch, Pine. Shows annual shipment trends.

SHIPMENTS FROM OTHER NEW BRUNSWICK PORTS.

Table with 3 columns: Shippers, Sup. ft. deals, Tons Timber. Lists other ports like Dalhousie and Bathurst.

Table with 3 columns: Shippers, Sup. ft. deals, Tons Timber. Lists additional shippers for other ports.

Table with 3 columns: Shippers, Sup. ft. deals, Tons Timber. Lists shippers for Sackville and Harvey.

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Table with 3 columns: Shippers, Sup. ft. deals, Tons Timber. Lists shippers for Sackville and Harvey.

Table with 2 columns: Hillsboro, Sup. ft. deals. Lists John T. Peck and J. Nelson Smith.

TOTAL TRANS-ATLANTIC SHIPMENTS OF NEW BRUNSWICK, 1902 COMPARED WITH 1901.

Table with 2 columns: Hillsboro, Sup. ft. deals, etc. Compares 1902 and 1901 data for various locations.

Table with 2 columns: Hillsboro, Sup. ft. deals, etc. Compares 1902 and 1901 data for various locations.

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

Table with 4 columns: Year, Sup. ft. deals, Tons Timber. Shows annual shipment trends for the province.

SHIPMENTS FROM NOVA SCOTIA, 1902.

Table with 3 columns: Ports, Ship Harbor, etc., Sup. ft. deals, etc. Lists Nova Scotia ports and their shipment statistics.

The shipments of deals, etc., from Nova Scotia to trans-Atlantic ports for the past ten years were:

Table with 4 columns: Year, Sup. ft. deals, Tons Timber. Shows annual shipment trends for Nova Scotia.

BRITISH COLUMBIA.

The lumber and shingle industry of British Columbia witnessed a remarkable expansion in the year under review. The benefit of the law prohibiting the export of timber was illustrated by the erection of many new mills and the creation of new lumber centres. While export trade in lumber shows a falling off, there was a vast improvement in local business and in shipments to Eastern Canada, as well as in prices of timber products generally. No. 1 flooring which in 1901 sold at \$21 was marketed last year at \$24; common dimension advanced from \$10 to \$11, and rough culls from \$6 to \$9. In other grades there was an advance ranging from \$1 to \$5. At the close of the year shingles showed an appreciation of 30 cents, selling at \$1.85 at the mill as compared with \$1.55. Many manufacturers, however, did not profit by the increased price, having placed much of their output under contract early in the year before the upward movement had begun.

Great difficulty was experienced in obtaining labor, and the prices paid for logs and shingle bolts were much in excess of any previous year. The scarcity of labor became so pronounced that in the fall some of the manufacturers were compelled to close down for a time. A shortage in the car supply was another worry with which manufacturers had to contend.

The total production of the shingle mills of British Columbia in 1902 was about 500,000,000.

Perhaps the Kootenay district furnishes the best example of the growth of the saw-milling industry in British Columbia. Six years ago there was one small saw-mill in the East Kootenay district south of the Columbia Lakes, and valuable timber limits were passed by as hardly worth noticing. Mills have since been built all along the Kootenay, Moyie and Elk valleys. It is estimated that the cut of the coming season will aggregate 120,000,000 feet. The capacity of the various mills is estimated as follows: Cotton, at Crow's Nest, 2,000,000 feet; Carbon Creek Lumber Company, 2,000,000; Fernie Lumber Company, 5,000,000; Mott & Son Company, Fernie, 5,000,000; Cedar Valley Improvement Company, Fernie and Morrissey, 5,000,000; McCrea Lumber Company, Coal Creek, 5,000,000; Robinson-McKenzie Lumber Company, Cranbrook, 5,000,000; King Mercantile Company, Cranbrook, 5,000,000; Leask & Slater, Cranbrook, 5,000,000; Larrie Lumber Company and Finch & Jones, Marysville, 4,000,000; East Kootenay Lumber Company, four mills, 20,000,000; Crow's Nest Lumber Company, Wardner, 12,000,000; Moyie Lumber Company, Elk Mouth, 2,000,000. At Slocan the Ontario-Slocan Lumber Company is building a mill to have a daily capacity of 100,000 feet.

Only two companies were engaged in the export trade, namely, the British Columbia Mills, Timber and Trading Company, and the Victoria Lumber and Manufacturing Company. Their shipments aggregated about 56,000,000 feet, somewhat less than the total export trade of 1901.

The loss in export trade was due to lighter shipments to South America, China and Japan. Whereas South America took approximately 13,000,000 feet in 1901, less than 9,000,000 feet was shipped to that country last year. Upwards of 12,000,000 feet was shipped in 1901 to China and Japan, an increase over last year of 7,000,000 feet. These losses were made up in part by increased shipments to South Africa, the trade with that country expanding from 4,000,000 feet in 1901 to nearly 11,000,000 feet last year. The shipments to Australia and Great Britain varied but little from the previous year. The figures in detail for two years are given below:

SHIPMENTS TO COUNTRIES.

	1901.	1902.
	Feet B. M.	Feet B. M.
Australia ..	22,019,807	20,632,584
South America ..	13,045,214	8,815,835
United Kingdom ..	8,009,863	8,174,134
China and Japan ..	12,702,602	5,053,444
South Africa ..	3,926,620	10,675,008
United States ..		875,842
Fiji Islands ..		20,751
Germany ..	1,211,061	38,033
Calcutta ..	3,036,530	
Mexico ..	746,762	
Belgium ..		950,449
Alaska ..	170,260	
Bombay ..	44,852	
Total ..	66,714,271	55,855,405

The following table shows the port of shipment, destination, quantity and value of foreign cargoes.

FROM CHEMAINUS.			
Vessel.	Destination.	Feet B. M.	Value.
Labina ..	South Africa	1,300,611	\$11,004
Jane L. Stanford ..	Mellbourne	1,137,561	10,015
James Johnson ..	Sydney	1,166,082	10,762
Chas. E. Moody ..	Adelaide ..	1,378,381	11,500
Ostara ..	South Africa	1,665,061	15,015
Star of Bengal ..	Adelaide ..	1,508,202	12,542
Sourina ..	Sydney ..	731,419	6,167
King Cyrus ..	Sydney ..	840,277	7,544
Antigone ..	U. K. ..	1,162,830	10,275
Louisiana ..	Sydney ..	1,072,534	9,347
Arrosa ..	Sydney ..	1,303,090	15,957
Paramita ..	Sydney ..	1,151,219	10,174
Servia ..	Adelaide ..	1,300,067	10,855
Ema Lovisa ..	W. Coast S.A.	965,735	8,115
Emily Reed ..	Cape Town	1,210,357	13,166

FROM CHEMAINUS.			
Vessel.	Destination.	Feet B. M.	Value.
Antonietta ..	W. Coast S. A.	737,053	7,360
Lake Lemah ..	W. Coast S. A.	859,587	7,240
Antofagasta ..	W. Coast S. A.	772,219	9,980
India ..	W. Coast S. A.	869,053	7,674
Prosper ..	Valparaiso	768,573	6,730
Atlantic ..	U. K. ..	1,488,279	23,773
Balboa ..	Mollendo	844,545	12,405
Helios ..	South Africa	725,609	8,091
John A. Briggs ..	Cape Town	1,595,031	18,052

FROM HASTINGS.			
Vessel.	Destination.	Feet B. M.	Value.
Athenian ..	China and Japan	142,510	2,504
Empress of Japan ..	Yokohama	25,404	434
Elizabeth Nicholson ..	Shanghai	653,509	6,833
Mary A. Troup ..	Wilmington, Del.	875,843	18,510
Altavella ..	Ostend, Belgium	950,449	7,725
Reuce ..	Sydney	1,251,030	12,510
Rose ..	Fremantle	595,909	5,022
Andromeda ..	Iquiqui	279,020	7,714
Alderley ..	Sydney.	1,082,502	11,000
Zamaranth ..	Taku	1,380,414	17,380
Pallas ..	U. K. ..	1,080,573	10,500
Athenian ..	Japan	57,612	1,810
Queen Mary ..	Taku	121,611	3,200
Challenger ..	Delagoa Bay	1,090,233	9,775
Prince Louis ..	Cardiff	940,000	15,100
Moana ..	Sydney	16,211	300
Empress of China ..	Kobe	9,911	270
Tartar ..	Yokohama	7,706	205
Miwera ..	Sydney	32,070	490
I. D. Everett ..	U. K. ..	1,413,050	21,000
Invermay ..	Mellbourne	1,179,206	10,300
Antigua ..	Fremantle	1,113,464	11,380
Pentaur ..	Hamburg	38,033	1,250
Aorangi ..	Sydney	116,625	1,615
St. Francis ..	Delagoa Bay	1,358,714	12,375
Empress of China ..	Yokohama ..	29,078	750
Kirkdale ..	Taku	1,914,772	20,085
Mona ..	Sydney	53,129	720
Empress of India ..	Yokohama ..	20,162	435
Eric ..	W. Coast S. A.	671,732	7,700
Kohala ..	Delagoa	974,760	9,500
Tartar ..	Japan	160,571	2,340
Miwera ..	Sava, Fiji ..	20,751	450
Clavering ..	Taku, China	401,470	4,020
Foreic ..	Sydney	261,404	4,950
Windsor ..	Iquiqui	681,947	8,500
Ellen A. Read ..	Greenock ..	1,178,754	7,120
Albania ..	London	1,000,949	17,350
Jane L. Stanford ..	Sydney	1,154,100	13,450
Kailua ..	Kobe	854,820	11,270
Athenian ..	Japan	52,322	1,800
Empress of China ..	Japan ..	16,739	455
Thistle ..	Fremantle	942,261	10,000
Tartar ..	Yokohama	17,266	470
Antuco ..	Iquiqui	1,234,488	13,559
Empress of China ..	Yokohama	6,000	150
Jabez Howes ..	Sydney	1,138,802	13,030

FROM HORNBY ISLAND.			
Vessel.	Destination.	Feet B. M.	Value.
Samar ..	Santa Rosalia	205,870	3,000

MANITOBA.

Early in the year it became evident that a large quantity of lumber would be consumed in Manitoba and the Territories. Manufacturers put forth their best endeavors to supply the requirements of their customers, but the buying in anticipation of good crops was extensive, and there developed a shortage in the lumber supply. The demand was unprecedented, all classes of lumber being consumed in large quantity. Building operations in Winnipeg were of large volume, totalling in value nearly three million dollars, and calling for many million feet of lumber. There was scarcely a lull in trade until winter weather brought about a cessation of outdoor work. Manufacturers were always far behind with orders for lumber, as is evidenced by the statement of the manager of one company that they always had unfilled orders on their books for at least three hundred cars.

British Columbia lumber and shingles sold freely in Manitoba, but very little stock was imported from the United States. Prices were advanced at different intervals, and stand materially higher at the close of the year.

COOPERAGE STOCK.

The Sutherland-Innes Company, Chatham, Ont., furnish the following particulars of the cooperage stock market in 1902:

The year has been a most unfavorable one for getting out cooperage stock. While there were fairly good stocks of timber put in at the mills last winter, just as soon as these were

cut out there was no chance of getting any more timber to the mills, consequently as soon as the winter supply of logs was cut out the mills had to close down. This curtailed the production very seriously, and the consequence is at the present time there has been an entire clean-up of cooperage stock in Canada. There has been hardly anything at the mills except No. 2 stock, of which the production last year was very much larger proportionately than is usual. The excess in the production of No. 2 staves was caused by the continual wet weather throughout the season, which mildewed and damaged staves that would otherwise have gone into the No. ones, consequently the percentage of No. ones from the staves cut was very small this season.

The demand for all classes of stock has been exceptionally good, there having been a splendid apple crop, and trade through the country being excellent.

The supply of raw material in Canada has been rapidly exhausted, and the prices of logs and bolts are almost double what they were five years ago.

On the whole the season was not a very satisfactory one for manufacturers of cooperage stock, as while the prices during the latter part of the season were very good, manufacturers had little or no stock to dispose of, it taking about all of the stock of the manufacturers to supply their contracts and their regular customers. In the early part of the season cooperage stock was sold at too low figures, and the prominent manufacturers do not anticipate that stock will ever go down so low again, in fact it would be impossible to sell stock as low again except at a loss, on account of the increase in the cost of raw material.

THE FORESTS OF RUSSIA.

The gradual deforestation of Russia is attracting increased attention throughout the Empire, and the Forestry Society as well as the Forestry Department of the Ministry of Agriculture and Domains are discussing means for regulating the consumption of timber and for propagation. There does not seem to be any great cause, however, for apprehension, as a recent official report states that forests in Russia now cover an area of 180,000,000 hectares (464,000,000 acres.) Among European countries Sweden comes next with 44,000,000 acres of forests. In Russia the forests cover 36 per cent. of the whole area of the country. The Swedish forests occupy 44 per cent. of the total area, and the Austro-Hungarian 32 per cent. of the territory of the dual monarchy. Reckoned by the population there are 2.4 acres of forest to each inhabitant of Russia, 0.5 acres in Sweden, 10.4 acres in Norway, and .60 acre per head in Germany. The forests have a greater importance for Russians than for people of Western European countries, as villages and country houses are largely built of wood, stone and brick houses being almost unknown, and the forests furnish the main sources of fuel supply.—Journal of the Society of Arts.

NATIONAL WHOLESALE LUMBER DEALERS' ASSOCIATION.

Arrangements have been completed for holding the annual meeting of the above association at the "New Willard" hotel, Washington, D.C., on March 4th and 5th. This meeting will be one of the most important that has ever been held. Many questions of interest to the lumber trade in general will be discussed and it is contemplated that important action will be taken on several matters.

It is reported that C. P. Easton & Company, of Albany, N.Y., have decided to build a saw mill on their timber limits recently purchased in the province of Quebec.

THE Canada Lumberman

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ADVERTISING RATES ON APPLICATION.

THE CANADA LUMBERMAN is published in the interests of the lumber trade and allied industries throughout the Dominion, being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion by others.

Special pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information in which it can rely in its operations.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN, with its special class of readers, is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements, which will be inserted in a conspicuous position at the uniform price of 15 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

LUMBER GRADING.

The remarkable activity in the lumber business of late has served to accentuate the necessity of uniform grading. It is well-known that when business is good and prices high the grades are usually lowered, this being the case in some degree even where lawful inspection is in vogue. Where every manufacturer makes his own grades, and they are not subjected to the scrutiny of an official inspector, the opportunity is most favorable for raising or lowering the grades according as the demand is strong or otherwise. In times such as the present, when lumber is difficult to find, the limit to which this elastic process may be carried is a very wide one. A person in need of lumber will hesitate to return a shipment even if it is deficient in quality unless he is reasonably sure that he can obtain his requirements from another source.

Buyers encountered undergrading quite frequently during the past year. The activity in the trade often made it advisable to purchase stock without first making an inspection, and as a result instances of disappointment were quite common. The consequent loss usually fell upon the dealer, as the consumer, requiring a certain grade of lumber for a specific purpose, would refuse to accept the grading or was given a discount in lieu thereof. Where the manufacturer deals directly with the consumer he is generally closely in touch with his requirements and regulates his grading accordingly.

It is singular that no concerted effort has

yet been taken by the lumbermen of Canada to establish standard inspection rules which would remedy the existing unsatisfactory conditions and assist to give the business a prestige in keeping with its importance. Visiting lumbermen from other countries invariably express surprise that they are not able to obtain more definite information as to the grading of Canadian lumber. Perhaps the Ontario Lumbermen's Association, at its forthcoming meeting, will take the initiative.

COST OF PRODUCING WOOD-WORK.

The inventory taken at the close of 1902 by the producers of wood-work for house finish and general building purposes should have shown a very substantial margin of profit on the year's business, as the volume of building was large and factories were operated continuously. That such was the case, however, is to be doubted, inasmuch as prices of wood-work have not advanced in proportion to the increased cost of the raw material. When about four years ago the price of lumber commenced to advance, it was anticipated that there would be a corresponding rise in the price of sashes, doors and other finished goods. Contrary to expectations, there seemed to be a disposition on the part of manufacturers to adhere to the old lists, and it was with difficulty that even a slight advance was attained. Proposals in the same direction have ever since been received coolly and without unanimity, so that the business of manufacturing wood-work is to-day less profitable than it should be.

In Toronto, and doubtless similar conditions prevail elsewhere, dealers in lumber have found great difficulty in selling to the sash and door manufacturers at a profit, the obstacle being the low price at which the finished goods are being sold. It has seemed to be the object of the trade to endeavor to sell their products as low as possible, with little regard to the increased cost of production so long as there was a margin of profit on the year's business. While manufacturers in most other branches of industry have benefitted by the recent prosperity, and have strengthened their position so as to withstand the reverses of possible years of depression, the producers of wood-work have pursued a policy of management tending to ultimately bring disaster.

Within the last three years the selling price of finished wood-work has advanced perhaps fifteen per cent. This compares with an advance ranging from twenty-five to fifty per cent. in the cost of the raw material. Lumber which three years ago could be bought for fourteen dollars to-day brings twenty dollars; machinery and labor are much higher in cost; while the value of pine timber stumpage has increased nearly fifty per cent. In the face of these conditions it seems singular that the manufacturers of wood-work do not come together and agree upon a price basis by which they would share to a reasonable extent in the prevailing prosperity.

These remarks express the sentiment of many persons engaged in the lumber trade, and of some manufacturers of wood-work. It

is to be hoped that this sentiment, which is gradually growing, will soon become sufficiently strong to remedy the unsatisfactory conditions.

FIRE INSURANCE RATES.

The dissatisfaction in lumber circles with fire insurance rates on saw mills and allied risks still exists. The present method of rating is very unpopular and is claimed to be unjust, in that it does not allow the policy holder due benefit from precautions taken to render his property free from danger of fire. The lumber mutual insurance companies of the United States give special attention to fixing a rate in proportion to the risk involved in each individual case, and on this ground seem to offer more reasonable terms. By such a system every policy holder makes the rate for himself in the precautions he adopts to protect his property. Another advantage in this method is the resultant smaller number of fires, as it is well known that in the event of fire the loss is not alone in the actual damage, but in the inconvenience and loss of articles, documents, etc., which sometimes cannot be replaced.

The manufacturers of British Columbia have taken a wise step in their purpose to investigate the causes of fires in dry kilns. It is intended to build a sample kiln and make exhaustive tests, the results of which will be awaited with interest. In connection with insurance rates it would appear that certain Canadian companies have found it cheaper to carry their own insurance. The Montreal Street Railway Company, for instance, have, after a thorough investigation, adopted this policy, and at the last annual meeting set aside the sum of \$100,000 for the purpose. It may be that the lumber fraternity will find it advisable to adopt a similar course unless more equitable and reasonable rates are given by the insurance companies.

EDITORIAL NOTES.

The facts presented in last issue relating to the export of British Columbia shingles to the United States are a strong commendation of the manufacturing methods of Canadian millmen. There is unanimity in the statements as to the better quality of the Canadian red cedar shingle which would seem to substantiate the claim beyond all doubt. In the British Columbia mills upright machines are used exclusively. These operate comparatively slowly, and turn out a product second to none. In the United States it seems that quality has been sacrificed to quantity, with the result that the Canadian shingle commands from 25 to 50 cents per thousand more than the home product in that market.

Some time ago there was a great splurge of advertising by the Atlantic Pulp and Paper Company, a \$3,000,000 corporation of Canada that had some stock to sell. The public did not show any enthusiasm in the matter, and now the newspapers that carried the "ads" are entering up judgments for the amounts of their bills, plus court costs, etc.—Paper Trade Journal.

Our contemporary has only told half the truth. The so-called "\$3,000,000 corporation of Canada" was a United States concern, incorporated in the State of New Jersey by A. L. Meyer, B. P. Moore and F. G. Smith, all of New York city. The fate of the company would probably have been different if it had been backed by Canadian capitalists.

IEWS AND INTERVIEWS

Mr. John Waldie, president of the Ontario Association of Lumbermen, when asked for his opinion with reference to the request for an export duty on pulp wood, said: "I am strongly in favor of allowing each province to build up its industries. Any enactment made at Ottawa dealing with the properties of a province would not likely be as permanent as if the province acted for itself. For instance, what in an international treaty suited the Maritime Provinces might not suit Ontario, and to get fish free into the American market would not suit Ontario, it procured at the sacrifice of the manufacturing conditions for wood products in the country. The export duty would be considered an offensive enactment by the United States, and would at once bring into operation the double duty clauses of the McKinley bill, which were specially inserted to prevent the export duty, while the provincial enactments to compel manufacturing are defensive measures to protect and develop our own industries. Between an offensive action and a defensive action, the latter is our better position."

A gentleman always on the alert for good sound ideas representing an advance in manufacturing methods had before him when I entered his office a copy of the December LUMBERMAN, with the article relative to Killam's new method for sawing lumber marked in colored pencil, presumably in order that it should receive a little consideration at his hands in a leisure moment. "The claims advanced in the article," he remarked, "are all right, but lumbermen are always desirous of seeing such machines in operation before giving them their approval. I think that Mr. Killam's circular mill would be likely to increase the quantity of waste and produce more thick and thin lumber than is the case with the ordinary single-cutting saw. I know that some trouble in this direction has been experienced by the double-cutting band, and while it may be possible to turn out the lumber equally as good as by the single saw, this I believe can only be done by giving extra care and attention to the saws and having men to operate them who are expert sawyers of the first order." There is no doubt but that the tendency towards increased output may show itself in a poorer quality of lumber. This, however, is a question which has not yet been definitely settled so far as the double-cutting bands and circulars are concerned, and it is unfair to condemn them before they are put to the test.

D. H. and J. N. Talford at one time operated a retail lumber yard at Danvers, Minnesota, but a few years ago moved to Winnipeg and purchased a small mill located on Lake Winnipeg. They have been sawing a quality of timber not altogether to their liking, so have been on the lookout for a new limit. This they recently secured on the Saskatchewan river, chiefly spruce of a good grade. The

timber will be floated down the Saskatchewan river to Prince Albert, where they have purchased and are remodelling a saw mill. Mr. D. H. Talford was in Minneapolis last month and expressed himself as in every way satisfied with his venture into Canadian territory. Speaking of the Northwest, he said that a few years ago when he first contemplated going up there his friends were inclined to consider him an object for sympathy on account of having to undergo the frigid temperature of the sub-Arctic region. Even now, when the wonderful tide of immigration has made that territory well known, few realize its almost boundless extent. While cruising through the timber in the summer Mr. Talford became acquainted with a missionary from the far north. He told him of a little settlement up in that section where they had been able to raise over forty bushels of wheat to the acre. This was over a thousand miles above the international boundary line. A great many who have made partial explorations of this great unknown region predict that there will be discoveries in the way of minerals that will astonish the world.

Mr. S. Gagne, whose father is a large pulp wood contractor in the Lake St. John district of Quebec, recently gave me some particulars regarding the pulp development in that territory. The Chicoutimi Pulp Company, he says, are greatly extending their works at Chicoutimi, and when completed expect to have an establishment second to none. There are four other pulp concerns in the Lake St. John district. The Jonquieres Pulp Company have a mill about ten miles above Chicoutimi, on the Riviere aux Sables, built about two years ago. It is now largely controlled by Messrs. Price Bros., of Quebec, who are said to have decided to build a large paper mill in connection therewith. The mill of the Metabetchouan Pulp Company is located on the river of that name and on a branch of the Quebec and Lake St. John Railway. Then there is the mill of the Quiatchouan Pulp Company at Quiatchouan Falls, which was described in the December LUMBERMAN. The fifth mill is located on the Peribonka river, north-east of Lake St. John. It was built about a year ago and turned out pulp during the past summer. Mr. Gagne is of the opinion that sometimes too little importance is attached to the necessity of securing competent engineering advice before building a pulp mill. He cited instances where as a result of this neglect suitable turbines had not been installed and where a railway had been built with a curve of 27 degrees, whereas it should not have had more than about 10 degrees. In another case proper surveys of the river were not made and it was afterwards found that the river was navigable only when the water was high, with the result that difficulty was experienced in getting the pulp to market. These mistakes have been expensive but will probably serve as object lessons for later and more extensive developments. If engineering advice of high order is ever necessary, it is in developing a water power and building a pulp mill. Mr. Gagne is very enthusiastic as to the future of the Lake St. John district, the water powers of which, ac-

ording to Mr. Langelier, are capable of developing 11,000,000 horse power.

MICHIGAN'S LUMBER INDUSTRY.

BY OUR TRAVELLING REPRESENTATIVE
(Continued from last issue).

At one of the lumber mills I asked where the town of Muskegon got its name. One man volunteered the information that it was taken from the Indian word "Muskeg," meaning a swamp, as the lower part of the city was formerly a swamp. But another lumberman said "No, it was called Muskegon because of a party of Indians and white traders who in going up the river accidentally lost a musket and one of the Indians or traders said "Musket-gone." You can take your choice of the two—I can't attempt to decide.

From Muskegon I passed through Sparta (famed for peaches), on to Greenville (famed for potatoes). At the latter place they say they have the largest export of potatoes of any county in the United States. At the hotel a farmer told me they had taken 29 bushels of apples from one of his trees—other prominent men vouched for this. But what will make Greenville famous is the Gordon Hollow Blast Grate Company. This concern is not only of interest to all lumber mill owners, but of interest to all consumers of fuel. They have a great thing and ought to do a big Canadian business. Greenville has at least one real live lumber industry, and that is the John J. Foster Lumber Company, who are well-known as an old established firm.

At Detroit I saw Mr. Ed. Hall, of the Detroit Mill, Brownlee & Company, Detroit Lumber Company, Fred. W. May, Galloway-Pease Company, H. Wineman, Jr., Moyer & Montgomery, McArthur Bros. Company, Ltd., Fred. G. Ross, and a few other lumbermen. Most of these handle considerable quantities of Canadian pine. Some of the old companies have gone under, as in the Saginaw Valley (where I found three old lumber companies who are now engaged in the beet-root sugar industry). The Detroit Lumoer & Timber Company have sold their Arkansas limits. Detroit is a good point for Canada lumber, and ought to be a good distributing point, but it cannot come up to Toledo or Cleveland in that respect. It may later on

One of the well-known millionaire lumbermen of Michigan was the late Charles T. Hills, who died at Muskegon three weeks ago. He started into the lumber business in 1841, by living shingles near Grand Rapids. At this time shingles were all made by hand. In 1852, with his brother Charles, he went to Muskegon, built a shanty and commenced business as a shingle weaver. Then for 12 years he was a clerk for the lumber firm of Ryerson & Norris. In 1865 he became a partner in the firm of Ryerson, Hill & Company. In 1887 he was sole manager. While in Muskegon I had abundant testimony to the personal worth and integrity of this grand old man. He donated a temple costing \$50,000 to Muskegon.

Although "the woods" in Michigan is now confined to a very small area, there has been a scarcity of labor both in the upper Peninsula and Wisconsin. The real "lumberjacks" are not as numerous as they were a few years ago. It is not that the wages are not high enough, but the hardy Canadians who were the best woodsmen have gone further west or drifted into "something better." These men have turned their attention to other kinds of labor. Their place is being taken by an entirely different type of man. Foreigners, principally Swedes and Finlanders, who have not been in the country long, have been hired by lumber operators. But they are not like the "lumberjack" of old days, the men who were seldom known to wear mittens or coat even on the coldest days, and whose constitutions were like iron.

"The Woodman's Hand-book" is the title of a very useful work issued by the Bureau of Forestry of the United States Department of Agriculture. It is from the pen of Henry Solon Graves, Director of the Yale Forestry School and brings together information of much value to the lumberman and forester alike. It contains different rules for computing the contents of logs, information concerning the volume of standing trees, the rate of their growth, and the future yield of forests, as well as methods of estimating standing timber.

THE MANUFACTURE OF RESAWS.

The accompanying illustrations will bear out the statement that Messrs. W. B. Mershon & Company, of Saginaw, Michigan, possess a plant for the manufacture of saw-mill machinery which is not excelled on the American continent. The first illustration is an exterior view of the front of their office, the other two being interior views of their new machine shop. The building is over 250 feet in length and ranges from 59 feet to 70 feet in width. There are many special tools located with particular reference to the work in hand.

ing Company, of St. Paul, Minn. In the first year they sold probably half a dozen machines; a score or more the second year; sixty the third year; and during 1902 they built and sold one hundred and fifty band resaws, pony band mills and other band sawing machines. Their catalogue, "Use and Care of Band Resaws," shows the line of machinery which they manufacture.

PERSONAL.

Mr. T. R. Deacon, chief forest ranger, has resigned his position in connection with the crown timber office.

in the east and was cared for in the Toronto General Hospital.

Mr. J. M. Agnew, Secretary of the Hanbury Manufacturing Company, of Brandon, Man., was a recent visitor at the office of the CANADA LUMBERMAN. He is in the east for the purpose of purchasing machinery for the new sash and door factory which the company have recently erected and will shortly put in operation.

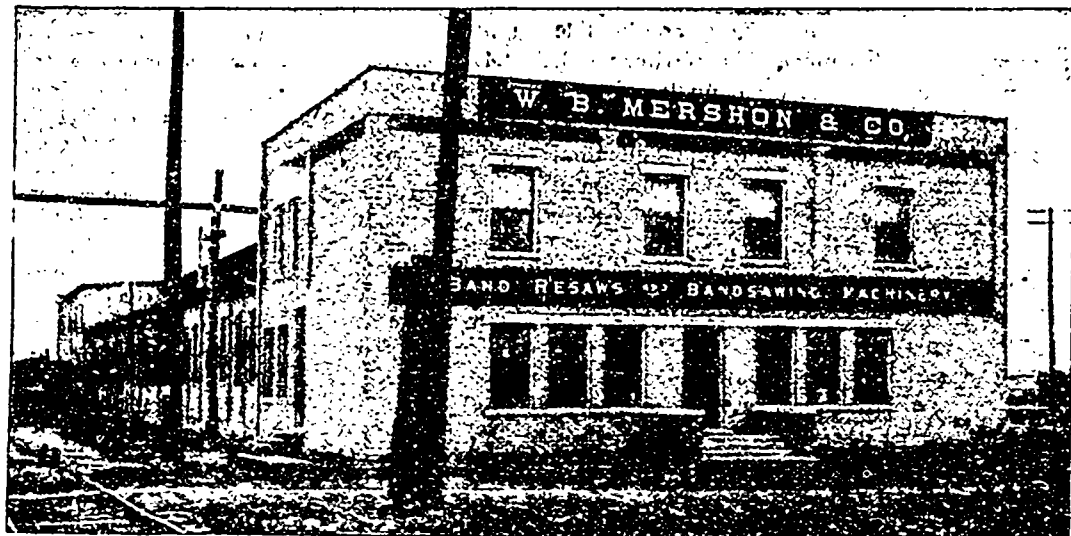
A party of Canadian lumber dealers recently sailed on the "Oceanic" for England. It consisted of Messrs. W. H. McAuliffe, of Ottawa, R. L. Blackburn, of the Hawkesbury Lumber Company, and Thomas Mackarell, Ottawa manager for Watson & Todd, of Liverpool, England. Messrs. McAuliffe and Blackburn have arranged a trip to Egypt and will devote some weeks to a winter yachting trip on the Mediterranean.

On January 5th Hon. J. K. Ward, M.L.C., of Westmount, Que., who has been identified with the lumber business for half a century, and is well known to many readers of THE LUMBERMAN, celebrated the fiftieth anniversary of his arrival in Canada. Mr. Ward is in his eighty-fourth year and still finds it possible to attend to his regular work. His numerous friends trust that for many years to come his health may permit of his taking an active part in business.

A surprise was in store for Mr. Robert Kennedy, president of the Kennedy & Davis Milling Company, of Lindsay, on December 20th, when his employees gathered together to express to him in a practical way their appreciation of the uniform fairness which characterizes his dealings with them. He was presented with a costly gold-headed cane, suitably inscribed, accompanied by a complimentary address. The presentation was made by the foreman, Mr. George Burton, who was equally surprised when he was asked to accept a beautiful chair as an expression of the esteem and respect entertained for him by the employees. Both the recipients replied in a suitable manner.

Reports from Puget Sound show that the supply of red cedar suitable for shingles is becoming smaller every year and that manufacturers will soon have to go to Alaska for cedar logs. New appliances have so greatly increased the output of the mills that five billions of shingles were cut last year in Washington and Oregon.

A cooperage exchange says: "Minneapolis millers recently received sample barrels from a Pittsburg cooper, the feature of which consisted of galvanized



EXTERIOR VIEW OF OFFICE OF W. B. MERSHON & COMPANY.

The machinery is mostly electrically-driven, Westinghouse and General Electric induction motors transmitting power from the central power plant of Mershon, Schuette, Parker & Company located in an adjoining building. The machines are even tested and loaded electrically, and the shops are lighted by electricity and heated by steam and hot water.

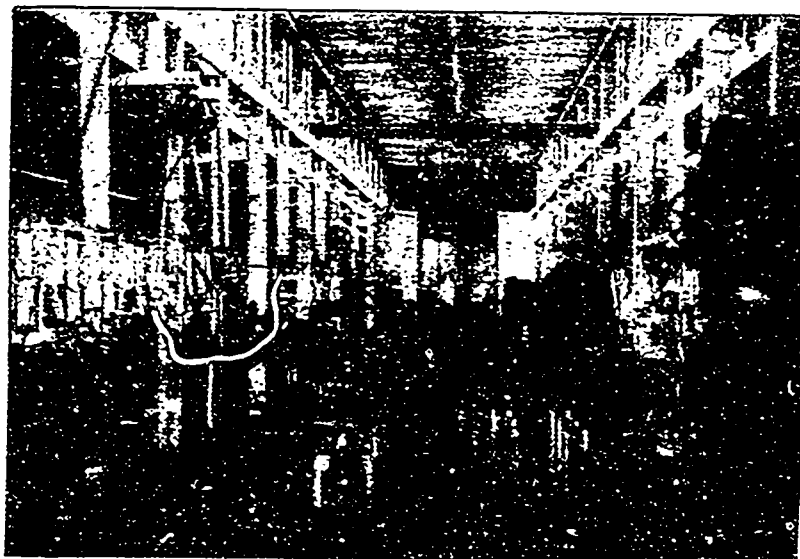
This firm are comparatively young in the business. About 1890 Messrs. W. B. Mershon & Company having obtained a large contract for oil boxes to be exported, required different methods than the ordinary for resawing 1/4 inch stock. The order specified that the material must be planed after resawing, and it was necessary

Winnipeg, and is about to assume the management of the Manitoba Iron Works.

The death took place last month of Mr. H. P. Lawrence, of the firm of Jacob Lawrence & Sons, lumber and stave manufacturers, Sarnia, Ont.

A quiet wedding was celebrated in Chicago last month, the participants being Mr. James Thomson, of the wholesale lumber firm of McAllister & Thomson, Hamilton, and Miss Louise Le Duc.

Mr. Robert Hamilton, jr., late of Parry Sound, who has been engaged for some months with the Dominion Lumber Company at Ingram River, N.S., sailed on the



INTERIOR VIEWS OF MACHINE SHOPS OF W. B. MERSHON & COMPANY.

to resaw the material so accurately that it would be impossible to detect any inequalities in thickness. They purchased the best resaw to be had at that time, fitting the saw blades by hand, as there was no filing machinery for band resaws to be obtained. This proved the success and practicability of the band resaw. Having done so, they commenced to manufacture resaws for their own use. Competitors in the box business made application to be supplied with similar machines, and thus a demand for the Mershon band resaw was created, which has developed from year to year.

The first machine was sold to the Bohn Manufactur-

steamer "Pretorian" from Halifax on December 22nd en route to England to visit relatives.

Yielding to the wishes of his friends, Aldermen Joseph Oliver, president of the Oliver Lumber Company, Toronto, decided to seek re-election at the recent municipal contest. He was again successful, polling the large vote of 1,883 and standing second on the list.

Mr. Theodore Ludgate, the well-known lumberman who has been endeavoring to secure permission to erect a sawmill on Deadman's Island, near Vancouver, B. C., recently became a victim of typhoid fever while

steel heads. Tests of these barrels did not prove satisfactory. On being filled with flour and rolled about, it was found that the flour sifted badly from between the staves and the head. The cost was also greatly against these heads. The unmanufactured steel would cost 4 cents per pound, and it would take about 6 pounds for the two heads. Hence the device has no longer been thought seriously of. Had this head been found practicable, it might have revolutionized coopering as it relates to the working cooper, as only ordinary labor would have been required to put such barrels together."

TREATMENT OF SECOND-GROWTH WHITE PINE.

BY WALLACE I. HUTCHINSON, Wolfville, N.S.
(Continued from January issue.)

There can be no set rule as to what space of time shall elapse between thinnings. The quicker the growth, the shorter the interval between cuttings during the early life of the tree, the time being gradually lengthened as the trees advance in age. Common sense will have to govern largely on this point. The expense of thinning can be almost eliminated by the sale of the trees to be used in box-board manufacture, in southern New Hampshire white pine for box boards being worth from \$6 to \$10 per thousand. Under no conditions should brush wood be left in the forest, as it greatly increases the danger from fire. If the work of thinning is carefully carried out, a stand of white pine should be ready for the market in thirty or forty years, while by that time the ground will be in good condition for a seed-bed.

Cutting for reproduction should be carried on with considerable care and forethought. A

light and space. In summing up it may be that when the object is to produce quantity, thinning should be early, heavy, and often during the first half of the life of the woods, and



FIG. 4.—NATURAL REPRODUCTION OF WHITE PINE. SEED TREES (IN THE BACKGROUND) ON THE WINDWARD SIDE.



FIG. 3. SHOWS EFFECT OF THINNING AND PRUNING.

few select trees, varying in number from ten to thirty per acre, may be left on the cut-over area to seed the ground, or a small lot may be cut clear and the ground allowed to seed itself from the surrounding trees. In the latter case the seed trees should be left on the windward side, so that the seeds can readily blow into the open (Fig. 4), the cuttings to be made, if possible, when there are indications of a good seed year.

While the white-pine seedlings are still small, Grey Birch (*Betula populifolia*) is almost sure to come in, and, as it grows much more rapidly than the pine, soon overtops the latter trees (Fig. 5). The birch should be allowed to remain only as long as it is of material aid to the seedling as a nurse. After the pines are old enough to take care of themselves the birch should be removed.

Even aged stands in a natural forest are rare, as the whole of a denuded area is seldom seeded at once. In a natural forest, therefore, cutting should begin by taking out the mature trees first, thus allowing those that remain to quicken their growth through the increased amount of

more moderate and at longer intervals during the second half.

(To be Continued.)

THE CULLER'S TEN COMMANDMENTS TO THE SHANTYMAN.

1. Thou shalt have no other thought but to make logs.
2. Thou shalt not make any crooked logs, or any which are rotten from the heart out, or any which have a gum crack, also shalt thou butt every log which is unsound on the stump.
3. Thou shalt not take the culler's good name in vain, for the culler will drop onto thee heavier than a house if ever he should scale logs for thee.
4. Six days shalt thou labor and do all thy logs but on the seventh thou shalt wash and mend thy clothes.
5. Honor thy foreman and manager that thy days may be long in the employ of the Company.
6. Thou shalt not kill time.
7. Thou shalt not put the crooked logs in the bottom of the rollway.
8. Thou shalt not steal the Company's goods by trying to get them from the van below cost.
9. Thou shalt not bear false witness against the Company, by saying that they make a profit out of the van, when thou knowest it is but for thy convenience and comfort it is kept.
10. Thou shalt not covet thy neighbor's socks. Thou shalt not covet thy neighbor's mats, nor his pipe, nor his tobacco nor anything that is thy neighbor's.

J. E. McI.

Pierpont Morgan is undoubtedly the most fascinating figure before the world to-day. "Mr. Morgan, His Advisers and His Organization" are discussed at length in the *COSMOPOLITAN* by John Brisben Walker, who spent ten days between Mr. Morgan's and Mr. John Mitchell's offices, in September, in an attempt to settle the coal-strike.



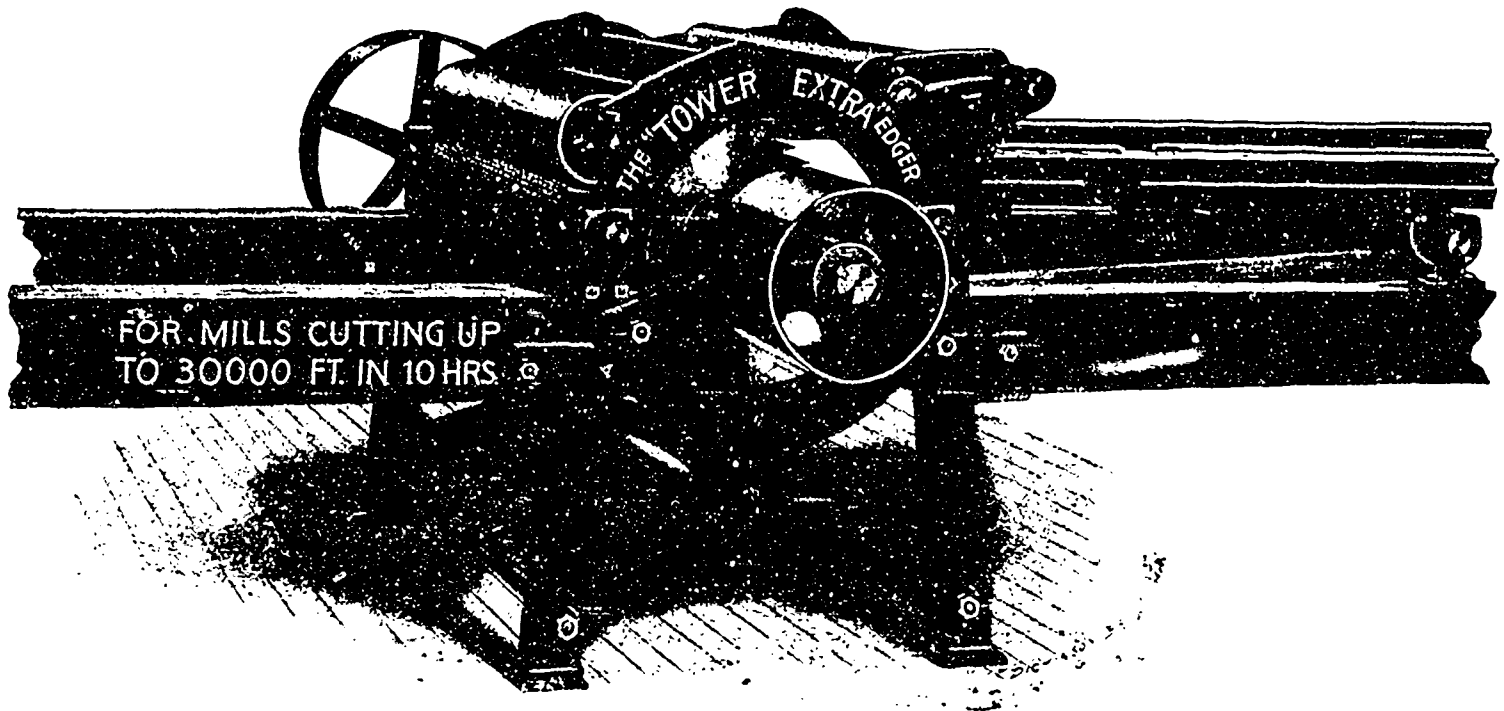
FIG. 5.—SHOWING GREY BIRCH AND YOUNG WHITE PINES.

SAW MILL EDGERS.

There is probably no saw mill edger made to-day that is so widely known as the "Tower" and "Tower Extra" edgers, manufactured by the Gordon Hollow Blast Grate Company, of Greenville, Michigan, and none that

they require little power; the shifting mechanism is up-to-date, convenient and positive, the feed rolls are adjustable in four directions, this being an original feature, the saws may be removed easily and quickly, without disturbing the arbor, the saw arbor is provided with a

"Tower" 2 and 3-saw edgers, improved—claimed to be the only edgers made for mills cutting not to exceed 20,000 feet in ten hours. The "Tower Extra" 3-saw edger, for mills cutting up to 30,000 feet in ten hours. The "Tower Extra" is a duplicate of the "Tower Im-



is more favorably regarded. The reason is not far to seek. They are thoroughly practical edgers for small and medium sized mills at low prices, and edgers of this description are very scarce.

Among the special features of these edgers the manufacturers claim the following: They take up little room;

steel leather key throughout its entire length, which does away with individual keys for the different collars; the vital parts are carried by a substantial iron husk resting solidly on the floor; there is no other edger made approaching them in cheapness.

These edgers are made in two sizes, as follows: The

proved, except that it is larger and considerably heavier

That these edgers are entirely satisfactory is evidenced by the fact that there are at the present time over 800 of them in use. We have no doubt the manufacturers, the Gordon Hollow Blast Grate Company, of Greenville, Michigan, would be glad to promptly respond to a request for a copy of their new Catalogue D.

ADJUSTABLE LOG SIDING MACHINE.

A machine which would slab opposite sides of a log at one operation, and do it perfectly and rapidly, has long been wanted. For certain uses the "rosser" has been applied with success, but it has in many cases a decided disadvantage in that it is a machine which planes off opposite sides of the log, reducing what might be slabs, with some value for the manufacture of shingles or lath, into chips. The Rodgers Iron Mfg. Company, of Muskegon, Mich., have a log siding machine with which the saws can be adjusted so that no time will be lost in passing from one size of logs to another.

The object of this machine is, of course, to take care of a small class of timber or bolts which cannot be profitably manufac-

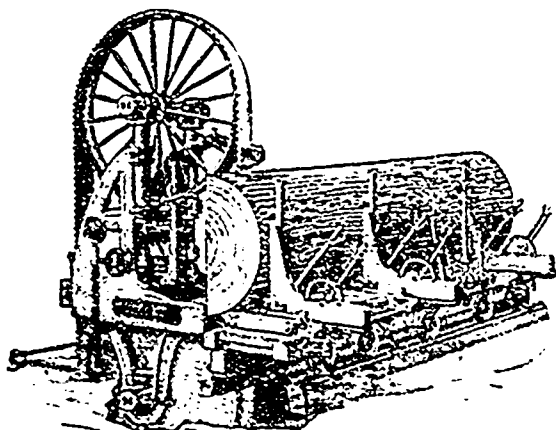
tured with a band saw or circular mill, also for the manufacture of ties and preparation of material for the gang or edger. Close upon two thousand logs have been sided with this machine in a day of ten hours. Machines of this kind will be in great demand as the logs from year to year become much smaller. Mr. A. Rodgers, the president of this enterprising company, as well as the energetic secretary and manager, Mr. W. F. Chrystal, deserve great credit for the introduction of this machine into the Canadian lumber field.

That man who never dares risk a penny in advertising his goods, can generally be heard above the entire and chorus, insisting "Advertising doesn't pay."—Business Problems.

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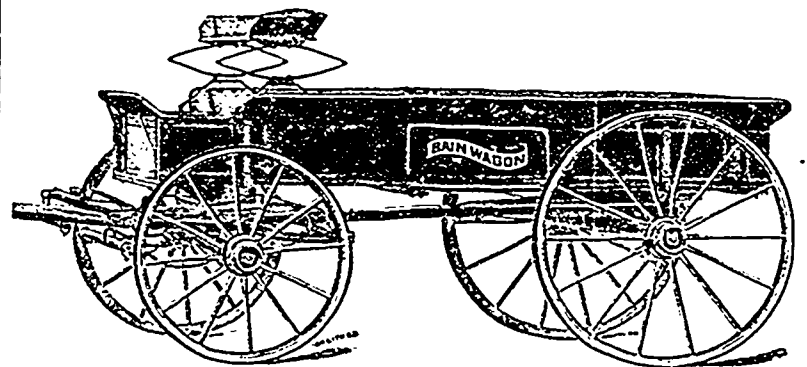
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Yours truly,

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THE TEMISCAMING DISTRICT.

Editor CANADA LUMBERMAN.

Dear Sir,—When I received the December edition of THE LUMBERMAN I noticed on the first page an illustration of a burnt forest in the Temiscaming district which called to my mind what I personally observed during my nine weeks visit to this same district last summer, and probably the following remarks may be of some interest to those who have not had the opportunity of travelling through this wonderful new country. On my arrival I was greatly taken up with the fine class of people who have ventured into this new land to hew out a home for themselves and their children. The impression which generally prevails amongst old Ontario men is that the Temiscaming is a great wilderness of rocky mountains and ravines, but I must confess that I was somewhat surprised to find a very level country, no mountains or ravines, but all clay soil fit to grow any grain sown on it. I have seen soil taken out of a well 17 feet deep and spread on the ground, which produced oats to the height of five feet. I have reason to doubt if the soil in old Ontario at 3 feet deep would give any better crop, or even as good. The district is most beautifully watered by small rivers and lakes.

The town of New Liskeard, no doubt the coming county town of West Nippissing, is located on the beautiful bay on picturesque Lake Temiscaming, and Wahby river flows down through the centre of the town and empties into the lake, and about three miles up this river there is a small stream from the

south, which is fed from a large lake about 300 feet above the level of the "Temiscaming." I walked up this stream about 2½ miles and found in this distance no less than four water powers ranging from ten to twenty feet with any amount of water.

As you go up the Temiscaming about ten miles you come to White river, which flows from the north-west. This river is most beautiful, its width varying but little from the mouth where it empties in the lake to the head or rather to the falls, which is about 40 miles up. It is very straight, and the depth of water ranging from 15 to 40 feet. This river flows through a fine tract of clay land mixed with sandy loam. It is all settled along each side by men making farms for themselves. I bush-travelled over 35 miles of this country, examining the timber, and I was somewhat disappointed to find the timber very small, the average being about 15 inches. I expected to find large timber but only found such of white pine. The forest consists of spruce, cedar, tamarack, white birch, ash, elm and oak. I did not see in all my travels one hemlock, beech or hard maple tree, and I do not believe there are any in Temiscaming district. The spruce grows very close together on high land and is mixed with tamarack, which is principally all dead. The cedar is large. On the stoney ridges I saw trees from 2 feet to 4 feet on the butt. The white birch grows about 12 inches on butt on flat land, along with poplar, whitewood, elm and ash. Oak only grows on the White river tract, the variety being what we call white oak, very coarse in the grain.

I do not think that the Temiscaming will ever make a lumbering district for large logs and square timber—only for poles, ties and pulp wood for the Ottawa

Valley, any quantity of this kind of timber. Those who like to bush tramp ought to take a few weeks in that new country and examine both soil and timber and you will never rue the time or money spent, and I warn you not to go out in sand-fly time.

Yours truly,
JAMES YORK.

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WOOD PULP DEPARTMENT

PULP SHIPMENTS.

The annual export shipments of Canadian pulp are increasing very rapidly, and the reports for 1902 show a very favorable season's business. The future prospects of this industry are most encouraging.

Shipments made by the Belgo-Canadian Pulp Company, Shawinigan Falls, to Europe, from Three Rivers and Quebec, are as follows:—

Antwerp	12,855 tons wet pulp.
Antwerp	1,894 tons dry pulp.
Manchester	808 tons dry pulp.
Hull	954 tons wet pulp.
Newcastle	394 tons wet pulp.

With a large demand for Canadian wood pulp from all parts of the world, this new industry will soon become one of the leading features in regard to exports from the St. Lawrence ports.

THE BRITISH PULP MARKET.

The official returns of the imports of wood pulp into Great Britain during the first eleven months of 1902 were on a larger scale than during either of the two previous years, but the value shows a depreciation. The total quantity imported in that period was 469,882 tons, as compared with 404,581 tons in 1901. The chemical pulp consisted of 105,026 tons of dry and 120,002 tons of wet pulp. Of the mechanical pulp imported 283,956 tons were wet and 8,898 tons dry. The Scandinavians continued to enjoy a monopoly of the British market, although the Chicoutimi Pulp Company, Belgo-Canadian Pulp Company, St. John Sulphite Fibre Company and other Canadian firms exported largely to Great Britain.

Prices of chemical wood pulp were weak during the year. Business was difficult to arrange owing to the opposite views of sellers and buyers in regard to prices. The first quotations were at £8 to £8 7s 6d per ton, and later an advance was made of 2s 6d to 5s, but it was not maintained. The market became depressed, prices falling in August to the low level of £7 10s and advancing towards the close of the year to £7 15s.

The conditions mentioned affecting chemical pulp will apply also to mechanical pulp. Early in the year 50 per cent. moist (white) was quoted at £2 10s to £2 15s, and dry pine £5 10s to £5 15s. Subsequently the low level of £2 2s 6d for moist and £4 10s to £4 15s for dry pine was reached. These prices continued until the close of the year, and at the present time the market is weak.

PULP INDUSTRY OF THE DOMINION.

An interesting lecture on the wood pulp industry of Canada was recently given by Prof. D. P. Penhollow, of McGill University, Montreal, in the assembly hall of the Normal School, Ottawa, under the auspices of the Field Naturalists.

The professor, in beginning, spoke briefly on the manufacture of paper in Japan. For a great length of time Japanese paper has been famous for its toughness, yet fineness of texture and the manufacture of it has received much attention from Europeans. They found they manufactured it from the pulp of the mulberry tree. The manufacture of paper out of pulp, the professor said, was of great antiquity, yet only quite recently discovered in this country.

He next referred to the enormous growth of the pulp industry in the United States and Canada during the last decade or so. Beginning with 1880 there were only 50 mills in the United States in 1890, while in 1900 the number had increased to 763. The value of the output being estimated at \$167,000,000. While the development of the industry did not begin so early as across the line, yet in the past few years it has received an immense impetus, a tidal wave of progression has seemed to sweep over the industry, and mills of enormous size have sprung up, as if by magic, in various parts of Canada. He also described in detail the manufacture of paper and by means of views carried on as it were the progress of manufacture.

PULP NOTES.

The price of ground wood pulp in the United States is about \$13 to \$14 per ton at the producer's mill.

Price Bros. & Company, of Quebec, are constructing a large pulp mill at Rimouski, to cost about \$250,000.

The Trois Pistoles Pulp & Lumber Company, of Trois Pistoles, Que., has applied for a charter of incorporation.

The Union Power & Pulp Company, Limited, has been incorporated by the British Columbia Government. The capital is \$25,000.

T. G. McMullen, of Truro, N.S., has in view the erection of large pulp and paper mills at Union, where a large dam has been built.

The annual meeting of the Chicoutimi Pulp Company was held in Quebec on January 8th, at which a semi-annual dividend of 4 per cent. was declared.

The North River Pulp & Lumber Company is making arrangements to commence the erection of a pulp mill at Murray, N.S., in the spring. It is proposed also to erect a large saw mill.

The British Canadian Pulp Company, Limited, are offering their stock to British capitalists. The company is capitalized at \$500,000 and proposes to erect a pulp mill at North Bay, Ont.

Incorporation has been granted to the Imperial Pulp Company, Limited, of Toronto, with a capital of \$90,000. The incorporators include J. H. Spence, J. R. L. Starr, A. W. Hunter and D. W. P. Hardistry, all of Toronto.

Considerable shipments of wood pulp are being made from Europe to the United States. The Zellstoff Fabrik Waldhof, with extensive mills in Germany and Russia, has increased its production from 60 tons to 120 tons per day, and is one of the leading exporters.

Negotiations are on foot between the Reid-Newfoundland Company and certain capitalists for the leasing of timber limits of the former with the object of starting pulp and paper mills. Grand Lake, Dear Lake and Codroy Valley are the centres where mills are likely to be built.

The Quebec Official Gazette contains notice of the incorporation of the Riviere Ouelle Pulp & Lumber Company, with a capital stock of \$100,000. The incorporators include Hon. John Sharples, William Power, Gerald Power and Patrick B. Murphy, all of Quebec city. The company's timber limits are in the counties of Kamouraska and L'Islet.

The publishers of newspapers in the United States are making a strong effort to have the duty on wood pulp removed, and to that end propose to send a strong delegation to place the matter before Congress. The publishers will make a strong point of the fact that as it is now necessary to import heavily from Canada, the duty has become a burdensome tax on an important domestic industry.

The Ontario Government has approved of a new pulp concession in the name of the Rainy River Pulp & Paper Company, of which Hon. George E. Foster and W. J. Elliott, barrister, of Toronto, are directors. The company bind themselves to expend \$75,000

JOSEPH H. WALLACE, C. E.

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within 2½ years in building a mill on Turtle Lake, above Fort Frances, on the Rainy River, and to make at least 20 tons of pulp daily. Their concession covers an area of about 100 square miles on waters tributary to the Rainy River.

A syndicate of American capitalists has been negotiating for the purchase of the Robitaille limits in the County of Bonaventure, Quebec Province. The property is 300 square miles in extent and is said to be worth half a million dollars, although the Robitailles are believed to have paid for it only \$8 per square mile.

After nearly a year of experimenting A. Cushing & Company, of St. John, N.B., have succeeded in a process which converts the waste of their sawmill into a pulp that is used in the manufacture of cardboard. It is not an entirely new process, but is new so far as the pulp industry in the eastern provinces is concerned. The firm have built a small mill in connection with their sawmill, which takes all the waste, even to the bark. The particular machine in use is the joint invention of Capt. Ellis, former manager of the big Cushing pulp mill, and Geo. S. Cushing, and they have got it patented. The firm will probably add a cardboard plant. They would then have sawmill, box mill, pulp mill and cardboard mill under the one management.

The Sturgeon Falls Pulp Company, Sturgeon Falls, Ont., propose to operate their large paper mill by al-

ternating-current induction motors throughout. Two Westinghouse type "F" motors are to be used to drive the variable speed shaft of the paper machines, and two 75 horse-power, type "C" motors will drive the constant speed line shaft of the same machines. Another 75 horse-power, type "C" motor will operate other machinery in the mill. A 15 horse-power induction motor will be direct connected to a triplex pump; one of 10 horse-power will drive the wet machines; a 20 horse-power motor will drive the agitators for the clay-mixing tanks and a 30 horse-power motor will drive the conveyors. The contract has been placed with the Westinghouse Electric & Mfg. Company, and includes also a 560 kilowatt, revolving field alternator, designed to be direct connected to a water wheel, with the exciter, switchboard and instruments to accompany the generator. The engineer and designer of the Sturgeon Falls plant is Mr. George F. Hardy.

Representatives of the pulp and paper manufacturing companies of the Dominion had an interview with Mr. Parent, Premier of Quebec, on January 25th. They endeavored to secure the Premier's support for their petition to the Federal Government, asking for an export duty on spruce logs and pulp wood at the rate of \$1 per cord for the first year, \$1.50 for the second year, \$2 for the third year, and \$3 for the fourth year and subsequent year. A cord to be of 128 cubic feet. Of the

duty collected, 90 per cent. would be returned by the Federal Government to the land owners of the Government of the provinces from which the pulpwood would be taken. The Federal Government would retain ten per cent. to defray expenses of collecting, etc.

Capt. Ellis, late manager of the Cushing Sulphite Pulp Company, and Mr. George S. Cushing, head of the Andre Cushing lumber business, St. John, N.B., have patented a machine which, if it proves successful in its operation, will be a money-saver for lumber mill owners all over the country. The machine is a pulp grinder, and takes the small waste of a mill, grinding it into a pulp suitable for cardboard. One of these machines is now in operation at the Cushing mill near St. John, and mill men who have seen it express the belief that it will in time become one of the adjuncts of every saw mill. The machine's great advantage is that it takes all kinds of waste, with or without bark, and grinds it into a pulp from which cardboard can be made. Pulp men say the cardboard is of an excellent variety. The machine is simple in construction, easy and inexpensive to operate, and will make profitable an immense quantity of material that has heretofore been burned on the refuse piles of the saw mills. With the installation of this machine for the small waste, and a box machine for the larger waste, the Cushing Company are utilizing about all their product.

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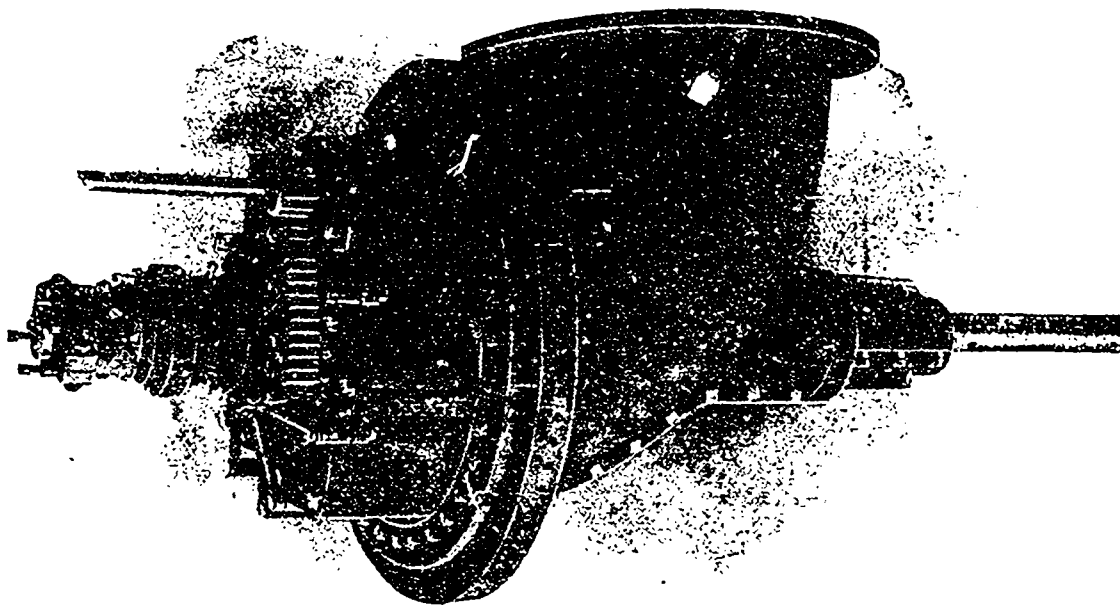
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Some recent contracts filled and under way are the following :

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St. George Pulp and Paper Co., St. George, N. B.
J. R. Booth, Ottawa, Ont.
Georgetown Electric Co., Glen William, Ont.

Town of Cornwall, Ont.
D. F. Jones Mfg. Co., Gananoque, Ont.
Jos. Beaumont, Glen William, Ont.
Kinleith Paper Co., St. Catharines, Ont.

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THE NEWS

—Leon Gagne, jr., has started in the wholesale lumber business in Montreal.

—B. Bell & Sons, of St. George, Ont., intend building a new saw mill.

—Joseph Empey has sold his saw mill at The Brooke, Ont., to C. & P. Empey.

—Butler Bros., of Woodstock, Ont., purpose establishing a lumber yard in Mitchell.

—The National Syndicate Match Company, St. Raymond, Que., has been dissolved.

—William Symington & Sons have moved their saw mill from Mara to Sebright, Ont.

—A new saw mill is being erected 100 miles above Whitney, Ont., by Mickle & Dymont.

—Owen Bros., saw mill, Richard's Landing, Ont., are advertising their business for sale.

—The Laurentian Lumber Company, of Montreal, is applying for supplementary letters patent.

The Sussex Woodworking Company, of Sussex, N.B., have installed several new machines.

Blouin & Brousseau, lumber manufacturers, St. Tite de Caps, Que., have registered partnership.

It is rumored that McCormick & McLeod, of Orillia, Ont., intend building a saw mill at Fenelon Falls.

J. Crew, of Lindsay, will operate the saw mill at Fenelon Falls formerly run by William Burgoyne.

—The Canadian Atlantic Railway Company proposes to extend its road from Whitney to Sault Ste Marie.

—Incorporation has been granted to the Christina Lake Lumber Company, Limited, Christina Lake, B. C.

The East Kootenay Lumber Company, of Cranbrook, B. C., are building a tie mill on Moyie Lake.

E. Gilbert has disposed of his lumber business at Bothwell, Ont., to C. W. Taylor, by whom it will be continued.

—Samuel Lane, who is building a saw mill at Denbigh, Ont., is talking of putting in cheese box, lath and shingle machinery.

—The firm of Cummins & Black, lumber manufacturers, Grand View, B. C., has been dissolved, Mr. Cummings continuing.

—H. W. Petrie, of Toronto, has shipped a complete saw mill outfit, including a portable engine and boiler, to Gustaf Leidtke, Wilno, Ont.

—H. W. Woods, of Welsford, Queens County, N.B., has purchased a portable saw mill outfit through the St. John branch of E. Leonard & Sons.

—It is reported that A. J. DeLaplante, of the Laidlaw Lumber Company, Buffalo, proposes to retire from the company and go into business for himself.

—The Aptus Veneering Company, of West River, N. B., are installing additional machinery which will permit of the manufacture of much larger sheets of veneer than have formerly been made.

—The St. Joe Island Lumber Company has secured incorporation, with a capital of \$75,000. The provisional directors are J. H. McCaul, J. McGugan, P. T. Roland, N. Simpson and J. P. Weeks.

—The saw mill of Shannon & Company near Prince Albert, N.W.T., is being reconstructed after the recent fire. Some of the planing machinery and one engine were situated in a detached building and were saved.

—The Canada Wood Manufacturing Company, of Toronto, has been incorporated, with a capital stock of \$300,000. The incorporators include C. E. Stone and O.M. Hudson, of Toronto, and W. G. Morden, of London, England.

—Thomas Kennedy is building a new woodworking factory at Fort William, Ont., in which twenty machines are being installed. H. H. Dale is also building a factory at Fort William for the manufacture of sash and doors, etc.

—Mr. G. G. Glidman, of Carleton Place, Ont., expects to have his new mill completed at an early date. It will be an up-to-date band mill with a capacity of sixty thousand

and feet per day. Power will be furnished by two boilers.

—It is the intention of the Shepard and Morse Lumber Company, of Ottawa, who have purchased the Mason saw mill at Bayswater, to remodel and extend the plant. This mill was originally owned and operated by William Mason & Sons.

—The Kilgour-Shives Lumber Company, of Campbellton, N.B., expect to have their new mill completed early in the spring. The main building will be 265 by 65 feet, with a wing 40x60 feet, and the capacity will be about 150,000 feet per day.

—David McNair, of Vancouver, B.C., is at the head of a company which will build a large shingle mill on Burrard Inlet, the site for which was purchased last month. No further information regarding the proposed plans has yet been given out.

—The Canada Lumber & Trading Company, of Vancouver, B. C., are building a saw mill on Howe Sound, to have a daily capacity of 30,000 feet. The timber will be carried to the mill by means of a chute seven miles long. The principals in the enterprise are J. G. Hutchison and C. R. Drew.

It is understood that the Pacific Coast Lumber Company are considering the building of a large extension to their new saw and shingle mills at Vancouver, B. C. J. G. Scott, manager of the company, has secured an option on what is known as the floating dry dock property just east of the present mill.

The improvements to the Pigeon River Lumber Company's saw mill at Port Arthur, Ont., have been completed, and the mill will be enabled to cut lumber the year round. In the winter the logs are dumped from the cars into a pond of water, which is kept above freezing by means of steam pipes.

The Industrial Publishing Company, New York, have issued a second edition of "Hardwood Finishes", compiled and edited by Fred T. Hodgson, of Collingwood, Ont. The second edition contains a new feature in the shape of an illustrated treatise on the preparation of woodwork by the joiner or cabinetmaker for the finisher. The price is \$1.00.

—A number of lumbermen who put logs into the Vermillion river and its tributaries have organized the Vermillion Boom Company. It is the intention to improve the stream and drive the output under one organization, instead of each firm looking after its own logs as heretofore. It is estimated there is one billion feet of timber to come out of the different streams.

The annual meeting of the British Columbia Loggers' Association was held on December 17th, when officers were elected as follows: W. H. Higgins, president; J. S. Emerson, vice-president; H. G. Ross, secretary-treasurer. It was decided to reduce the annual membership fee from two cents to one cent per thousand feet.

—The Speer-Woods Company, of Vancouver, B.C., have awarded to J. Chase the contract for the construction of a timber flume on the Capilano River. The flume will be eight miles in length and two feet square in size, affording room for the largest shingle bolts. There is an average fall of more than 100 feet to the mile for the entire distance, and it is expected that the run will be made in half an hour.

—It is reported that a large saw mill, with one exception operated entirely by Chinese labor and owned by Chinese capitalists of Vancouver and Victoria, is to be erected on Burrard Inlet. The one exception to the operation of the mill entirely by Chinese is that of the engineer, who will have to be a white man, as no Chinese have yet taken out papers as stationary engineers, as required by the provincial government.

The Hanbury Manufacturing Company, of Brandon, Man., are about to establish a saw mill at Crow's Nest Pass Railway, in the Rocky Mountains, where the company have purchased limits. A portable mill capable of cutting about 20,000 feet per day will be used. For lumber manufacturing in the mountains it has been found cheaper to use a portable mill than a stationary one, being more economical to move the mill to the timber than to bring the timber to the mill. The company will manufacture cedar, mountain tamarac and other varieties of timber, the product being shipped to their headquarters at Brandon. They are also extending

thru a system of branch yards, which will hereafter be ten in number, distributed over a wide area. Notwithstanding that the company lost a considerable quantity of logs by freshets last spring, they have done a very large business during the past year, and, as above stated, are now making arrangements to greatly enlarge their operations during 1903.

A meeting of the Provisional Committee of the Reading Camp Association was held at Lindsay recently, when officers were elected as follows: Honorary president, J. R. Booth, Ottawa; president, John Charlton, M.P., Lyndoch; first vice-president, A. P. Turner, Copper Hill; second vice-president, E. W. Rathbun, Deseronto; treasurer, William J. Bell, Cutler; general secretary, A. Fitzpatrick, B. A. Naion Centre; educational secretary, A. O. Paterson, Naion Centre; literary secretary, E. A. Hardy, Lindsay. The work of distributing literature to the lumber and mining camps has been confined largely to Ontario, but it is proposed to extend the work to the other provinces.

TRADE NOTES.

Park Bros., of Chatham, Ont., have installed a new engine in Blonde Bros., mill in that city.

The M. Garland Company, of Bay City, Mich., recently made a shipment of saw mill machinery to the Mouthorp Lumber Company, of Cutler, Ont.

The Standard Dry Kiln Company, of Indianapolis, Ind., are sending out to their customers a very convenient and useful pocket memorandum book for 1903.

The Wisconsin Veneer Company, at Rhineclander, are increasing their dry kiln capacity, and have placed their order for additional apparatus with the American Blower Company.

The M. Garland Company, Bay City, Mich., have shipped a band mill carriage, equipped with their improved set works and drag offset complete, also a 20 foot Garland lumber trimmer, to Mack Dickinson, Tower, Mich.

The attention of lumbermen is drawn to the announcement of the Adams Wagon Co., of Brantford, Ont., which will be found on another page. We expect to be able to give in a future issue some particulars of this company's manufacturing plant.

The B. Greening Wire Company, of Hamilton, have as usual issued a most useful and attractive calendar, the date figures being large and discernible at a considerable distance. During last year extensive additions and improvements were made to the company's factory and offices.

The attention of our readers who buy machinery is called to the full page advertisement in this issue of the A. R. Williams Machinery Co., of Toronto. The company will be pleased to send a copy of their new stock list to any of our readers who may write for same mentioning the CANADA LUMBERMAN.

Messrs. Boynton & Company, 67 West Washington street, Chicago, have issued an attractive catalogue of the various lines of embossed and turned mouldings, spindles, ornaments, etc., manufactured by them. It is intended both as a catalogue and price list, and will be found very useful to users of such goods.

The Goldie & McCulloch Company, of Galt, Ont., have found the capacity of their works inadequate to meet the demand for their machinery, and have decided to erect new works about a mile from their present location. They have secured 26 acres of land, with railway facilities of the most satisfactory character.

Every owner and operator of a saw mill or woodworking factory should be interested in the advertisement in this number of the Hanchett Swage Works, of Big Rapids, Mich. This company makes swages for circular, band, gang and band resaws. The qualities of their swages is testified by letters of many of the leading mill men of the United States. The company now propose to enter the Canadian market and will be pleased to send full particulars of their goods to Canadian mill operators and supply firms who will write mentioning the CANADA LUMBERMAN.

An ad that sounds as if it meant what it said, is a good ad; the ad wherein the writer could not possibly mean all he says, is hopelessly bad. —Business Problems.

SUIT FOR DELIVERY OF POLES.

Judgment was given at Toronto, on December 10th, in the case of Phelps V. McLachlin, an action tried at Ottawa without a jury. The action was brought for damages for non-delivery of poles under a written contract under which, as the plaintiff contended he could not be called upon to pay until the poles had been first inspected and passed by both parties and the defendants had supplied the cars and shipped the poles. The defendants contended that if the poles had been on the ground for 30 days and an estimate was made after the 30 days had elapsed the plaintiff was obliged to make immediate payment, otherwise they (defendants) were not called upon to deliver. Held, that both parties were wrong in their interpretation of the contract on these points, but that the plaintiff was justified in treating the defendant's letter to him of August 2, in which they refused to load the poles until payment, as a breach of contract to deliver and in rescinding the

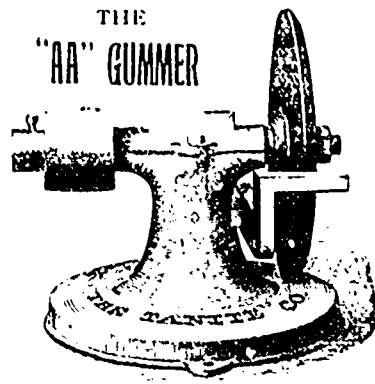
contract. Reference was made to the master at Ottawa to assess the damages the plaintiff had sustained from the non-delivery of such poles as defendants had on hand under the estimate (20,000), referred to in the contract and which would pass inspection.

Among the attractive calendars received by the LUMBERMAN for the New Year are those of Brownlee & Company and McClure, Zimmer Company, wholesale lumber merchants, of Detroit.

A. F. Dudgeon, of Ashland, Wis., called at the offices of The M. Garland Company, Bay City, Mich., recently and placed a large order for saw mill machinery to be shipped to The Fred Robinson Lumber Company, Revelstoke, British Columbia. The order includes one Garland steam digger, Kline patented log loader, two slashers, one combined gang and edger, twin engine steam feed, lumber assorter, transfers, carriers, etc.

P. PAYETTE & CO.

Manufacturers of Saw Mill and Engine Machinery, and all kinds of Marine Machinery.
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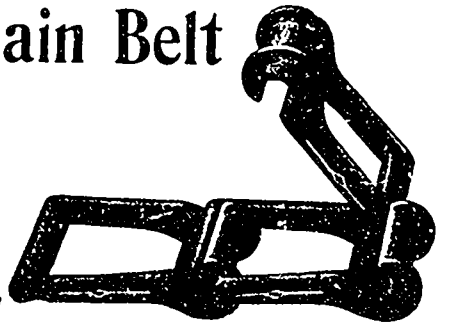
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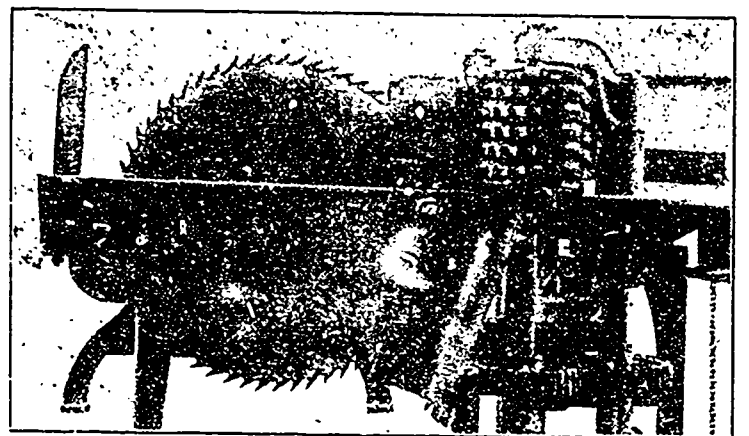
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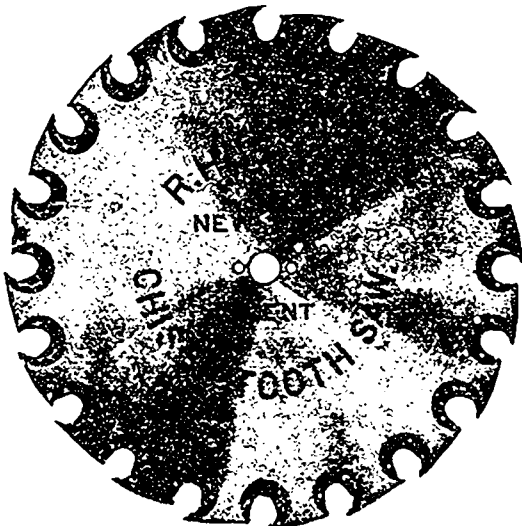
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ANNUAL MEETING OF LUMBERMEN.

The annual meeting of the British Columbia Lumber and Shingle Manufacturers' Association was held in Vancouver on January 10th. Mr. John Hendry occupied the chair.

The following officers were elected for the ensuing year: President, John Hendry, of the B. C. Mills, Timber & Trading Company; 1st Vice-President, E. H. Heaps; 2nd Vice-President, A. E. Carter, of the Vancouver Builders' Exchange; Secretary, R. H. H. Alexander.

Committees were appointed as follows: Lumber Mills Branch—Chairman, P. D. Roe, of the Canadian Pacific Lumber Company; Vice-Chairman, J. G. Scott; R. Jardine, E. H. Heaps and E. C. Mahony.

Shingle Mills Branch—Chairman, T. Kirkpatrick; Vice-Chairman, W. Tytlor; J. A. McNair, J. G. Scott and J. T. Hillis.

Sash and Door Factory Branch—Chairman, S. N. Jarrett; Vice-Chairman, J. W. Hackett; E. H. Heaps, E. C. Mahony and R. Jardine.

Box Factory Branch—Chairman, E. C. Mahony; Vice-Chairman, L. A. Lewis; D. B. Grant, T. Harvie and R. Jardine.

Contractors' Branch—Chairman, W. Hepburn; Vice-Chairman, S. J. Crowe.

The affairs of the Association were reported to be in a satisfactory condition, and hearty votes of thanks were rendered to the retiring officers.

A pleasing feature of the meeting was the handsome presentation made to the retiring Secretary of the Association, Mr. W. T. Stein, whose valuable services were readily acknowledged by the members.

The offices of the Association have been removed to the Thompson-Ogle Block on Hastings Street, Vancouver.

WORTH THE PRICE.

The Cleveland Box Company, Cleveland, Ohio, write: "When your agent was here in November last, we paid him \$1.00 for subscription to your paper for one year. We also placed an advertisement with him. We think the paper is worth all we paid for it and shall continue to subscribe for it."



You can get practically twelve good axes to the dozen in buying **Dundas Axes**

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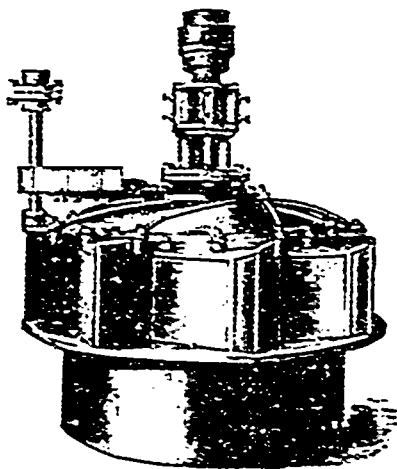
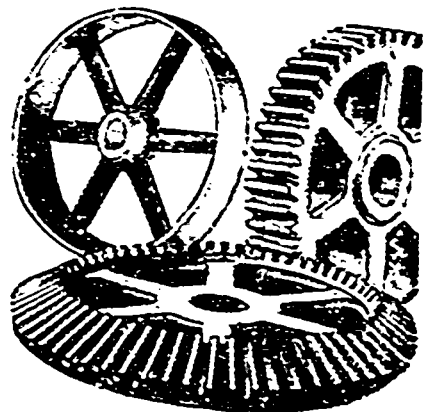
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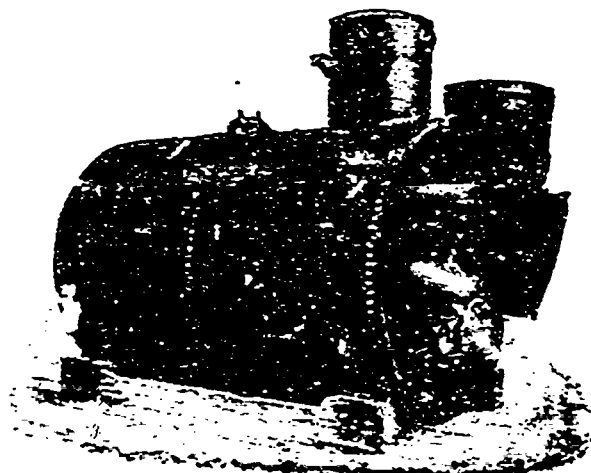
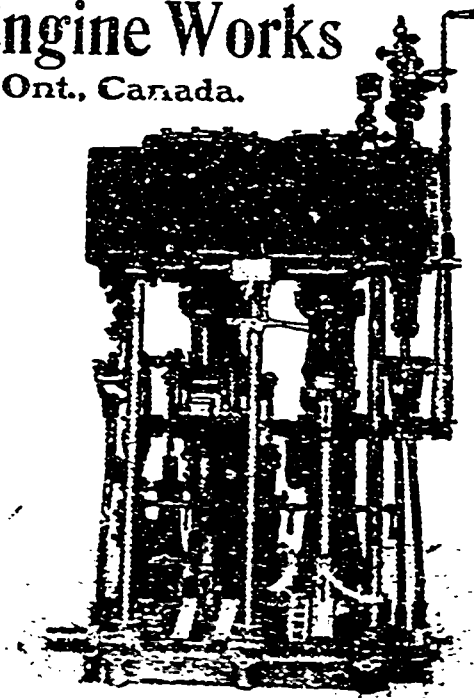
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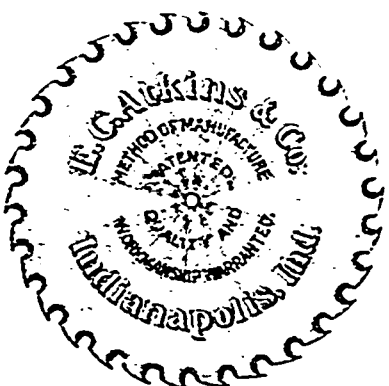
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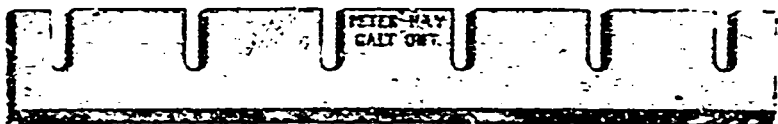
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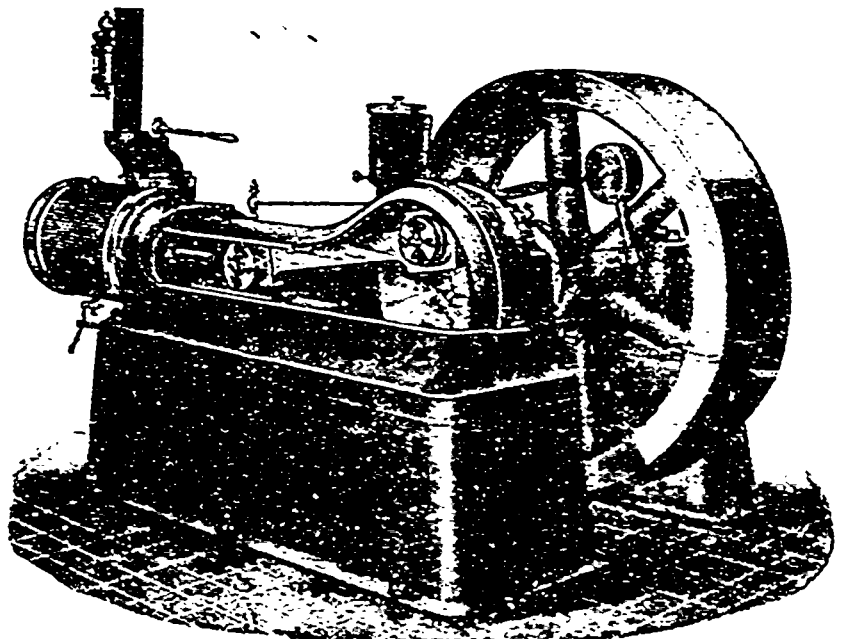
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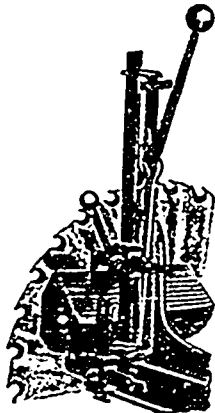
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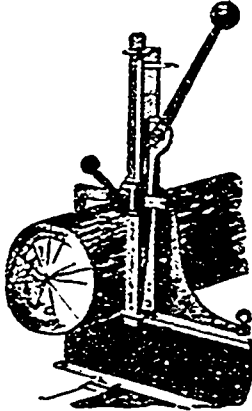
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These dogs have no springs, no ratchet, no pawls, nothing to get out of order, but have a positive grip so that no log can become loose or turn while being sawed. Dogs can be fastened on any head block knee and will hold small blocks on single head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

Dogs made either right or left hand as required.



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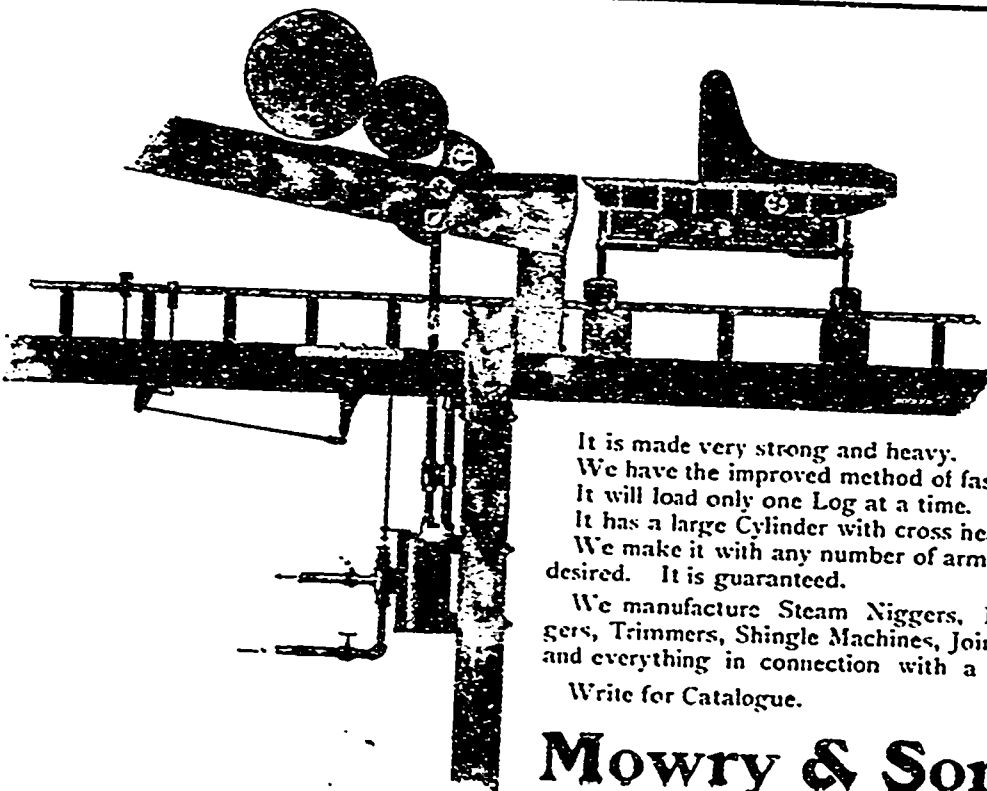
Boots and Shoes

Lace Leather

For Belting:

Get our quotations before ordering for next season. & &

James P. Sherry, MANUFACTURER Memramcook, N. B.



Log Loader

Our LOG LOADER always makes half revolution towards the Carriage.

It is made very strong and heavy. We have the improved method of fastening the arms. It will load only one Log at a time. It has a large Cylinder with cross head guide. We make it with any number of arms and with any spacing desired. It is guaranteed.

We manufacture Steam Niggers, Double and Single Edgers, Trimmers, Shingle Machines, Jointers, Sappers, Splitters, and everything in connection with a Saw or Shingle Mill.

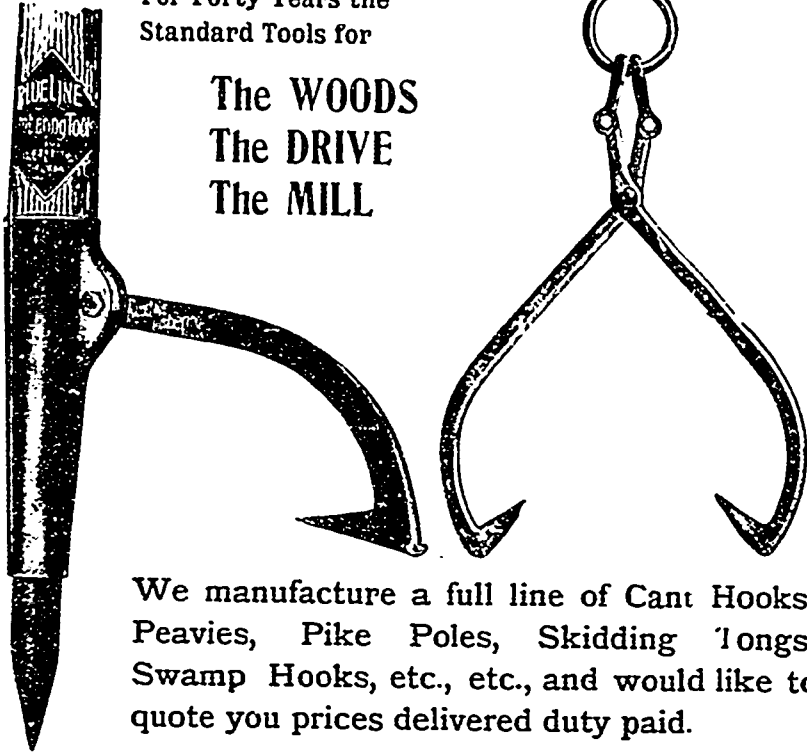
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Mowry & Sons, Gravenhurst, Ont.

BLUE LINE LUMBERING TOOLS

For Forty Years the Standard Tools for

The WOODS
The DRIVE
The MILL

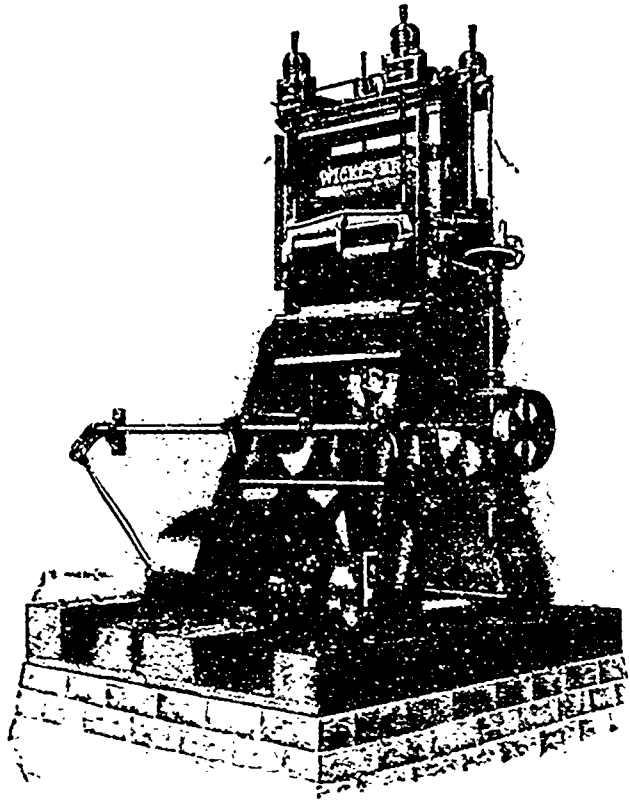


We manufacture a full line of Cant Hooks, Peavies, Pike Poles, Skidding Tongs, Swamp Hooks, etc., etc., and would like to quote you prices delivered duty paid.

WRITE FOR OUR CATALOGUE SHOWING COMPLETE LINE

MORLEY BROTHERS, SAGINAW MICH., U. S. A.

The Wickes Gangs



Are Money Makers for Progressive Saw-Mill Operators.



CUT SHOWS NO. 1 MACHINE.

ASK FOR CATALOGUE.

WICKES BROS., Saginaw, Mich.

We make a specialty of

LOGGING TRUCKS

—AND—

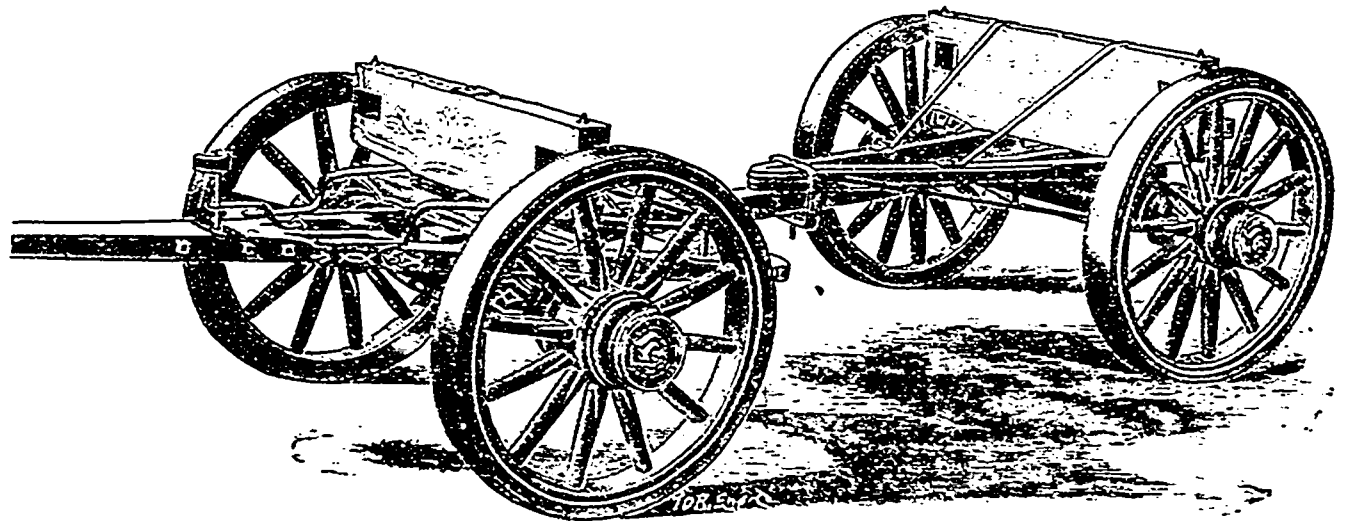
Heavy Teaming WAGONS

If in the market write for catalogue and prices.

Adams Wagon Co.

Limited.

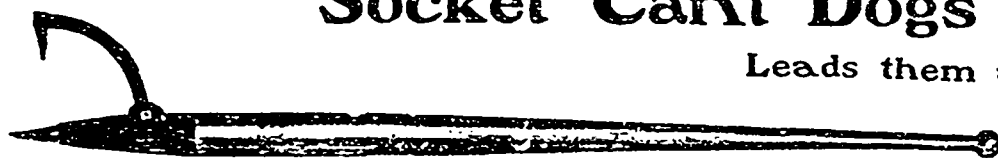
Brantford, - Canada.



IN OUR LINE WE LEAD

McFarlane Patent Wrot Forged Steel Socket Cant Dogs

Leads them all



Used in every Lumbering District from the Atlantic to the Pacific Ocean

Extra Fine Quality Split Rock Maple Handles.

Round and Duc Bill Peaveys and Cant Hooks

Write for quotations. If once used you will never return to the old malleable sockets.

THE MCFARLANE-NEILL MANUFACTURING CO., Limited

ST. MARY'S, YORK COUNTY
New Brunswick

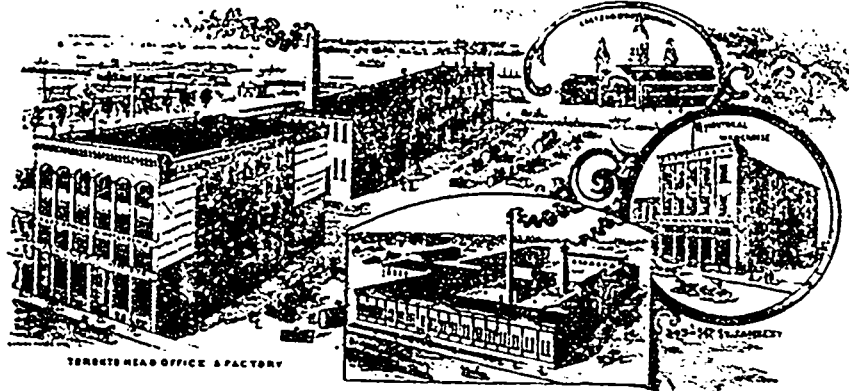


Head Office: TORONTO

The A. R. Williams Machinery Co., Limited.

95 and 97 Front Street West, Opp. Queen's Hotel.

LARGEST ASSORTED
STOCK OF
MACHINERY
UNDER THE BRITISH
FLAG



LARGER STOCK OF
MACHINERY

CARRIED THAN THE COMBINED
STOCKS OF ALL OTHER DEALERS
IN CANADA

—MANUFACTURERS, IMPORTERS AND DEALERS IN—

Engines, Boilers and High Grade Mill and Factory Machinery and Supplies

Following are some of the Wood-Working Machines we have in stock now. We are just issuing a new stock list No. 45 which we will gladly mail to any address on application.

Surface Planers

5583.—Planer, iron frame, 30 in. wide, B. S. Nichols & Co., makers, Burlington, Vt. This machine is made especially for taking in doors, and is known as a diagonal door planer; cylinder is fitted with 3-42 in. new knives, one pair of 4½ in. geared feed rollers; this cylinder has been newly babbitted, bearings being 8 in. long; floor space occupied 68 in. long x 3 ft. 8 in. wide. This machine has been thoroughly refitted and is complete with countershaft, wrenches, etc. Maker's cut and printed description cheerfully furnished on application.

7921. Surface Planer, planes 30 in. wide x 6 in. thick; B. D. Whitney, maker; is fitted with two pair of 3½ in. heavy geared rolls; cylinder is solid steel, 3 in. square, fitted with two 30 in. new knives, driven from both ends by 4 in. x 3 in. face drive pulleys; feed shaft has 2-step cone on, which gives the variety of feeds; is complete with belt tightener, countershaft, wrenches, etc., and is in first-class condition.

66944.—Surface Planer, planes 28 in. wide x 3 in. thick, solid iron frame (Whitney type). This is one of Whitney's well-known smoothing planers fitted with one pair of 5 in. heavy geared feed rollers, also one 2½ in. delivery roll; cylinder is made of forged steel, 2½ in. square, runs in heavy babbitted bearings, which are made long, and thus insures rigidity not otherwise obtained and also has two new knives fitted to cylinder, drive pulley being 4 in. diam. x 4½ in. face. This machine is in good condition.

7810. Planer, 28 in. wide, Whitney pattern, made by Cant, Gourlay & Co., Galt. This machine is almost new and is of a very heavy pattern; bed has a drop of 6 in., with two pair of 5 in. diam. heavy geared feed rollers; cylinder 2½ in. square fitted with two 28 in. knives, cylinder is double belted, pulleys being 4 in. diam., 5 in. face; feed shaft has a 2-step cone, which permits fast and slow feeding. This machine will be found to give entire satisfaction where heavy dressing is done extensively. Write for price and any further particulars.

Planers and Matchers

1079.—24 in. Double Cylinder Planer, Matcher and Moulder, McKechnie & Bertram, builders; planes 24 in. wide and from ½ in. to 5 in. thick; matches up to 12 in. wide; two pair heavy feed rolls 8 in. diam.; forged steel cylinders fitted with three and two knives for the top and under heads, respectively, furnished with a pair of brass shimer heads, all knives and cutters same as when new; full countershaft and hangers. This is a very heavy and substantial machine, and will fill the requirements of any shop requiring a large capacity; has been put in splendid shape and will give guarantee as to its giving A1 satisfaction. Weight about 7,000 lbs. Price, f.o.b., \$450.

6234.—Planer and Matcher, planes 24 in. wide x 3½ in. thick; this planer is fitted with two pair of 4 1-2 in. feed rollers; cylinder is 3½ in. square, fitted with two new 24 in. knives, also drive pulleys on both ends of cylinder, 5 in. x 5 in. face; two matcher spindles 24 in. long, with 4 in. x 5½ in. heads; also drive pulleys, 4 in. x 4 in. face; is complete with countershaft and all parts. We guarantee this machine to be in good working order.

9393.—Planer and Matcher, long bed, planes 24 in. wide x 4 in. thick, 3 pair of rolls, all driven by power gearing, the cylinder is solid steel forging and runs in long bearings. The side head spindles are steel, have long self-oiling bearings and run in oil in bronze steps; the countershaft is attached to frame. This is one of Goldie & McCulloch's standard machines. Will be pleased to send full description and price on application.

8990. 9357.—The New Eclipse Planers and Matchers, 24 in. wide. These are two of our well-known machines, on which we hold the Canadian patent. Cut and full description on application.

66454.—Double Planer and Matcher, 24 in., McKechnie & Bertram, makers. This is one of their standard make of planers and matchers so well known to the trade, and needs no further describing, is almost new and will be sold very reasonable.

Moulders

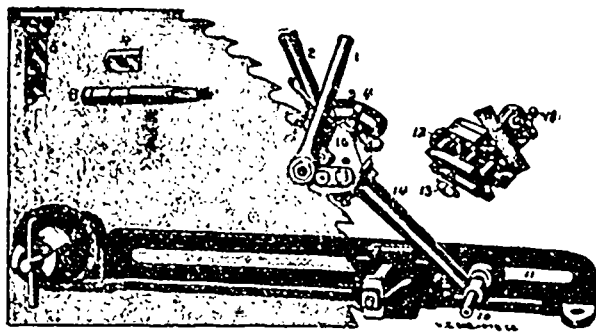
9521.—New 12 in. 4 side Moulder. This is one of Ballantine's latest machines. Table drops 16 in., the heads are forged from solid steel slotted on four sides and run in long self-oiling journals; the side spindles are large diam., made of refined steel, the bottoms rest on brass step in a reservoir filled with oil. This machine is furnished with patent guide spring adjuster; by turning small handle springs all move together; the feed is very powerful, consisting of 4 large rolls driven by cut gears; the bonnet of top cylinder is made to move back or forward, and swings clear to give free access to knives, four changes of feed. Descriptive circular sent on application.

8048. 12 in. 4 side Moulder, with 10 in. under head. This is one of Goldie & McCulloch Co.'s latest designs. Table drops 13 in.; it is 9 ft. 6 in. long and has broad base. The cutter heads are 5½ in. diam. and slotted on four sides, the side heads are adjustable vertically, horizontally, and angularly, spindles are steel and run in oil in bronze steps; table carrying lower head and side heads has movable mouthpieces let in flush, which can be adjusted to close gap for lower head, back end of table swings clear of cutter head, giving free access to knives. There are four feed rolls 6 in. diam. all driven by heavy gear, upper rolls weighted to give parallel feed; has only been in use a short time. A snap for anyone requiring a first-class moulder.

9413.—10 in. 4 side Moulder, Jackson, Cockran & Co. make. This is one of their latest designed machines. Heads are forged from solid steel and slotted on four sides. The journals are heavy and run in long self-oiling bearings; the frame is long and is well braced, and all working parts are of easy access for adjustment. The feed is simple and powerful, consisting of four large rolls, all driven by powerful gearing. This machine is as good as new. Will be pleased to quote price and send descriptive circular on application.

Everything in Saw, Shingle and Lath Mill Machinery.

Hanchett's Adjustable Saw Swages



The accompanying cut represents our **SWAGE AND JOINTER** for circular saws.

Without question the best Swaging Machine in existence.

We also make **SWAGES FOR BAND SAWS, GANG SAWS AND BAND RESAWS.**

We invite correspondence from Canadian mill operators and supply houses, mentioning this paper.

HANCHETT SWAGE WORKS, Big Rapids, Mich.

"THE REEVES"

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

Reeves Pulley Manufacturing Company, Limited

17 PEARL STREET,

TORONTO, ONT.

GET OUR PRICE LIST AND DISCOUNTS

THE BEST IN THE WORLD

There is no doubt about the fact that the

RODGERS Adjustable Log Siding Machine

is without a peer.

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



A MONEY MAKER

A MONEY SAVER

HUNDREDS OF LETTERS RECEIVED LIKE THIS :

Clinesburg, Texas, Nov. 17, 1902.

RODGERS IRON MANUFACTURING CO., Muskegon, Mich.
Gentlemen:—We delayed answering your recent letter until we had an opportunity of testing your Adjustable Log Siding Machine. We find it works satisfactory in this timber which is short leaf yellow pine, and is a good thing. When you ship to us the the Combination Gang Edger as ordered we wish you would send us another Log Siding Machine. Respectfully yours

TEXAS LUMBER TIE & TIMBER CO.

For full particulars and literature, mention this paper and address :

RODGERS IRON MFG. CO.
MUSKEGON, MICH.

HIGH GRADE RUBBER BELTING

"MONARCH" "RED STRIP" AND "LION" BRANDS.

These well known grades of Rubber Belting are used by the principal lumber and saw mills from the Atlantic to the Pacific. Unequalled for durability, tensile strength and power-transmitting qualities.

"REDSTONE" SHEET PACKING.

The most satisfactory Sheet Packing. Remains flexible under the highest pressures. Does not blow out or require any following up.

MILL AND FACTORY FIRE HOSE.

Are you efficiently supplied with Fire Hose, and if so, is it in good condition for immediate use? If not, let us send you a Post Graduate treatise on the subject. We are the largest manufacturers of Fire Hose in Canada.

THE GUTTA PERCHA & RUBBER MFG. CO.

of TORONTO, Limited.

Head Office and Warerooms, 45, 47 and 49 West Front Street **TORONTO, CAN.**

Branches, Montreal and Winnipeg.

Shutting Down to Wait for Steam to Rise is Expensive.
Sell Your Wood.
Run Your Mill With Your Refuse.

The Gordon Hollow Blast Grate



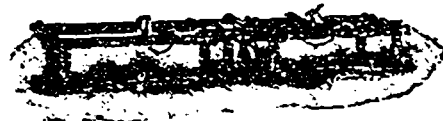
Develops every ounce of power a boiler is capable of generating, regardless of the weather, or of the character or condition of your fuel.



The TOWER 2 and 3 Saw Edger. For mills cutting not to exceed 20,000 ft. in ten hours.

The TOWER EXTRA 3 Saw Edger. For mills cutting up to 30,000 ft. in ten hours.

Why pay twice as much for an Edger requiring double the power and floor space, and doing no better work?



The TOWER One-Man 2-Saw Trimmer. With this trimmer one man can easily trim the output of a mill cutting up to 30,000 ft. in ten hours.

"I am more than satisfied with your 11 trimmer. I do not notice that it takes any power. It runs easy and does first-class work."
December 31st., 1902.

THEO. W. CYCHOSZ,
Revent, Wis.

Gordon Hollow Blast Grate Co.,
GREENVILLE, MICH.

SEND FOR CATALOG D.

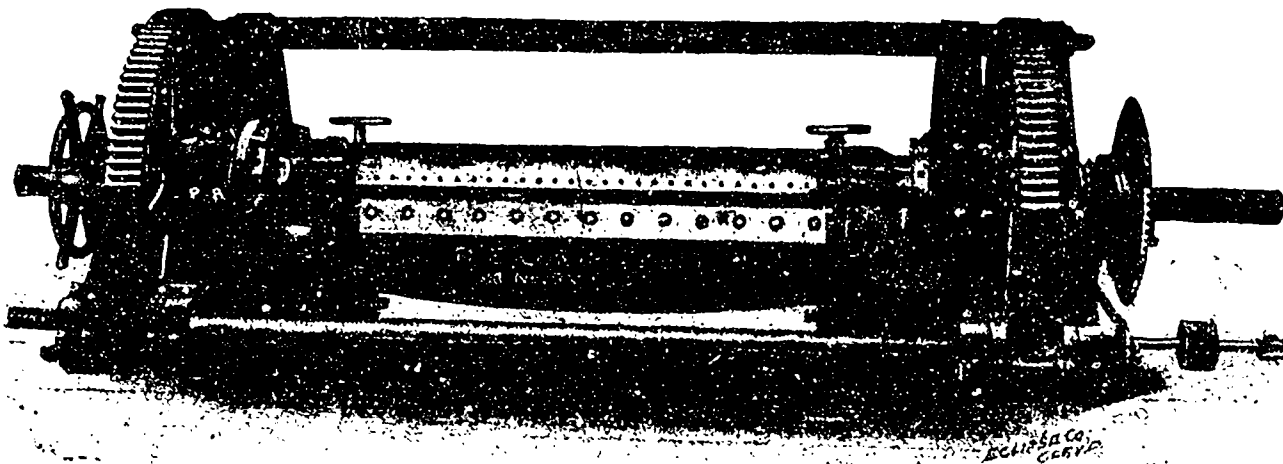
The largest Manufacturer of Blast Grates, Edgers and Trimmers in the world.

ESTABLISHED 1889.

Our Celebrated

Rotary Cutting Veneer Machines

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



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

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

WRITE US.

THE GOE MANUFACTURING COMPANY, Painesville, Ohio, U. S. A.

Established 1852.

Largest Builders of Veneer Cutting Machinery in the world.

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C. A. FLEMING, VICE-PRES.

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OWEN SOUND IRON WORKS COMPANY

LIMITED.

Builders of a complete line of

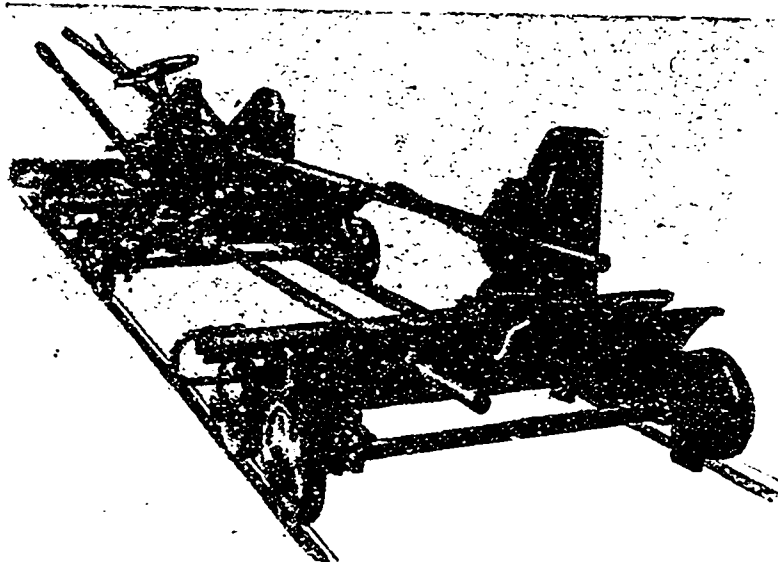
**Saw, Shingle
and Lath Mill
Machinery**

--ALSO--

Engines

--AND--

Boilers



OUR

**Steel Saw
Carriages**

(10 M. to 100 M. feet capacity
per day)

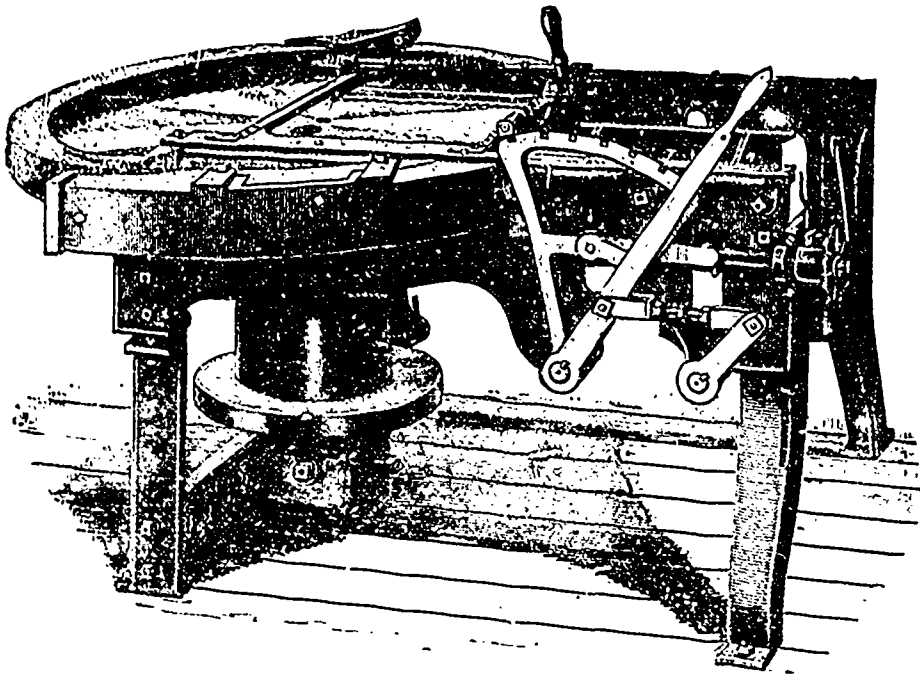
**Steam Feeds
Double Edgers
Swing Shingle
Mill, etc.**

THE BEST IN THE MARKET

MARINE REPAIRS A SPECIALTY.
SEND FOR CATALOGUE.

OWEN SOUND, ONT.

"DAUNTLESS" SHINGLE AND HEADING MACHINE



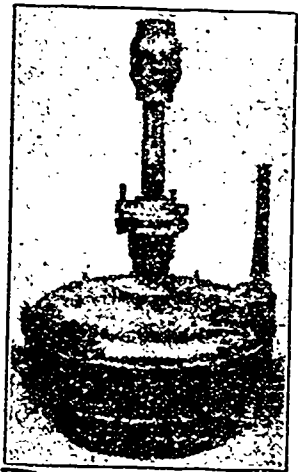
The strongest and most durable machine made. Made expressly for hard and fast work. Saws 40 or 42 inch diameter. Steel tubular carriage. Holds blocks up to 18 inches wide and a length to 20 inches or longer if ordered.

Any respectable sawyer can easily keep two good smart boys—or men either—busy jointing and they will have to hustle too to keep up. I furnish complete outfits. Let me quote you prices. Catalogues on application.

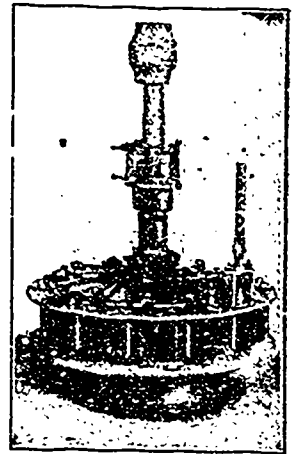
F. J. DRAKE, - Belleville, Ont.

Manufacturer of Saw Mill and Shingle Mill Machinery

Do You Need a Turbine?



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



Standard Leffel and Vulcan Turbines.

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

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

MADISON WILLIAMS, PORT PERRY, ONT.

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

SUCCESSOR TO
PAXTON, TATE & CO.

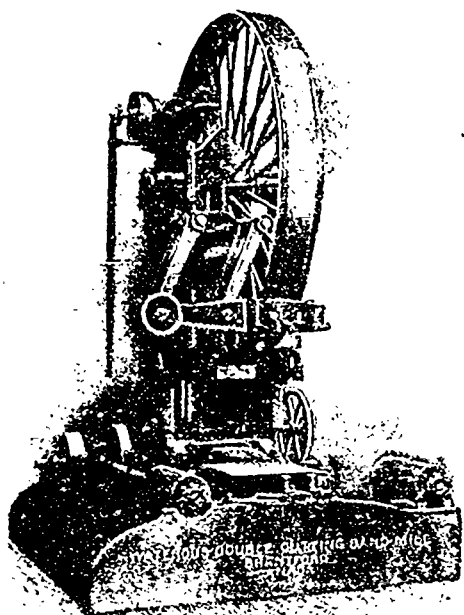
Winnipeg Machinery & Supply Co.
Western Selling Agents, Winnipeg.

From Present Appearances

the Log Cut this Year will be Larger than in 1902

Some Lumbermen State

it will cost 15% more to manufacture their lumber this year than last year, including extra cost of cutting and delivering logs in mill.



What Are You Doing to Economize in Manufacture

to offset this 15 per cent. extra cost? If you are still running the old time Circular Saw a change to a Band Mill with its 14 gauge saw will give you 10 to 15% more lumber out of the same logs.

Thus Saving You in One Year

the entire cost of the change and the extra cost of this year's saw bill.

If You are Running one of our Band Mills Now

you can save this year's extra cost of manufacture by making your band over to a double cutting mill, using our special devices for this purpose.

You Will Increase the Output of Your Band Mill

at least 10,000 feet per day at no extra cost for labor, except the wages of one tail Sawyer at log deck.

This Will Help You Out on This Year's Extra Large Log Cut and Save at Least All This Year's Extra Cost of Manufacturing.

The Change is not Expensive.

With Our Patent Devices the Lumber is Cut Perfectly True and the Boards Dropped on either side are exactly the Same Thickness.

No More Trouble to Keep Up Saws or to Run Mill than a Single Cutter.

No Difficulty is Experienced in Cutting Defective Lumber to the Best Advantage with a Double Cutting Saw.

Changing the Single Cutting Band Mill inexpensively to a Double Cutter is one of the Most Progressive Changes in Lumber Making that has occurred for many years.

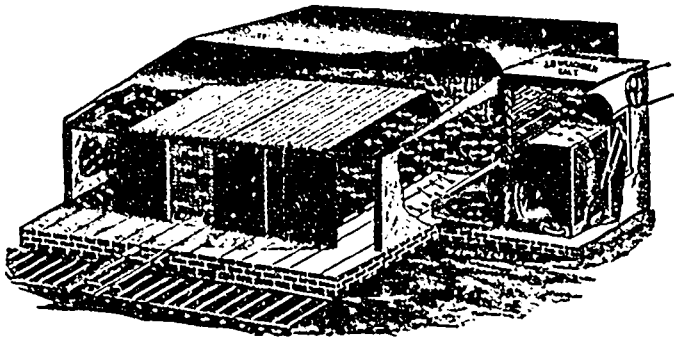
We shall be pleased to correspond with you on this subject, or in regard to any contemplated changes in your Mill.

WATEROUS, BRANTFORD, CANADA

McEachren Heating & Ventilating Co.

GALT, ONTARIO.

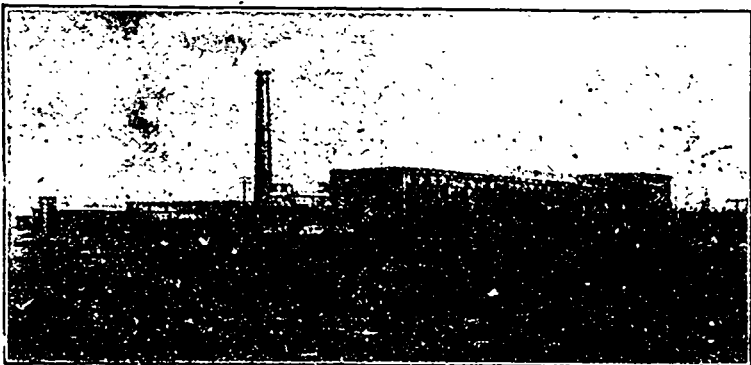
Our Dry Kiln Installations are all giving the best of satisfaction. We make both a natural draft kiln and a blower kiln. Our Steel Trucks and Transfer Cars are worth examining; they are cheap yet strong and durable.



- Durability
- Efficiency
- Simplicity
- Economy

THE "A B C" DRY KILNS

Simplicity and Economy of Operation.
Perfection of Product.



The Fred Macey Company, Grand Rapids, Mich., write:

"We have had ample opportunity to test the six 'Moist Air' Dry Kilns which you installed in our plant, and we find them to be entirely satisfactory. Our superintendent reports that they require very little attention, are economical and easily regulated, and the lumber comes out of the kiln in perfect condition to make high grade goods. We might add that our superintendent has had at least thirty years' experience in kilning lumber and he says these are the best he has had the pleasure of operating."

Catalogue No. 139 L sent on request.

American Blower Company, - Detroit

New York, 141 Broadway. Chicago, 1550 Marquette Building.
London, 70 Gracechurch Street.

What Users Say

The practical knowledge of users should be your guide in buying a new drying system.

What users say is necessarily fact—not theory.

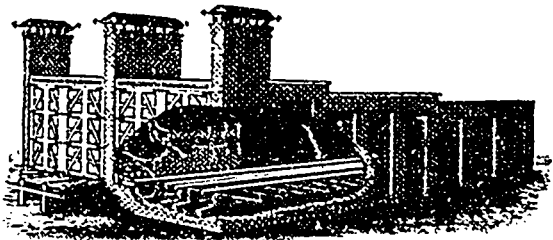
Our new Catalogue "D" contains scores of letters from pleased owners of

THE STANDARD MOIST AIR DRY KILN

THE DRY KILN THAT DOES NOT DISAPPOINT

THE DRY KILN THAT DOES NOT DISAPPOINT

Your copy will be promptly sent on request.
WRITE FOR IT TO-DAY.



THE STANDARD DRY KILN CO.

Indianapolis, Ind.

PRACTICALLY STRETCHLESS

STRONG

Canadian Oak Belting Co. Limited

Brockville, Ont.

SATISFACTION GUARANTEED

LEATHERS

The Morton Moist Air Dry Kiln

There is no other Kiln like the Morton.
SEND FOR CATALOGUE.

Many say they thought they had good kilns before they bought the Morton, but would be satisfied with nothing else now.

What Constitutes the Best Dry Kiln?

The one that gives the most universal satisfaction, which, without question, is the Morton.

Manufacture: No. 149 rue Prince-Edouard, St. Roch.
Bureau: No. 142, rue de l'Eglise.
MESSRS. THE A. H. ANDREWS Co., Chicago, Ill.

QUEBEC, January 31st., 1902.

GENTLEMEN:—Replying to yours of the 28th inst. I am pleased to say the Dry Kiln I purchased of you is giving good satisfaction. I am drying all kinds of Lumber in it, and use exhaust steam in the day time and live steam at night. I am well pleased with the Morton Patent Moist Air Down Draft Dry Kiln, and have no hesitation in recommending same.

Yours truly,
(Signed) J. H. GIGNAC.

The A. H. Andrews Co.,

300 Wabash Avenue,

Chicago, Illinois.



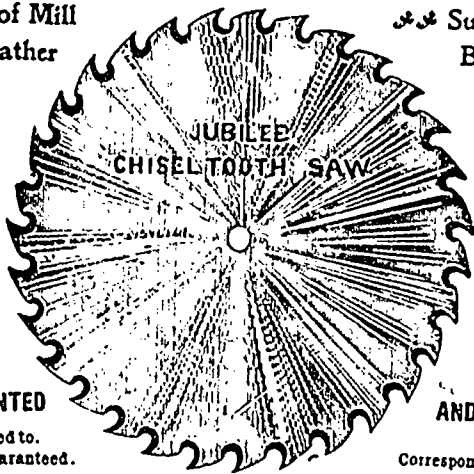
THE JAMES ROBERTSON CO., Limited.

Manufacturers of Saws of All Description

A Full line of Mill
Rubber and Leather
Metal, &c., always

Supplies, including
Belting, Babbit
carried in stock.

Head Office:
144 William St.
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Factories at
MONTREAL,
TORONTO,
and
ST. JOHN, N.B.

CIRCULAR, GANG
AND MILL SAWS
A SPECIALTY
Correspondence Solicited.

ALL OUR SAWS
FULLY WARRANTED

Orders promptly attended to.
Satisfaction Guaranteed.

Rice, Lewis & Son

Dealers in LIMITED

BAR IRON AND STEEL

BOOM AND LOGGING CHAINS MADE TO ORDER

TORONTO

Write for
Prices.



THOMAS PINK
Pembroke, Ont.

Send or Catalogue and Price List.

PINK LUMBERING TOOLS

The Standard Tools

In Every Province of the Dominion, * * * * *
* * * * * New Zealand, Australia, Etc.



Pink Round Bill Peavey, Handled in Split Maple

Pink Duck Bill Winter Cant Hook, Handled in Split Maple.

**FINEST QUALITY
SPLIT MAPLE
CANT HOOK AND
PEAVEY HANDLES,**

Gar Load or Dozen.

Boom Chains,

Pike Poles,

Skidding Tongs

Boat Winches, Etc.

Sold Throughout the Dominion by all Wholesale and Retail Hardware Merchants.

LUMBER AND PULP

SAW MILLS.—Complete equipments, on either the Circular, Band or Gang systems, manufactured, erected and handed over under guarantee to produce a specified output. We have been doing this sort of thing for years.

PULP MILLS.—The most advanced type of Pulp Mill Machinery and Supplies.

MILL SUPPLIES.—Absolutely everything required in manufactories, engine rooms or workshops. We carry extensive lines and can fill orders promptly.

SPECIAL MACHINERY.—No other establishment has the facilities we enjoy for constructing machinery required for special purposes.

Your inquiries are requested.

Estimates prepared on application.

We make liberal allowances
for old machinery replaced by
our modern plants * * *

CARRIER, LAINE & CO.

Levis, Que.