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THE


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Wood-Workers', Manufacturers' and Millers' Gazette

TORONTO, CANADA, FEBRUARY, 1902

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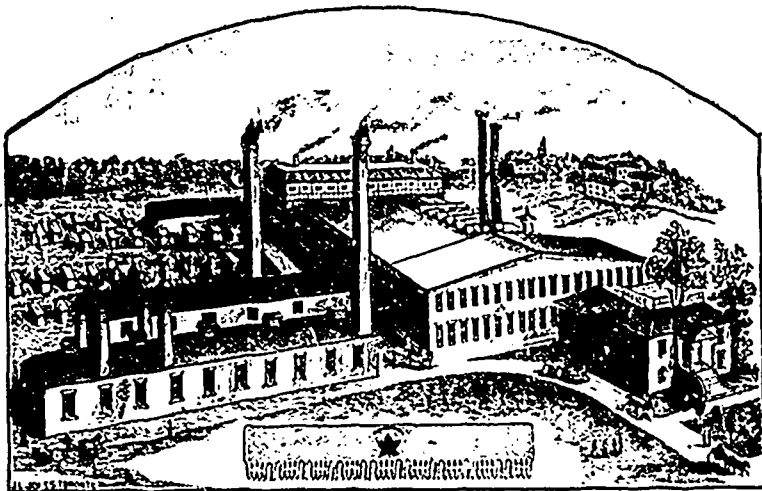
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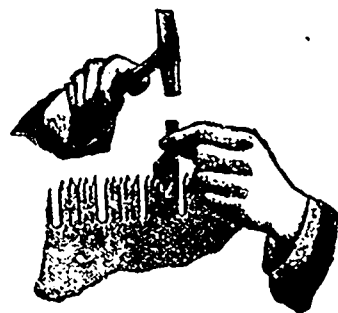
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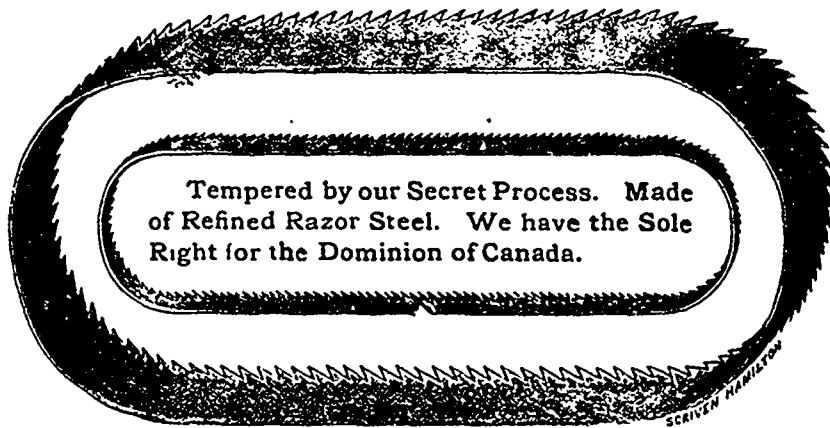
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THE CANADA LUMBERMAN

VOLUME XXII.
NUMBER 2.

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OPENING OF THE ONTARIO AND RAINY RIVER DIVISION OF THE CANADIAN NORTHERN RAILWAY.

The accompanying illustration is from a photograph taken on January 1st on the occasion of the driving of the last spike of the Ontario and Rainy River division of the Canadian Northern Railway. Hon. E. J. Davis will be noticed with the spike maul on his shoulder, the silver spike in his left hand. On his left is Mr. William MacKenzie, with Mr. D. Mann on his right. The ceremony was performed at the divisional point, Atikokan, one hundred and thirty miles west of Port Arthur, and closed with singing the National Anthem.

The second and third illustrations show the two sides of the first car of lumber sent over

copper. The Hon. E. J. Davis (than whom there should be no better authority on the forest wealth of Ontario) states that he is satisfied this portion of the country contains from seven hundred million to nine hundred million feet of pine, leaving out all other kinds of woods, such as spruce, tamarac and birch, which exist in abundance.

Forty miles from Port Arthur the road enters the Mattawin Iron Range, and at one hundred and thirty miles is met a most magnificent body of magnetic iron ore known as the Atikokan. This mountain is within one thousand feet of the rail for a distance of ten miles, and is one of the largest ore bodies in America. North of this range are the various silver mining properties, and west of the

surrounding hill tops. From this point the road follows the bed of the Kaninistiquia river, with its falls and rapids, then traversing through the many river valleys and by the shores of a hundred inland lakes, the waters of which are abounding in fish and the forest in game. And you are still travelling in New Ontario, and a vast and rich portion that has come into prominence as it were in a day.

The building of this road has been accomplished and brought to successful completion in the space of three years, when it required from seven to eight years for the Dominion Government to complete a similar line from this point to Winnipeg. The Canadian Northern Railway Company have just completed at Port Arthur a million and a quarter elevator, large



DRIVING THE LAST SPIKE—ONTARIO AND RAINY RIVER DIVISION, CANADIAN NORTHERN RAILWAY, PORT ARTHUR TO WINNIPEG.

Forde, Photo—Copyright applied for.

the Canadian Northern Railway from Port Arthur to Winnipeg.

The opening of this road is an event of greater importance to older Ontario than is generally conceived, and is also one of national (Canadian) importance. It furnishes the second all-Canadian outlet for a province which is not yet twenty years of age, counting its railway connection, only sparsely settled, but is exporting its fifty millions of dollars worth of the products of the soil. What will it produce in the next twenty or forty years?

The Canadian Northern Railway opens up between Port Arthur and the western boundary of Ontario a magnificent country equal in size to one-third of the province of Manitoba—a country rich in timber, iron, gold, silver and

Atikokan you enter vast timber forests, and in leaving those you are in the gold country. Then the fertile soil of the Rainy River country, this river valley stretches for a full hundred miles, and it has been stated that nowhere in all Ontario is there a similar stretch of equally rich lands for grains, roots, fruits, cattle, and in fact anything that springs from the soil.

The Canadian Northern Railway route from Port Arthur to Winnipeg will demand a large patronage from both tourist and sportsman. Twenty miles from Port Arthur and within a few hundred feet of the track is the grand and magnificent Kakabeka, with the grand fall of one hundred and twenty feet sending its exquisite rainbow-colored sprays far above

merchandise docks, round house, and machine shops, and are now laying out yards for the handling of freight. During the coming season the company will erect a passenger depot in keeping with the importance of the position, also other docks and elevators.

RICHARD VIGARS.

Port Arthur, January 22nd, 1902.

The immense increase in lumber importations to the United States from Canada is illustrated by the report of Collector of Customs Brawn at Bay City, Mich. Over 10,500,000 feet of lumber, 431,000 pickets and 385,000 lath were received from Canadian ports during the month of November. The duties collected on these amounted to \$21,307.27. The shipments for the same month of last year were 1,427,500 feet of lumber and the duties but \$3,063.33.

REVIEW OF THE LUMBER TRADE

Progress of the Past Year in the Manufacture and Shipment of Lumber.—A Banner Year for White Pine.—Volume of Export Business Remained Almost Stationary.—Statistics of the Different Provinces.

It is not possible to chronicle great expansion in the lumber trade of Canada during the year 1901. The demand, however, was of moderate volume, and prices, on the whole, were well sustained. When it is considered that the British timber market was depressed almost throughout the entire year, the figures of export shipments presented in this number must be regarded as eminently satisfactory. That there were practically no failures in the lumber trade is another cause for congratulation.

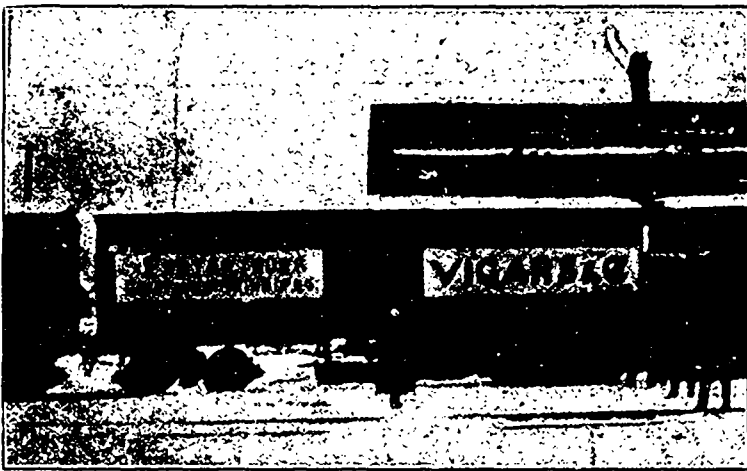
There was a steady appreciation during the year in the price of white pine lumber. This was due in large measure to a revival of trade with the United States. Turning to the figures for 1900, we find that shipments to that country were comparatively small owing to the

of 5,000,000,000 feet, although every effort was put forth in the winter of 1900-1901 to get out as many logs as possible. Within ten years the cut in these states has declined over 50 per cent. While a corresponding reduction has not taken place in Canada, the fact emphasizes the necessity of pursuing a conservative policy in respect to the cutting of timber and of protecting our timber limits from fire.

The cost of logging has now become a serious problem with lumbermen. Within the past three years it has increased about 50 per cent., due to the higher cost of labor and supplies and to the necessity of going further back into the woods for timber. It has, therefore, become absolutely necessary that higher prices should be obtained for lumber,

winter was fairly heavy, and as very few were hung up in the streams, the mills were well supplied with raw material. The demand was such as to stimulate production, and the total white pine lumber output of the province was comparatively heavy and so what in excess of the previous season. The Ottawa valley production was 611,000,000 feet, an increase of 22,000,000 feet for the season. The mills in the Georgian Bay district were operated to their full capacity, and taking into account the new mills that have been put into commission since the export of logs was prohibited, the increase is estimated to be considerable.

The volume of white pine trade was greater than in 1900. Heavy shipments were made to the United States, and there was a large domestic consumption. The industries of the province were in a flourishing condition and the agricultural interests enjoyed a period of prosperity, conditions which brought about an increased demand for lumber. As prices at the beginning of the year were comparatively high, a marked advance was not looked for, and consequently the range of prices generally



THE TWO SIDES OF FIRST CAR OF LUMBER SHIPPED FROM PORT ARTHUR TO WINNIPEG OVER THE CANADIAN NORTHERN RAILWAY.

unsettled condition of business prior to the Presidential election. Thus at the beginning of last year dealers and consumers were carrying exceptionally light stocks, and a brisk buying demand set in which continued almost without interruption throughout the year. Canadian mills were called upon to supply a large quantity of the requirements of Michigan and the Eastern States. For the ten months ending October 31st the exports were 452,349,000 feet, of a value of \$6,190,545, while for the same period in 1900 the value of exports was \$5,530,713. The domestic demand for white pine was likewise heavy, and the year closed with manufacturers carrying exceptionally light stocks of unsold lumber. The higher grades were in greatest demand, the advance in these being quite marked. It is estimated that within the past three years the grades of white pine that are used in sash and door manufacture and in house finish have advanced \$10 per thousand. The explanation of this is that in the great pine districts of Canada and the United States the quantity of standing timber is gradually becoming diminished. This is illustrated by the production last year in the States of Michigan, Wisconsin and Minnesota, where the total cut was only slightly in excess

and it is extremely improbable that the low prices of a few years ago will ever be reached again.

A large production of hardwood logs one year ago was responsible for an unsettled market for that class of lumber last year. While prices did not decline to any extent, there was no snap to the demand, although towards the close of the year there was a slight improvement. A light input of logs this winter is likely to bring about better conditions during the coming season. It would be advisable, however, for manufacturers to give more attention to the export trade, as there is a large market in Great Britain for hardwood lumber cut to standard sizes.

From the tables following it will be seen that the foreign shipments of British Columbia, Quebec and the Maritime Provinces were almost as great as in the previous year, while if complete statistics were available they would doubtless show that a substantial increase was made in the shipments from Ontario.

ONTARIO.

To speak of the lumber trade of Ontario it is necessary to make a division between white pine and hardwoods. The cut of pine logs in the

was narrow; yet the improvement which exhibited itself early in the year finally resulted in a net gain in price, on an average, of about one dollar per thousand. In the higher grades and the class of lumber exported to the United States the appreciation was from two to three dollars, while on the other hand some of the lower grades remained stationary, even selling off slightly about midsummer, to recover towards the close of the year. Clear picks, which sold at \$32 in 1900, brought \$35 last year, and common stocks, which were marketed at \$14 in 1900, realized from \$15 to \$16. A considerable portion of the cut of the western mills was sold to Michigan dealers.

A dull demand characterized the red pine trade. On account of the unsettled condition of the British market it was difficult to effect sales early in the year, and while there has since been some improvement, the immediate future of this class of lumber seems somewhat uncertain. Hemlock prices advanced during the year from \$9 to \$10.

Of the hardwood situation nothing encouraging can be said. Stocks were offered more freely than during the previous year, and while prices did not decline seriously, no advance for the year was accomplished. In some classes

of stock the market was weaker. Soft elm sold at \$13 as compared with \$15 in 1900, and maple at \$14 against \$15 in 1900. The other hardwoods held their own. Basswood was scarce throughout the year. Within the past two months there has been a slight improvement in the hardwood situation, and it is believed that there will be a larger demand during the coming season, and in all probability a recovery in prices.

The scarcity of white pine shingles was a feature of the year, and consequently higher prices were the rule. It seems that the enhanced value of pine timber is bringing about a reduction in the production of white pine shingles. The result has been that a greater quantity of the white and red cedar variety is being used. The fluctuation in lath was somewhat narrow, and at the close of the year they were selling at almost the same figure as one year ago.

The manufacturers of cooperage stock are not altogether satisfied with the season's business. About midsummer large quantities of staves were forced on the market, breaking prices considerably. No. 1 staves soon recovered, but No. 2 continued heavy and in little demand. Hoops opened well in the beginning of the season, and after a slight decline advanced 25 per cent. in less than three months. In No. 2 staves and heading the trade of the year was unsatisfactory. The production of No. 2 stock was very heavy on account of the inferior grade of logs and bolts taken out, and consequently a large quantity of that class of stock is being carried over. The high prices of logs, combined with the moderate price of No. 1 and the low price of No. 2 stock, have reduced the profits of the manufacturer to a very small margin.

The following figures show the production of the Ottawa Valley pine mills for two years:

OTTAWA VALLEY PRODUCTION.

	1900—Feet.	1911—Feet.
J. R. Booth, Ottawa.....	125,000,000	125,000,000
Gilmour & Co., Trenton....	25,000,000	25,000,000
Hill Lumber Co., Hull....	35,000,000	35,000,000
McLachlin Bros., Arnprior..	70,000,000	70,000,000
Hawkesbury Lumber Co., Hawkesbury.....	45,000,000	45,000,000
W. C. Edwards & Co., Rock- land and New Edinburgh	85,000,000	85,000,000
St. Anthony Lumber Co., Whitney.....	42,000,000	50,000,000
Gilhes Bros., Braxside.....	30,000,000	40,000,000
Gilmour & Hughson, Hull...	35,000,000	35,000,000
Pembroke Lumber Co., Pem- broke.....	14,000,000	14,000,000
Ottawa Lumber Co., Calumet	8,000,000	8,000,000
Ross Bros., Buckingham....	10,000,000	10,000,000
McLaren Estate, Buckingham	15,000,000	15,000,000
J. R. & J. Gillies, Arnprior	3,000,000	3,000,000
A. Hagar & Co., Plantaganet	6,000,000	6,000,000
A. & P. White, Pembroke...	5,000,000	8,000,000
Bailey Bros., Aylmer.....	4,000,000	4,000,000
McLaren & McLaurin, East Templeton.....	6,000,000	20,000,000
G. H. Perley Co., Calumet...	25,000,000	25,000,000
Total	588,000,000	611,000,000

QUEBEC.

"The lumber trade in general was good from start to finish, and still continues." This opinion, expressed by a Quebec lumber manufacturer, perhaps savors of optimism, yet it illustrates the satisfied and hopeful feeling of the lumbermen of that province. The manufacturers were more fortunate than the shippers, as most of them sold their British stock early in the year when prices were at about the

highest point reached, whereas the shippers had to meet the depression in the British timber market and found it difficult to close the year with their transactions showing a reasonable margin of profit. The best grades of spruce deals remained comparatively firm. A large trade was done with the United States in clapboards and shingles. The stocks being carried over are light and less than one year ago.

The total shipments from Montreal, Quebec, and the smaller ports along the St. Lawrence were 479,099,464 feet, a decrease of 5,000,000 feet from the preceding year. The port of Montreal shows a falling off of 16,000,000 feet, this being due in part to the fact that more lumber than usual found its way to the British market through Portland and Boston, from which ports the rate of insurance is much less. From New York and Boston the insurance rate is 4 per cent., as against about 9 per cent. from Montreal. This makes a difference of about \$5000 to a vessel, in favor of an American port, and accounts for the steady decline in the shipping trade of Montreal. From 516 steamships leaving that port in 1898, the number has fallen each year to 396 in 1901.

Freights ruled low throughout the year. Opening at 40 to 45 shillings on deals for Montreal liners, they showed little or no advance. During the summer, rates to Glasgow fell to the very low figure of 25 shillings, other ports being somewhat affected. The season closed with a very weak freight market.

The respective shipments of the different firms from the port of Montreal for two years are shown by the following table:

	1900—Feet.	1901—Feet.
Watson & Todd.....	55,574,000	66,107,435
Dobell, Beckett & Co....	39,429,408	36,695,912
W. & J. Sharples.....	37,735,855	26,322,102
R. Cox & Co.....	26,826,629	31,736,125
McArthur Export Co.....	19,302,370	10,411,035
Charlemange Lumber Co.	16,135,965	10,867,809
J. Burstall & Co.....	14,843,496	22,521,217
Cox, Long & Co.....	6,043,931	4,653,216
McLaurin Bros.....	5,214,061	5,348,000
E. H. Lemay.....	4,339,925	3,472,000
D. Cream.....	955,526	.....
Haold Kennedy.....	613,800	.....
The Robert Reford Co., Ltd.....	524,708	.....
Imperial Lumber Co.....	289,020	.....
Montreal Lumber Co.....	228,189	.....
Sundry Shippers, Railways, etc.....	10,565,497	4,393,979
Total feet	239,222,380	222,424,850

In the statement for 1901 the exports of one or two small shippers are not given. The only shipment of lumber to South America was one of 863,067 feet by the Export Lumber Company.

From the ports east of Montreal the following shipments were made:

	Quebec Feet.	Three Rivers and Pierr ville Feet.	Other Ports Feet.
Dobell, Beckett & Co.....	43,081,000	26,62,000	8,724,000
Price Bros & Co.....	2,500,000	.....	65,244,000
W. & J. Sharples.....	27,051,397	17,6,105	8,361,010
J. Burstall & Co.....	6,418,790	.....	.....
H. R. Gooday & Co.....	27,077,147	.....	.....
McArthur Export Co.....	12,378,415	.....	.....
King Bros.....	17,150,557	.....	.....
H. Kennedy.....	6,150,000	.....	.....
Totals	141,757,447	31,68,105	82,929,102

The largest shippers were Dobell, Beckett & Company, with a total of 114,762,912 feet, followed by Price Bros. & Company, W. & J. Sharples and Watson & Todd with about 67,000,000 feet each.

The following particulars regarding the timber trade of the port of Quebec are found in the annual timber trade circular of J. Bell Forsyth & Company, compiled by Mr. E. J. Dalton, of Quebec.

WHITE PINE.—The lightest export and smallest stock on record tell their own tale. The production can now be closely estimated, and will be quite inadequate to meet anything but a very moderate demand. In no case can this wood be overdone either in waney or square timber.

	Supply.	Export.	Stock.
1901 { Square... 585,432	2,317,443	589,561 Square	361,488 Waney
{ Waney... 1,446,889			
1900 { Square... 570,818	2,754,920	804,417 Square	506,001 Waney
{ Waney... 1,504,615			

RED PINE.—The supply and wintering stock show little change from last season's reduced figures. It has been more profitable of recent years to take out saw logs than to make square timber, and in any case the demand is not large, pitch pine having replaced this timber in the home markets.

	Supply.	Export.	Stock.
1901.....	80,917	86,535	78,084
1900.....	63,780	133,640	85,880

OAK. The supply has closely approximated to that of the preceding year, and although the shipments have shown a reduction, the wintering stock remaining has fallen to the lightest recorded figures. There is no probability of an increased production unless a very marked advance in price takes place.

	Supply.	Export.	Stock.
1901.....	498,261	516,437	126,874
1900.....	488,100	779,040	315,213

ELM.—The large supply consists to a great extent of soft elm. The recorded stock is made up largely of this wood, and is consequently quite misleading. Rock elm is scarce and its contract value has been fully maintained.

	Supply.	Export.	Stock.
1901.....	1,023,372	548,869	594,922
1900.....	712,468	682,600	115,311

ASH.—The demand in the United Kingdom has fallen off except for large wood of good quality. Small wood is not wanted. Meantime good wood of any size cannot be purchased except at full prices owing to scarcity of suitable standing timber.

	Supply.	Export.	Stock.
1901.....	135,245	118,074	25,420
1900.....	91,745	84,880	2,211

BIRCH. A moderate production has been well shipped out and the manufacture will be kept within reasonable limits to meet anticipated demand. A good demand from the United States for sawn wood will ensure this.

	Supply.	Export.	Stock.
1901.....	291,786	304,584	7,721
1900.....	441,019	371,240	11,486

PINE DEALS.—The Ottawa mill cuttings have again been placed for next season's manufacture at unchanged prices. Some considerable dissatisfaction has existed over the changed culling, but there seems every prospect of this being fairly adjusted. The following figures being only for Quebec, represent but a small portion of the trade. They are given in 100 Quebec standards, equal to 2,750 feet B. M.

	Supply.	Export.	Stock.
1901.....	383,655	379,993	12,062
1900.....	182,307	233,540	15,720

SPRUCE DEALS. Values have been fairly maintained on this side throughout the season and the mill cuttings for next year have been placed at a decided advance on previous figures. The exceedingly light stock in Quebec as compared with former years is very striking.

	Supply.	Export.	Stock.
1901.....	6,900,659	6,728,669	253,048
1900.....	5,414,171	4,965,468	415,038

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

THE MARITIME PROVINCES.

An average season was experienced last year by the lumber manufacturers and shippers of the Maritime Provinces. The trade of the North American Continent was satisfactory, but European business was somewhat disappointing and characterized by many uncertainties. The home consumption of lumber was about on a par with the previous year, while increased shipments were made to the United States, the West Indies and South America, specifications for the latter country bringing about \$11.50 per thousand. Boards suitable for the West India market brought an average of \$10.75, as compared with \$10 in the year 1900.

Throughout the Eastern States there was a strong demand for spruce lumber, and consequently the year closed with prices about \$1 per thousand higher than at the end of the previous year. Towards the fall there arose an active demand for spruce clapboards, and as the supply at the mills was light a sharp advance took place, and the gain for the year is about \$3 per thousand. It is a question, however, how long present prices of clapboards will be maintained, although it is improbable that there will be a material decline before the new stock is ready for the market. Several periods of weakness were experienced by cedar shingles during the year, but these were not sufficient to offset the advances that were made at other times. For Boston delivery extras are now quoted at \$3.25 and clears at \$2.80. These figures represent a gain for the year of 50 cents per thousand. In other grades of shingles the improvement was very slight.

The shipments from St. John to the United States show a gain in value of over \$400,000. The increase is made up exclusively by lumber manufactured from Maine logs, as the quantity of Canadian lumber shipped from that port was less than in the previous year. Below will be found a table giving a comparative statement of lumber shipments from St. John to the United States in the years 1900 and 1901:

EXPORTS FROM ST. JOHN TO UNITED STATES.

	1900	1901
Canadian lumber....	\$442,794.07	\$ 300,593.42
American lumber....	505,213.10	1,052,860.73
Total.....	\$948,007.17	\$1,353,454.15
Increase for 1901		\$415,446.98.

Canadian lumber was exported across the border to the value of \$150,891.21; laths to the value of \$136,919.44; and shingles to the value of \$12,782.77.

Turning to trans-Atlantic shipments, we find that the total from the Province of New Brunswick was 339,000,000 feet, a decrease of 90,000,000 feet as compared with the previous year and the smallest since 1896. This is accounted for by the depression in the British timber market. The early shipments were sold at fair prices, but as the season advanced the demand fell off and prices declined sharply towards midsummer. For the bulk of the deals shipped to Great Britain the price realized was about \$1 per thousand less than in 1900. The depression continued until late in the fall, when there was a sharp recovery in spruce prices, and at the present time the outlook is for an improvement during the coming season. The year was characterized by uncertain and generally low freight rates, which was an incentive to heavy shipments early in the spring.

The lumber shipments from Nova Scotia to trans-Atlantic ports are given as 102,000,336 feet, but these figures are believed to include South American shipments also, as they show an increase of nearly 40,000,000 feet over the previous year.

The distribution of shipments indicates that France, Spain, and Australia are likely to be larger buyers of Canadian spruce lumber in the future. The shipments from Miramichi

and St. John to France and Spain were 10,000,000 feet greater than in 1900, and those to Australia 6,000,000 feet greater. The following tables are taken from the Miramichi wood trade circular of the J. B. Snowball Company, of Chatham.

SHIPMENTS FROM MIRAMICHI FOR 10 YEARS, FROM 1892 TO 1901 INCLUSIVE.

1892—95,000,000 sup. feet	1897—102,000,000 sup. feet.
1893—83,000,000 "	1898—113,000,000 "
1894—96,000,000 "	1899—129,000,000 "
1895—82,000,000 "	1900—122,000,000 "
1896—106,000,000 "	1901—126,000,000 "

Shippers	No. Vessels.	Tons.	Sup. ft. deals, ends, scantling boards, etc.
J. B. Snowball Co. Ltd..	29	28,056	30,414,093
F. E. Neale.....	27	34,446	44,488,461
W. M. Mackay.....	8	10,549	13,534,203
Fred. Dyke.....	10	9,246	11,253,707
Ernest Hutchinson..	9	9,594	10,749,324
D. & J. Ritchie & Co..	13	9,751	10,252,000
Geo. Burchill & Sons..	3	3,357	4,914,000
Clark, Skillings & Co..	1	950	
Thomas W. Flett.....	2	1,100	58,623
Total.....	102	107,057	125,664,411

Birch—J. B. Snowball Co., 61 tons. Spoolwood and shooks—F. E. Neale, 207,499 sup. feet; Clark, Skillings & Co., 1,584,501 sup. feet; Thomas W. Flett, 955,000 sup. feet; J. A. Rundle, 415,979; total, 3,163,039 sup. feet.

DISTRIBUTION OF MIRAMICHI SHIPMENTS.

Country	No. Vessels.	Tons.	Sup. ft. deals, ends, scantling boards, etc.
England.....	48	58,539	73,333,843
Ireland.....	35	33,804	38,941,852
France.....	12	9,565	9,757,927
Spain.....	4	2,627	1,422,810
Australia.....	1	1,127	958,896
South America.....	1	822	698,083
Africa.....	1	573	551,000
Total.....	102	107,057	125,664,411

Birch—England, 61 tons. Spoolwood and shooks—England, 2,208,039 sup. feet; Spain, 955,000; total, 3,163,039 sup. feet.

DISTRIBUTION OF ST. JOHN, N.B., SHIPMENTS, NOV. 30TH, 1900, TO NOV. 30TH, 1901.

	Sup. ft. deals, boards, scantling and ends.	Timber Birch.	Pine (tons)
Manchester.....	31,595,051		
Liverpool.....	21,416,845	4,538	50
London.....	7,404,817	989	
Swansea.....	758,223		
Barry.....	3,814,620		
Sharpness.....	10,932,849		
Bristol.....	6,219,948		
Cardiff.....	4,275,245		
Newport.....	955,121		
Mersey, f. o.....	9,742,189		
Kinsale, f. o.....	5,306,083		
Barrow.....	4,523,333		
Fleetwood.....	2,342,784		
Glasgow.....	16,959,546	526	
Ayr.....	598,997		
Methel Dock.....	619,353		
Greenock.....	1,249,751		
Belfast.....	7,708,121	153	
Dublin.....	2,375,748		
Sligo.....	355,243		
Tralee.....	245,168		
Waterford.....	970,892		
Drogheda.....	406,871		
Queenstown.....	3,026,130		
Bantry.....	508,389		
Limerick.....	4,159,349		
Londonderry.....	2,179,370		
Foynes.....	439,110		
Youghal.....	418,439		
Newry.....	648,266		
Galway.....	1,156,205		
Cork, f. o.....	2,302,638		
France and Spain.....	9,074,377		
Australia.....	10,483,803		
Africa.....	1,122,383		
Total.....	176,295,257	6,206	50

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

	Total sup. ft. deals, etc.	Timber	Pine (tons)
1892.....	146,529,309	10,200	
1893.....	156,653,334	5,294	
1894.....	153,473,076	5,015	
1895.....	126,449,706	8,374	324
1896.....	167,249,707	9,892	128
1897.....	244,399,060	9,454	92
1898.....	184,954,343	6,035	95
1899.....	184,192,435	5,859	131
1900.....	236,459,838	5,851	71
1901.....	176,295,257	6,206	50

SHIPMENTS FROM OTHER PORTS IN NEW BRUNSWICK FOR THE YEAR 1901.

Shippers	Sup. ft. deals, ends, scantling and boards
Jno. L. Peck, Hillsboro	1,220,076 sup. ft.
J. Nelson Smith, Hillsboro	1,348,803 "
Alex. Wright & Co., Hillsboro	500,238 "
W. M. MacKay, Hopewell..	8,516,161 "
Geo. McKean, Hopewell	5,462,400 "
W. M. MacKay, Harvey	4,335,510 "
Geo. McKean, Harvey	4,089,215 "
Total.....	25,478,403 "

DALHOUSIE.	
Geo. Moffat & Co.	7,987,258 sup. ft.
Prescott Lumber Co.....	3,078,168 "
King Bros. & Co.....	2,352,531 "
Nat McNair.....	1,182,923 "
Fred Dyke.....	1,193,164 "
W. S. Montgomery.....	1,105,231 "
W. K. McKean.....	1,047,397 "
Chas. J. Willis & Co....	599,491 "
Geo. Dutch.....	450,517 "
Total.....	18,966,980 "

CAMPBELLTON	
F. E. Neale.....	11,414,740 sup. ft.
Kilgour Shives.....	8,246,530 "
Total.....	19,661,270 "

SACKVILLE.	
M. Wood & Sons.....	855,083 sup. ft.
Geo. McKean.....	545,140 "
P. G. Mahoney.....	1,643,260 "
J. & C. Hickman.....	1,522,790 "
Total.....	4,566,278 "

BATHURST.	
W. M. McKay.....	1,476,023 sup. ft.
P. G. Mahoney.....	1,594,921 "
Total.....	16,361,944 "

SHEDIAC.	
J. L. Black & Son.....	2,759,000 sup. ft.
Geo. McKean.....	960,000 "
C. J. Willis & Co.....	467,000 "
M. Wood & Co.....	588,000 "
Total.....	4,774,000 "

RICHIBUCTO AND BUCTOUCHE.	
J. & T. Jardine.....	2,754,579 sup. ft.
Edward Walker.....	748,513 "
J. D. Irving.....	440,051 "
Total.....	3,943,143 "

TOTAL TRANS-ATLANTIC SHIPMENTS OF NEW BRUNSWICK, 1901, COMPARED WITH 1900.

	1901	1900	Sup. ft. deals, etc.
St. John.....	176,295,257	128,827,450	
Miramichi.....	128,827,450		
Moncton { Hillsboro.....			
{ Hopewell.....		25,478,403	
{ Harvey.....			
Shediac.....	4,774,000		
Dalhousie.....	18,966,980		
Campbellton.....	19,661,270		
Richibucto and Buctouche.....	3,943,143		
Sackville.....	4,566,278		
Bathurst.....	16,361,944		
Total.....	398,874,745		

	1901	1900	Sup. ft. deals, etc.
St. John.....	236,459,838		
Miramichi.....	121,542,971		
Moncton { Hillsboro.....			
{ Hopewell.....		41,509,441	
{ Harvey.....			
Shediac.....	11,055,531		
Dalhousie.....	24,060,224		
Campbellton.....	20,968,145		
Richibucto and Buctouche.....	4,462,000		
Sackville.....	10,361,892		
Bathurst.....	18,669,103		
Total.....	489,089,148		

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

	Sup. feet.	Sup. feet.
1892.....	325,000,000	1897..... 493,000,000
1893.....	312,000,000	1898..... 412,000,000
1894.....	326,000,000	1899..... 426,000,000
1895.....	291,000,000	1900..... 489,000,000
1896.....	386,000,000	1901..... 399,000,000

SHIPMENTS FROM NOVA SCOTIA, 1901.

Ports.	Sup. ft. deals, etc.
Halifax { Mahone Bay.....	
{ Ship Harbour.....	129,006,500
{ Sheet Harbour.....	
{ Hubbard's Cove.....	
Parrsboro.....	21,835,480
Yarmouth (Tusket, etc.)	12,828,000
Pugwash.....	8,396,590
Pictou.....	7,791,000
Liscombe.....	2,142,766
Total.....	182,000,376

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

1892	87,861,398	1897	185,362,562
1893	109,252,930	1898	148,239,804
1894	106,327,250	1899	128,009,504
1895	109,324,393	1900	146,294,110
1896	123,116,385	1901	182,000,336

BRITISH COLUMBIA.

The lumber trade of British Columbia no more than held its own during the year. The car trade was fairly good and an increased quantity of lumber found its way to Manitoba, the Northwest Territories and the eastern provinces. There was also an average local demand for building material, salmon boxes, etc. The foreign trade, however, was not altogether satisfactory either in respect to volume or price. Shipments show a falling off of 14.2 per cent. as compared with the previous year. It was difficult to secure a price on foreign cargoes which would leave the exporter a fair profit, and it is understood that several orders were refused on account of the price being too low. Efforts are now being made by the mill men to reach an agreement which will do away with the cutting of prices and place the export trade on a more satisfactory footing.

The principal loss in export business was 41.1 per cent. in Australia, which took only 23,000,000 feet against over 32,000,000 feet the previous year. The United Kingdom took only 9,000,000 feet, against 22,000,000 feet in 1900, a falling off of 146.7 per cent. The consumption of South Africa was only 4,000,000 feet, a decline of over 30 per cent. The countries showing an increased consumption were South America, with a gain of 19.3 per cent.; China, a growth from less than 2,000,000 feet to nearly 7,000,000 feet; and Japan expanding from 1,500,000 to 6,000,000 feet.

The figures in detail of shipments to foreign countries are shown below:

SHIPMENTS BY COUNTRIES.

	1900	1901
	Feet B. M.	Feet B. M.
Australia	32,240,564	22,919,807
United Kingdom	21,980,695	8,909,864
South America	8,739,125	13,045,214
China	1,955,368	6,687,133
Japan	1,523,627	6,015,559
South Africa	5,117,672	3,926,620
France	2,696,242	
United States	1,030,625	
Mexico	357,445	746,762
Calcutta		3,036,539
Hamburg		1,214,661
Alaska		170,260
Boevey		44,852
Fiji Islands	446,724	

Total 76,208,087 66,714,271

Sixty-eight vessels sailed from the province with lumber, the shipments from the different ports being as follows:

SHIPMENTS BY PORTS.

	1899	1900	1901
	Feet B. M.	Feet B. M.	Feet B. M.
Chemainus	24,952,042	38,365,833	25,856,316
Vancouver	12,553,087	20,128,612	21,815,297
Woodyville	9,515,655	14,700,467	16,926,189
Other ports	2,620,180	3,003,175	2,116,469

The Chemainus mills were 48.4 per cent. behind their 1900 shipments, while the Vancouver and Moodyville mills expanded about 2,000,000 feet each. The North Pacific Lumber Company entered the export market, shipping two cargoes to Australia.

The following table shows the point of shipment, destination, quantity and value of foreign cargoes:

FROM CHEMAINUS.

Vessel	Destination	Feet B. M.	Value.
Great Admiral	Sydney	1,066,218	\$ 6,316
St. James	Sydney	1,198,984	12,519
Fort George	Sydney	1,505,895	14,343
Antofagasta	Antofagasta	777,150	7,976
Dundee	Cork	1,712,532	21,950
Senator	Liverpool	1,074,939	14,365
Reland	Greenock	834,582	10,588
James Drummond	Fremantle	1,135,518	11,410
Antonieta	South Africa	790,434	7,442
Star of Bengal	Adelaide	1,461,765	13,100
Socoma	Melbourne	741,900	6,453
Hawaii	Taku	1,102,347	12,287

Vessel	Destination	Feet B. M.	Value
Sixtus	Hambourg	1,211,651	31,885
Highlands	Capetown	1,005,519	8,385
St. Frances	Adelaide	1,405,193	12,000
Forest Holme	Shanghai	848,752	9,356
Antofagasta	Antofagasta	811,472	7,820
Rufus E. Wood	Sydney	1,067,920	9,791
Fort George	Port Pirie	1,510,836	10,198
Republic	Melbourne	936,686	8,268
Hawaiian Isles	Port Pirie	2,014,376	13,597
St. David	Adelaide	1,269,821	10,746
Admiral Tegetthoff	Antofagasta	703,749	6,654
Kona	Valparaiso	749,606	7,420
Undaunted	Cape Town	1,317,516	10,881
Robert Sudden	Wallaaroo	770,665	6,866
Lottie Bennett	Valparaiso	641,371	6,076

FROM MOODYVILLE.

Rose	Geraldton	613,217	6,282
Alsterthal	Valparaiso	1,407,071	13,761
Alexander Gibson	Cape Town	1,603,585	15,928
Athenian	Bombay	44,852	
Palatinia	Yokohama	718,838	
Admiral Tegetthoff	Antofagasta	706,843	6,875
Anna	Callao	1,332,873	11,802
Sulitelma	Arica	766,979	7,600
Cavour	Callao	1,085,780	9,716
Guernsey	Nagasaki	2,253,571	21,769
Salfordia	Port Arthur	2,003,284	14,370
Benj. Sewall	Fremantle	1,046,555	9,487
Ivy	Hong Kong	819,499	7,840
Ventnor	Calcutta	3,036,539	24,890

FROM VANCOUVER.

Paul Rickmers	London	2,503,827	22,252
Sehome	Valparaiso	728,193	6,662
Palatinia	Yokohama	1,198,120	14,078
Prince Victor	Queensborough	784,942	10,189
Antuco	Callao	1,225,458	11,395
Falls of Garry	Sydney	1,627,472	14,770
Prince Albert	Queensborough	1,211,979	17,354
Fantasi	Liverpool	927,103	14,669
Mindora	Fremantle	880,650	7,640
Thalassa	Plymouth	1,091,970	12,522
Palatinia	Taku	883,094	8,178
Bangor	St. Michaels	170,260	1,447
Khorasan	London	781,835	9,331
Athenian	Nagasaki	276,280	2,922
Golden Shore	Sydney	844,681	6,709
Guernsey	Nagasaki	1,358,225	17,754
King Cyrus	Melbourne	330,261	6,946
Fred E. Sander	Iquique	516,100	4,901
Salfordia	Port Arthur	990,247	6,932
Tartar	Japan	210,525	4,065
Servia	Sydney	1,225,841	9,909
Battle Abbey	Melbourne	1,238,774	9,845
Kailua	Melbourne	842,825	6,630
Sehome	Iquique	742,119	7,100
Hesper	Fremantle	738,361	6,502
Ida	U. K.	489,989	8,555

FROM BARNET.

Passepartout	Sydney	436,891	
City of Hankow	Sydney	932,816	9,609

FROM PENDER ISLAND.

Commerce	Santa Rosalia	169,540	3,229
Eric	Santa Rosalia	143,233	2,766
Luzon	Santa Rosalia	159,972	2,840
Forester	Santa Rosalia	191,418	3,626

BRITISH COLUMBIA SHINGLES.

The British Columbia shingle trade of 1901 opened with very light stocks in the lumber yards throughout Ontario, Manitoba and the North-West. There were also only one or two mills which had any stock on hand worth mentioning. It is safe to state that there was less than 15 million shingles at all the mills in British Columbia ready for shipment when the spring trade started.

The demand was rather later than usual in developing—no shipments to amount to anything being made until April. When once started, however, the demand remained heavy and prices kept fairly firm throughout the year till the close of the fall trade; in fact, prices were advanced 15 cents per thousand in August, but the advance was not held at the close of the season's trade, when orders commenced to fall off. Although some dealers had to wait on shipments, it is safe to state that they all finally got what shingles they wanted to supply their customers.

The apparent scarcity of shingles for a time during the year is accounted for by the fact that three mills (including two of the largest in the province) were burned down during the early part of the year; and one of these mills had been closed down from the beginning of the year until the time it was burned. These three mills made a shortage in the supply for the whole season of about 75 millions. In

other words, had these mills been in operation steadily, the trade would have been supplied more promptly, and all the mills would have done less business.

One of the features of the year's shingle business was the arrangement between the Pacific Coast Lumber Company and four of the manufacturers, whereby the company closed down their mill and acted as selling agents. While the demand, of course, had something to do with keeping up prices during the year, it is conceded by all that the arrangement above referred to was responsible in a large measure for maintaining a uniform price, and if it could have been amicably continued for the length of time intended, it would have undoubtedly maintained a uniform price and helped to keep the business in a healthy condition.

Another feature in the shingle trade of British Columbia during 1901 was the building of no less than eight new mills, with an aggregate capacity of about 700 thousand per day. Arrangements are also made for the building of three more large mills in Vancouver, which will have a combined capacity of at least 600 thousand per day.

The total quantity of British Columbia shingles manufactured and sold during 1901 amounted to about 225 millions. Of this quantity from 25 to 35 millions would be consumed in British Columbia and the balance about equally divided between Ontario, Manitoba and the North-West.

The following is a list of the existing mills in the coast district of British Columbia, with their daily (10 hour) capacity, viz.:

B. C. Mills, Timber and Trading Co., Vancouver	160 M
E. H. Heaps & Co.	180 M
Hastings Shingle Mfg. Co.	135 M
(4 mills in Washington in addition to Vancouver mill.)	
Thos. Kirkpatrick	Vancouver 80 M
Spicer Shingle Mill Co.	" 160 M
British Columbia Shingle Co.	" 90 M
Cook & Tait	" 80 M
Cascade Lumber Co.	" 90 M
Robertson & Hackett	" 25 M
W. L. Tait	" 25 M
Robert McNair	" 75 M
The Canada Shingle Co.	" 90 M
Fraser River Lumber Co., New Westminster	110 M
A. R. Welch	" 110 M
Brunette Saw Mill Co.	" 75 M
Galbraith Bros.	" 25 M
Chillawack Shingle Co., Harrison River	75 M
Haddon & Son, Cloverdale	25 M

In addition to the above the following firms have made arrangements to build shingle mills: Pacific Coast Lumber Co., at Vancouver, capacity about 250 M a day.

Hastings Shingle Mfg. Co., at Vancouver, capacity 250 to 300 M per day.

The following named firm has actually commenced building: Robert McNair, at Vancouver, capacity not decided on, but will likely be about 150 M a day.

It can be seen from these figures that the 10 hour per day capacity of the shingle mills now built and those building and arranged for is about two and one-quarter million. All these mills can be operated night and day in fact, it has been the practise for the shingle mills in British Columbia to work night and day as long as orders were on hand. Continuing, these figures show a monthly capacity of 25 working days of 112,500,000, or a yearly capacity of 1,135,000,000 shingles for the coast mills of the province.

The total Canadian trade for B. C. shingles during the last five years has not averaged over 200 to 225 million a year. If all these mills could get timber to operate steadily, the shingle business would certainly be in an utterly demoralized condition in a comparatively short time; but where the proprietors are going to get a supply of raw material for their mills is a question we will not attempt to answer just now. It looks like trouble in the near future for the shingle industry of British Columbia, and the above words of warning would seem to be timely.

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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.

PROPOSED TIMBER CHARTER.

The British Chamber of Shipping have submitted to the trade a new timber charter covering vessels sailing from British North American ports. This charter, so far as can be judged, is a reconstruction of the charter which was submitted in the fall of 1898. It will be remembered that the timber trade refused to accept this charter, on the ground that it contained many objectionable clauses. The document now submitted is, in the opinion of the trade, no improvement on the rejected one. At a meeting of the Quebec timber and deal exporters, an unanimous resolution was passed that the charter as promulgated by the Chamber of Shipping for British North America, to come into force in 1902, should be strongly opposed as an arbitrary change from the London Chamber of Commerce form of Charter Party which has been in use for the last eleven years. The trade placed itself on record in a very decided manner, at the same time pledging itself to accept such changes as might be shown to be of general advantage and mutually agreed upon after fair discussion.

The form of charter is so manifestly in the interest of the ship-owner that it is almost needless to specify the objectionable clauses. Perhaps those most glaringly unfair are clauses 5, 5 and 6, relating respectively to the manner in which the cargo is to be supplied and received, reservation as to strikes, and objectionable terms under which bills of lading would be given. There are likewise important omissions, and the bill of lading is ambiguous and by no means satisfactory. Under the circumstances the Quebec shippers are justified in insisting on the adoption of the form of charter which has been found workable for so many years.

LESSONS OF THE YEAR.

The lumber trade of 1901, as reflected in the statistical information published in this number, was not particularly suggestive of either advancement or retrogression. The position of Canada as a lumber producing country was merely sustained. If the year served to prove one thing more than another, it was the supremacy of white pine—not, however, so much on account of its acknowledged superiority over most other woods as for the reason that the supply is annually decreasing.

In Canada the limit of production in white pine has not yet been reached, and it is hoped that by a wise policy of forest preservation such limit may be postponed for an almost indefinite period. But the top of the ladder has been reached in the United States, and a backward movement would seem to have set in. The cut of pine in the Lake Superior district last year was smaller in quantity than in any year since 1879. This was not due to a lack of demand for lumber, but rather to the increased difficulty and expense of getting out logs as compared with the earlier years of the white pine industry. The state of Michigan now furnishes a very small portion of the total white pine production, and is reckoned as a considerable importer of lumber.

It will be noticed from the tables that the shipments of British Columbia lumber to Australia were smaller than in the previous year, whereas that country took an increased quantity of spruce from the Maritime Provinces. France and Spain are also becoming better customers for Canadian spruce. The trade of the Pacific coast seems to be expanding in the direction of Japan, China and South America.

The figures with respect to shipments from British Columbia to South Africa are not encouraging. The assumption that South Africa is not a large buyer of lumber must be dismissed when reference is made to the Washington shipments, which were 21,000,000 feet last year, as compared with 12,000,000 feet in 1900. The falling off of over 50 per cent. in the lumber exports from British Columbia to that country shows that our lumbermen are not giving as much attention to that market as it deserves. This is to be regretted, as it is probable that merchants who now secure a foothold in South Africa will have little difficulty in maintaining it for years to come and in gradually increasing the volume of their business.

The conditions which have arisen in the shingle industry of British Columbia do not forecast a promising future for that trade. During the year a number of new shingle mills were built, and several others are now in process of construction. It is difficult to understand what has been the underlying cause for this expansion in shingle mill building; certainly it could not have been the prosperous condition of the industry nor the inability of the existing mills to supply the demand. Nevertheless, when the mills now under way are completed, the combined capacity of the then existing mills will be five times greater than the total consumption of British Columbia shingles in

Canada. What the ultimate result will be cannot be foretold, but it is not likely to be profitable to those engaged in the business. The supply of cedar timber cannot last long under the present consumption, and in a short time it is probable that British Columbia will reach the point when the manufacture of shingles must be abandoned for want of raw material. It is some satisfaction to learn that the provincial government has actually enforced the law prohibiting the export of cedar logs to the United States. The law, however, only applies to timber cut on crown lands and cannot affect that taken from deeded property.

It should be the aim of lumber manufacturers to make the most out of their raw material. The question with lumbermen should not be how much timber can be taken out of the woods and manufactured into lumber, but how can the greatest returns be obtained from a given quantity of timber. By pursuing such a policy the manufacturer, the workingman and the country at large will be benefitted to the greatest extent.

EDITORIAL NOTES.

THE suggestions made by a committee of the Canadian Manufacturers' Association to the Dominion Government regarding the extension of export trade should be heartily supported by Canadian manufacturers and the Canadian press. We may not all agree as to the particular methods to be adopted, but the necessity of taking steps to make our manufactured products better known in foreign countries must be universally admitted. The markets of the West Indies, for instance, are now very largely supplied by United States merchants. Very little is known of Canadian goods. It is claimed that New York houses already handle more Canadian goods in the West Indies than are shipped direct from Canada. The publishers of this journal recently received from a gentleman at Hamilton, Bermuda, a request for a directory of Canadian wood-working firms and dealers in building material. This gentleman states that for materials for public works they are compelled to obtain estimates from the United States on account of not knowing where to apply in Canada. He adds that the Imperial Government Surveyor had applied to him for such a directory, and he was certain that such information would oftentimes lead to the placing of considerable orders that now go to the United States.

An interesting and instructive chart has been received by the CANADA LUMBERMAN from Messrs. Foy, Morgan & Company, showing the periodical estimates of the duration of the timber supply at London, England, for the past four years in comparison with the averages at the same time in the previous five years. With Canadian pine the largest stock for the years 1898, 1899 and 1900 was held on 31st January, 1899, when it reached 20 per cent. above the average of the preceding five years. In 1901 the supply reached 45 per cent. above the average on 30th April and 31st July. The largest supply of spruce for the past four years was on the 31st October, 1898, the quantity then in stock not being reached even last year, when

so much was heard about the large supply and depression in spruce. The highest stocks of both Canadian pine and spruce were held on June 30th, 1898, the quantity being 50 per cent. below the average and 15 per cent. smaller than the supply at any other time during the four years. Baltic deals and battens were in most excessive supply during the summer of 1901, being 45 per cent. above the average. The diagram representing the supply of rough boards is particularly suggestive. Only at five monthly periods during the past four years has the supply been below the average of the preceding five years. In 1898, 1899 and 1900 the supply ranged from 10 to 45 per cent. above the average, and on the 31st January, 1901, was 40 per cent. above. This, however, was the highest period of the year, and from that time the supply gradually decreased until on October 31st it was 35 per cent. below the average, rapidly increasing again to 15 per cent. above the average on December 31st last.

LUMBER THAT SOUTH AFRICA WANTS.

The timber requirements of South Africa were recently the subject matter of a elaborate report prepared by the Norwegian consul at Durban, Natal. It is well known that Norwegian manufacturers have a large share of that country's trade of lumber, and also that the shipments from the Pacific coast are taking the place of Norway and other exporting countries to a considerable extent.

The market prices of timber were quoted per running foot, as follows: Deals, fourth and fifth quality, 3x9 to 17 feet, per foot 10½ cents; same up to 18 and 19 feet, 11½ cents; same, 20 feet and above, 13 cents; 3x11 feet, 14 and 15 cents; 4x9 feet, 16 cents; 4x11, 20 cents; planed ceiling, quality "colonial mixed and thirds," 5½x6½ feet up to 20 feet, per foot, 1½ cents; 5½x5 feet, 1 cent; flooring, same quality, 1x6½ feet, up to 20 feet, 2 and 3 cents. These prices include delivery to buyers, less 5 per cent. discount, and from thirty to sixty days' credit. Landing charges are: Deals, per ton (40 cubic feet), 25 cents; boards, 31 to 37 cents. Sorting: Deals, 18 to 25 cents, boards 25 to 31 cents per ton; delivery from wharf to any building site in town, 41 cents a ton. The customs duties are 2 cents a cubic foot for rough timber, and 3 cents for planed.

The sizes most preferred are: Deals, 3x9, 4x9, 3x11, 3x8, and 3x6 feet; scantlings, 3x4½, 3x3, 2x4½, 1½x4½, 2x3 and 4x4 feet; boards, 1x6½, 5½x6½, 1x5 and 1½x6½ feet. The consul says that it is far more advantageous for exporters to send the sizes and qualities used locally, and get good prices for them, than to send those for which there is no demand. Although the latter eventually find buyers, after much delay, they have to be disposed of at low prices. It has been his experience to see cargo after cargo of unsuitable sizes remain a drug on the market for long periods. Consignors who ship such cargoes create difficulties for the consignees, who cannot realize to the satisfaction of their clients. There is a heavy demand for spars from twenty-eight to forty feet in length and not less than three to four inches in diameter.

They are sent as deck loads, and the prices range from \$2.50 to \$3.25 each, landed and delivered.

The dimensions and prices of made doors most suitable are as follows: Six and a half feet by 2½ feet by 1¼ inches, molded on both sides, \$2 to \$2.60 each; 6½x2½ feet x 1 1-2 inches, molded on both sides, \$2.35 to \$3.10 each; 6 1-2x2 1-2x1¼ inches, molded on both sides, \$3.50 each. These prices include delivery to buyer, less 5 per cent. discount. Duties are 7 1-2 per cent. ad valorem. The dimensions and prices of molding in demand are: Three-inch cornice, per running foot, 2 cents; 4-inch, 2 1-2 cents; 5-inch, 3 cents; 6-inch, 4 cents; 3-inch architraves, 3 cents; 4-inch, 3¼ cents; 5-inch, 4 cents; 6-inch, 4 1-2 cents; 3-inch O. G. molding, 2 1-2 cents; 4-inch 2¾ cts; 6-inch skirting, O. G. 21-2 cts.; 7-inch, 3¼ cents; 9-inch, 4 1-2 cents. These prices include delivery to building site, less 5 per cent.

The consul reports a great demand for packing cases, saying that in Durban alone from 50,000 to 70,000 are used every year. He gives these samples of three specifications: Case No. 18—Ends 16x7x¾ inches, one piece each; sides 19x7x¾ inches, one piece each, lid and bottom 19x16¾x¾, two pieces each. Case No. 11—Ends, 12½x6½x¾, one piece; sides, 28½x6½x½, one piece each; lid and bottom, 28½x13½x½, one piece each. Case No. 20—Ends 12½x6½x¾, one piece each; sides 20x6½x¾, one piece each; lid and bottom 20x13½x½, two pieces each. The thicknesses of the end pieces in Nos. 11 and 20, and the thickness of the lid, bottom and sides of No. 18 are actual. All the other thicknesses are nominal, and one sixteenth may be allowed for sawing.

The United States consul general at Cape Town reports: "The lumber trade for the year is highly gratifying, and the United States has had the bulk. Twelve American sailing vessels are now awaiting discharges. The lumber is principally Oregon pine, (Douglas fir). For the year ended June 30, 1901, over fifty Swedish and Norwegian sailing ships have left South Africa for our southern ports, to bring back pitch pine. It is to be regretted that American ships could not be found to do this work."

Wood that will stand the attacks of white ants will find a ready market in South Africa. It has been found that the Canadian spruce pine is very liable to destruction by the white ant. Norwegian and Swedish deals are in great demand, as the dimensions of this timber are superior.

As to chances of a good market in the future, it is reported that plans are matured for expending \$10,000,000 on railway; that several thousand miles of telegraph lines are to be erected and renewed; that £1,000,000 is to be spent on public works, £3,000,000 on harbours; that £7,000,000 will be expended in the Transvaal, and a like proportion for the Orange Colony.

To cut lumber requires a mill and some brains; to cut prices requires neither.

Only poor advertising is an expense. Good advertising is always a paying investment. —Printers' Ink.

TESTING A SULPHITE COOK.

A correspondent of the World's Paper Trade Review asks: "In boiling wood, what are the usual tests to ascertain completion of cooking operation?" to which that paper replies as follows:

"In sulphite processes for boiling wood, one or both of the following tests are employed. Iodine test: A sample of the liquor is taken from the digester by means of the test cock, of which 1 cc. is run into an 8-ounce glass beaker, half filled with distilled water. To this is added a few drops of starch solution and titrated with a decinormal solution of iodine until the appearance of the bluish tint of the starch compound of iodine. If less than 2 cc. of iodine solution turns it bluish, the acid is almost exhausted and the wood is considered sufficiently boiled. Of course this only holds good providing the correct proportions of wood and liquor were employed.

If the wood employed is hard, dark or knotty, the boiling may be continued until only 1 cc. of iodine is sufficient to show the blue coloration. If the boiling is continued beyond this, sulphuric acid soon shows itself by burning or charring the pulp. Ammonia test: This test is generally employed by the foreman or boilermen themselves, as it requires less skill and manipulation than the iodine test. A small test tube is three parts filled with liquor from the digester and a few drops of strong ammonia added. If the liquor remains a light color and precipitates lime, it shows the liquor is not exhausted and the boiling may be continued. If the ammonia throws down no precipitate, or very little, the liquor is exhausted and the boiling must be stopped at once. If a brown ring is formed on adding ammonia the boiling should be stopped. A sample of pulp should also be examined to ascertain if it is sufficiently boiled."

PETRIFIED WOOD IN SOUTH RUSSIA.

An interesting account is given in a contemporary of some remarkable deposits of petrified wood existing in one of the rivers of South Russia. The deposit consists of a quantity of calcined oak lying in the bed of the river in layers three or four deep, and extending over an area of some 150 miles. A main feature—which, indeed, constitutes the chief value of this specific hardwood—is its variety of colors. No fewer than twelve shades in pink, blue, yellow and that known as American walnut, have been found. This peculiar formation would seem to have been caused by the variegated character of the soil at the bottom of the river. How long nature has taken to achieve this feat is a question to be solved by geologists. The excavated timber is in logs of from 42 feet to 100 feet in length by 15 inches to 20 inches in diameter, and each log is one uniform shade throughout. The effect must be far less pleasing than that produced by the petrified wood of Arizona, where all the colors of the rainbow are shown in a single piece. No indication is given as to whether the Russian petrified wood could be used for ornamental purposes. For years there has been a steady, although limited use made of the American chalcedony.

THE LATE HONORABLE R. R. DOBELL.

It was with feelings of profound regret that the people of Canada learned of the death of Hon. R. R. Dobell, which took place at Folkestone, England, on January 13th, as the result of being thrown from his horse. Mr. Dobell was a member without portfolio of the Dominion Cabinet, and head of the lumber exporting firm of Dobell, Beckett & Company. In the former capacity he had been prominently before the people, while his business interests were of such magnitude as to give him an acquaintance and standing which few men enjoy. His death is a national calamity and an almost irreparable loss to the city of Quebec, of which he was a resident.

Hon. Richard Reid Dobell was born in Liverpool, England, in 1837, and when a lad was engaged as clerk for a timber importing firm. When twenty years of age he came to Canada to promote the business of buying and shipping timber, and subsequently founded the lumber and mercantile firm of R. R. Dobeil & Company, of Quebec, which has since been changed to Dobell, Beckett & Company. The Dobell firm, like others in the timber trade, had its vicissitudes and frequently encountered severe fluctuations in the prices of timber. But Mr. Dobell possessed indomitable energy and an enormous capacity for work, which, combined with good judgment and administrative capacity, invariably surmounted the difficulties. The strain under which some men sank only braced Mr. Dobell to renewed enterprise. An immense lumber business was built up by his firm, the shipments in late years sometimes reaching 80,000,000 feet.

It was Mr. Dobell's custom to make frequent visits to Great Britain, to which country almost his entire shipments were made. He was widely known in England and was an enthusiastic Canadian and Imperialist. He did eminent service in London by declaring his optimistic views as to the resources and future of Canada.

As a member of the Dominion Cabinet, Mr. Dobell was able to wield a power little known to the public. His political career began in 1895, when he was elected as independent Conservative for Quebec West, but on a recount he lost his seat. The following year he was elected in the same constituency as an independent, and upon the formation of the Laurier Administration was made a member of the Cabinet without portfolio. At different periods he acted as temporary political head of several departments, his longest service in this capacity being as Acting Minister of Inland Revenue. He was re-elected for Quebec West in 1900.

The late Mr. Dobell had been identified with most of the enterprises having in view the advancement of the port of Quebec and the St. Lawrence trade generally. He had been president of the Quebec Board of Trade, a member of the Harbor Board, a director of the Quebec Bridge Company, and was active in the promotion of the new Canadian Atlantic cable. He had a firm belief in the future destiny of Quebec as an ocean port, and was an advocate of the fast Atlantic steamship service and of

winter navigation from Quebec to Montreal. He was a delegate to the Congress of Chambers of Commerce of the Empire in 1892 and in 1896, and in 1894 was elected president of the deep waterways convention which met at Toronto.

But it was in private rather than political life that the late Mr. Dobell won distinction. Generous in purse and charitable in judgment, gifted with physical vigor and inexhaustible vitality, he was one of the most affectionate of men, harboring no ill will towards any person. In works of philanthropy he took a leading part. None have striven harder or more conscientiously to be of use to their fellowmen in their day and generation, and none will be more deservedly mourned by all.

Mr. Dobell married Elizabeth Frances, eldest daughter of the late Sir David Macpherson, of Toronto, and leaves three sons and two daughters. Mr. W. M. Dobell is a member of the firm of Dobell, Beckett & Company,



THE LATE HON. R. R. DOBELL.

Mr. Alfred Dobell is a law student, and Major C. M. Dobell is in the Imperial Service, an officer of the Royal Welsh Fusiliers.

Sir Charles W. Dilke contributes to "The Cosmopolitan" for February an article on "The Naval Strength of the Nations" which gives not only a most interesting and comprehensive account of the navies of the great powers, but also a clear insight into world politics.

An interesting question as to insurance has come up in New York state. The premium on a saw mill had been in arrears two months, though the subject of correspondence, when it burned. At the time of the fire a check for the premium was under way and was received by the company three hours after the fire. The mill owner demands the payment of the policy, while the company holds that there was no mill to be insured when the premium was received and therefore the policy was void. The United States district court at Buffalo will have to decide this question, which is entitled *Meyer vs. Pennsylvania Lumbermen's Mutual Fire Insurance Company*.

SAWS IN FROSTY WEATHER.

Do you have trouble with your saws in winter? It is quite common, says Barre Box, to hear complaints about the way their saws when the frost gets in the timber so a word on the subject is not out of place. There are troubles and troubles that concern the sawing machines, and a man would have to attend each individual case in person to make a sure thing of the individual trouble and its remedy, but the first is a common trouble and there is a general remedy that can be cited. That remedy is, slow down, the speed of your saws down at least 25 per cent. from the normal when you go into frozen stock, and the chances are in favor of your having very little trouble. It is simply a matter of proportioning speed to the density and hardness of the wood, and no matter what your speed is, when your timber becomes frosty it is in order to reduce it. This may seem queer when you look at it in the light that there are saws and sawmills that run in frozen timber at a speed that is above the normal at which you operate your saws, but that does not alter the logic of the idea. Your saws are hammered and tensioned to cut a certain wood at a certain speed, and when you change either the speed or the wood without changing the other there is trouble. That is what happens when the wood gets frosty, it is changed into a harder wood, and unless you want to get your saws hammered up for it you should lower the speed, and this holds good regardless of what the speed is—within reasonable bounds. There is, without question, such a thing as too high and too low a speed for good work, but that is always understood. How to lower the speed is sometimes a problem, especially if there is other machinery attached that requires the full speed of the engine, and that you cannot slow down there, and about the best way to solve that problem is to provide yourself with an extra pulley for your saw mandrel that is somewhat larger than the one you operate with in the summer time. Mill men who have alternate runs of soft and hard wood find it good policy to carry large mandrel pulleys in this way regardless of frost, and any man who has trouble with his saws in winter weather will find a larger mandrel pulley a good investment. The foregoing applies particularly to sawmills, but the same logic ought to hold good with a heading saw so far as the speed question is concerned, and where heading is manufactured, a progressive policy is to slow down the engine during winter. In other words, a general specific for saw trouble in the winter is to run slower, and then if there remain troubles they are of special nature and need special treatment.

Another way of protecting the tops of piles of lumber while drying is that adopted by the Canton, Ohio, firm that air-dries all its stock. The last tiers on the top are offset to the center of the pile about half the width of the board on each side for successive tiers until the top is reached, with one board for the crown of the pile. This top board is allowed to project over the ends of the pile, being fastened down by a strap at either end of the pile.

THE NEWS

Moffatt is building a new shingle mill at N.B.

Chisholm, lumber dealer, Oxford, N.S., month.

saw mill has been built by Weston & Sons on, Que.

Fox River Lumber Company, Limited, has organized at Fox River, N. S.

Columbia Saw Mill Company have decided to their saw mill at Hazelmere, B.C.

ements will be made this spring to the and box factory at Sundridge, Ont.

ive improvements are being made at the of Gillies Bros. at Braeside, Que.

achinery is being installed in the Northern company's saw mill at Pine River, Man.

Black, formerly of Walkerton, Ont., has a shingle mill and timber limit at Pike Bay.

Bros. are about to erect a steam saw mill at N.B., for the manufacture of lumber and

Firstbrook Box Company, of Penetanguishene, preparing to build a new saw mill at the head

Gregory, of St. John, N.B., is building a mill at Lepreaux, which will be put into operation spring.

annual meeting of the Montreal Lumber held in Montreal last month, the old board was re-elected.

ard & McKinley, builders and planing mill London, Ont., have dissolved partnership, Millard continuing.

Morton, lumber dealer, Milton, N. S., has J. S. Morton as partner, and the firm name G. Morton & Son.

Eastman Lumber Company are building an to their mill at Racine, Que., for the purpose acturing clapboards on a large scale.

eg the new industries likely to be established on, Ont., this year are two saw mills and a door factory, the latter by Pullybank Bros., of

announced that the Clarksburg Wood Rim and the Shupe Manufacturing Company, of on, Ont., which amalgamated two years ago, wound up.

mas Bros., of Norwich, Ont., purpose removing Thomas, where they will establish a plant to here washboards, butter boxes, and box shooks port trade.

Collins will operate a saw and shingle mill at Ont., this year, and expects to start sawing el. The capacity of the mill is about per day.

value of forest products exported from Canada six months ending December 31st, 1901, was 17, as compared with \$19,666,158 for the oding period in 1900.

first shipment of lumber from Port Arthur, Winnipeg over the Canadian Northern Rail- made by Vigers & Company on January 10th. was decorated with flags and bunting.

announced that the timber limits, saw mill, the Moodyville Land & Saw Mill Company, B.C., have been purchased by the parties ol the British Columbia Mills, Timber & Company.

reported that the large saw mill at Moodyville, oding timber limits, has been sold to an Eng- ate, at a figure in the vicinity of \$110,000.

ard & Company have been agents for the e past five years.

gwood, Ont., is becoming a central point for acture of lumber. J. & T. Charlton located e fall of 1899, and it is said that a large firm

has secured an option on a site along the lake shore on which to build a large mill this year.

A new concern, known as the West Coast Timber Company, Limited, was incorporated by the British Columbia Government in December last. The president is E. B. Morgan and the secretary-treasurer H. G. Ross. The head office of the company is in Vancouver.

F. H. Clergue, of Sault Ste. Marie, Ont., has decided to build a reading room at each of the seven camps connected with the lumbering operations of the Algoma Commercial Company. Application will be made to the Department of Education for travelling libraries.

Work was commenced early in January on the large saw mill to be built in Vancouver by the Pacific Coast Lumber Company. The mill will have a capacity of 300,000 feet of lumber per day. The machinery is being supplied by the William Hamilton Manufacturing Company, of Peterborough, Ont.

The Standard Lumber Company, of Manitoba, is seeking incorporation, to carry on a lumber business throughout the Dominion, the capital stock to be \$125,000. Peter McArthur, A. D. McArthur and George Barr, of Westbourne, G. O. Bellamy, of Winnipegosis, and J. G. Harvey, of Dauphin, are the applicants.

Negotiations are under way between R. H. Pope and the Standard Chemical Company looking towards the establishment of the latter of a large chemical factory at Cookshire, Que. The plant is estimated to cost about \$30,000, and Mr. Pope is to get out on his limits in Auckland and East Clifton upwards of 10,000 cords of wood.

The lumber firm of H. Elderkin & Co., Port Greville, N.S., have built on an average one vessel annually for about thirteen years. Their draughtsman is said to be one of the best in the province. The firm own large tracts of timber lands, including considerable virgin timber, and ship large quantities of piling and spars to Boston and New York.

James Bain, jr., read a paper before the Canadian Institute on January 11th on "National Parks and Forest Reservation." He reviewed the action of European nations in preserving large areas for the benefit of their citizens and for the supply of timber products, and pointed out how generously the United States Government had during the past twenty years preserved immense tracts of country in the west for parks and reservation. The total area set apart amounts to 50,000,000 acres, or nearly the area of Great Britain. He commended the Ontario Government in setting apart the Algonquin Park, Rondeau Park, and the forest reservations in the counties of Frontenac and Addington and township of Sibley. He urged the extension of the Temiscaming reserve over the whole of the country near the height of land north of Lake Huron.

CASUALTIES.

While operating a circular saw in his planing mill J. S. Desrivieres, of Ottawa, had two fingers of his left hand severed.

W. J. Beattie was caught in the machinery of D. C. Beattie's planing mill at Norwich, Ont., and received injuries from which he died.

John Wilson, employed in the Rathbun Company's lumber camp in Findlayson township, was killed on December 31st by a falling limb.

TRADE NOTES.

Mr. C. M. Strange, who for many years represented Messrs. Lewis Bros., of Montreal, on the road, has recently been appointed warehouse manager

Mr. Theo. Korb, late of St. Louis, has recently taken charge of the advertising department of Messrs. Lewis Bros., of Montreal. Mr. Korb will give to the duties of his present position the benefit of a wide experience.

A new company is being formed in Toronto to take over the business of the John Abell Company, manufacturers of engines, boilers, and general machinery. The company will have a large capital and will proceed at once to extend the business.

The Syracuse Smelting Works, of Montreal, have

sent their customers a neat calendar, showing the figures of two girls on a tandem going at a high rate speed down a steep hill with a bar of Syracuse rabbit under the wheels. The illustration gives an exact idea of the anti-friction qualities of the metal

PERSONAL.

Hon. John Sharples has been re-elected first vice-president of the Quebec Board of Trade.

Mr. D. C. Cameron, manager of the Rat Portage Lumber Company, has been re-elected as mayor of Rat Portage, Ont.

Mr. W. A. Hare, a graduate of the School of Practical Science, Toronto, has been engaged as superintendent of the car building works of Rhodes, Curry & Company, Amherst, N. S.

Mr. J. M. Chisholm, representative at Winnipeg for the Rat Portage Lumber Company, was on Christmas morning presented by the members of his staff with a handsome gold headed cane, suitably engraved.

Mr. William Power, of the firm of W. & J. Sharples, lumber merchants, Quebec, has been elected by acclamation as member for Quebec West in the Dominion Parliament, to fill the vacancy caused by the death of Hon. R. R. Dobbell.

Mr. H. Herrebout, a capitalist from Antwerp, Belgium, visited Eastern Canada early in January with the object of arranging for the shipment of hardwood lumber to Belgium, where he states there is a good market for that class of timber.

Mr. O. G. Anderson, manager of the Anderson Furniture Company at Woodstock, Ont., which has been absorbed by the Canadian Furniture Manufacturers, Limited, has severed his connection with the establishment, and will probably build a new factory at some other point.

Mr. F. T. Rutherford, of Winnipeg, has been appointed travelling agent in Manitoba and the Territories as far west as Moose Jaw, for the North Pacific Lumber Company, of Barnet, B.C. Mr. Rutherford is the youngest son of Mr. Thomas Rutherford, of the lumber firm of Brown & Rutherford, Winnipeg.

A pretty wedding was celebrated early in January at the residence of Mr. John Bertram, 9 Walmer road, Toronto, when his daughter, Miss Ella A. Bertram, became the bride of Mr. C. W. Pitt, of the Collins Inlet Lumber Company. Mr. and Mrs. Pitt received many tokens of esteem, and were warmly congratulated by numerous friends.

Mr. William Little, who has been connected with the Magann-Fawke Lumber Company at Toronto for some time, has gone to Irving, Kentucky, to look after the financial interests of the above firm in connection with their manufacturing department. The company have a large circular and band saw mill at Irving, manufacturing chiefly whitewood and oak.

Mr. C. W. Burns, who recently sold his lumber business at Trout Creek, Ont., to the Anderson Furniture Company, has resigned his position as manager for this company at Trout Creek, and is about to leave for British Columbia to engage in lumbering in that province. Mr. Burns has already had considerable experience in lumbering in California, and is therefore familiar with the character of the timber in British Columbia and the methods of handling and manufacturing. He is also experienced in the manufacture of shingles, and will no doubt meet with success.

The Collins Bay Rafting & Forwarding Company, of Kingston, Ont., are reported to have disposed of their rafting business to the Calvin Company of that city. The reason for the sale is said to be the falling off in the quantity of square timber shipped to the Quebec market.

To file a rip saw with a sharp bevel to the teeth and use it as a cross cut has often been done, but is commonly regarded as a makeshift and is not done except in cases of necessity. A filer in a Michigan factory found the results so satisfactory from that method of filing that he now uses it in preference to the common method of filing. But as one swallow does not make a summer, it is not expected that there will be any great haste in other filers to follow the example.

CARING FOR RAW MATERIAL.

It is generally conceded that the best way to preserve logs or blocks of timber is to store them in the water. However, water is not always available for this purpose, and, when there is a big stock of valuable timber to be cared for at the mill till it can be worked up, it is frequently a source of worry. Painting the ends of logs is a help in this way, and is quite frequently resorted to, but even with this there is need for some shelter from the sun. It may seem a little odd, too, but it appears that about as good a way to do this as any is to cover the stock with sawdust and such trash that accumulates about a mill. A pile of burls and short logs covered in this way present something of the appearance of an old abandoned mill site with a few old stumps and log ends mixed up with the sawdust pile. At first flash this whole thing looks like decay, and there is no doubt but what it is conducive to decay as far as the sap portion of the wood is concerned, but in making fine veneer that is waste stock, any way, so there is not so much loss, and there is no question but that the sawdust will prevent season cracks. Probably a better settling of the point here would be to say that the sawdust pile is not resorted to for indefinite storing, but where there is a desire to protect fine logs and burls from the sun for a short season it is undoubtedly effective.

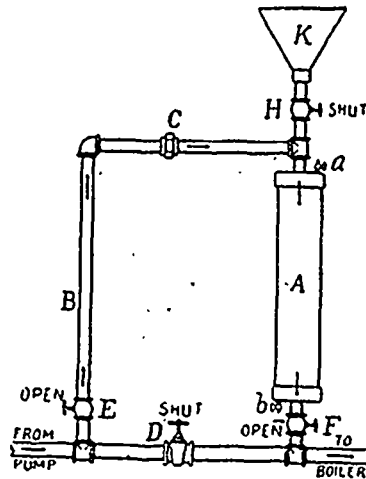
Great Britain pays out annually for timber and lumber over one hundred million dollars.

INTRODUCING SOLVENTS INTO BOILERS.

We are often asked by engineers and others how to introduce scale solvents, such as soda ash, into a boiler. We took up this question at some length in the issues of The Locomotive for July and August, 1888, when we showed two very convenient arrangements for pumping the dissolved solvent into the boiler, and also a method of introducing it by means of an injector. These different methods ordinarily work very well in practice, but we have occasionally had complaints to the

the boiler without passing through the pump at all. The present arrangement is for more piping than the ones previously shown, and its only advantage is that it saves the pump.

Referring to the illustration, it is a section of big pipe, say 6 inches in diameter, which is to serve as a reservoir. It connects with the feed pipe running from the pump to the boiler, by means of the pipes B, C, and F, which are so arranged that they connect the feed pipe on opposite sides of the stop valve D. Over the reservoir is a funnel, K, by means of which the reservoir, A, can be filled through the valve H. The reservoir, A, is provided with pet-cocks, a and b, at the top and bottom, so that it may be readily filled and emptied. A union is provided at C, to facilitate the assembling of the piping. (A right-angle elbow, of course, may be used instead, if it is preferred.)



ARRANGEMENT OF PIPING FOR INTRODUCING SOLVENTS.

effect that the soda ash, when passed through the pump, eats out the packing thereof. We think this would hardly be likely to occur with a new packing, but with an old one, which had become impregnated with oil or grease, the soda ash might easily give some such trouble as has been reported.

To assist those who have had difficulties of this sort, we present, herewith, another plan for introducing the dissolved solvent, by means of which it is forced into

The device is used as follows. The reservoir A being empty, valves E and F, and pet-cock b, are first closed, and valve H, and pet-cock a, are opened. The soda ash solution is then poured into K, until the reservoir A is filled. The valve H and the pet-cock a are then closed, as well as the valve D, in the main pipe. Valves E and F are then opened, and the pump is started. The device is then in the condition shown in the engraving, and the water from the pump passes through B, C, and A, as shown by the arrows, sweeping the contents of A out into the boiler.

When the pump has been run long enough to thoroughly remove all soda ash from A, valve D may be opened and valves E and F closed. The reservoir A is then emptied by opening pet-cock b and closing pet-cock a or valve H, and the device is again ready for operation.—The Locomotive.

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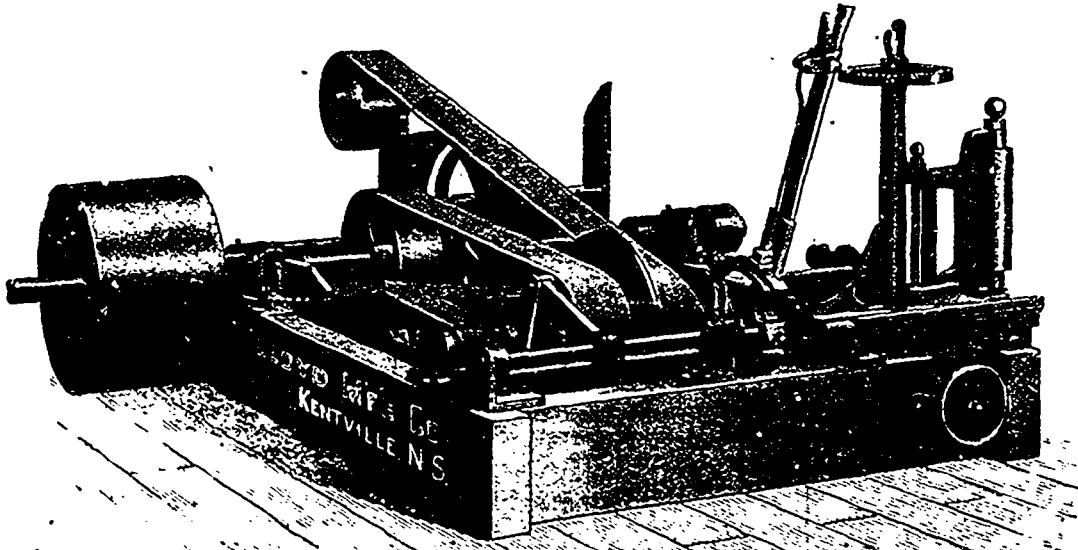
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Owing to the rapid wholesale manner in which we move and handle lumber we do not consider it practicable to issue a stock sheet or make standing quotations, for which reason we solicit your inquiries for any material that you are in the market to buy or will use in the future, and if you will take the time to furnish us the above information, we will make you some interesting quotations.

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BRITISH COLUMBIA LUMBERMEN'S ASSOCIATION.

A report of the annual meeting of the British Columbia Lumber and Shingle Manufacturers' Association was received just after our January issue had gone to press. The meeting was held in Vancouver on December 17th, when officers were elected and the price list revised and ordered to be published in more concise form. The new list includes a schedule for the Vancouver trade, one for the Fraser River trade, and others for export and Manitoba and eastern trade. The officers elected for 1902, and the various committees appointed, are as follows:

President, John Hendry (B. C. Mills, T. & T. Co., Ltd.), Vancouver; **Vice-President**, J. A. McNair, (Hastings Shingle Manufacturing Co., Limited), Vancouver; **Secretary**, William T. Stein, Chartered Accountant, Vancouver; **Honorary Treasurer**, William Sulley (E. H. Heaps & Company), Cedar Cove.

LUMBER MILLS BRANCH: Chairman, L. A. Lewis (Brunette Sawmill Company, Ltd.), Sapperton; **Vice-Chairman**, P. D. Roe, Canadian Pacific Lumber Company, Ltd., Port Moody; **Committee**, R. Jardine (Royal City Planing Mills), New Westminster; E. C. Mahoney, (Royal City Planing Mills), Vancouver.

SHINGLE MILLS BRANCH: Chairman, E. H. Heaps (E. H. Heaps & Co.), Cedar Cove; **Vice-Chairman**, J. G. Scott (Pacific Coast Lumber Company, Ltd.), New Westminster;

Committee, H. H. Spicer (Spicer Shingle Mill Company, Ltd.), Vancouver; William Tytler, (Canada Shingle Company, Ltd.), Hastings; A. J. Welsh (B. C. Shingle Manufacturing Company, Ltd.), Vancouver.

SASH AND DOOR FACTORIES BRANCH: Chairman, S. N. Jarrett (Vancouver Sash and Door Company, Ltd.), Vancouver; **Vice-Chairman**, J. W. Hackett (Robertson & Hackett), Vancouver; **Committee**, E. H. Heaps, (E. H. Heaps & Company), Cedar Cove; E. C. Mahoney (Royal City Planing Mills), Vancouver; R. Jardine (Royal City Planing Mills), New Westminster.

STANDING COMMITTEES: Legislation, R. Jardine (Royal City Planing Mills), New Westminster; J. G. Woods (Moodyville Lands & Saw Mills Co.), Moodyville; L. A. Lewis (Brunette Sawmill Company, Ltd.), Sapperton.

RAILWAY RATES: C. M. Beecher (B. C. Mills T. & T. Company, Ltd.), Vancouver; P. D. Roe (Canadian Pacific Lumber Company, Ltd.), Port Moody; H. H. Spicer (Spicer Shingle Mill Co., Ltd.), Vancouver.

LABOR: E. C. Mahoney (Royal City Planing Mills), Vancouver; William Tytler (Canada Shingle Company, Ltd.), Hastings; H. DePencier (North Pacific Lumber Company, Ltd.), Barnet.

LOGS: C. M. Beecher (B. C. Mills, T. & T. Company, Ltd.), Vancouver; L. A. Lewis (Brunette Saw Mill Company, Ltd.), Sapperton; J. W. Hackett (Robertson & Hackett), Vancouver.

UTILIZING PINE WASTE.

A western firm write the CANADA LUMBERMAN as follows: "We are operating a small planing mill, sash and door factory and jobbing shop, and find that we have a good deal of pine waste that looks too good to throw away, and yet we cannot just see how we can work it up profitably. We would not have enough of this waste to consider shipping any product by the carload. Could you make us a suggestion that would assist in solving the problem?"

We would be glad to hear from any of our readers who know of a profitable method of utilizing the waste from pine timber.

SAW MILL STATISTICS.

The preliminary census report of the saw mills, planing mills (operated in connection with saw mills) and timber camps of the United States shows the following figures for 1900 and the increase during the previous decade:

Establishments, 33,035; increase, 46 per cent.; capital, \$611,010,412; increase, 96 per cent. Average number wage earners, 283,510; increase, 9 per cent. Total wages, \$104,633,091; increase, 19 per cent. Miscellaneous expenses, \$71,719,239; decrease, 26 per cent. Cost of materials, \$317,607,048; increase, 31 per cent. Value of production, \$566,832,984; increase, 29 per cent.

PRACTICALLY STRETCHLESS

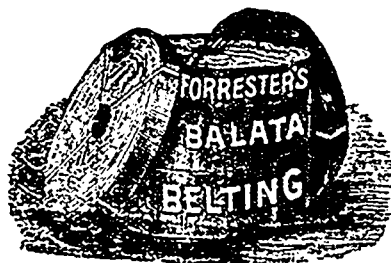
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WOOD PULP DEPARTMENT

PULP WOOD—TREATMENT OF THE RAW MATERIAL IN THE LOG AND ITS MEASUREMENT.

BY A CANADIAN PULPMAKER.

CHAPTER V.—MEASUREMENT BY THE SCALE OF CORDS.

As already suggested, there is, as yet, no fixed rule for calculating the relation existing between the contents of a number of logs as found by Doyle's rule, and as determined by a measurement of the same logs in term of standard cords.

Now, as the actual quantity of wood in a pile will vary slightly, according as the logs are large and piled loosely, or of small diameter and piled closely, custom allows sundry alterations in the dimensions of the standard cord in order to make up for deficiencies or differences arising from this cause. Hence a good many anomalies exist in certain localities. In some of the states 132 cubic feet is accepted as the cord, and wood contracts are based on that measure.

In the province of Quebec, until quite recently, the cord has been taken as equivalent to 1,000 feet board measure.

In some parts of New York state the cord has been allowed to scale 685 feet board measure.

As a result of careful observation as to the amount of lumber which could be obtained from a given number of logs, many experts on this question accept 500 feet board measure as the equivalent of a cord of wood.

As these relative quantities are fixed in a manner more or less arbitrary, they cannot serve as an exact measure of the contents of a cord of pulp wood. The amount of wood in a cord is determined somewhat by the diameter of the logs, and the manner in which they are piled. Thus, if a number of logs of large diameter are cut up into four-foot lengths and piled, the total quantity or weight of wood would not necessarily be the same as if a number of logs of smaller diameter were similarly treated, owing to the fact that the wood of smaller size will pack closer and leave less air space between the individual pieces of wood.

But in practical everyday work considerations of this kind are not of much account, for it is unlikely that in handling any quantity of logs the amount of wood in a number of piled cords would vary to a serious extent, that is when the whole quantity dealt with is considered.

The method adopted by the Government of Ontario seems to be based on more correct principles than any other system at present in use, although it must be confessed that it entails a good deal of work on the scaler or other employed in checking the wood cut.

This system has been referred to in a previous chapter, more particularly with respect to the practical work of scaling. The contractor or jobber is compelled to keep a record of the two end diameters of each and every log cut. The mean of the two figures recorded for each log is taken as the mean diameter, and this figure so obtained is the basis of after calculation.

The official standard of reckoning is the determination of the cubical contents of each log, and the selection of some empirical number for converting the total number of cubic feet of timber obtained into cords.

For this purpose the Government has issued a table showing the contents of round logs in solid cubic measure. Reference is made to this table and the scaler is thus enabled to work out the contents of the logs cut into solid cubic measure.

The following extract will serve to indicate the nature of the table, which in reality is only an ordinary mathematical table showing the volume, in cubic feet, of cylindrical bodies for certain diameters.

Length feet	Dia. 6 ins.	Dia. 8 ins.	Dia. 10 ins.	Dia. 12 ins.	Dia. 14 ins.	Dia. 16 ins.	Dia. 18 ins.
8	1.57	2.80	4.36	6.28	8.55	11.17	14.14
10	1.96	3.49	5.45	7.85	10.69	13.96	17.63
12	2.36	4.19	6.54	9.47	12.83	16.75	21.21
14	2.75	4.89	7.54	11.00	14.97	19.55	24.27
16	3.14	5.59	8.73	12.57	17.10	22.34	28.78
18	3.53	6.29	9.84	14.14	19.24	25.13	31.81
20	3.93	6.99	10.90	15.71	21.38	27.93	35.34

A log which measured 20 feet and having its small end diameter 6 inches and the large end 10 inches, thus giving a mean diameter of 8 inches, would contain by this table 6.99 cubic feet.

A log having a mean diameter of 6 inches and a length of 14 feet, would contain 2.75 cubic feet.

The contents of any log can readily be determined without reference to a table by the use of the general formula or rule as follows:—

$$\text{Cubic contents equals—} R^2 L$$

where the dimensions are all expressed in feet.

R is the radius (half the diameter).

L is the length.

Example:—What are the contents of a log 20 feet long, having a mean diameter of 8 inches.

$$\text{Contents are—} R^2 L = \frac{22}{7} \times \frac{16}{144} \times 20 = 6.99.$$

This is the figure given in the above table.

With the log 14 feet long having a mean diameter of 6 inches the same formula applies.

$$\text{Contents are—} R^2 L = \frac{22}{7} \times \frac{9}{144} \times 14 = 2.75.$$

The calculation of the total number of cubic feet, obtained in this way, into standard cords is effected by

taking 115 solid cubic feet as equivalent to one standard cord. This figure has been arrived at by the Government as the result of numerous experiments instituted with the intention of determining the relation between a piled cord and the solid contents of the wood comprised in that cord.

Thus, a number of logs giving a total measurement of 563,511.5 cubic feet would equal 4,900.1 cords.

This system of ascertaining the contents of pulp wood is commendable for several practical reasons, as it is independent of the size of the logs and no errors are introduced by large variations in the diameters of the logs.

The following table gives some idea of the number of logs required to produce a cord by this method of measurement:—

Diameter Inches.	Cubic Feet in One Log	Number of Logs
6	2.36	49
8	4.19	27
10	6.54	17
12	9.47	12
14	12.83	9
16	16.75	7
18	21.21	5

In all cases referred to, so far, the cord of wood consists of the raw material cut up into such lengths as required by circumstances, but after the removal of the natural bark and of the inner dark coloured bark the shrinkage in measurement is very appreciable.

Messrs. Griffin & Little, in their treatise, quote an experiment which was made in order to determine the important factor in the question of pulp wood manipulation:—

"One cord of green spruce, containing 37 per cent of moisture and weighing 4,440 lbs., when cut up into four-foot lengths, was barked by the usual barking machinery and again weighed. The weight so obtained was 3,750 lbs. This loss is about 20 per cent. In ordinary cases the shrinkage is somewhat greater, especially if the logs have not been closely trimmed or the projecting knots cut away."

According to this experiment it will take about 125 cords of unbarked wood to produce 100 cords of barked wood.

BRITISH PULP IMPORTS.

During the year 1901 the imports of wood pulp into Great Britain declined 37,379 tons, and in value £24,956, compared with the previous year. The total imports for the two years were 450,363 tons in 1901, and 487,742 tons in 1900. The following table shows the quantities of pulp supplied to the British market by different countries during the two years:

	1900 Tons.	1901 Tons.	Increase or Decrease Tons.
Norway	286,960	250,557	- 36,403
Sweden	113,067	104,863	- 8,204
Canada	54,507	70,364	+ 15,857
U. S. A.	12,006	11,384	- 622
Various	21,202	13,195	- 8,007

It will be seen that the past year was not a satisfactory one from point of demand, and consequently prices weakened considerably. The following are the

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Comparative values of wood pulp received from the countries mentioned:

	1900	1901	Increase or Decrease
Norway...	£1,323,105	£1,052,595	- £270,510
Sweden.....	830,001	845,097	+ 15,096
Canada.....	240,435	312,084	+ 65,649
U.S.A.	55,393	91,491	+ 36,098
Various.....	162,855	111,566	- 51,289

The tables make an interesting study. Canada was the only country that increased her exports of wood pulp to Great Britain last year. Altogether 70,364 tons were received, an increase of 15,857 tons, whilst the total value shows an increase of £65,649.

Of the total quantity imported Norway supplied 55.6 per cent., compared with 58.8 per cent. in the previous year. Sweden supplied 23.2 per cent., against 23.1 per cent. in 1900. Canada comes third, supplying 15.6 per cent. of the total import, whereas the percentage in 1900 was 11.1 per cent. The United States participated to the extent of 2.5 per cent., compared with 2.4 per cent. in the previous year. The average value of the

British imports of wood pulp last year given as follows: Norway, £4 4s per ton; Sweden, £8 1s; Canada £4 8s 6d; United States, £8. The World's Paper Trade Review, from which these figures are taken, does not give an explanation of the vast difference in the estimated value of pulp imported from the various countries.

350 miles below Quebec, by Clarke Bros., of New York.

The Blanche River Pulp Co. have asked the Ontario Government for an extension of time in which to build their proposed pulp mill.

C. A. Messerve, manager of the Boston and Nova Scotia Wood Pulp Company, is endeavoring to complete arrangements with New York capitalists for the early building of the proposed pulp mill at Wentworth, N. S.

A despatch from Winnipeg dated January 20th stated that Charles Chamberlain had just returned from New York, where he completed arrangements with capitalists for the erection of immense pulp and paper mills on the Winnipeg river, 66 miles from the city of Winnipeg.

It is understood that the work of completing the pulp and paper mills of the Sturgeon Falls Pulp Company at Sturgeon Falls, Ont., will be proceeded with at once. A. S. Fairbanks is making a survey of the mill property and as soon as this is completed the plans will be prepared.

PULP NOTES.

Roy & Cannon, solicitors, Quebec, are seeking incorporation for the New Richmond Timber Company, Limited, for the purpose of building pulp and paper mills.

A syndicate of American capitalists have made an offer for the purchase of the Dewar lumber property at St. George, N. B., the object being to build a large pulp mill thereon.

Ross & Holgate, consulting engineers of Toronto and Montreal, are preparing plans for the large pulp mill development to be undertaken at Seven Islands,

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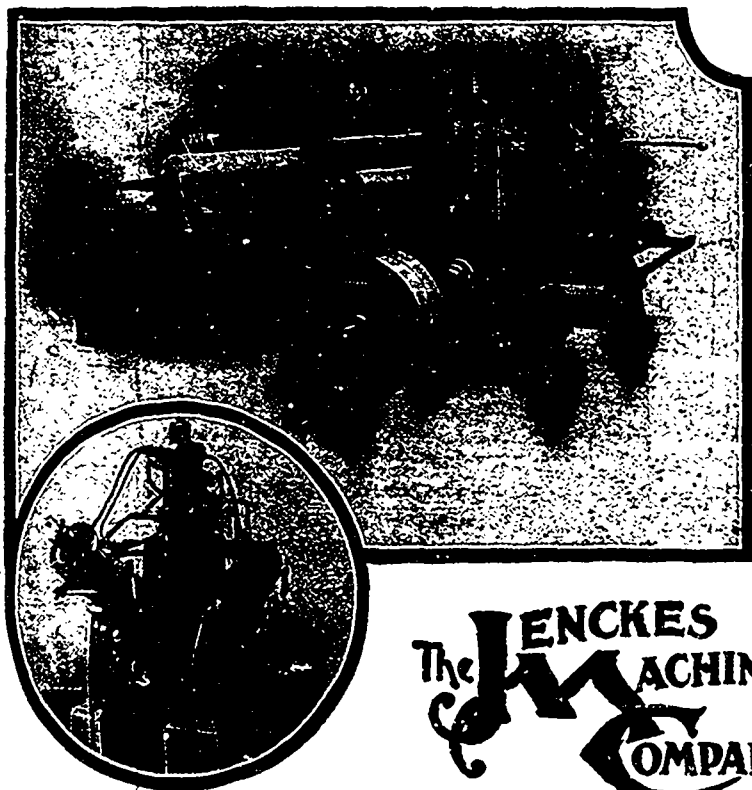
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Correspondence invited from those about to build new mills or renew and enlarge existing plants.

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CANADIAN FORESTRY ASSOCIATION.

At a meeting of the Board of Directors of the Canadian Forestry Association, held in Ottawa on January 6th, there were present: Messrs. W. Little, Wm. Saunders, C. E. E. Usher, Prof. John Macoun, E. Stewart, Norman M. Ross and R. H. Campbell. Arrangements for the annual meeting to be held on the 6th and 7th of March were discussed. So far as at present arranged, papers will be submitted by Dr. Wm. Saunders on the "Results of Experiments with Shelter

Belts as Carried Out at the Experimental Farms," by Norman M. Ross, assistant superintendent of forestry, on the "Work Accomplished by the Dominion Bureau in the West;" by Mr. W.N. Hutton, on the "Management of Wood Lots in Ontario." A report on the forest fires which have occurred throughout Canada during the past year is to be prepared by the secretary. Arrangements are being made for other papers on the management of spruce pulp forests and other subjects of special interest at the present time. The

Forestry Association numbers, having now 300, and is doing great interest in the preserv

H. L. Merritt, of Blenheim, is considering the removal of his saw mill to Galt.

In reply to a question asked in the Ontario Legislature, Hon. E. J. Davis, Commissioner of Crown Lands, stated that the province received \$550,000 during the past year as bonuses on past sales

steadily growing membership of our work to arouse interest in our forests.

Ont., is considering the removal of his saw mill to Galt.

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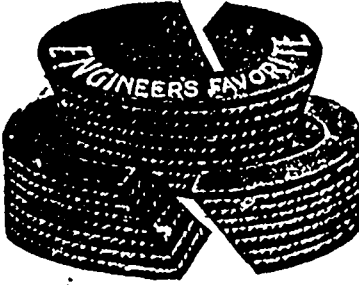
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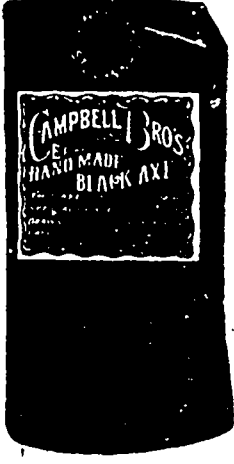
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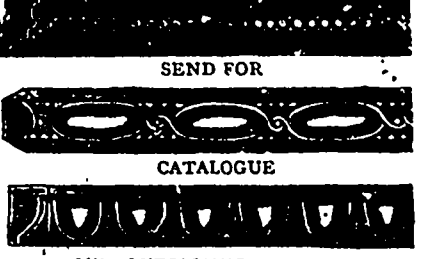


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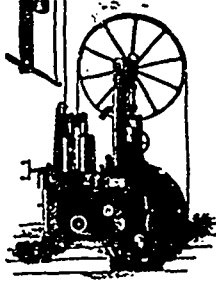
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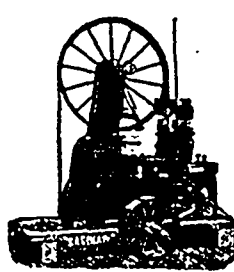
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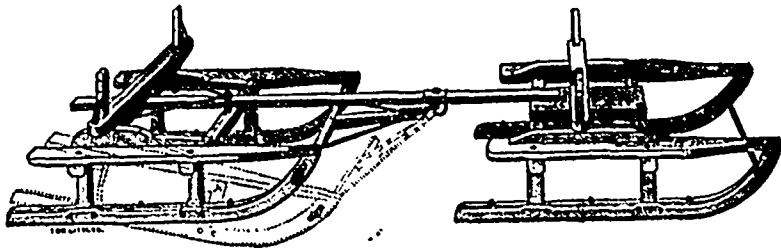
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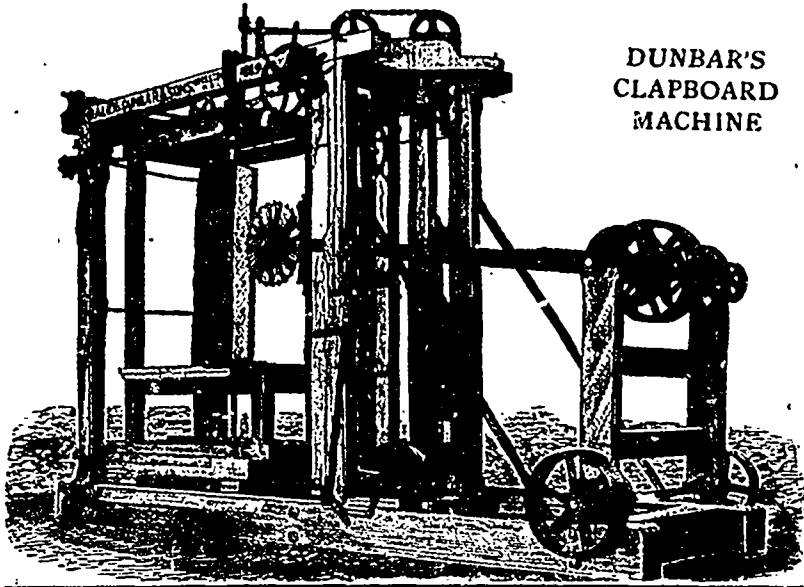
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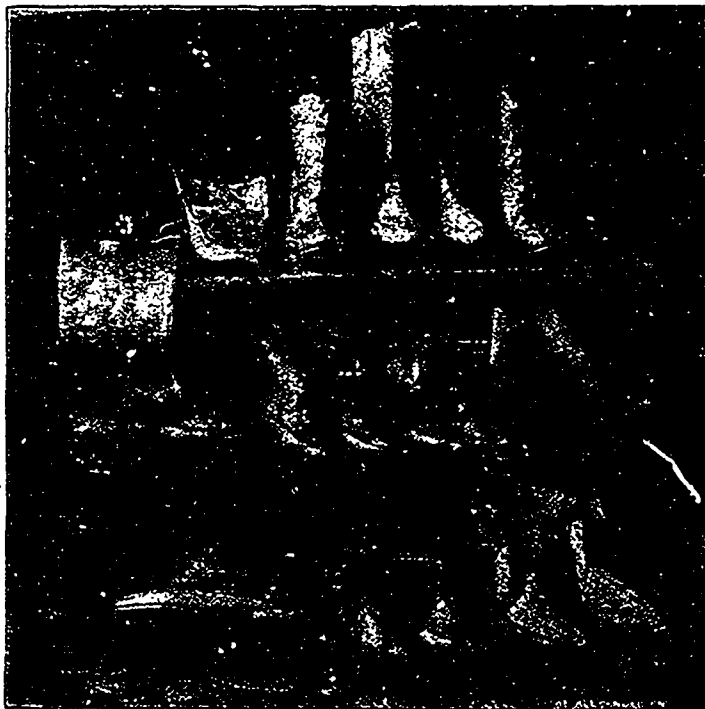
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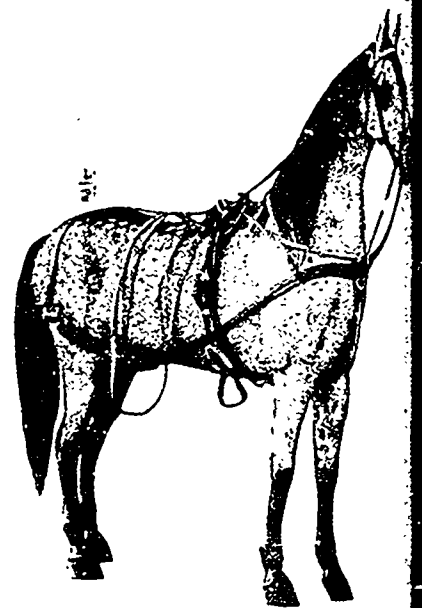
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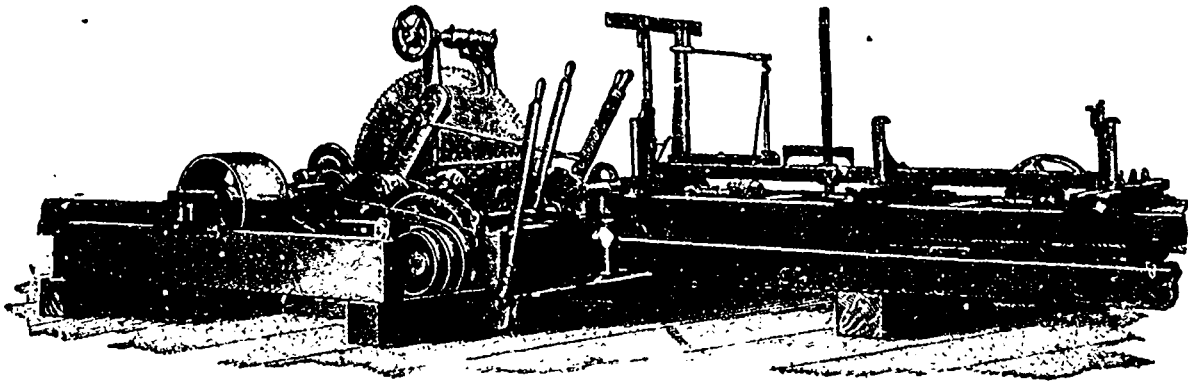
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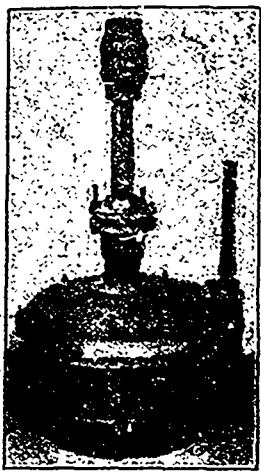


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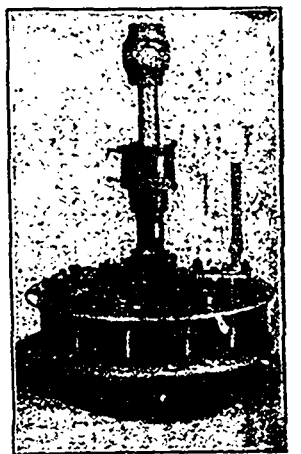


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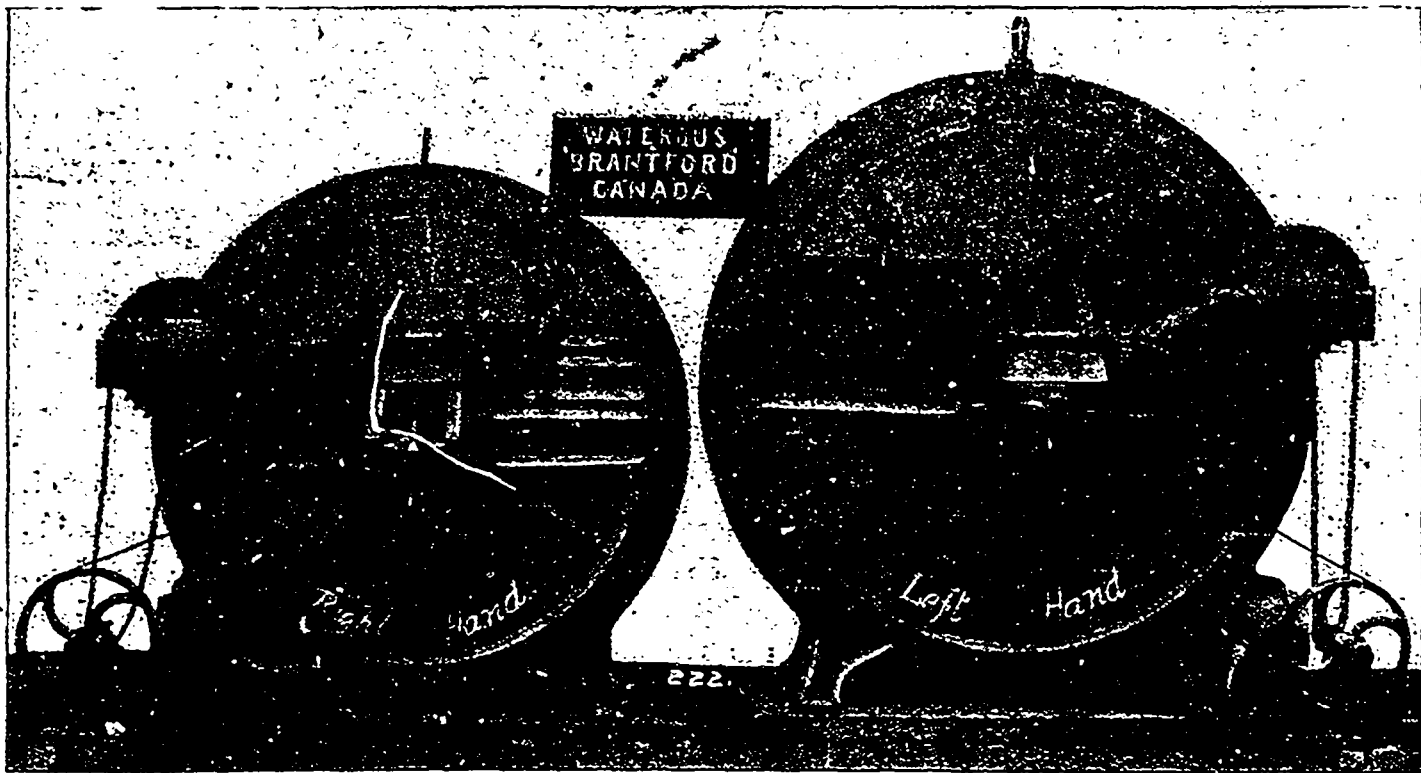
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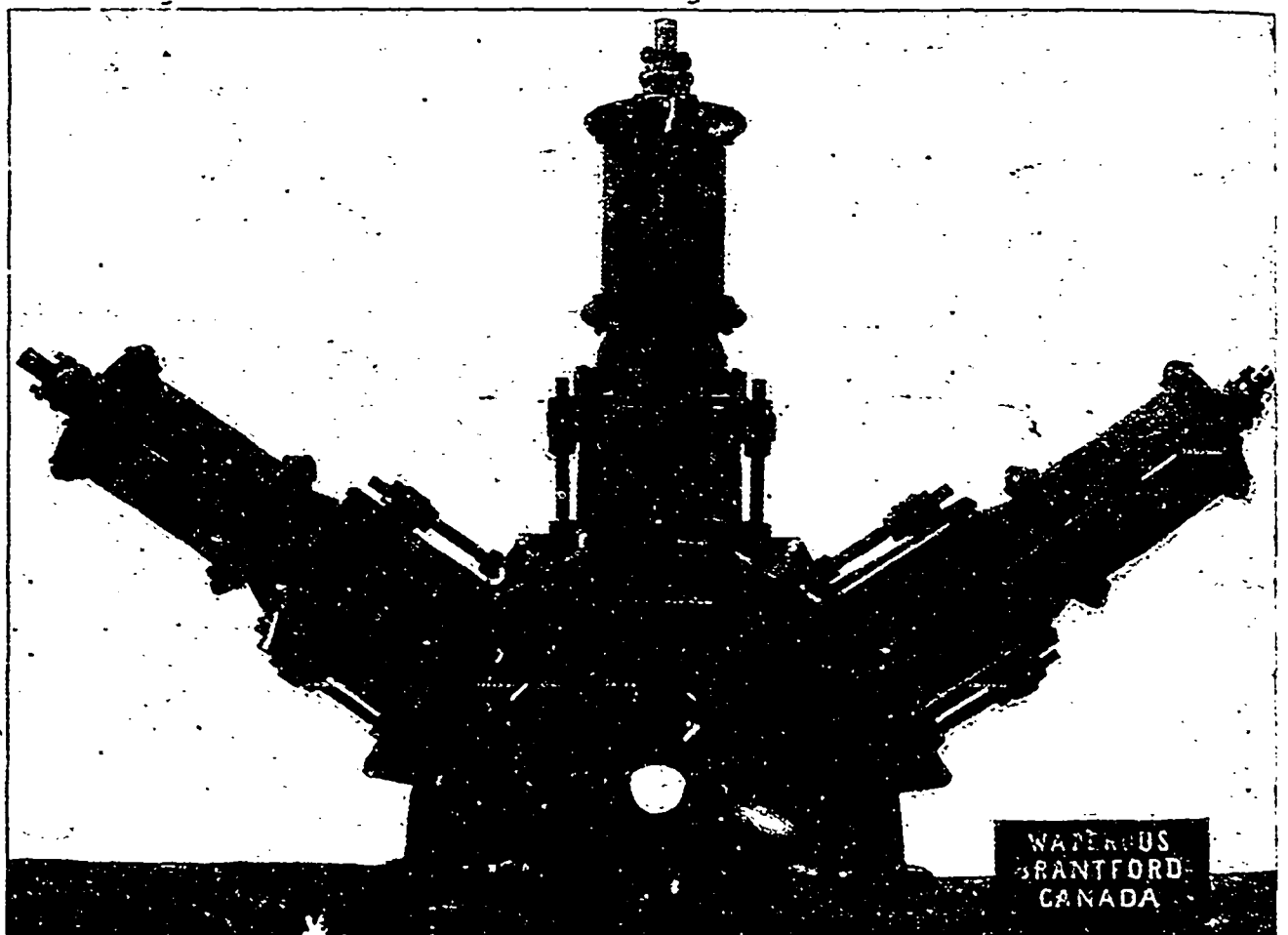
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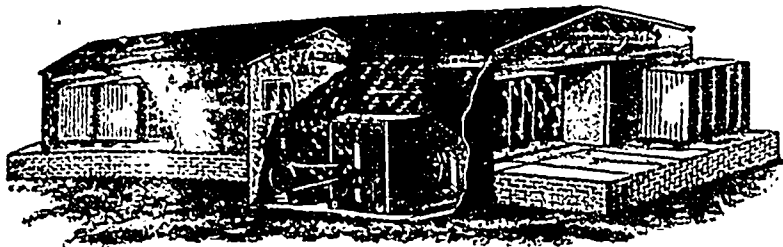
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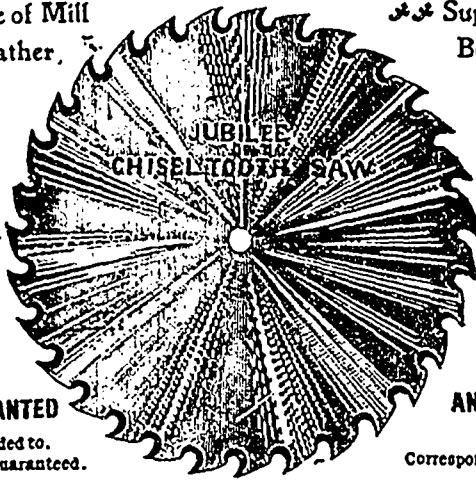
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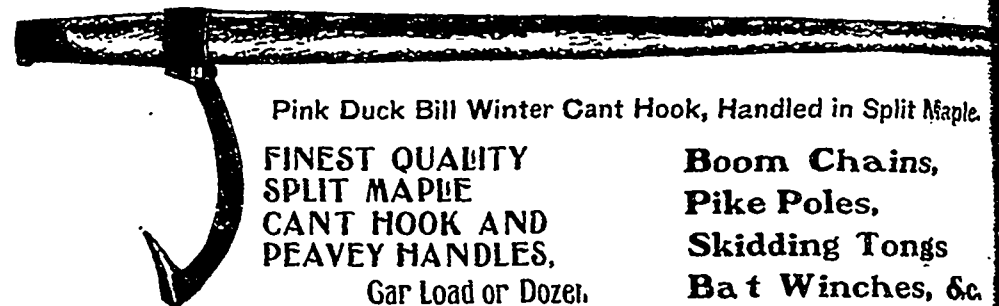
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