#### Technical and Bibliographic Notes / Notes techniques et bibliographiques

copy may of th signif	e Institute has attempted to obtain the best original by available for filming. Features of this copy which y be bibliographically unique, which may alter any the images in the reproduction, or which may nificantly change the usual method of filming, are coked below.						L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.  Coloured pages/						ł			
	Coloured cove Couverture de							L		jes de coi	•					
	Covers damaged/ Couverture endommagée						Pages damaged/ Pages endommagées									
	Covers restored Couverture res			e								or lamina ou pellicu				
	Cover title mis Le titre de cou	•	que					4	<i>_</i> `			tained or chetées o				
	Coloured maps/ Cartes géographiques en couleur						Pages detached/ Pages détachées									
	Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)						Showthrough/ Transparence									
	Coloured plate Planches et/ou							4		ality of p alité inég		ies/ impressio	n			
	Bound with ot Relié avec d'au								1	ntinuous Jination (						
	Tight binding may cause shadows or distortion along interior margin/  La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure						Includes index(es)/ Comprend un (des) index  Title on header taken from:/									
	Blank leaves ad	lded during	restoratio	n may ap	pear				Le	titre de l	'en-tête	provient:				
	within the text been omitted f	rom filming	/							le page o Je de titro		vraison				
	Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont						Caption of issue/ Titre de départ de la livraison									
pas été filmées.						Masthead/ Générique (périodiques) de la livraison										
	Additional comments:/ Commentaires supplémentaires:															
This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.																
10X		14X		18X	,			2X	المراجع فيعمر		26X			30×		
	12X		16X			20X			2	4X		28X			3	32

YOLUMR XVIII. }

TORONTO, ONT., JANUARY, 1897



# AGNOLIA METAI

In Use by Eight Leading Governments.

BEST ANTI-FRICTION METAL

For All Machinery Bearings

### MAGNOLIA METAL GO.

OWNERS AND SOLE MANUFACTURERS

74 Gortland Street, NEW YORK

Chicago Office:

TRADERS BUILDING.

Montreal Office:

Messis. Caverhill, Learmont & Co., Agents.

London Office: No. 49 QUEEN VICTORIA STREET, LONDON, E. C.

HOT BLAST SYSTEM for large buildings

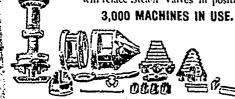
VENTILATING FANS. SHAVING FAN BLOWERS. FIG



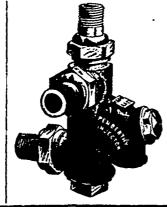
For Catalogue of the above articles write the

McEachren Heating & Ventilating Co. - Galt, Ont.

#### THE VALVE MACHINE is the only machine in the market that will reface Steam Valves in position.



# DARLING BROTHERS "Reliance Works," - MONTREAL.



World-Renowned Automatic INJECTOR

Is the Most Economical and Durable Device for Feeding the Boiler ever placed on the Market. . . . Sales of 125,000 in ten years in the United States and Canada attest its merit.

Branch Factory: WINDSOR, ONT.

PENBERTHY INJECTOR CO.

Largest Injector Manufacturers in the World.

226 Abbott St., DETROIT, MICH.

Is a Most Important Consid-

eration in a Boiler Feeder ....

#### John Bertram & Sons

CANADA TOOL WORKS

DUNDAS

ONIARIO.

Any one desiring a good Second-Hand Tool, should write us for prices. Have several we will dispose of at a bargain.

CORRESPONDENCE SOLICITED.

C. C. CLEVELAND

G. F. CLEVELAND

J. L. Goodhue & Go.

[ EATHER BELTING: AND LACE LEATHER

Danville, Que.

ellington St. Esst, TORONTO, ONT.

All Grades of

# **CROSS-CUT SAWS**

at Lowest Prices

The "Burns" Patent Handle



PATENTED JUNE 26th, 1893

Positively the Strongest Handle Made.

Ask your Hardware Merchant for our Goods.

Special Quotations on Large Quantities.



# No. I IRON FRAME OSCILLATING GANGE SAW SASHES OF ALL WIDTHS

We manufacture a Complete Line of



HIGH GRADE SAW-MILL MACHINERY

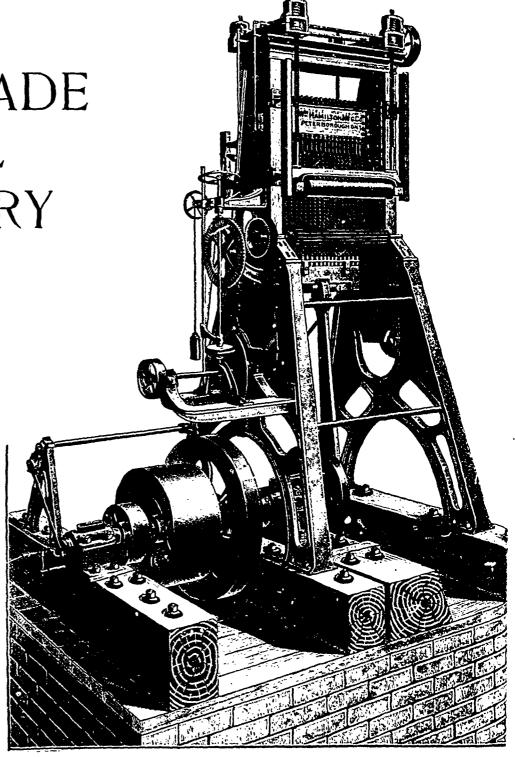
Prescott Band Mills
Perkins Shingle Mill Machinery
Covel's Tools for the care of
Saws

Engines, Boilers, Etc.

CATALOGUES ON APPLICATION

WE are prepared to furnish plans, specifications, and build mills complete of any capacity, or to remodel old mills.

Write for prices, informing us what your requirements are.



The Wm. Hamilton Mfg. Co., Ltd.

Branch Office: VANCOUVER, B. C.

PETERBOROUGH, ONT

# THE CANADA LUMBERMAN

VOLUME XVIII. }

TORONTO, ONT., JANUARY, 1897

J. TERMS,\$1,00 PER YEAR Y. Single Conies, 10 Cents.

#### THE LATE HON. LOUIS TOURVILLE.

EARLY in November, after a somewhat protracted illness, Hon. Louis Tourville, member of the Legislative Council of Quebec, and president of The Tourville Lumber Mills Co., died in the city of Montreal. Ever since his severe illness of last year he had been feeling unwell, but was not compelled to withdraw from business until a few days previous to his death. Deceased was prominently connected with many commercial enterprises of the province, and was recognized as an eminently successful business man.

Hon. Mr. Tourville was born on February 13th, 1831, in the city of Montreal, and was therefore 65 years of age. After receiving a sound commercial education, he was employed as dry goods salesman, and in the year 1854 embarked in that business on his own account, and afterwards conducted a grain and provision store. In 1880 he established the lumber firm of Tourville & Co., his partner being the late Mr. Joel Leduc. In this venture he was remarkably successful, and some years afterwards the name of the firm was changed to The Tourville Lumber Mills Company. The headquarters of the company were in Montreal, and the saw mills located at Louiseville, Nicolet and Pierreville. In 1801 incorporation was granted, the capitalization being \$250,000. In the vicinity of thirty-five million feet of lumber are handled each year, large cargo shipments being made to foreign markets.

Not alone to the lumber business did the deceased direct his attention. In 1873 he founded the Hochelaga Bank, of which he was president until the year 1878. He had also been president of the Montreal Exposition Company, the South Shore Railway Company, and the Imperial Electric Light Co., an honorary director of the Equitable Life Assurance Company of New York, and a member of the Council of the Board of Trade.

Mr. Tourville was appointed to the Legislative Council by the late Mr. Mercier in 1888 in recognition of the signal service he rendered to the Liberal cause in the province, and had ever accorded a hearty support to a policy of international development of her own resources. By his death the Liberal party are placed in a minority of two in the Legislative Council.

In the year 1856 he married Miss C. St. Jean, who died three years ago. A family of six children survive him.

A subscriber to the Wood Worker writes that he has found the best way to pile lumber which is to go into the dry kiln is to place it edgewise, properly supported beneath, and with strips between to allow air circulation and close enough together to prevent any sagging sidewise of the lumber to be dried. A little more moisture on one edge is not nearly so bad as too much on one side.

#### BRITISH COLUMBIA SHINGLE MILLS.

Our representative in British Columbia furnishes the following particulars of some British Columbia shingle mills:

II. II. SPICER & CO.

Among the largest manufacturers of shingles in the western province are Messrs. H. H. Spicer & Co., of Vancouver. This business was established on False Creek, at the end of Cambie street, in 1888, and has continued to grow ever since. The output is shipped to all parts of the Dominion, as well as to the United States, some going east of the Mississippi river.

The premises have a frontage on False Creek of 187 feet. The Canadian Pacific Railway track



THE LATE HON. LOUIS TOURVILLE.

runs through the yards. The principal output of this establishment is shingles, which have a farreaching reputation. The various buildings are thoroughly well equipped with the most improved machinery, including a Perkins ten block machine, manufactured by the William Hamilton Mfg. Co., and two Challoner double block machines. Three large boilers and two engines, 18 x 36 and 14 x 20, supply the power. Selffeeders are used for conveying the saw-dust to the furnaces. The new dry-kiln consists of a 7,000-foot heater and a 110-inch fan, driven by a 7 x 10 inch engine. The capacity of this kiln is two and a quarter million shingles. The total capacity of the mill is one hundred million shingles per annum. From 55 to 65 men are employed at the mills, and from 25 to 35 in the woods. As will be noted, the shipping facilities, both by water and rail, are excellent.

HASTINGE SHINGLE MANUFACTURING COMPANY.

Messrs. James A. and Robert McNair established the business at Hastings known as the Hastings Shingle Manufacturing Co. three years ago. The shipments from this firm are also ex-

tensive, and extend throughout Canada and the United States, some having been made to Boston and other Atlantic sea ports.

The main mill is  $60 \times 35$  feet, equipped with the most modern machinery. The dry-kiln is  $100 \times 35$  feet. Various other buildings complete the establishment. A staff of 25 men are employed in the mill, which, when running day and night, has a capacity of forty million shingles annually.

A second mill owned by this firm was destroyed by fire about March last, and in six weeks another one was built and running. This, like the former, is equipped with the most modern machinery, and affords employment for 50 men. It has a yearly capacity of forty million shingles.

This firm control the output of the Buse shingle mill, the capacity of which is twenty million shingles per annum, thus making a total capacity for this firm of one hundred million shingles annually.

They have several thousand acres of very fine cedar limits on Burrard Inlet, from which their cedar blocks are supplied.

#### ARCHIE MCNAIR.

Another shingle establishment at Hastings is owned by Archie McNair, and was established three years ago.

The concern has a well-equipped plant, operated by steam power, and using the latest appliances. A specialty is made of red cedar shingles, and the output averages ten millions per annum. A ready sale for these is found in all parts of Ontario, the Northwest, and in the Eastern United States markets.

#### WOOD PULP BICYCLE FRAMES.

Wood pulp is the latest material for the making of frames for bicycles. The use of wood after it has been ground up and reduced to a pulp is not so new as many people suppose. As far back as 1719 a Frenchman named Reamur published an essay upon the subject, taking his hint from the wasps, whose paper-like nests are literally made from wood pulp manufactured by those insects. But it was only 30 or 40 years ago that any practical trial of the matter was made, and it is almost wholly within the last quarter of a century that the industry has begun to attract attention and assume importance. For some time past railroad car wheels have been made from wood pulp, and also many other things which are exposed to great strain in use, and now the attention of bicycle makers has been attracted to this useful article. - Cincinnati Tribune.

Resolutions have been passed by the Board of Trade at Thorold and Owen Sound requesting that the Government impose an export duty on pulp wood.

The total cut of the Minneapolis saw mills in 1895 was 479,000,000 feet. In 1896 a reduction of 37 per cent, was made, the production being 300,000,000 feet.

RALL WALLEN TO THE RESIDENCE OF

IT

#### AGAINST FREE LUMBER.

UNITED STATES LUMBERMEN REQUEST THE RESTORATION OF AN IMPORT DUTY.—PERMANENT ORGANIZATION EFFECTED TO CONSIDER TARIFF LEGISLATION.

In response to a call issued by the publishers of the Timberman and Northwestern Lumberman, of Chicago, acting under instructions from the Southern Lumber Manufacturers' Association, about 150 delegates convened in the city of Cincinnati, Ohio, on the 16th of December, to discuss the tariff question and to take action to secure the restoration of an import duty on lumber. Delegates are said to have been present from every lumber state in the union, and the representation included wholesale and retail dealers and manufacturers.

Upon opening the convention, Mr. Judson, of the Northwestern Lumberman, was called upon. He dwelt upon the injurious effect of Canadian competition in lumber, and stated that over \$500,000,000 were invested in mill plants in the United States, giving employment to more than half a million persons, to whom \$141,000,000 in round numbers was paid in wages annually.

Mr. Defebaugh, of The Timberman, followed, delivering an eloquent and carefully prepared address, and submitting the following figures for the consideration of the delegates:

#### IMPORTATION OF CANADIAN BOARDS, DEALS AND PLANKS TO THE UNITED STATES.

	Thousand	
Year.	Feet.	Value.
1888	. 608,326	\$7,497,078
1889		7,804,163
1890	. 659,703	7,744,954
1891		8,498,046
1892		7,539,766
1893		8,217,331
1894		6,134,204
1895		6,859,532
Six months ending March 1, 'o		3,662,041
Year ending June 30, 1896		8,505,634
Three months ending Sept. 30, 9		2,360,896
Nine months ending Sept. 30, 9	96 549,522	5,790,028

#### IMPORTATIONS OF CANADIAN SHINGLES.

From Nova Scotia, New Br'nsw'k, etc. Quebec, Ontario, etc	1890-1	58,687	\$122,934
Total		260,648	\$553,269
Nova Scotia, New Br'nsw'k, etc. Quebec, Ontario, etc			
Total		362,998	\$732,060
Nova Scotia, New Br'nsw'k, etc. Quebec, Ontario, etc			
Total		458,709	\$915,482
Nova Scotia, New Brinswik, etc. Quebec, Ontario, etc	1893-4 1893-4	58,057 320,415	\$115,623
Total		378,472	\$731,724
Nova Scotia, New Br'nsw'k, etc. Quebec, Ontario, etc			
Total		51,513	\$99,790
All sources 18	95-6 5	78,870 \$	1,100,223

#### IMPORTATION OF CANADIAN TIMBER (NOT ROUND.)

Average

	Yearly
Year. Value. 1888	Value.
1888\$ 5,748	\$ 3,334
1889 3,108	3,334
1890 1,147	
1891 37,652	
189256,777	
1893 65,792	
1894 47,865	
1895 56,783	
Six months ending March 1, 1896 26,093	
Year ending June 30, 1896 87,603	87,603
Three months ending Sept. 30, 1896 24,763	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Nine months ending Sept. 30, 1806 46.654	

#### IMPORTATION OF LOGS FROM CANADA.

	Yearly	y early
	Average	Average
Year.	M. Feet.	Value.
1882-85	1,084	\$ 9,483
1886-89		52,964
1890-93		570,700
1894	277,947	2,359,951
1895	212,231	1,860,725
Year ending June 30, 1896	315,464	2,584,438
Three months ending Sept. 30,'96.	187,077	1,508,600
Nine months ending Sept. 30, 96.		2,432,076

A mention of Mr. Defehoushin remarks were as

A portion of Mr. Defebaugh's remarks were as follows:

The true influence of the tariff is only seen when we compare the statistics of particular years with our commercial condition at those times. It will be noted that the year 1891 showed an increase in imports over the preceding year of nearly 100,000,000 feet to a total of 757,149,000 feet. During this year the McKinley bill was in effect. The reduction of the duty had let in a large amount of low grade Canadian stock that the higher duty previously in force had kept out. Many of you will recall the immediate developments at the gateways leading from Canada into this country, at Niagara, Lake Ontario ports, and on the northern boundaries of New York and New England.

The next year, 1892, imports dropped off materially, owing, it is believed by many of our lumbermen, to the assumed fact that Canada during the previous year had to a certain extent disposed of her surplus and was merely getting in readiness for the larger business which she did later on. The year 1893 showed another increase, bringing the imports almost up to the largest previous year.

But during 1893 came the panic and the period of dull trade that succeeded it. Canadian lumbermen at once felt the effect of that financial convulsion. Its exportations to this country of boards, deals and planks, which are the classes of product that I am in this connection considering, dropped down to the lowest point known for years, and it might have been supposed that Canadian competition was to be a thing of the past. But, given fresh courage by the removal of the one dollar a thousand duty provided by the McKinley bill, an increase began to be seen.

Notwithstanding the fact that the consumption was tremendously curtailed throughout this country, that the United States has not in any twelve months since June 30, 1893, consumed to exceed 75 per cent. of its annual consumption for several years preceding the panic, the Canadians have continued to gain. Mills have been erected on Canadian soil, and during the year ending June 30, 1896, importations of boards, deals, planks, etc., from Canada amounted to 786,209,000 feet, valued at \$8,505,634. The first three months of the present government fiscal year showed importations of 225,396,000 feet, which, if maintained for the year, would bring the aggregate to much the highest point ever known.

It would be instructive to know the precise magnitude of the American demand for lumber, but let us estimate the requirement for lumber with which the Canadian product comes directly in competition—such as white pine, yellow pine, hemlock and spruce—at sixteen billion feet in 1892, and twelve billion feet in 1895-96; and we find that Canada in the former year furnished about four per cent. of our supplies, and in the latter about six and one-half per cent.—a comparative increase of five-eighths.

Messrs. Judson and Defebaugh were appointed secretaries of the convention, and upon motion a permanent committee on organization was appointed. It was stated that those present represented 7,805,000,000 feet of the annual production of lumber. Communications were then read from a large number of manufacturers and lumber associations expressing their sympathy with the movement for the re-imposition of the duty, which was in most cases placed at \$2.00 per thousand.

Mr. Silas W. Gardner, who is interested in both yellow and white pine, spoke at some

length, advocating that a duty of \$1.00 per thousand feet be imposed on rough lumber and timber, and \$2.00 upon all dressed or re-manufactured lumber. Such a duty would realize a revenue for the government of one million dollars, while it would not be sufficient to shut out much of the Canadian product, but would protect the market from becoming demoralized.

Mr. H. E. Foster, of Washington, referred to the competition from British Columbia. The manufacturers there had quite an advantage in being able to ship their lumber in foreign ships to American ports, by means of which they were often enabled to get very cheap rates. Canadians had also an advantage with respect to stumpage, as they had no taxes to pay, the land reverting back to the government when cleared.

Several other delegates expressed their views, advocating a duty of not less than \$2.00 per thousand feet, and the Committee on Permanent Organization reported, recommending the appointment of a ways and means committee to establish such legislation as is considered in the best interests of the lumber trade, also the appointment of a committee on resolutions, to be composed of five members. Mr. C. W. Goodlander, of Pennsylvania, was elected president of the ways and means committee. Other speeches followed, and Mr. W. B. Mershon, of Saginaw, made the the following report for the committee on resolutions:

Whereas, The placing of lumber on the free list by the existing tariff law not only promotes ruinous competition on lumber from Canadian mills, but discriminates against lumber as compared with other manufactures. Therefore, be it

Resolved, That this convention representing the entire lumber industry of the United States in all lines, respectfully petition congress to place lumber on the dutiable list. And be it further

Resolved, That each lumber dealer in the United States be urged to furnish to the senators of his state, and to the member of congress from his district, full information in relation to the needs and condition of the lumber industry, to the end that they can consistently assist in the passage of this measure. Finally

Resolved, That this convention recognizes the fact the unjust discrimination prevails in some countries in South America and elsewhere, as against American lumber, and that we are entirely opposed to such unjust discrimination, and we invoke the aid of the United States congress for the purpose of removing the same, either by reciprocity or otherwise.

Mr. G. W. Hotchkiss, of Chicago, gave an animated talk on the value of lumber and the effect of importations. He had commenced his lumber business in Canada, buying common lumber for \$3.00, fourths for \$7.00, and the three uppers for \$14.00. This was about forty years ago.

The chairman made a few remarks and adjournment was announced, after which a meeting of the Ways and Means Committee was held. In the evening a banquet was tendered the visiting delegates.

#### WELL PLEASED.

MR. D. P. Sicklesteel, McGregor, Ont., having recently sold out his business, requests that THE LUMBERMAN be discontinued, and adds: "Am very well pleased with THE LUMBERMAN, and would continue to take it had I not sold out."

#### THE LUMBERMAN FILLS THE BILL.

The Napance Pulp and Paper Co., Ltd., of FenclorFalls, Ont., write: "It is with pleasure that we hand you settlement for our 'ad' in The Canada Lumberman, at the results have been very satisfactory indeed."

#### CORRESPONDENCE

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

#### "ONE LEADER."

BARRIE, ONT., Nov. 25th, 1896.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR,—Now that McKinley has been elected, and gold declared to be the leading metal, from every nation and point of compass is heralded the news of general satisfaction and restoration of confidence; resulting already in furnishing employment to over one hundred and fifty thousand of idle artisans. The election has developed that the people only require one metal as a leader-and that is gold. This decision is, I believe, in accordance with the original Designer from the creation up to the end of time-that there should be only one leader in anything, whether of nations or societies, mineral, agricultural, forest, or any other productonly one leader of its class can successfully exist. And the moment two leaders are given equal power, the seed of discontent is planted, the growth of which will in time be destroyed by its superior. White pine, like gold, is the leader.

With gold as a foundation for all obligations, coupled with a permanent advance in mineral lands, wheat and all other agricultural products, a reason is furnished to anticipate an increased demand for the goods supplied by the manufacturer which will set in motion the wheels of commerce, the effect of which cannot be otherwise than beneficial to the lumbering industry. But as to the general revival of trade advancing the price of lumber, say one dollar per M feet mill run, this will largely depend upon the lumbermen themselves and the banks that supply the funds. If the lumbermen produce an excessive quantity in the future, as they have in the past, and then force it upon the market (as many will) -two million feet when only one million is required—then I fail to see that the result in price will follow beyond a moderate advance over dull time prices. With the competition that exists from whitewood, pine timber, flooring, ceiling, box lumber and shingles from the Southern States, and cedar, redwood, Douglas fir and shingles from British Columbia and Washington territory, and the manufacturers of these exercising the same fault of forcing double the quantity upon the market that is required, the result will be in order-to find their gain. It would require a one stamp gold mill with latest improvements, also a lightning calculator with a powerful magnifying glass, to discover a small speck of profit-after paying interest, insurance, and depreciation of property and expense of manufacturing, which is the smallest, most economical and hardest earned of all.

The moment there is a permanent advance in lûmber or grain the railroad companies claim they have a "title deed" to it from the Crown, and advance the rate accordingly—they claim it o is fair to allow you to hold the "title deed" to the ground, and they a "deed" to the profits therefrom, as they do not want the earth, only results-for which they "draw" to secure.

d.

cith

not

clos

There is no doubt but that the retail yards in the United States are all carrying small stocks, but the demand corresponds with the amount of small stock carried. Now, where is the lumber if not in the retail yard? You will find millions upon millions at Buffalo, Tonawanda, Chicago and other wholesale yards, and at the mills in Canada, Michigan, Wisconsin and other states, hundreds of millions of '94, '95 and '96 stock, all ready to ship, and millions more to be manufactured, with 1897 cut to follow. The effect of this will be to check the advance in price that should take place.

Canada owns billions of white pine standing timber, and for want of appreciation or realizing its value an annual destruction of millions is going on, resulting in a loss to all interested.

I know of only one way to advance the price of lumber to a paying basis, and that is to manufacture no more than the demand requires, but who can stop the "Niagara" or the whirlpool below?

The lumber manufacturers are "in it"-the loss; the railroad companies are "in it"—the profit; the government are "in it"-destruction of timber.

Yours truly,

C. H. CLARK.

[The above letter was written for our December number, but was received too late for insertion. - THE EDITOR.]

#### THE DUTY QUESTION.

MONTREAL, 25th Nov., 1896.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR, -In reply to yours of the 10th inst. would say, that although a protectionist president has been elected in the United States, I cannot believe that the duty on lumber going there will be re-imposed, for the following reasons: The great bulk of the people of the United States being consumers, their interests will be considered rather than that of a few lumbermen who represent but a small portion of the people and who have really a monopoly of the business, as the principal part of the timber lands are comparatively in the hands of a few operators who can control the output if they will; but the apparent disposition of most lumbermen is to get rid of, as fast as possible, what standing timber there is left and let the future take care of itself. Then the fact of so many Americans being so largely interested in our mills and timber lands, will naturally influence them to oppose any legislation that will debar them from getting our pulp wood, logs and lumber, which they see the necessity of having to keep their paper mills working, and the refuse of the logs to make their salt. The Titabawassy, the Cass and other rivers that once furnished this material are almost denuded of their pine, and it is doubtful if Michigan, which once made four thousand million feet of lumber in a single year, produces half that quantity at present, even though it is of a very inferior quality. There is still some good timber in Michigan, but it is in very few hands.

Last year there was taken across the Georgian Bay and Lake Huron to that state some three hundred million feet of pine logs to keep their pans and mills going. Saginaw, Alpena, Muske, and Grand Haven, and other centres of the great number industry, will, if something else does not turn up, be places of the past. Then, again, if our American friends should revert to the import duty on our lumber, we would, of

necessity, reimpose the export duty on logs and pulp wood going to the States, resulting in what I think would be contrary to the interests of both

In reference to the outlook for the coming year's business, I think it is good. The American market during the past year has been very quiet, while the English trade has been good, most every kind of lumber being in demand, particularly waney board timber and spruce deals Had it not been for the high rates of freight prevailing in the fall, much more of the latter would have gone forward; in fact, had it not been for the British market the past season, many of our lumbermen would have run their mills on short time. The outlook for next year's business is promising, the cut of deals being all

Yours truly,

J. K. WARD.

#### INFORMATION WANTED.

Scotstown, P. Q., Dec. 16th, 1896.

To the Editor of the CANADA LUMBERMAN:

Sir,—I wish to transmit about eight horse power a distance of about 1,500 feet from a water wheel, which I can do by using an electric motor, but that is expensive.

I have been thinking that I could connect an air compressor directly to the water wheel and carry the air in steam pipes to the place where the power is required, and use an ordinary steam engine. There is only one difficulty I see in the way, that is, to keep the engine from heating. Perhaps some of your readers have had experience with this kind of power, and can give me some light on the subject through the columns of THE LUMBERMAN.

Yours truly, C. H. PARKER.

(It is perfectly feasible to transmit the power by means of a compressor and a steam engine as you propose. There is no difficulty about the heating. The cylinder of course would need oiling, but the principal difficulty that has been found has not been the heating but the cooling, as the air expands when released from the engine and usually produces frost. The method of transmission by compressed air has a good deal to be said in its favor, but in this individual case we are of the opinion that the cost of the apparatus, namely, the compessor and the engine, would be considerably more than the cost of the electric outfit. - Ed. Lumberman.]

#### KEEP ON ADVERTISING.

No business man not yet dead in the shell but can see even in dull times an opportunity to let the world know that he is alive. In advertising one's business it is perhaps three times out of four a blind and fatal mistake to leave the public in the dark as to whether the factory is still running and the owner thereof alive or dead. No industry that is not overdone or wrongly located can be effectually downed by a spell of depression. Consumers do not quit the world as some gentler, en did in the days of Noah, and if unable to purchase what they need to-day, the same need speaks for itself to-morrow. When the wind is low, mend your sails, and the man who is prepared for the breeze is the man most benefitted by the same.-Power and Transmission.



#### MONTHLY AND WEEKLY EDITIONS

#### C. H. MORTIMER PUBLISHER

CONFEDERATION LIFE BUILDING, TORONTO

BRANCH OFFICE:

NEW YORK LIFE INSURANCE BUILDING, MONTREAL

The LUMBERMAN Weekly Edition is published every Wednesday, and the Monthly Edition on the 1st day of every month.

#### TERMS OF SUBSCRIPTION:

One Copy, Weekly and Monthly, One Year, in advance...... \$1.00 One Copy, Weekly and Monthly, Six Months, in advance.....

Foreign Subscriptions, \$2.00 a Year.

ADVERTISING RATES FURNISHED ON APPLICATION

THE CANADA LUMBERMAN is published in the interests of the lumber trade and of 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 touthing these interests, discussing these topics editorially and inviting free discussion by others.

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

Special correspondents in localities of importance present an accurate report act only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome, but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way affecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting their. Any items of interest are particularly requested, for even if not of great importance individually they contribute to a fund of information from which general results are obtained.

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, it ordered for four successive issues or longer.

Eubscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its

#### TO VISITING LUMBERMEN.

Lumbermen visiting Toronto are invited to use the office of the CANADA LUMBERMAN as their own. We shall take pleasure in supplying them with every convenience for receiving and answering their correspondence, and hold ourselves at their service in any other way they may desire.

#### 1897.

STANDING on the threshold of a new year, the portals of which are about to swing open to us, we cordially extend to readers of THE LUMBER-MAN the wish that 1897 may bring to them in satisfying measure happiness and prosperity. There's no denying the fact that business conditions have not been to our liking for several years past. In consequence most of us have thought that we had good cause to grumble, and have, perhaps, exercised our prerogative a little too freely. Our grumbling has not improved matters—on the contrary it has probably been a more or less potent influence in the other direction. On the principle that misery loves company, we have had the satisfaction of knowing that our neighbors across the border were being pinched harder than ourselves.

In spite of hard times, however, our exports of lumber and timber products of various kinds were considerably in excess of any previous year. So far as the United States market was concerned prices ruled very low, but European transactions brought satisfactory profits.

Speaking generally it can be said that the outlook for the new year is an encouraging one. A feeling of hopefulness, which has been lacking

for several years past, now pervades the business community. This of itself must exert a powerful influence in setting the wheels of enterprise in swifter motion, creating a demand for lumber and other lines of material. The satisfactory price which has been reached and is being maintained for wheat is a mighty factor in bringing about good times in an agricultural country like Canada, and affords a solid basis upon which business men may build their hopes.

The CANADA LUMBERMAN would like to see every lumberman as well as business man in every line, put a cheerful courage on, get his shoulder against the wheel of the car of progress and assist to give it a momentum that shall continue throughout this and many future years.

The attention of our readers is called to two new features which appear for the first time in this number of THE LUMBERMAN, viz., a department for Retail Lumbermen, and a Wood Pulp Department.

The retail lumber trade of Canada is deemed to be sufficiently important to warrant us in giving it in future a gréater amount of attention in these pages that it has heretofore received. We hope to have the encouragement and assistance of the retail lumber merchants throughout Canada in the effort we shall make to impart interest to this new feature of the paper.

The wood pulp department has been established owing to the close relationship existing between the lumbering and pulp manufacturing industries-many of our lumbermen being owners of pulp wood limits as well as investors in pulp mills. The relationship thus existing between these industries should render this department of interest to both lumbermen and pulp manufac-

#### OUR RELATIONS WITH THE UNITED STATES.

FOLLOWING the election of Major McKinley to the Presidency, the lumber manufacturers of the United States, particularly those of the Southern States, are reviving the agitation for the re-imposition of a duty on Canadian lumber. We print elsewhere an account of a recent meeting held at Cincinnati to discuss this question. The enterprising publishers of the Chicago lumber journals and other gentlemen delivered eloquent speeches in which the woes of the American manufacturer were skilfully painted in becomingly sombre hues. It is not the usual custom of our American friends to attach much importance to Canada. They are accustomed to say, when Canada is mentioned, "Canaday - where is Canaday, anyhow?" It is rather amusing, therefore, to see the representatives of the greatest American industry appealing to their government to save them from destruction at the hands of the Canadians. Candidly, we think our American friends are acting on this occasion in a manner altogether inconsistent with their usual practice, and are making much ado about nothing.

Purposely, no doubt, they present to their government but one view of the situation, and that the one most favorable to themselves. They admit that the lumber imported from Canada constitutes only about one-sixth of the total amount placed each year on the American market-or in other words, about two-thirds of the total yearly receipts of lumber at the city of Chicago alone. It is a well-known fact that a

considerable part of the lumber imported from Canada, is exported by the American buyer to his foreign customers and therefore does not come into competition in the home market with the product of American miles. We presume that should an import duty be imposed, there would be a rebate of duty on such lumber as could be shown to have been bought for and exported to foreign markets. There would also be a rebate granted to box manufacturers on all lumber brought in from Canada for use in their business. Deducting the total amount of such rebates, the revenue which the American government would derive from a moderate duty would be trifling indeed, and the benefit which would be likely to accrue to the American lumber manufacturer from shutting out say 25 per cent. of the Canadian exports, would be correspondingly small.

The American government should and doubtless will consider whether it is worth while to disturb the present trade relations of the two countries-the advantages of which are reciprocal-for the purpose of conferring a trifling advantage upon a particular class, largely at the inconvenience and expense of the consumers, who, in point of numbers, are as 100 is to 1. The advantages of the present arrangement are, as already stated, reciprocal-notwithstanding the efforts of the speakers at Cincinnati to make it appear that Canada gets all the benefits. In exchange for the free admission of our lumber to the American market the owners of the largest mills in Michigan and Wisconsin are permitted to export from Canada, free of duty, the timber necessary to keep their business in operation. Were this privilege to be withdrawn, these extensive mills would be obliged to close down, the capital invested in them would be to a large extent destroyed, thousands of workmen would be permanently deprived of employment, and cities like Saginaw and Bay City, which are dependent upon lumber manufacturing, would be ruined.

Again, under the present arrangement the owners of pulp mills in New England are allowed to carry immense quantities of pulp wood out of New Brunswick each year free of duty. The withdrawal of this privilege would certainly entail inconvenience and loss upon the owners of these mills, and in many instances, no doubt, would lead to the removal of American pulp mills to Canada. Our American friends should endeavor to take a broader view of this question, in which case they should be able to see that it has many bearings, and that the interests of both countries would probably be best conserved by leaving the tariff unchanged. Taking into consideration the fact that the principle at stake in the late Presidential election was that of a sound as against a debased currency, and that the President elect received substantial support from a strong section of the Democratic party, the probability of the protectionists being able to carry such a measure as the American lumber manufacturers desire is at least doubtful. In this connection we desire to express our satisfaction with the proposal that has recently been made that the Canadian government should arrange to have a permanent representative of the Dominion at Washington to facilitate negotiations and promote satisfactory relations between the United States and this country.

#### EDITORIAL NOTES.

The Board of General Appraisers at Washington have just rendered a decision in the important question of the valuation of wood pulp, by which is determined the amount of duty to be paid by Canadian manufacturers shipping to the United States. Heretofore the Government valuation has been \$12 per ton, but at the suggestion of Treasury Agents Wood, of Detroit, and Stokes, of Plattsburg, N. Y., an appraisement was made, the decision being that the valuation should be placed at \$11 at the point of manufacture.

The Mississippi Valley Lumberman's Association has announced an exposition of lumber grades to be held in Minneapolis this month. It is intended as a means by which manufacturers, wholesalers and retailers may inspect and become acquainted with the standard grades, and as such it should prove of great interest. There will be exhibited in a suitable building, provided for the purpose, from 75,000 to 100,000 feet of lumber. Canadian lumbermen will learn with surprise of the attention given to the question of grading by this association.

A STRONG argument in favor of holding firmly to prices is found in the published statement that the manufacturers of red cedar shingles have so reduced prices as to make their product unpopular in the eastern markets. Following the reduction in price, an attempt is said to have been made to produce the shingles at a less cost, and consequently the quality has deteriorated and the product become unpopular. Owing to the lack of anything like a standard grade or price, dealers also feel a delicacy about making purchases, lest their neighbors should undersell them. To retain the eastern trade the manufacturers of red cedar shingles must study the market more closely.

One of the essential features in the production of a first-class trade journal is that it should contain the views of those in whose interest it is published. When important questions are under consideration, readers naturally look for the opinion of others engaged in the same line of industry. During the past year the CANADA LUMBERMAN has received contributions from a number of its subscribers, to whom we are deeply grateful. In the year 1897 it is hoped that many more will assist in increasing the value of the Lumberman by expressing their views on subjects relating to the lumber trade, as well as by seeking information through its columns. The publisher is always pleased to hear from subscribers. Let one of your New Year resolu-· tions be that you will write more frequently to your trade paper.

Mention was made in these columns a few months ago of the fact that the vessel in which Dr. Nansen attempted to discover the north pole was made of Douglas fir, and that it had been subjected to great pressure among the ice floes. Further corroboration of the strength of the vessel is given by Dr. Nansen, who states that when the pressure was at its height, her beams and timbers began to crack; she broke loose and was slowly lifted up out of the icy berth in which she had been fast frozen, but they were unable to find a single crack or a splinter displaced. This proves the immense strength and

elasticity of the Douglas fir. In this connection we note that expert testimony before the Behring Sea Commission at Victoria, B. C., affirmed the fact that Douglas fir was far superior for purposes of shipbuilding to Oregon pine, the only article of lumber that is in any way to be compared to the product of British Columbia.

THE subject of business courtesy is one to which greater attention and study might profitably be given in this and other countries. The indifference and lack of courtesy shown to representatives of business houses by those holding responsible positions is often such as to cause astonishment, and the person who has sought an interview is made to feel that he is regarded as an intruder. An instance of this was recently brought to our notice. A representative of a European house called upon a prominent manufacturing firm in Ontario and was treated with such indifference as to be at a loss to understand the situation. He afterwards expressed the opinion, in which we entirely concur, that such an attitude was not only injurious to the particular industry with which the firm in question were identified, but to the country at large. Particularly in a young country such as Canada, the aim of every business man should be to establish our reputation as a courteous and hospitable people, always willing to extend the hand of friendship to visitors from abroad. Thus Canada will be looked upon as a desirable country in which to reside, and the increased population which is so necessary to our welfare will be attracted to us. It costs nothing to treat your fellow-beings civilly, and the results are invariably profitable.

#### ENGLISH TERMS AND MEASUREMENTS.

Below will be found some particulars regarding English terms and measurements as furnished to us by one thoroughly acquainted with the English trade which will assist our readers to a better understanding of the English market. In the article which we reproduced last month from the Tradesman there are said to be several inaccuracies.

Lumber in Great Britain is spoken of as timber, the only exception to this rule being in the case of hardwood lumber imported from the United States, which is spoken of as States lumber.

The term yellow pine in England is synonymous with the white pine of Canada, while the yellow pine of the Southern States is designated pitch pine.

Round timber in England has formerly been measured to find the cubical contents by the quarter girth by what is called the "Hoppus' system," in which the devisor is 144, but of late years it has been discovered that this devisor gives 27 per cent. less than the actual contents when used for measuring round timber. The Customs Find Timber Measuring Department now measure round timber by the quarter girth and use the 113 devisor, but if the timber is measured by calliper, or by the diameter, the devisor used is 183, which gives the true content.

Sawn timber, such as deals, battens and boards, or "lumber," as it is called in Canada, is imported by the St. Petersburg standard hundred. The standard St. Petersburg deal is

12 feet in length by  $1\frac{1}{2} \times 11$  inches. The standard contains 120 pieces, or 6 score to the hundred, which is equal to 1,980 feet of 1 inch boards. To this measurement every size and dimension has to be reduced. In London and Ireland, however, there is another standard which is used principally for retail transactions, and which is 120 pieces 12 feet by  $3 \times 9$  inches, equal to 3,240 feet board measure.

Planed or dressed wood, such as flooring and matched boards, are imported by the St. Petersburg standard, but are re-sold in England by the square of 100 superficial feet.

Another measurement in England is the fathom, which is 6 feet cube, or 216 cubic feet. Lath wood, deal and batten ends, or as it is called in England, "firewood," is bought and sold by this measurement. Mouldings are sold by the 100 running feet.

Square timber is sold in the English market by the load of 50 cubic feet, equal to 600 feet inch board measure. The railway companies carry 50 cubic feet of fir timber to the ton, and 40 cubic feet of hardwood timber. Mahogany, cedar and furniture and fancy woods are sold in the log or in plank at per superficial foot of one inch thick. Hardwood boards or States lumber is now sold in considerable quantities to English merchants by the car load.

#### BAND VS. CIRCULAR.

A SHORT time ago I asked for a discussion on the difference between the saw kert of a circular and that of the band saw, or the gain of the band over the circular in amount and profit, writes A. Blackmer in the Wood-Worker.

By allowing a difference of one-eighth of an inch between the circular and band—that is, calling the circular 1 5-16 inches for the board and kerf, and the band 1 3-16 inches for the same—I find that the band will make 21 boards out of the same timber that the circular will make 19 boards from, making a difference of 2-19 in favor of the band; 2-19 of a day's run of 60,000 feet makes 6,315 feet, which at a moderate estimate of \$10 per thousand, is worth \$63.15, so that if there were no other items to consider, the band would have paid for itself in a very short time.

However, there are several other points to consider. In the first place, when the band averages 50,000 a day it is doing well, and so the sawing of this extra 10,000 a day which would be necessary to make its day's work equal to the circular in amount, at \$2.50 per thousand equals \$25, which must be charged to the band, and when taken from the \$63.15 that it now has credit for leaves a balance of \$38.15.

As a further offset, when there is a change to be made from a circular to a band, is the expense of making this change, including the enlarging of the filing room and new outfit for the same, and interest on the investment.

To recapitulate: The difference in saw kerf on which these estimates are based is probably not far out of the way. It is probably in each case about a 32nd of an inch more than the majority carry, but that does not materially change the result. It costs much more to keep a supply of band saws on hand and keep them in order than circulars. Just how to estimate some of these things is a little difficult without a demonstration by an actual account being kept.

# THE Wood-Worker

#### A WORD TO THE RETAILER.

In this country there are two classes of retail dealers, the one conducting a strictly retail yard, and the other having in connection with his retail business a wood-working factory, by means of which he supplies dressed stock, sash, doors, etc., to his customers. This fact has suggested the change which has been made in the heading of this department, and while in the future the same attention will be paid to the wood-worker as in the past, it is hoped to present, also, articles of interest to the dealer conducting exclusively a retail trade.

Many millions of feet of lumber are consumed annually in building operations in Canada, a large portion of which passes through the hands of retail dealers, to whom manufacturers and wholesalers look for much of their Canadian trade. A close affinity, therefore, should exist between the manufacturer, the wholesaler and the retail dealer, and each should strive to promote the interests of the trade in general, by according to each branch its rights. To make this department beneficial in advancing the interests of the retail dealer is one of the objects desired, and to attain this the assistance of every dealer throughout the country is solicited. Contributions on any subject of interest to the trade, whether local or general, and discussion on the methods of executing work in the planing mill, are invited. This is the Retailer's Department, and we trust the retailer will assist us to make it of the greatest possible service.

#### SUGGESTIONS FOR IMPROVEMENT.

WHILE the lack of organization in the lumber trade of the Dominion is strikingly manifest by comparison with other countries, it is creditable to the retail trade that the only association which can fairly be said to be in active or, ation is the Western Retail Lumbermen's A sociation of Manitcha. Nearly every retail a aler of the Northwest has his name enrolled on the membership list, which also includes the manufacturers as honorary members, thus assisting in a better carrying out of the objects sought. Since the inception of the association dealers have been enabled to maintain fair prices. While cutting has been avoided, the consumers have not been called upon to pay exorbitant figures. There is certainly much to be said for and against the perpetuation of combines. There always has been, and perhaps always will be, strong opposition to their existence, but any arrangement that will secure to the manufacturer a reasonable return for money invested, and prevent him from sinking into bankruptcy, bringing loss to the community in which he resides, must, we think, be looked upon as serving a desirable purpose.

This the Western Retail Lumbermen's Association are striving to do, and what can be done in one section of country can be done in another. It might not be perfectly feasible for the retail dealers of Eastern Canada to organize on their own account, but they might become a branch of a manufacturers' association if such existed, and work in harmony therewith. In the United States there are a number of retail associations, which have proven to be of great assistance in maintaining the trade on a profitable basis.

THE lot of the retail dealer in many parts of Canada has not been a happy one during the late period of depression. In British Columbia his condition has been improved by mining operations, and in the Northwest the advance in the price of wheat has had the effect of creating considerable trade, but in Ontario and Quebec less favorable conditions have prevailed. Upon the building trade largely depends the business of the retail lumber dealer, and unfortunately, the two largest cities, Toronto and Montreal, have just passed through a period of severe depression. Dropping into the office of a retail dealer in Toronto, the writer inquired how the past year's business had compared with 1895, and was told by the proprietor that he had adopted the policy of selling for cash only, and this, of course, had restricted his trade, but until the books were balanced for the year he could not say just how he would stand. He said, however, that the past few years had been a period of enduring expectation, and they were just hanging on awaiting the return of better times. The wisdom of conducting a cash business is not to be doubted, although it is sometimes very difficult to do. Bad detts are the bane of many an otherwise promising business, and liberal credit opens the door to the unscrupulous contractor to evade payment for his goods. The refusal of credit to builders would have a tendency to weed out the weak contractors, and thus place the retail lumber trade on a stronger footing.

#### CONDITIONS NECESSARY TO SUCCESS.

For a long time the planing mill business has been one of very close competition, for which state of things mill owners have only themselves to thank. A great percentage of them are troubled to-day to know how to make ends meet on the last day of 1896.

The proprietor or manager who always comes in an hour or two late, sits down, puts his highly-polished boots up on the desk, there to remain until he has posted himself fully on horse racing and base ball matters, and smoked his cigar, leaving his correspondence and business—that should receive his first attration—till the cigar

and sporting news are fully digested, is nearly always in trouble, as well as those who wait daily in their offices for the clouds to roll by, never making an effort to look up a job, and only getting what falls on their plates without any efforts on their part. If work is to be had you must hustle around and get it. If you don't get a car load get half a car load; hustle around and get your share of what is to be had.

The owner or manager should be at his place of business the first one in the morning and arrange business for the day. See that your foremen have everything properly arranged for the day's work, making necessary suggestions and having a good understanding about the work. Nothing pays better than this "entente cordiale." It makes things work smoothly—like riding along in a nicely-oiled carriage instead of one that squeaks and squeals all the day through. The proprietor should not only be there first, but should remain till the last and see what has been done and what left undone; often what has been left undone is of more importance than that which has been done.

Because you are proprietor or manager is just the reason why you should be right around among the men and machines, especially in close times like the present. It is necessary at all times to keep an eye on the material that comes into the mill. See what it is and how it is handled. It is wrong in principle to go along from year to year in an old beaten way that you have always been used to. You must from time to time look into new ways of doing things and see if there is not a better, cheaper and quicker way to do work.

It is not always machines that need improving. There is often as much saved in handling stock as the percentage of profit you hope to make on it. One concern may underbid another and make a good margin of profit just from a better and easier way of handling the stock. This stock handling is a stumbling block in the way of many an otherwise enterprising business concern.

You go to a mill and see men passing up one board at a time through a scuttle, that thing being repeated every day. It doesn't need a demonstration to show they are liable to have hard times there. They are slow coaches. Get some kind of a lift over that hatch, if it is only a simple hatch over a drum; hitch steam to it and instead of putting up one board send up a thousand feet. I see every day men carrying one board at a time from scows on to a wharf, and if the stuff is heavy, two, three and sometimes four men to a plank or stick of timber. Away up the wharf they go with it about as they would go to a funeral. Not that the men don't work hard enough. We all know it's hard enough to carry this stock up the wharf, and it's slow enough too. There needs to be some enterprise and some go-ahead; instead of one piece at a time going ashore, a steam crane should put a thousand feet ashore and a traveling crane or car carry it up the dock. Does any one wonder that this concern is in the hands of a receiver?

Numbers of owners and managers think it is beneath their dignity to get out and dig into their work, preferring to entrust it to some kindof a foreman. Business is business, and if you are going to make anything out of it, you must get into it with your whole life and soul. No business ever succeeds if handled with the tips of one's fingers. Everything must be made to count on the profit side, even if it is only on a small margin.

Not a great while ago our mill figured on a job of 200,000 feet of 3 x 12 planks, but lost it by fifty cents a thousand. The firm that got the work failed before the stock could be delivered and we got the job at our own price. This was the method of the concern that figured against us, and as it is always the last ounce that breaks the camel's back, this little job tipped them over. You can not figure too closely on work where you have a solid half dozen figuring against you, and when you get the work you n . go in to win. Every available point must be taken advantage of; not the least item must be lost in handling. Keep it moving, so the machine need not wait for it one minute; keep the machines drawing it through. Here's another place where a great many lose money-taking away from the machines and loading. If the order is a local one, of course in most cases you expect to lay it down so teams can haul it away, but if it is to be loaded on cars or on board a vessel, there should be no waiting. Keep it moving along out of the way, by power if possible. Study up some plan by which you will be able to move it quickly and easily. Machine work counts, especially on heavy jobs. Where you want to load a car every three hours you must figure close on the minutes. Ten minutes lost here and ten minutes lost there, soon count up into hours; the hours and manutes lost can never be recovered.

To run things closely does not mean that it is advisable to rush. The rusher more often than otherwise loses his head and either has a breakdown or makes a mistake and has to do part of his work over again, which hinders instead of hurrying the work on hand. It is a steady, strong, continuous pull that pushes work alc. ag; every man at his place and doing his earnest, honest best. There are times when we must carry sail to keep off a lee shore, and with the hundreds to-day who are carrying heavy sail, let me say, keep things close. One wrong move may tip you over. Every minute must count.

Recent political events lead us to hope for better times. Whether we get them or not the principle is the same. Our business is never boys' play and always needs constant care and close attention.—Jonathan Torrey, in the Wood-Worker.

#### REDUCING VALVES FOR STEAM HEATING.

e.

ey

ı't

.rd

t's

me

ne

ıne

el-

any

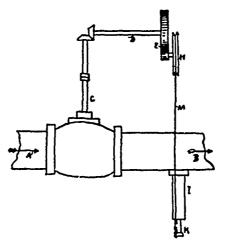
of a

cind-

you

A GREAT deal of steam is lost by escaping through the valves, which conduct it to the various points in use in the mill, when not needed, due either to the valves being carelessly left partly open or to a disordered state of the valves, whereby they leak when closed. This occasions a waste of steam. The waste of steam in a heating system for the mill is almost proverbial. In steaming stock there is waste. Some of this waste comes about by the workmen leaving the steam on. If more steam is used than is necessary the excess simply passes off and escapes with the vapor. Steam at five or pounds pressure is for nearly every purpose

as good for heating as steam having the full boiler pressure, provided in cases of heating liquids or boiling the supply pipes are made of sufficient area to transfer the low pressure steam; and provided in cases of heating by pipes and other surfaces the area employed is enough larger than it would be if high-pressure steam was used to provide for the reduced difference of temperature. We have frequently seen instances where the quantity of steam used for heating was largely reduced by simply closing down the main valve at the boiler which supplied the heating steam, so as to shut away from the heating apparatus the full boiler pressure, and this result is brought about by reducing the quantity of steam which before was used carelessly. Something can be done, however, in preventing unnecessary waste of steam generally by introducing between the boiler and the main supply pipe a reducing valve capable of easy adjustment, so that the pressure of the boilers can be held back from the system of pipes and valves in question. The main lines of supply pipe are naturally made of sufficient size to carry all the steam that may be needed. The reducing valve is an essential factor in this connection, but we present herewith a home-made contrivance which any man can make and adopt. It has saved us much steam, as it is self-governing and allows only a uniform quantity of steam to pass. The steam enters at A and goes out at B. Fasten an extra shaft C to the valve and arrange it to be turned by the gearing on shaft D, as shown in illustration. Then cut a hole in the pipe and insert the tube I. This tube is fitted with a plunger K, so that the higher the pressure of the steam the further down will it go, carrying the cord M with it, and as the cord goes over the groove in the pulley H, the latter is turned, and in turning of course revolves the gears E, thus closing the valve. When the steam pressure runs low, a spring on the plunger causes the latter to move upward, and a weight on the other end of the cord makes the latter act the



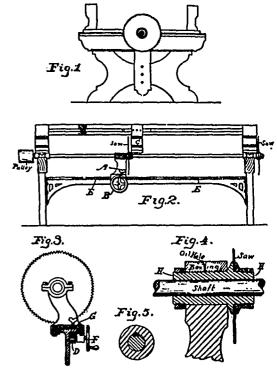
reverse upon the gearing and open the valve, thus admitting more steam. With such a device steam of much lower pressure will easily find its way to the point of use, and answer all purposes. So long as the pressure beyond the valves is high enough to do the work required of the steam, everything is obtained which could be wished. Variations in the adjustment of the valve will supply increased pressure, which, from time to time, may be called for. If the pressure is by this means kept down to the lowest point which will suffice to do the work, unnecessary use of

steam through the carelessly-left-open or leaking valves will be avoided. The reduction of pressure in this way will often secure a noticeable economy in the use of steam in a mill or where live steam is employed for any work.—B. F. Fells, in Hardwood Record.

#### CUT-OFF SAW.

The accompanying drawings show a double cut-off saw that is getting quite popular throughout Canada in small wood-working establishments. It is described by Mr. W. Welch as one that can be made cheaply by any machine shop. It is very easy to set for different lengths of stock, from a few inches to as many feet as the machine will take in. It is used mostly to take in stock  $6\frac{1}{2} \times 2\frac{1}{2}$  feet.

Fig. : shows end view. The carriage I, Fig.



r, is made of wood with V run-ways screwed on bottom. The legs and cross-piece are also made of wood. Fig. 2 shows front view. To set to different lengths of stock, loosen set-screw A, Fig. 2, and turn hand-wheel B, then move rest C, Fig. 2, up to saw.

Fig. 3 shows end view of attachment for moving saw back and forward. D, Fig. 3, is gear wheel to run in teeth as shown at E, Fig. 2. F, Fig. 3, is hand-wheel, and G is set-screw to hold attachment in place after the saw is set. H, Fig. 4, shows saw mandrel with double nuts at each end to fasten saw on and take up wear of boxing. Fig. 5 shows shaft with groove cut in for key in mandrel to slide in.

A patent has been granted to T. H. Madgett and William Crawford, of Burk's Falls, Ont., for a wood-working machine.

In the district of Semenovsk, where wooden spoons chiefly come from, about 7,000 men make a living at the trade. The spoons are generally made from birch wood, and a skilful workman can turn out several hundred a day. No fewer than 12,000,000 spoons are manufactured during the course of the year, which are sold at six to eight roubles per thousand.

# WOOD PULP ~9 ©~ DEPARTMENT

#### THE MANUFACTURE OF PULP IN CANADA.

VIEWED from almost any standpoint, there appears to be a promising future for the pulp industry in Canada. The development during the past ten years, in the face of an import duty of ten per cent. imposed by the United States government on the manufactured article, has been such as to cause capitalists to look with favor upon that industry as a profitable field for investment, and the number of new mills now in course of erection, or contemplated, is evidence of its growing importance. An abundance of raw material, valuable water powers, efficient labor at an average cost—these advantages place Canada in a position to compete with any other country in the world in the supply and manufacture of pulp and paper.

At the present time there is a strong agitation in favor of imposing an export duty on spruce wood, which provides the main supply for the pulp mills. Such action on the part of the Canadian government would probably be followed by retaliatory measures by the United States government, and instead of the duty on pulp going to that country being ten per cent. of the value, as at present, it would likely be advanced to such a point as to practically close the United States market to Canadian pulp manufacturers. The effect of this would be, we believe, to stimulate the manufacture of paper in Canada, as well as cause manufacturers of pulp to seek new markets.

Our foreign exports of pulp already total up to a considerable sum annually, and information to hand proves that the industry is capable of much greater development. Denmark is now turning her attention to Canada for a supply of pulp wood, and if the raw material can be profitably exported to that country, there is no reason why the manufactured article should not find a market there, unless tariff duties should prevent. It is also learned that there has been a decided increase in the cost of logs in Norway and Sweden, which countries have hitherto furnished a large portion of the European supply, and as a result the price of pulp wood to English paper manufacturers has been increased. Thus a wide market would seem to be opening for the Canadian product, as no raw material suitable for the manufacture of paper is found in Great Britain.

The establishment of new mills will not, perhaps, meet with the approval of the proprietors of existing concerns, who may fear the effects of competition, but taking a broader view, and attaching due importance to the present outlook for an increased foreign trade, the demand would seem to warrant a considerable increase of production.

One drawback to the manufacture of pulp for export is said to be the excessive freight rates. On the highway of water communication through rates to the seaboard are equitable, but there is a lack of facilities for shipping cheaply from inland points. With the growth of the industry this will no doubt be remedied.

#### PULP AND PAPER.

Ir is estimated that 3,000 to 4,000 cords of pulp wood a day enters into the manufacture of paper in the United States. At the minimum, 3,000 cords, the total for a year would be the enormous amount of 900,000 cords. It is safe to call it 1,000,000. If this wood were piled in one continuous string, it would make a wall four feet wide and four feet high a little over 1,515 miles in length. It can be seen what a prodigious thing the wood pulp industry is, and at what a tremendous rate it is devouring trees, mainly spruce. Yet all this wood is converted into paper, which, after being used, vanishes from sight in a few days, and goes back to dust, out of which element the trees grow. The pulp business of this country is only a "patchin" to what the world can show. One mill in Paris annually imports about 50 ship loads of pulp wood from Norway and Sweden, and on the east coast of Great Britain and Scotland large quantities are imported every year. The mills of this country export a large portion of their output. During the week ending November 18, pulp and paper to the amount of \$30,000 worth was shipped foreign from New York. Of the total \$10,000 worth went to Melbourne, Australia, \$4,725 to Mexican ports, \$2,160 to London, \$2,715 to Liverpool, \$500 to Manchester, \$3,578 to Wellington, \$680 to Buenos Ayres, and about 600 to Hamburg. The exports of paper this year from this country have been greatly in excess of that of any previous year, amounting to \$2,107,700 against \$1,711,131 in 1895. For the month of September the comparative increase was 43 per cent. With this grand start in the business further increase may be looked for in the years to come. Verily the pulp and paper trade is a big thing, and spruce timber is strictly in it along that line. - Northwestern Lumberman.

#### SISSIBOO FALLS PULP COMPANY.

THE manufacture of pulp in Nova Scotia has grown to be quite an important industry, and one of the largest establishments is that of the Sissiboo Falls Pulp Company, which is located on the Sissiboo, about eight miles above Weymouth Bridge. The company was organized in January, 1894, the capital being \$30,000, held chiefly by American parties, Messrs. F. M. Steadman, the manager, and W. E. Palfrey, of Lawrencetown, being the only Nova Scotia shareholders.

The factory is built in the heart of the lumber country, which furnishes an abundance of raw material, which after being manufactured into pulp, is shipped chiefly by rail into Port Gilbert station. The works are operated by water power and lighted by electricity. The machinery is most improved.

The company owns two hundred acres of wood land of its own, but this is far from sufficient for the capacity of the mill, and every lumberman around sells his cut. They buy between one and one-half and two million feet each year.

Less than one hour is required for the transformation of a log of spruce wood into pulp. The wood best adapted for the purpose is smooth rounds of six inches diameter. The log is sawn into two foot lengths and has the bark removed by revolving scrapers. These pieces are then placed in the grinders, which are immense stones

revolving at great speed. The wood is ground against the fibre, hydraulic pressure of 100 pounds to the inch forcing the stick against the stone until the last bit is ground up. It is very essential that these stones, of which there are three, are strong, for the strain is immense. As it courses through the grinder the wood, which is now a pulp, is mixed with water, to counteract the heat of the friction and to act as a temporary glue between the particles. It is then pumped up thirty feet into a long trough from which it is taken to the three wet machines. These machines resemble rude printing presses. As the porridge-like pulp passes through these it goes over a sieve which drains out the bulk of the water. The sheets which come out at the other end are then cut up into smaller sheets, aud placed in a hydraulic press for a final drainage of water. After leaving here the pulp is bundled into a machine similar to a hay press, and is now ready for shipment in 100 lb. packages. In twenty-four hours 40,000 pounds are manufactured. The output of the mill is sent largely to the American market, the sales being made through a Boston agent.

#### PULP NOTES.

It is stated that the construction of a pulp mill at St. George, N. B., is under consideration by capitalists.

It has been decided to erect a pulp mill at Chicoutini, Que. The shareholders of the electric light company are the promoters.

Mr. B. Wickett, of Sundridge, Ont., has been engaged to build a pulp mill at Sturgeon Falls, Ont., for Messrs, Heath & Paget.

It is said to be the intention of Messrs. Hamilton & Ayers, who are building a new dam across the North river at Lachute, Que., to build a large pulp mill.

The South River Mercantile Company of Manitoha have made a contract to supply 2,000 cords of pulp wood to an Ontario mill.

The cut of pulp wood in Maine and New Hampshire this winter will be larger than ever before. It is estimated that more than half the cut of spruce will be consumed in the manufacture of pulp.

Twenty-one cars of lumber, paper and pulp were recently shipped in one week by the Royal Paper Mills Company, of East Angus, Que. The company have recently received twelve carloads of paper machine, from Scotland.

Mr. Thomas Allison is said to have commenced an action against the proprietors of the Masterman pulp mill at Chatham, N. B., to recover the sum of \$5,000 alleged to be due him for services in connection with the construction of the mill and in perfecting the manufacture of pulp. The works are said to have cost \$100,000.

The American idea of concentrating the manufacture of pulp and of paper in one establishment is making headway in Germany. The manufacturers of sulphite pulp in that country have not found their industry very profitable during the past year or two, and they have been gradually turning their attention to the manufacture of paper, finding it easier to sell paper than it is to sell pulp.

It is said that the Glens Falls Paper Mills on the Hudson River, New York, the largest pulp and paper concern in the world, will in 1897 make 275 tons of finished newspaper per day. This will require at least 475 cords of spruce wood each day, or 142,500 cords in a year, a quantity equivalent to 90,000,000 feet of spruce logs. More than 80 per cent. of this spruce is of Canadian production, while the balance is cut in the Adirondacks. At the average of spruce growth in the forests of Canada or Maine, these mills will consume each year the merchantable product of 22,500 acres of land. Should Canada impose an export duty on pulp wood of \$2 per cord, it would cost nearly \$500,000 per annum over present cost to supply these paper mills with the requisite spruce wood from the Dominion.

#### OBITUARY.

HENRY HERRMANN.

With deep regret the lumber trade throughout the United States and Canada learned of the death of Mr. Henry Herrmann, of New York, which occurred at his residence in that city on November 30th, after a short illness. Deceased was 59 years of age, and on the 12th of October last celebrated his 28th business anniversary. He ranked among the largest lumber dealers in New York, and was head of one of the most extensive establishments in the world for the manufacture of special lines of household furniture, employing 2,000 hands. The following particulars of his life, taken from a sonvenir recently issued, will be read with interest, serving, as they do, as an exemplification of what may be accomplished by indomitable perseverance and a thorough knowledge of a trade:

Born in East Prussia in 1837, he was apprenticed to the trade of cabinet-making at the age of fourteen years. He came to America in 1866, landing in New York, but immediately starting for the west. Returning to New York a year later, he entered into partnership with a fellow craftsman and rented a small shop on Mott street, manufacturing walnut wardrobes, the combined capital being \$43, representing the wages of the partners for the preceding week. In two weeks they had doubled their cash capital, and in six weeks their business had so grown that they were compelled to secure larger quarters. Within six months their business necessitated a further change, and at the end of three years the aggressive young firm was employing 100 men. In April, 1872, Mr. Herrmann's partner died. He then branched out, establishing a lumber station, saw mill and factory at Indianapolis. Two years later he engaged extensively in the hardwood lumber trade, buying immense tracts of timber lands. Since that time he has met with unparalleled success, and at the time of his death was the active head of more than twenty manufacturing plants making or consuming hardwood lumber, located at various points in the eastern, central and southern portions of the United States, with agencies at London, Eng., Hamburg, Germany, and Sydney, Australia. Mr. Herrmann was the pioneer in the export hardwood lumber trade to England, which he first commenced in 1877, and since that time it has reached the enormous amount of \$10,000,000 annually. Some idea of the extent of Mr. Herrmann's business operations may be gathered from the fact that in one year he handled 25,000,000 feet of black walnut alone. His ordinary stock of hardwoods at various distributing points aggregated more than 20,000,000 feet. Over one million dollars were annually paid to his employees as wages. The lumber business was exclusively owned by Mr. Herrmann, in whose hands rested the entire management. He was a man of extraordinary business qualifications, and notwithstanding his active career, he had many social friends, and his home life was most pleasant. He was twice married and leaves a widow and two children.

#### RICHARD NAGLE.

Mr. Richard Nagle, a prominent citizen of Ottawa and one of the best-known lumbermen of Eastern Ontario, died at Peterboro', Ont., on November 30th, after an illness of about a month's duration. The late Mr. Nagle was of Irish descent, having been born in Mitchellstown, county of Cork, in 1831. He came to this country with his amily when nine years of age, and settled in the township of Ramsay, county of Renfrew. When quite a young nan he took to lumbering, and was for many years one of the trusted and expert foremen of the late firm of ohn Egan & Co., being afterwards appointed manager, position which he occupied for many years. Then he severed his connection with the firm and branched out in he lumber business himself. His limits were principally a atuated in the Lake Nipissing region. His first limit was he rocky farm near Mattawa, which he disposed of to Clock Bros. He purchased many others, but sold the najority of them, and retired from active business twelve 'ears ago. Mr. Nagle's headquarters were at Ottawa, and for several successive years he took out square imber and marketed it in Quebec, but it was not in this ne that he made the greater portion of the considerable ortune he died possessed of, but in buying and selling 5 mits, in which branch of business many fortunes have uring the last twenty years been made. In politics P ecessed was a staunch Liberal, and occupied a foremost lace in the ranks of this party. In 1875 he was the \* about standard-bearer in Ottawa in the provincial elec-

tions, but was defeated, the contest being a three-cornered one. He was a man of great natural ability, and it was often remarked that he could talk as fluently in French and Gaehe as in English or Irish. Possessed of a vigorous mind and much perseverance, he gained a leading place among his fellow citizens. His estate will probably reach \$250,000.

#### WM. PARK.

The death of Mr. Wm. Park took place at Newcastle, N. B., on the 25th of November. The deceased came from Scotland to Newcastle when quite young, and for many years was engaged in the milling and lumber business, first as a partner in the firm of Park & Alexander, and on the death of Mr. Alexander, as a member of the firm of McLeggan & Park. Later he carried on the same business on his own account. A few years ago he gave up the lumber business and confined himself to general merchandise. As a business man his word was his bond, few men stood as high in the estimation of the public. He was married to a danghter of the late Alexander McLaggan.

#### HON. J. J. FRASER.

On the 24th of November a cable from Genoa announced the death of Hon. John James Fraser, Q. C., Lieutenant-Governor of New Brunswick. A few weeks previous he left for Europe in the hope that the climate of that country would prove beneficial to his health, which had been failing for some months past. Deceased was born in Nelson, Northumberland county, N. B., in the year 1829. His father was a native of Scotland, and settled on the Miramichi in 1812, commencing business as a lumber merchant and ship builder. Hon. Mr. Fraser was appointed Lieutenant-Governor in 1894.

#### JOHN FRASER.

c. 'a'

A fortnight ago the news was received of the death of Mr. John Fraser, the well-known lumberman of Westmeath, Ont. Mr. Fraser had been ill with cancer for a long time. He was at one time one of the most prominent lumbermen in the !Ottawa district, having with his brother, Mr. Alex. Fraser, of Ottawa, engaged in extensive operations. He was highly esteemed by his competitors in the business and was always known for his upright dealings. He was 67 years of age.

#### INSPECTION OF LUMBER CAMPS.

At the request of Messrs. Gilmour & Co., of Trenton, Ont., Dr. A. Robertson made an inspection of the lumber camps of the company situated in the townships of Peck, Hunter and McLachlin, and has reported as follows:

At the mills I found a clean bill of health, no sickness whatever. The company have been building a number of commodious boarding-houses for the accommodation of its employees, into which they expect to move in a few days. The old camps, which they have occupied since coming here, they intend to tear down as soon as possible after vacating them.

After inspecting the mill and surroundings, I visited the camps under the jurisdiction of Mr. P. M. Gunter, and found all the men in a very good state of health, there being a few cases of la grippe in the camps, and cases being complicated with a little sore throat of a follicular tonsilitis character, there being some exudation of pus over the follicies of the tonsil, but nothing of a membranous character.

There had been, previous to my visit, several cases of sore throat among the men, the majority of which, however, recovered in from one to three or four days. The camps under Mr. Gunter's jurisdiction are well built, being high and well ventilated, while the interior of each is kept in a cleanly condition, a man being appointed for the express purpose of keeping the camps clean.

At a suitable distance from each shanty, water closets have been erected on the cesspit plan, and all men are ordered to use them. The waste from the cookery is carried to a suitable distance from the camp before being dumped.

Altogether, the general health was as good as could be expected where so many men from different parts of the country are congregated.

I next visited the camps under Mr. McCaw's jurisdiction, and found the camps, with probably one exception, in much the same condition as I had found the case of those first visited. There had been no cause for men to lay off work.

The camp in question is an old camp, having been

used the season before, and was not so well ventilated as the others. I gave orders to have a couple of ventilators put in the roof over the men's sleeping apartment, and instructed the foreman to see that all waste was carried to a suitable distance from the camp before being dumped.

In this camp I found the men all in a good state of health, and was informed by the foreman that there had been no cases of sickness in the camp during the time they had been there, but I gave these instructions as a precautionary step on account of there having been some cases of sore throat on the limit.

Whatever there may have been in the way of sore throat previous to my visit, I can report that now there is nothing whatever of an infectious of contagious character, and I am satisfied that the precautions taken by the men in charge are all that can be required to prevent an outbreak of anything of a contagious character. I might mention that in the boarding-house at the mills, as well as in the camps, I found the provision supply of the best, both as to quantity and quality, everything necessary to a bealthy diet being supplied, as well as many of the linguistics.

#### ADJUSTMENT OF TOLLS.

A settlement of the dispute between the East River Improvement Company and the Brennan Lumber Co., of Hamilton, and the Whaley Lumber Co., of Huntsville, has been arrived at by the arbitrators, Messrs. George Kennedy and Theo. C. Taylor, of the Ontario Crown Lands Department. The lumber companies held that the Improvement Company were charging excessive tolls, but the basis of settlement awarded a higher rate of toll than had hitherto been charged. The case was first argued before Messrs. Kennedy and Taylor, who submitted their findings in regard to the books, vouchers, etc., of the East River Company. The total expenditure of the company was calculated at some \$9,100. It was determined to fix the rates of tolls so that the income thus realized would give a revenue of 10 per cent. on capital invested, would provide for the sinking fund which, calculated at 6 per cent. per annum, would repay the company's paid-up capital at the end of their 12 years' lease if invested now, would also pay for the repairs on each section for last year, and would meet as well the expenses of management.

To cover these, the arbitrators decided that the following rates of toll would be necessary, and at a private meeting between the representatives of the parties interested it was decided to accept a settlement on the basis involved: For section 2, consisting of Tasso Lake dams, 8½ cents, formerly 5 cents, per thousand feet; section 2, consisting of the Tasso Creek, 27½ cents, formerly 25 cents; section 3, West Branch dam improvements, 21½ cents, formerly 12 cents; section 4, Tasso Creek to Sinclair town, 4 3/5 cents, formerly 8 cents; section 5, Sinclair to Tonawanda Creek, 4 3/5 cents, formerly 5 cents; section 6, Tonawanda to Rebeccah Creek, 3½ cents, formerly 3 cents, section 7, Rebeccah Creek to the mouth of the river, 1½ cents, formerly 2 cents, and section 8, at the mouth of the river, 1½ cents, formerly 1½ cents.

#### INTERESTING LUMBER SUIT.

Litication over timber limits involving half a million dollars has been commenced in the Ontario courts. The plaintiffs are William H., Robert D., Charles G. and William Hurdman, of Ottawa, and the defendants are Walter G. Whyte, of Albany, N. Y., Andrew G. Buell, of Burlington, Frederick W. Avery, Ottawa, Charles E. Reade, Ottawa, and the Hull Lumber Company.

Some years ago the plaintiffs sold their rights in certain tumber limits in the province of Quebec to the defendants. According to the agreement the plaintiffs claim a one-fifth interest in the assets of the Hall Lumber Co., one of the terms of sale being that when certain liabilities assumed by the purchasing firm had been met the plaintiffs were to receive the interest now complained, and they contend that the liabilities have long since been wiped out. A writ has been issued asking for an injunction to prevent the defendants from selling or disposing of the property.

The Hull Lumber Company, Limited, is the name of the new company formed by the defendants, and their letters of incorporation give them power to purchase, take over or otherwise acquire by any legal and proper means all or any of the business now being carried on by the firm of Buell, Hurdman and Company, as well as that

formerly carried on by Buell, Orr, Hurdman and Company, at the city of Hull, in the province of Quebec, and elsewhere, and the whole or any part of the good-will, stock in trade, assets and property, real and personal, movable and immovable, of the said firms of Buell, Orr, Hurdman and Company, and Buell, Hurdman and Company, subject to the obligations, if any, affecting the same.

It will probably be some time before the case is finally brought to trial, as a large number of witnesses will be examined. Messrs. McCarthy, Osler, Hoskin & Creelman, of Toronto, are acting for the plaintiffs.

#### PERSONAL.

We regret to learn of the recent serious illness of Mr. Martin Russell, the well known lumberman of Renfrew, Oin.

The friends of Mr. Thomas Bryce, retail lumber dealer of Toronto, have induced him to contest ward 2 for Alder-

Mr. A. F. E. Phillips, of the Brunette Saw Mill Company, New Westminster, B. C., is at present paying a visit to friends in Ontario and Quebec.

1 Hon. J. B. Snowball, of Chatham, N. B., will leave for England about the end of January on his annual tour, and will be absent about two months.

Ex-Alderman Crannell, secretary of the Bronsons & Weston Lumber Company, of Ottawa, in response to a large petition presented by the citizens, has consented to offer himself as a candidate for the mayoralty.

Mr. Martin Power, who represented the large Liverpool lumber firm of Watson & Todd at Montreal, has gone to St. John, N. B., where he will look after the shipments of his firm from that port during the winter.

At a recent meeting of the shareholders of the Georgian Bay Lumber Co., Mr. W. J. Shepherd, who has been general manager of the company, was elected president, to fill the vacancy caused by the death of the late A. M. Dodge.

We are indebted to Mr. H. G. Ross, of Victoria, B. C., for the particulars and illustrations of British Columbia mills which appeared in our special November number, and which formed one of the most interesting features of the issue.

The news comes from across the Atlantic of the marriage of Mr. John F. Burstall, of the firm of J. Burstall & Company, Quebec and London. The bride was Miss Green, daughter of Sir William Henry Rhodes Green. Their honeymoon included a trip to Canada.

The success which Canadians attain in foreign countries has again been instanced in the case of Mr. James Connors, a native of Little Rideau, near Hawkesbury, Ont., who has recently been elected to represent Mackinac county in the Michigan legislature. Mr. Connors left his home about twenty years ago for California, moving a little later to St. Ignace, Mich., where he engaged in the lumbering business. A few years afterwards he had the honor of being elected mayor of St. Ignace.

#### TRADE NOTES.

From the Wm. Hamilton Mfg. Co., of Peterboro', Ont., we have received catalogues describing and illustrating their already well-known makes of engines and boilers. The improved "Payne" Automatic Corliss Engine catalogue is neatly printed, and contains, besides the numerous illustrations, a number of valuable tables of calculations relating to the operation of steam engines, as well as testimonials from customers. The boiler catalogue likewise contains numerous tables, and views of the different varieties of boilers and their sections. A copy of each of the catalogues will be forwarded to any address upon application to the company.

The Dodge Wood Split Pulley Company, of 74 York street, Toronto, are now offering for immediate delivery high grade turned and polished steel shafting in any diameter and in any length up to 24 feet each; new designs in either compression, grim-death or flange couplings; hangers of all kinds, any drop, of latest style, adjustable in all directions, with either plain bearings or the Dodge Company's new patent capillary self-oiling bearings. This is positively claimed to be the most up-to-date line of power transmission appliances on the market, and manufacturers and others using shafting, hangers, pulleys, clutches, etc., will do well to get the company's prices



Official business with the Crown Lands Department brings Mr. Wm. Margach to Toronto about twice a year. Mr. Margach is Crown Timber Agent for the Rainy River district, with headquarters at Rat Portage, and when in the city before the Christmas holidays he spoke very hopefully of the future of northwestern Ontario. "Lumbering is quite active," he said, "and more men have been sent to the woods than last year. The quantity of logs taken out this winter will be fully one-third greater than for any past season for many years, which is accounted for by the fact that Manitoba and the Northwest is our market, and the farmers there have obtained better prices for their wheat and have naturally more money to spend in improvements and new buildings. The farmers in the northwest are gradually becoming more prosperous and are pursuing more business-like methods." Mr. Margach tells me that the mining boom is creating quite a local demand for lumber, and as the attention of capitalists has now been directed to these fields, he anticipates that next season will be one of the most prosperous yet experienced. He expressed his regret that the country did not possess a greater population. Speaking of forest fires he said that during the past summer, owing to wet weather, no fires had occurred within his district, which embraces a territory 200 miles wide and over 150 miles from north to south. It was customary to employ fire rangers, but this year he had withdrawn his men, as the fires, if started, would speedily die out.

A LUMBER operator on the Restigouche, in New Brunswick, caused a survey to be made of certain crown lands held by himself and others, believing that another operator was lumbering on the property. A survey proved this to be the case. "Now," said the operator to a friend, "we told this man we believed he was over on our limits. We had this survey made and have shown our contention to be correct. Yet we must, under the law, pay the whole cost of running the line along our blocks. If we should allow him to take the logs the government can hold us for the stumpage. In order to get an already determined point to start from, we had to survey over six miles before coming to our own lands. Once I wanted to run a line for two miles. To do so I would have to start eight miles away. I let it go. They will perhaps tell you in the crown lands office in starting a line to begin at a certain tree on a certain spot on the line of an old survey. I was given as a starting point a cedar tree on a line run forty years ago. The cedar could not be found. The department should run out its block lines more rapidly, and it should insist that one man (as in my present case) should not have to pay the whole cost of a survey between his land and another's. Of course we can hold those logs, but if we do, after this man has gone to all the expense he has, we would be put down as the worst men in the country. I tell you the lumber operator has troubles that loom up so

times as big as the Sugar Loaf yonder."

MANY Canadian lumbermen have during it past month made the acquaintance of Mr. Edian Haynes, of the Timber Trades Journal, of Line don, England, who has been commissioned the publishers of that well-known journalil write up the export lumber trade of Canada a special number proposed to be published abd the first of February. Mr. Haynes has bh connected with the Timber Trades Journal w over twenty years, and is therefore an encuis pedia of information on matters pertaining to fe lumber trade of Great Britain, while his kn T ledge of that industry in other countries is abs the average. Before reaching Toronto hels spent some time in the principal eastern lun I centres of Canada, such as St. John, Quets Montreal and Ottawa, and expressed himsel a being pleased with his visit to these cities, E pecially Quebec, owing to its historical assor tions. Mr. Haynes spent a week in Tore: t going from there to New York. He states: 1 in England there is a growing feeling in fave t purchasing supplies from the colonies, provice as good value can be obtained. To my q. 5 tion regarding the probability of the further i tension of the Canadian lumber trade it Europe, he replied that he was afraid the dist ! between the countries, and the consequent !! carrying charges, would prevent the profit; shipment of low grade stock, but the quantity better grades exported would certainly contto increase. He was surprised that our m factures of wood were not much greater, as considered this to be one of the most remute tive ways of utilizing forest products, and stanced in this connection the extensive tradthe Rathbun Company, of Deseronto. " Canadian manufacturers," added Mr. Hay "give little study to the requirements of the E. pean markets, but content themselves with & ing with the shippers. This is in striking a trast to the Swedish and Russian manufacture who visit the markets each year in order to come thoroughly acquainted with their dema-Of course, here the lumber trade is conducted a cash basis, and the manufacturer receives; ment for his goods upon delivery to the ship while in Great Britain goods are always soll time. This, probably, partially accounts for fact that the whole export trade is handled about a dozen shippers who are financi strong, and who relieve the manufacturer e responsibility, and in the end this may be most satisfactory method. These shippers t established a connection in England which me more than the average Canadian imagines, by means of branch houses are enabled to har goods to the best advantage. There are n points to be studied in catering for the Eng trade."

Mr. T. H. DeCew, the well-known mill owner timber merchant, formerly of Essex, Ont., has been visit the past month to his old home. Mr. DeCewis located in Washington Territory, between Tacoms Portland. He owns 3,700 acres of timber land in On and his mill has a capacity of 90,000 feet per da great deal of the timber is exported to China and J Mr. DeCew says that a peculiar feature of the Cl duty is that it is a specific one, so much per stick, n less of size.

#### J. B. SMITH & SONS' SAW MILL.

LAST fall fire laid waste the saw mill of Messrs. J. B. Smith & Sons at Callendar, Ont., but upon its ashes has been erected a more pretentious and modern structure. In every particular the new mill is complete, being well lighted by large windows, while an electric plant furnishes illumination at night.

The mill is of frame, with heavy timbers, its adimensions being 132 x 42 feet. The roof is shipped with a cupalo running the full length, in which the windows are set. The lath mill annex is 30 × 55 feet, and the filing room annex 10 × 30 efect. On the ground floor is the motive power. Twin Cunningham steam feed engines drive the steam feed for the dimension carriage, and gunishot steam feed drive the lumber carriages. A Doty engine of 150 h. p. operates the circular tsaws, double edger and jack ladder chains, and La Doty engine of 50 h. p., slide valve, runs the , balance of the machinery. A Reliance 35-light o machine furnishes the light. Mr. Stephens is x the electrician in charge. The pulleys used are : made by the Dodge Wood Split Pulley Co., and c the belting is of Scotch manufacture. In the it engine-room are two steam pumps, which, with 1. six hydrants and 500 feet of hose, furnish the t fire, protection. The manufacturing machinery consists of three carriages, one driven by steam k feed, and the other two by rope drives operated ! by gunshot steam feeds. There are two circular & saws, one made by the Jas. Robertson Co. and it one by Shurly & Deitrich. The double edger & and lath mill machinery, steam niggers, trima mers, and the two lath tables, besides the cara riages, were mostly built by the Wm. Hamilton It: Mfg. Co.

In the filing room are two large automatic defiling machines, with all accessories. At one is side is the boiler room, built of brick, containing three Goldie & McCulloch boilers, two of 150 E. h. p. each and one of 100 h. p. Two iron smoke destacks have a brick base of 16 feet each. One is contained in diameter by 45 feet above the roof, and the other is 75 inches in diameter by 80 feet to high. Sawdust, etc., is used for fuel. The burner is circular, and built of stone, and is surfice mounted by an iron rim, but uncovered.

s; A well-equipped blacksmith shop,  $64 \times 20$  feet, in supplies all demands for repairs. There are two old forges, a 22" lathe swinging 40 inches, an iron or shaper swinging two feet, and an iron drilling led machine. An upright boiler supplies steam to a not 20 h. p. engine which operates the machinery.

the yard is large, and an engine owned by the be company does all the shunting, etc., of the cars. St. On the lake is their tug, the "Sparrow," which me picks up the logs and does all the towing.

has company, is in charge. The firm manufacing dimension timber.

#### IMPORTANT PATENT DECISION.

By recent decision of the United States Circuit Court at win Cincinnati, O., the Dodge and Philion patent for separable wood pulleys, covering the compression fastening Ore, and interchangeable bushing system, is broadly sustained. day Under the patent laws, the user, the seller and the manud of facturer are all held to be infringers and liable as such to Ct. the owners of the patent. The Dodge Wood Split Pulley, ref. Company, of Toronto, is taking proceedings against infragers of their patent in Canada.

#### NEW BRUNSWICK LETTER.

[Regular Correspondence of the CANADA LUMBERMAN.]

LUMBERMEN have been badly in need of snow in order to carry on operations in the woods successfully. The weather early in the month was most unfavorable, crews in some cases finding it impossible to do effective work. Of late there have been some light snow-falls, and it is probable that the extent of the cut will not be interfered with.

Messrs, Richard Turner, of Quebec, and W. H. Thorne, of this city, liquidators of the St. Lawrence Lumber Company, of Bathurst, have completed their duties and received their discharge from Judge Tuck. The St. Lawrence Lumber Company went into liquidation about two years ago. At the time it looked as if there would be serious legal difficulties, as there were conflicting interests in this province, Quebec and England. The liquidators were able to avoid trouble, and it is understood only about \$1,400 of the estate was required to pay all the legal bills. Operations were carried on the first winter and then the property was sold. In all about \$237,000 passed through the hands of the liquidators. The general creditors got fifteen cents on the dollar, a better settlement than was looked for at the time of the failure.

The construction of a line of railway from Bathurst to Tracadie, as contemplated, will prove of great benefit to the country. At Tracadie Senator Snowball has a large saw mill with an annual output of nine million feet. Adjacent thereto is a large area of timber, known as the Sweeney block, estimated to yield 100,000,000 feet of timber. It is owned by an American company, of which Mr. Hill, of Bangor, is the president, and it is said that it is proposed to erect on the property a large saw mill to cut lumber for the United States market. The rail shipments would go via the gulf shore and the Caraquet and I. C. R. lines through St. John.

At a meeting of the directors of the St. John River Log Driving Company held early in the month, matters in connection with the failure of F. M. Moore were discussed. An offer of \$4,000 was made by Mr. Moore in settlement of the claim against him, but it was refused as altogether too small. The selection of L. C. Stearns, of Caribon, as arbitrator between the log owners and the company was ratified.

Mr. Miles Moore, a son of Mr. Fred. Moore, the well-known lumber operator of Woodstock, has purchased the property known as the Craig & Sawyer mill on the Meduxualsek, and will make repairs thereto.

#### BITS OF LUMBER.

The revenue from New Brunswick crown lands will this year be ahead of last year's figures, which were \$140,000.

Hon, J. B. snowball, of Chatham, has commenced the construction of two steam tugs for service in connection with his lumber business.

Mr. Frederick Brown has sold his interest in the milling business at Cross Creek. The remaining partners, Messrs E. & W. Sanson, will continue the business.

Mr. William Cunningham left the city this week for New York, en route to Hamilton, Bermuda, where he has heen engaged to fit up a saw mill. The work will require about two months.

St. John, December 23, 1896.

#### BRITISH COLUMBIA LETTER.

[Regular Correspondence of the Canada Lumberman]

At the time of writing it is feared that the lumber trust formed last winter to control prices has gone to the wall, so far as coastwise shipments are concerned at least. The consensus of opinion is that the first of January will witness its termination. Since the first of the month prices have been reduced from \$11 to \$9.50 per thousand feet. This was brought about by the cutting of prices by retail dealers in California, which compelled the trust to take such action. The Central Lumber Company was formed a little over a year ago by the big mills of the Pacific coast, including most of those in this province. These controlled the large majority of the retail yards, and after months of hard work the mills of the coast and the dealers were united under the central combine. Prices were soon after raised, and the agreement entered into was dated January 1st, 1896. It was to terminate in a year, by which time the movers of the enterprise hoped to cement the organization so that it would last for years.

The attempt has been futile, however, owing to the diversity of interests of the large number of mill men and dealers, who became identified with the Central Lumber Company. The large manufacturers hope, however, to hold together for another year to control the foreign trade, and their efforts are now being directed towards this end.

British Columbia lumber manufacturers are looking for an increased trade with China. The Chinese Foreign Office has issued a secret order giving permission for the construction of railways from Hankow to Canton, and from Hankow to Soochow. As China is largely denuded of her timber, the supply will be furnished largely by foreign countries, and British Columbia should certainly receive a fair share of the trade.

G. O. Buchanan is making extensive improvements to his saw mill plant at Kaslo. The shingle capacity has been increased from 20,000 to 70,000 per day by the addition of a new machine, and the capacity of the saw mill will be doubled, which has necessitated the enlarging of the buildings. In addition to this a complete wood-working plant has been ordered. Mr. Buchanan reports a busy season, and the consumption of logs has been much greater than was anticipated.

#### COAST CHIPS.

The limits of new markets for Douglas fir have not yet been reached. The British Columbia Mills, Timber & Trading Co., of Vancouver, B. C., made a shipment last month to Gibraltar, Spain.

The local government have placed upon the market 10,-314 acres of timber land on Queen Charlotte Island, the lease being for twenty-one years. Offers are invited until the 21st January.

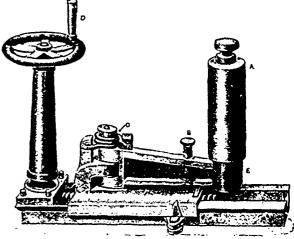
During the month of November twenty-two steamship chatters were reported for foreign points. The season thus far has been more active than last year.

NEW WESTMINSTER, B. C., Dec. 18, 1896.

#### LANCASTER MACHINE WORKS.

SITUATED on the bank of the beautiful Lake St. Francis, in the old Scotch county of Glengarry, is the pretty little town of Lancaster. Among the important business firms of the town is the Lancaster Machine Works. This enterprise was established in 1881 by the late William Stafford, a native of Hyde, Lancashire, England, who previously had carried on a similar business in Montreal. In 1884 the works were completely destroyed by fire, but were immediately replaced by a more modern and substantial building and plant.

A little over a year ago the head of the firm was accidentally killed on the G. T. R., and since that time the besiness has been carried on by his two sons, Messrs. A. & W. J. Stafford. They do an extensive trade in general saw mill plant and hold a number of patents on this and other machinery. The accompanying cut represents a



IMPROVED SET ROLLER MADE BY LANCASTER MACHINE WORKS.

set roller they manufacture which has many advantages in its favor, notably those of convenience, durability and neatness. It consists of a roller A carried on a radial arm E, which in turn is hinged to a traversing carriage sliding upon a planed bed or base, the whole of which is securely bolted to the saw frame or other favorable position in front of the saw. A spring C at the base of the radial arm keeps the roller in place, but when a knot or other uneven surface comes in contact with the roller this spring allows it to give way until the obstruction has passed. The roller is set by means of the hand wheel D, which controls the traversing motion of the carriage by means of a screw shaft beneath the same, and an indicating finger and guage assists the sawyer in setting the roller for the thickness of his cut. While slabbing, the retaining pin B is raised and the roller swung out of place. A large number of mill owners recognizing the merits of this inexpensive machine, have placed them in their mills and pronounce them very satisfactory.

In addition to the manufacture of saw mill appliances, this enterprising firm make a specialty of tannery and dairy machinery, and lately made several shipments of machinery to Europe. They are also working up a good trade in a special line of cotton mill machinery.

k.

#### THE NEWS.

-Gilmour & Company's new mill at Canoe Lake, Ont., has closed down for the season.

-Jacob Lawrence & Son, lumber merchants, of Sarnia, Ont., have opened a lumber yard at Bothwell.

-Iohn McCormack, of Ottawa, is fitting up a small saw mill in Low township for the Asbestos Mining Co.

-Thomas McCamus has returned to his home at Bobcaygeon, Ont., from Lake Temiscamingue, where he has erected a saw and shingle mill.

-It is stated that the Emery Lumber Company are pulling down their saw mill in Michigan and intend removing to Byng Inlet, where in future all their logs will be manufactured.

-George Merritt, of Chatham, and J. H. Hamill, of Toronto, have purchased an extensive timber limit in Georgia, in the United States, and will conduct lumber one ations there on a large scale.

-Charles Stewart has purchased W. L. Herriman & Son's mill at Honora, Ont., and is fitting it up for work this winter. Mr. Stewart is a practical mill man, and will certainly meet with success.

-The Rathbun Company are said to own two hundred million feet of hemlock, as well as a large quantity of cedar, in the townships of Grimsthorpe and Anglesea, North Hastings. At the present rate of cutting the timber will last sixteen years.

-A gift was recently made by Mr. E. Le Roi Nellis, of St. John, N. B., to Major Wm. McKinley, president-elect of the United States, of a large rocking chair weighing 175 pounds. It was made of Canadian white ash, and is said to have been much admired.

-William Robinson, lumber valuator, of Bobcaygeon, Ont., has lately returned from the Spanish river, where he spent six weeks estimating the quantity of standing timber on the different berths recently sold by the Ontario government.

-The Crown Lands Department of Ontario have sent a corps of rangers to examine into the value ard extent of the pine forests existing north of Lake Wahnapitae, with a view to opening the land to miners. The land has never been opened to prospectors, but it is said that valuable mineral deposits are to be found on portions of the territory.

-Several new saw mills are being erected along the line of the Lake St. John Railway in Quebec. Mr. Burns' new steam mill at St. Gabriel has commenced sawing and will be kept in operation all winter. A new mill is being built at Lake Sergent and another at Kenogeni, near Chicoutimi. It is estimated that over one million logs will be taken out along the line of the railway during the present winter.

-Stehelin Bros., lumber operators, have arranged for the construction of a railway from their limits to Wevmouth, N. S. The rails are to be of poles eight inches in diameter, and the wheels are to be concave to suit the rounding surface on which they will run. Probably the only other pole road in Canada is that operated by the Bass River Infusorial Company from their property at Economy to the refineries.

-The Rathbun Company have closed down their lumber and shingle mills at Lindsay, Ont., after a most successful season. During the seven months of operation. there were shipped fifty-one large cars of saw-dust, averaging twenty cords to the car, and making a total of 1,020 cords. Mr. G. H. M. Baker, the local manager, has gone to Manitoulin and the North Shore to arrange for getting out logs during the winter.

-In his budget's speech in the Quebec Legislature, Hon, Mr. Mantel referred to the increasing revenues derived by the province from crown lands. For the fiscal year ending 1886-87 the receipts were \$692,000, and the expenditure in connection therewith \$154,000, while for the fiscal year ending June 30th last the expenditure was only \$185,000, while the receipts were \$1,045,000. He further referred to the high prices realized for the timber berths at the public sale in May last.

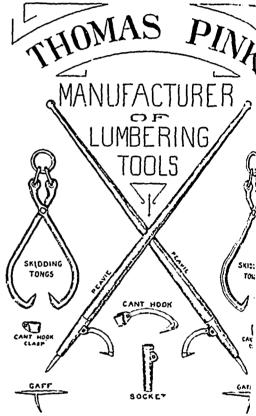
-A report received at the Department of Trade and Commerce, Ottawa, from J. W. Down, Bath Bridge, Bristol, says: "During the present month I have received many letters from firms in Canada interested in the exportation of timber, and I have placed their communications before the principal Bristol timber merchants. Bristol is a large centre for timber from the Baltic, and from what I can gather there is room here for much larger shipments of Canadian timber, and I trust my efforts in this direction will lead to much larger business being done next season."

-The annual meeting of the Maine Lumbermen's and Land Owners' Association was held at Bangor on the 20th of November. Secretary and Treasurer Wilson Crosby read his reports, which were accepted. These officers were elected; B. F. Davis, Bangor, president; Turner Buswell, Skowhegan, W. W. Brown, Portland, Llewellyn Powers, Houlton, John K. Ames, Machias, M. G. Shaw, Bath, vice-presidents; J. Manchester Haynes, Augusta, S. P. Bass, Bangor, Geo. Murchie, Calais, Geo. B. Dunn, Houlton, Cornelius Murphy, Old Town, executive committee; Wilson Crosby, Bangor, clerk and treasurer; S. H. Boardman, F. H. Appleton and C. P. Webber, Bangor, auditing committee.

-Another dispute as to water rights came up before the Ontario Commissioner of Crown Lands recently. Messrs. McRae and Mackenzie are the owners of a sawmill on the Bonnechere river, a branch of the Ottawa. A little further down the river and on the opposite side are situated the electric works of the Bonfield estate. McRae

and Mackenzie claim that certain works which the field people are building will deprive them of the preuse of the water, and they ask permission to lease a w lot on the same side of the river as the Bonfield workited order that they may build a dam and secure water poles The Bonfield estate oppose the granting of such a le. as they claim their works will be injured thereby.





PEMBROKE.ON

MANUFACTURERS OF THE

### FAMOUS CARSS MACKINAN

In Jackets, Pants and Shirts

WOOL SOCKS and MITTS

VAN GOODS Specially for the Lumber Trade.

Write for Prices and Samples.

W. Carss & ORILLIA, ONT.

#### Remember

WHEN SELECTING YOUR TEA IN THE FUTURE THAT . . . .

### LUDELLA CEYLON TEA

is growing more popular each day. It is first favorite with everyone who has tried it, and being the finest produced, should please you. Try It! In Lead Packages only 25, 40, 50 and 60 cts.

H. P. ECKHARDT & CO. Wholesale Agents TORONTO

Galt Machine Knife Works



#### MACHINE KNIVES

OP EVERY DESCRIPTION

Woodworking Machines Send for Price List.

PETER HAY Galt, Ont.

#### RAILS FOR TRAMW

N EW AND SECOND-HAND STE iron rails for tramways and logging 12 lbs. per yard and upwards; estimate complete outlit.

JOHN J. GARTSHOF 49 Front St. West,

### Electrica Supplies

TELEPHON: TELEGRAPI ELECTRIC LIG

Write for Illustrated Catalog

John Starr, Son & C Mnfrs, and Dealers in **ELECTRICAL SUPPI** 

Box 448 Hali

#### **CASUALITIES**

A man named Levesque was killed by the falling of a while working in the lumber camp of Gillies' Bros. at Jear Creek.

. -While working in one of the Huntsville Lumber Co.'s amps, George Hubbard was severely injured by a tree alling upon him.

-While working in the woods at Kleinburg, Ont., luncan McAllister was struck by a falling tree and kd his leg broken.

-Joseph Crosby, aged 70 years, was working in a saw till at Lake Tuskett, N. S., when his clothes caught in te belting and he sustained fatal injuries.

-James Painter, a resident of Woodland, N. B., was illed in the woods on the Southwest Miramichi by the illing of a large limb. Deceased was 58 years of age.

-A resident of Notre Dame du Rosaire, Que., named thanase Blanchet, while engaged in his mill, was precipitated on the circular saw in motion, by which he was terribly lacerated and died almost instantly.

-A lumberman named Joseph McPeak was brought to Toronto from Gravenhurst recently suffering from a broken leg. The injury was sustained by a falling tree while working in the lumber woods.

-- While a gang of men were at work in the woods about six miles north of Alvinston, Ont., one of their number named Lester Smith, aged 21 years, was struck on the head by the splitting of a tree, resulting in his death a short time afterwards.

Frank Buchanan is creeting, a new saw mill at Bass Lake, Ont.

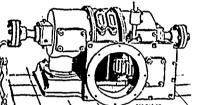
In one of the St. Anthony Lumber Company's camps at Cache Bay, Ont., a pine tree was cut making seven logs 16 feet long, the smallest measuring 32 inches at the top end.

The act of incorporation of the Kemptville Lumber Manufacturing Company, of Kemptville, N. S., has been extended to include the manufacture of doors, sashes, etc., and the capital stock has been increased from \$12,00 to \$25,000.

The advertisers in this paper are the most progressive and reliable men in the machinery and supply business, You will find it to your interest to write them for particulars and prices of their goods. In doing so kindly mention that you saw their advertisement in THE LUMBER-

Twenty-seven Poles recently arrived from Detroit on their way to Smith's lumbering camp at Ruscomb Station, bringing with them tools, clething and provisions. The custom officers refused to allow them to pass without paying a duty ranging from 25 to 35 per cent. on the goods, which was finally agreed to. This is said to be the first instance in which a duty of this character has been col-

Vertical and Horizontal & Built in 44 Sizes



Complete in its own case.

No expensive flume required.

Highest percentage of power guarananteed at full and partial gate opening.

Machine Dressed Gearing, Shafting, Pulleys, Hangers, Etc.

WRITE FOR CATALOGUES AND GEAR LISTS

253 Little Giants sold the Canadian Government.

IORE 'est, Tr

a

1E **三王** GH

Co.,

PLIES.

ılifar,

C. WILSON & CO. GLENORA, ONT.

MONTREAL, QUE.

Western Office: TORONTO, ONT.

Cable and Telegraph Address, "Roylectric."

MANUFACTURERS OF

LIGHT and POWER

Special Attention Given to-

#### LONG DISTANCE TRANSMISSION OF ELECTRICITY

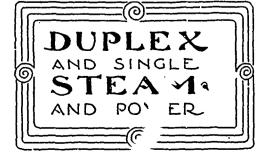
FOR LIGHT AND POWER

ALSO FOR

#### **ELECTRIC PLANTS FOR MILLS**

Distant water powers utilized and Mills lighted and operated safely. CORRESPONDENCE SOLICITED

# ORONT 0 THE J.C.Mº LAREN BELTING Cº MONTREAL



The Northey Mfg. Co. Ltd. TORONTO

THE LAURIE ENGINE GO. MONTREAL

Sole Agents for Province of Quebec.

THE PARMENTER

PATENT DRY KILL

For Drying LUMBER

Staves, Heading, Shingles, &

The Latest

JANUARY, 18

#### **LUMBERMAN'S**

VEST-POCKET

### INSPEGTION **BOOK**

Containing Rules for the Inspection and Measuring of Pine and Hardwood Lumber in the leading markets of Canada and the United States. Bmbracing also many useful tables and calculations or everyday service to lumbermen.

Prepared by the Editor of the \* Canada Lumberman."

Toronto, Capada C H. MORTIMER, Publisher 1805

THE above is a fac simile of the title page of the latest and most complete Lumber and Inspection Book published.

We shall be pleased to send you a godu on receipt of four 3 cent Ganadian postage stamps • • • •

THE CANADA LUMBERMAN.

Toronto, Canada

#### RE YOU WANTING STANDING TIMBER

I Can Supply You

35,600 acres in a block situated on water—can be delivered in salt water at \$4.50 per M—containing:

40,000 feet 1st class Fir pace, 10,000 " and " " " and " " " " and also 100 million feet of Hemlock, and 50 " Good Cedar.

43,672 acres, containing :

40,000 feet 1st class Fir pag.
5,000 " and " ""
10,000" (Cedar (on a pation of the
above), and also other Valuable Bill Timber, Spacy, cia—situated on water and can be delivered in salt wate,
at \$5,000 per M.

Computed by a competent Ontario ranger.

II. G. ROSS, Victoria, B. C.



OUR EXTRA HAND-MADE

AXE

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

CAMPBELL BROS. Mnfrs. St. John. N. B.

Mention the LUMBERMAN when corresponding with advertisers.

### CHATHAM, ONT., June 19th, t.

The Cheapest

JAS. S. PARMENTER, Flushing, N. Y.

And Best

JAS. S. PARMENTER, Flushing, N. Y.

DRAR Sir: We take very great pleasure is, able to say from nearly one year's use of your. Dry Kiln, we find it away ahead of anything ay ext tried for thoroughly drying lumber without it in the least. So far we have found exhaug, alone sufficient for our purpose, so that it alway coak, rock elm, halm and other hardwood lumber; time than we eve, did with a blast kiln, and esgend it a splendid kiln for drying white oak heldes its work so naturally that neither hubs not have injured by it.

CHATHAM MFG. CO., 1:

D. R. VAN ALLEN, President.

D R. VAN ALLEN, President.

J. S. PARMENTE

Canadian Office-

WOODSTOCK, ONT.

FLUSHING.



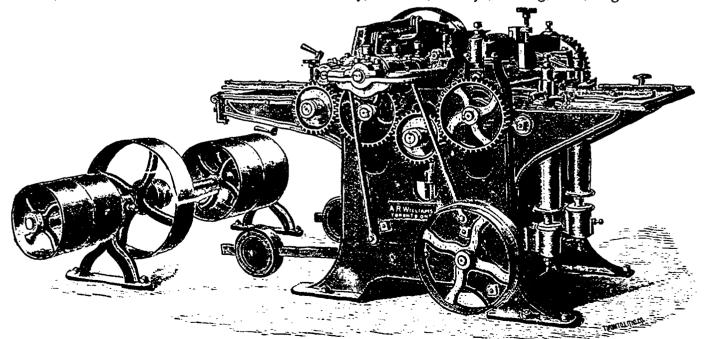
CASTER MACHINE WORKS

LANCASTER, ONT.

#### MS MACHINERY CO., Ltd The A. R. W HAVE FOR SALE THE FOLLOWING:

NOMPLETE OUTFIT of Saw Mill, Shingle Mill, consisting of one Three Head Block Saw Mill, two Large Engines, one 65 h.p. Boiler, Shingle Machine, Jointer and Packer; and Chopping Mill with Three Acres of Land, Wet and Dry Yard, with lots of Timber near.

PLANING MILL OUTFIT, consisting of Engine and Boiler, Planer, Matcher and Moulder Combined, with a Full Set of Sash and Door Machinery, Shafting, Pulleys, Belting, Etc., in good town.



"ECLIPSE" PLANER, MATCHER AND MOULDER.—DOES GREAT VARIETY AND FINEST WORK.

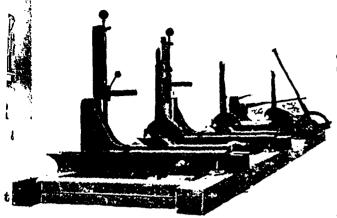
Sole Canadian Agents for the Genuine Sturtevant Fans and Heaters for Dry Kilns, Shaving Fans, Blowers; S. J. Shimer, Sons & Co.'s Celebrated Shimer Matcher Heads, Door and Sash Heads; E. Harrington, Sons & Co.'s well-known Chain Hoists and Overhead Tramway.

We have a Large Assortment of Planer and Sticker Knives for Immediate Shipment.

The A. R. Williams Machinery Co. Ltd., Front St. West (QUEEN'S HOTEL)

Toro

# aw Mill, Wood-Working and Pulp Mill Machinery



A Thoroughly Good but Cheap ....

Saw Garriage: OUR 31/2

with 3 Unbreakable Steel Girder Fractional Head-Blocks, opening 50 inches from Saw.

Reliance Dog; 2 Large Style Pull Dogs; Reliance Set Works with Index, Spring Receder, 6 Axles and 12 fourteen-inch Wheels; 50 feet V and Flat-Rolled Steel Track in to-foot lengths; Rope Feed Roller and Ratchet to take up Slack.

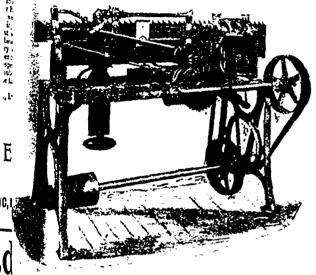
This Consists would be lightly increased

This Carriage could be slightly increased in cost by Cut Steel Segments and Pinions in Log Seats; Reliance Dog in each Knee and Cast Steel Truck Wheels.

Band Saw Tools

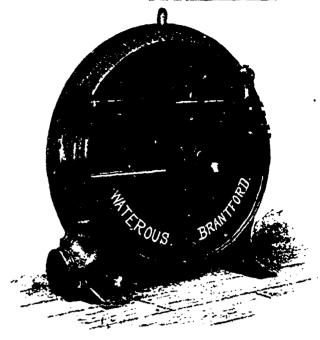
Band Saws and ...

We make 11 Different Sizes of Carriages from No. 0 to No. 6for any size Logs up to 6 and 8 feet in diameter and any length.



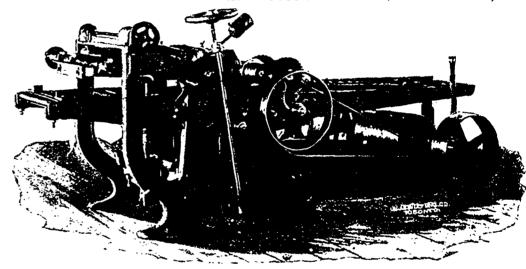
s is the Latest AUTOMATIC BAND SAW FITTING MACHINE (Patented).—It Swages, Joints and Side-Dresses 40 teeth per minute; doing the work perfectly; leaving the saw in much better condition than by hand.

fals and other Automatic Tools makes it as Easy to Keep Bands in order as the Circular.



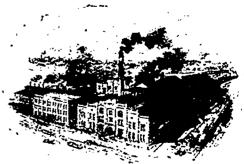
The Holyoke Pulp Wood Barker

Patent Attachment to Barker not shown, turning wood continually while knives bark it; increases capacity 25130%. HEAVY CUTTING-OFF SAWS, WET GRINDERS, ETC.

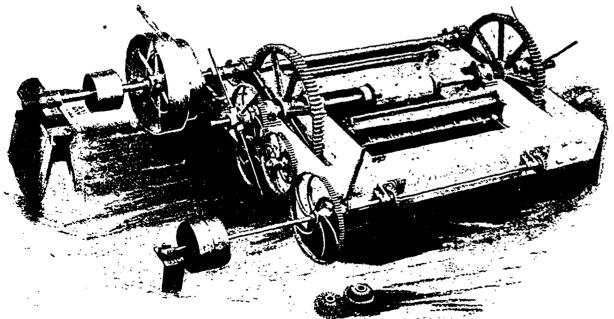


The Ghampion Planer, MATCHER AND MOULDER, with Extended Frame and Table.-Mandrel Double Belted-all Feed-Rolls Driven-a Heavy, Fast and Very Popular Machine.

**ESTABLISHED** 1844 **INCORPORATED** 1874 **NEW WORKS OCCUPIED** 1896



Everything for Saw Mills Get Our Quotations



Venger or Pelling Machine Shown peeling a very short log.—No. 1 takes a log 5 ft. × 48 in.; No. 2, 6 ft. × 48 in.—Makes any thickness of Vencers — Handles most of the Soft Woods Without Steaming—a Very Profitable Addition to any Saw Mill.

3est Quality of Work ow Prices . . . .

WATEROUS, Brantford, Canada

#### JOHN SCULLY & CG.

ESTABLISHED 1878.

TORONTO

#### TIMBER LIMITS BOUGHT AND SOLD

Contractors', Lumbermen's and Mining Co's Plant and Supplies.

Light Locomotives, Rails of all kinds

Air Compressors, Pamps, Steam Drills, Thesting Barteries, Wire and Hemp Rope.

MINING MACHINERY- New and Second-Hand.



SCRIBNER'S

LUMBER

FOR BOOK

er One Million Sold. Most complete book of its ever published. Gives measurements of all kinds amber, Logs, Planks, Timber: Hints to Lumber ers' Wood Measure: Speed of Circular Saws; of Saws; Cordwood Tables; Felling Trees; the of Trees; Land Measure: Wages, Rent, Board, est, Stave and Heading Bolts, etc. and and Itables and the United States and da. Illustrated edition of 1895. Ask your bookfor it.

for it. "Sent postpaid for 35 cents. S. B. FISHBR, Box 238, Rochester, N. Y.

#### J. D. SHIER

MANUPACTURER OF

# Lumber, Lath & Shingles

BRACEBRIDGE, ONT.

# 

#### Are you thinking of moving to better your condition?

If so, come to Michigan, where you can get comfortable living, good markets, good neighborhood, reasonable transportation for your products. A PROSPEROUS STATE!

#### The Flint & Pere Marquette

R. R. Go.

have good lands for sale, prices ranging from SEVEN TO FIFTEEN DOLLARS per acre, according to location and timber; easy terms.

You make no mistake locating in this territory

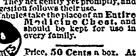
ADDRESS:

A. Patriarche, Traffic Manager # Saginaw, Mich.

Your Stomach Distresses You

afterenting a hearty meal, and the esult is a chronic case of Indigestion, Sour Stomach, Heartburn, Dyspensia, or a bilious attack.

#### IPANS TABULES



50 Cents a box. At

#### You ARE

OR A CHANGE IN LOCATION?

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

#### FINE SITES FOR NEW MILLS BEST OF FREIGHT FACILITIES

CLOSE PROXIMITY TO

#### COAL FIELDS AND DISTRIBUTING CENTERS

#### INTELLIGENT HELP OF ALL KINDS MANY KINDS OF RAW MATERIAL

For full information write to the undersigned for a

#### 100 Cities WANTING INDUSTRIES

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

To sound industries, which will bear investigation, substantial inducements will be given by many of the places on the lines of the Illinois Central R. R., which is the only road under one management running through from the North-Western States to the Gulf of Mexico. GEO. C. POWER, Industrial Commissioner I.C.R.R. Co., 506 Central Station, Chicago.



Sole Canadian Agents

Prices Reduced.

WATEROUS, BRANTFORD, CANADA.





### LOOKING IT COSTS YOU NOTHING

Automatic "Compression"



UNLESS OUR GUARANTEE IS FULFILLED

To convince you of the Superiority of our Process, write us for Catalogue " $\zeta_i$  and Testimonials.

Have you ever seen our Channel Steel . Roller Bearing Trucks and Lumber Buggies ?

. FIDELITY BUILDING

SIXTEEN

REASONS.

AND HOW TO

AVOID THEM



Being instructions to filers on the care of large band saw blades used in manufacture of lumber.

A book filled with valuable information on the care of band saws. Giving reasons for breaking: analyzing each reason; giving instructions to dispense with causes as laid down in each reason; and full details on filing and brazing proper styles of hammers to use are illustrated and described, and views of ble showing the blows of the different styles of hammers form an important part of illustrations. Improper and unequal tension are then treated and the manner illustrations. Improper and unequal tension are then treated, and the manne properly setting irregular teeth is described. In connection with the treatise is attory of the invention, manufacture and use of the saw from its origin to the pretime. The work in whole makes an accumulation of information such as has metallicities. before been published.

The book is printed on fine paper, good clear type, and is handsomely and stantially bound in cloth. It will be sent to any address on receipt of the w ONE DOLLAR.

Address-

CANADA LUMBERMAN, Toronto Ot.

FOR SAW AND SKINGLE MILLS

We make a Special Strong and Heavy::::::::

# WOOD SPLIT PULLE'

for Saw and Shingle Mills.

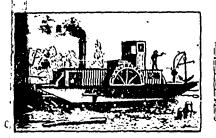
Millmen, when Overhauling or Extending, write for Prices. We can save you money and gi you good satisfaction.

DODGE



Office: 74 York St. **TORONTO** 

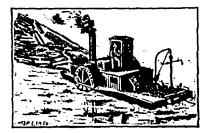
# WEST & PEACHEY • • •



SIMCOE, ONT.

MANUFACTURERS OF

# ALLICATOR STEAM TUGS



STEAM ROAD MAKER

# ENGINES AND BOILERS FOR STEAM YACHTS

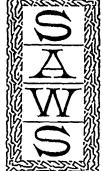


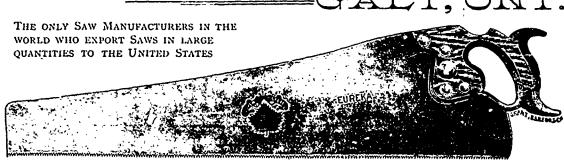
· Saw Mill Machinery ·

# \*\*\*\*\* SHURLY & DIETRICH \*\*\*\*

MANUFACTURERS OF







80LE PROPRIETURS OF THE SECRET CREMICAL PROCESS OF TEMPERING : : Our Silver Steel Saws are Unequalled

# Dauntless Shingle and Heading Machine

Shingles per day than any self-acting machine with vertical saw in existence, and more Shingles from the same quantity of timber.

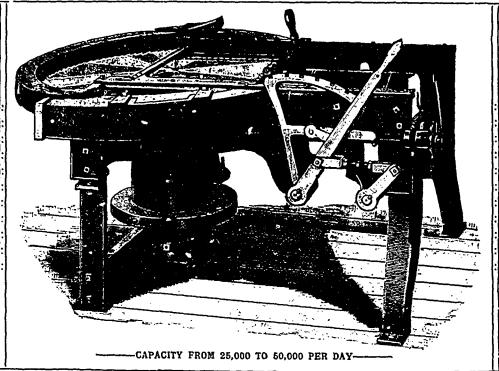
#### THE FRAME-

i... Is of Iron throughout, very heavy and rigid, strongly bolted and braced.

#### THE CARRIAGE-

gn

... Is very light and strong, made of forged Cast Steel Plate, running on steel ways or tracks. Will take in a block 18 inches wide and 19 inches long, adjustable for 16-inch or 18-inch shingles.



fcopy.1

HASTINGS, Dec. 3, 1894.

F. J. Drake, Esq., Belleville.

Dear Sir,—We have waited two years before giving you our idea of your machinery. This we do to thoroughly test it, and can now say we know what it can do.

Your Saw Mill is equal, or nearly equal to any we have seen of much heavier make, and far in advance of any light rig in the market. The capacity per day is fully up to your guarantee, 40 M per day. We have tested with eight men.

The Shingle Mill cannot be beaten for any kind of timber. Ours being in a manner a custom mill, we have good, bad and indifferent timber, but for all it does the work sattsfactorily.

You may use this in any way you please, or refer to us at any time.

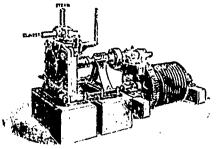
Yours truly, (Sgd.) W. J. & H. W. Fowlds.

Ganadian Locomotive & Engine 60., Limited.

MANUFACTURERS, UNDER THE F. J. DRAKE PATENTS, OF

SAW, SHINGLE and LATH MACHINERY

# THE DAKE STEAM FEED



EMBODIES THE FOLLOWING ADVANTAGES

Simplicity of Construction,
Positive and Easy Management,
Economical Use of Steam,
Small Space Occupied,
Cheapness,

Easy Adaptation to either New Mills or those now in use.

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

Mill men who have used other makes of Steam Feeds, comment favorably on the economical use of steam of our feed over others. Write for Catalogue and full particulars.

THE PHELPS MACHINE CO.



EASTMAN, QUE.

#### A. MOPHERSON

# SHANKS AND CHISEL BITS

For Inserted Tooth Saws.
Warranted equal to any on the market.

Also Manufacturer of

Locomotives and Trucks for the Pole System of Tramways for handling logular and lumber in the woods.

Correspondence Solicited.

A. McPherson - Oxford, NOVA SCOTIA

# SUPPLIES

OF ALL KINDS

Chains, Ropes, Axes, Files, Bar Iron, Horse Shoes, Peavy Cant Dogs.

# RICE LEWIS & SOI

(LIMITED)

Cor. King and Victoria Sts.

TORONTO

Every Lumberman wants it

35 cents buys

# Scribner's Lumber and Log Book

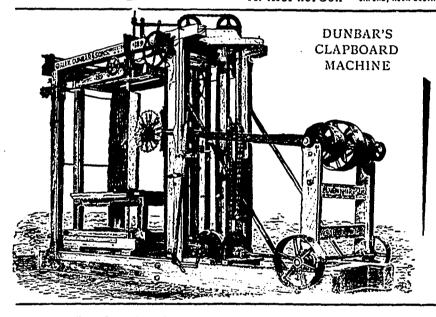
SAVES TIME

SAVES MISTAKES

SAVES MONE

BRIMFUL OF EVERY-DAY,
PRACTICAL INFORMATION

Address:
THE CANADA LUMBERMAN, Toronto



# ALEX. DUNBAR & SON

Manufacturers of

ار بور بهر بور بور بور بور بور بور بور بور بور

# Saw-Mill Machinery

OF ALL KINDS

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

WRITE FOR FURTHER PARTICULARS

ALEX. DUNBAR & SONS

Woodstock, N.

JSE THE FAMOUS .. PINK LUMBERING TOOLS

Duck Bill Peavies, Round Bill Peavies, Finest Duck Bill Winter Cant Hooks

**Lowest Prices** 

THOMAS PINK

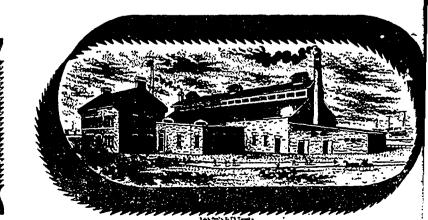
Cant Hook Handles By Car Load or Dozen Peavy Handles By Car Load or Dozen Pike Poles, Skidding Tongs, Boom Chains

© PEMBROKE, ONT.



Circular, Mill & Gang, Shingle, Butting. Concave. Band, Cross-cut, Billet Webs.





OTTAWA SAW WORKS CO.

WRITE FOR QUOTATIONS =