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AMERICAN LUMBERMAN

WOOD WORKERS' MANUFACTURERS' AND MILLERS' GAZETTE

VOLUME XVIII.
NUMBER 2.

TORONTO, ONT., FEBRUARY, 1897

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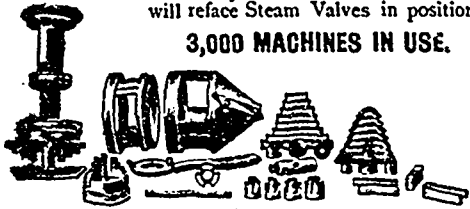
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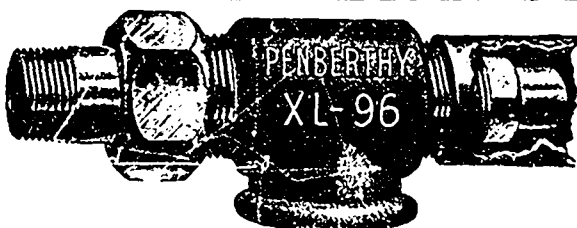
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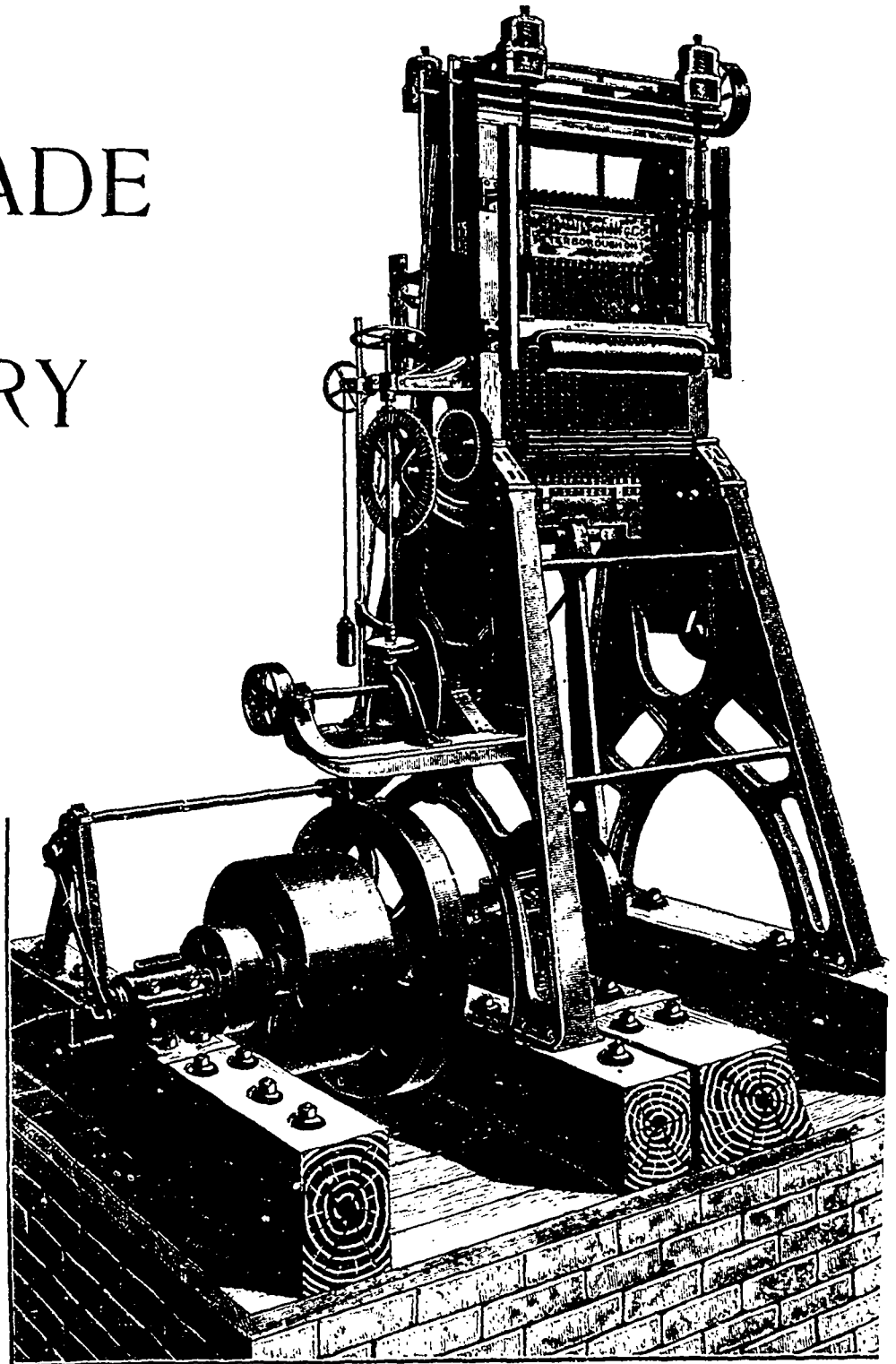
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VOLUME XVIII.
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TERMS, \$1.00 PER YEAR
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MR. JOHN CHARLTON, M. P.

As a lumberman and statesman, we take pleasure in placing before our readers a portrait and biographical sketch of Mr. John Charlton, M. P., of Lynedoch, Ont., the worthy representative for North Norfolk in the House of Commons. Born in humble circumstances, but with abundant persevering qualities, he has gradually risen to a high position of honor and commercial status.

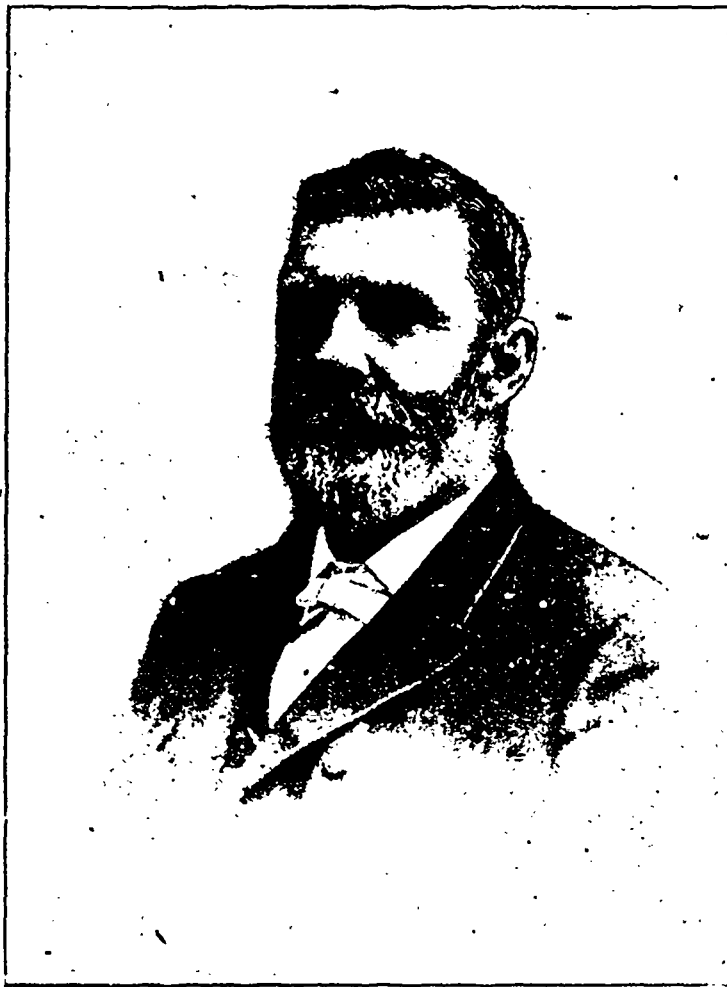
The subject of our sketch was born near Caledonia, Livingstone County, New York, on February 3rd, 1829. His father, Adam Charlton, came from Newcastle-on-Tyne to New York in 1824. The Charltons are one of the oldest families in England, and their geographical records in Northumberland date back to the eleventh century. After receiving his education at the Grammar School at Caledonia and Springville Academy, N. Y., Mr. Charlton worked for several years on the farm with his father. At Ellicottville, N. Y., he learned to set type, and spent a portion of his time reading law. In 1846 he made a trip on a lumber raft down the Allegheny and Ohio rivers to Cincinnati, and his later years he has always retained vivid recollections of this five weeks' experience with the rough but warm-hearted raftsmen.

When his father removed to Canada in 1849, Mr. Charlton was 20 years of age. They settled near Ayr, Waterloo County, and four years later, in partnership with Mr. George Gray, he launched out into mercantile life, starting a country store at Wilson Mills, under the style of Gray & Charlton. Their combined capital was about \$1,800, including the cost of the building which they erected. The country being yet sparsely settled, pine timber was abundant, and the firm shortly after starting business engaged

in the timber trade in connection with Smith, Westover & Company, of Tonawanda, and by dint of economy and industry were eminently successful. In the year 1859 Mr. Charlton sold his interest in the store at Wilson Mills and took entire charge of the extensive Canadian timber business of Smith & Westover. Two years later, in conjunction with Mr. James Ramsdell, he bought out the Canadian interest of the above firm, and for four years the firm of Ramsdell & Charlton carried on a successful business. He purchased the interest of his partner in 1865, and conducted business on his own account for several years. Since that time he has been associated with Mr. Alonzo Chesbrough, of Toledo, Ohio, and was at one time manager of the lumber firm of Chesbrough & Charlton. Lately he has

been associated with his brother Thomas, the firm name being J. & T. Charlton. They have extensive interests at Tonawanda and in Michigan, a sash and door factory being a portion of the Tonawanda business. In 1854 he married Miss Ella Gray, of Lynedoch, where he now resides.

His first connection with politics was in 1872, when he accepted the nomination for the House of Commons in North Norfolk and defeated Aquilla Walsh, after a bitter fight. Ever



MR. JOHN CHARLTON, M.P.

since he has continued to represent that constituency, being returned at every election. He is a staunch Liberal, and has always taken an active and laborious interest in the House of Commons. In early life he was somewhat of a Protectionist, but now favors a revenue tariff policy, and is a strong advocate of closer relations between Canada and the United States. A fortnight ago he visited Washington, for the purpose, it is said, of negotiating a new reciprocity treaty with that country.

In religion Mr. Charlton is a Presbyterian. He is of a genial and kindly temperament, but possesses firmness of character and tenacity of purpose. He has a wide knowledge of the resources of Canada, and is recognized as one of the ablest public speakers in the Dominion.

LUMBERMEN BEFORE THE TARIFF COMMISSIONERS.

THREE prominent lumbermen, Mr. J. R. Booth, Hon. E. H. Bronson and Mr. Robert Reford, gave an expression of opinion on tariff matters before the Commissioners at Ottawa. Mr. Bronson said he was not disposed to demand any changes, but thought the removal of the duty on corn would stimulate the production of pork and thus help the lumber trade. To Mr. Davies' reply as to what proportion of home fed pork was used among lumbermen, Mr. Bronson replied that he used American pork almost exclusively, as a heavier pork was required in their business than was generally raised in Canada. Canadian pork he thought just as sweet and good as any other, but the heavier American pork did not waste so much in cooking. He referred to the agitation to impose an export duty on Canadian logs and pulp wood, and said he would bespeak for the lumbermen a hearing before such action was taken.

Mr. Fielding stated that it had been represented to him that Canadian fed pork had greater success in England than American owing to the fact that corn was not used for feeding purposes.

Mr. J. R. Booth also favored the removal of the duty on corn and pork. He thought it in the interest of the great working class that the duty on pork should be reduced and made as cheap as possible. There was no doubt, he said, that the duty had been placed on pork to benefit the farmer, but he was inclined to think that the duty was a greater hindrance to the working classes than a benefit to the farmers. The present duty is \$2 per barrel, and he did not know that Canadian pork was consumed to any greater extent than formerly. He used American pork almost exclusively in his lumber camps for the reason that

he could not generally get Canadian pork in sufficiently large quantities when he required it, and also for the reason that Canadian pork did not keep so well. Mr. Booth stated that it would be only fair if pork were made cheaper for our lumbermen. No trade has ever had more reverses to struggle against than the lumbermen, he said, "and very few men have spent their life time in it and not died poor."

Mr. Robert Reford, of Montreal, asked an imposition of a duty on saw logs. He contended that at present the Americans were getting Canadian timber for practically nothing, while the Canadian forests were being rapidly depleted, with nothing to show in return. He had reason to believe that Canadian lumber was sold in Ottawa to Americans at \$4 per thousand, or less

than the cost of production. Forests did not replace themselves for years, and some active measures should be taken to prevent depletion. He did not think that the law restricting the size of trees to be cut was enforced. With respect to pork, Mr. Reford said that he considered Canadian pork much superior to that from the States. He had found it a most profitable business, and as for corn, there was much grown around Montreal, and the farmers were increasing the acreage under corn, finding that it could be raised profitably.

ANDRE CUSHING & COMPANY.

In a recent issue of THE LUMBERMAN we gave some particulars of the construction and equipment of the large



MR. GEO. S. CUSHING.

saw mill of Andre Cushing & Company at St. John, N. B. In this number we are pleased to present a more detailed description, together with a photograph of the mill and portraits of Messrs. George S. Cushing, Theophilus Cushing, G. L. Purdy and F. H. Jobson.

The mill deserves special notice as being the largest and most modern saw mill in the maritime provinces. The situation is unique in that it is within a stone's throw

difference of twenty-five to thirty feet between high and low water—spent some £80,000 in cutting a channel through the neck of land forming the point, and erected a saw mill with a number of single saws that were operated when the tide suited in sawing the large pine that was common on the St. John river at that time. This mill, however, was not a success, and was abandoned. All that remains of the enterprise is the channel, which is through solid rock, and looks as if it would last as long as water runs.

About the year 1852 the first steam mill was built on the extreme point, about in line with the break of the falls, the firm being Andre Cushing & Co. They had the misfortune to be burned out several times, but each time rebuilt on a larger scale. The last fire occurred in the spring of 1895, and for a time the impression was general that the mill would not be rebuilt, consequently the outlook for the large number of employees was not reassuring. However, as it afterwards transpired, Mr. George S. Cushing, the master mind of the firm for the past few years (the original members of the firm having died some years ago), while not saying much, had kept on thinking and planning, with the result that he purchased the interests of the heirs in the estate—retaining the old firm name—and in the fall of 1895 operations were begun to rebuild on a more extensive scale than ever before.

During the year after the fire Mr. Cushing was not idle; he had large lumber contracts in hand at the time of the fire which had to be filled, in which he succeeded, and, besides, he visited the large saw-milling centres to acquaint himself with all the latest saw mill equipments, and, having decided to rebuild, selected those that seemed best suited to his requirements. Owing to the improved machinery he selected, the old site was not deemed suitable, so he began on new ground altogether, but only a short distance from the old site.

Mr. Cushing's judgment was that the first and most important feature in the new enterprise was the power, the order for which he placed with Mr. James Fleming, proprietor of the Phoenix Foundry, St. John. The power plant consists of two horizontal engines of 250 H. P. each, right and left hand on same shaft, with belt fly wheel 12 ft. x 4 ft., six tubular boilers (three of which are sufficient to furnish steam), set with patent sawdust furnaces. These are all placed in a brick fireproof building, with a brick wall dividing the engine room from the boilers, and the whole separated from the mill proper. In the engine room there is a steam pump for fire protection,

band mills made by The Filer & Stowell Co., of Waukegan, one on either side of mill; one Wilkin's compensating direct action steam gang placed in the center of mill; two patent parallel gang edgers; patent slasher made by the Stearns Mfg. Co., Erie, Penn., which carries eight 42" saws; automatic trimmer, Watered make, also carrying eight saws. These machines are placed that with the live rolls and transfers used in lumber and slabs are carried to their respective destinations with very little attention and without a hitch. A planer is placed conveniently near the automatic trimmer so that lumber requiring it can be dressed before going to the yard.

The lath and box mill is in an addition at the side of the main mill, the material for which is delivered from the slab slasher very convenient to the operators, while the refuse is carried back to the main conveyor and delivered at the different points required.



MR. THEOPHILUS CUSHING, Superintendent.

The logs are taken from pond to bed of mill on an endless chain and rolled off on either side by large iron rollers eccentrically placed on a shaft under the floor. The shaft is so arranged that it can be turned either way, throwing the log to either side as desired.

There are steam canters or "niggers" for both the mills, as well as "tickers" for throwing the log onto log carriages. These appliances are of the latest



ANDRE CUSHING & COMPANY'S SAW MILL, UNION POINT, ST. JOHN, N. B.

of the only "Reversible Falls"—very aptly termed by the inimitable Burdette on the occasion of his first visit to St. John—of any magnitude in the world. It is situated on what is called Union Point, on the western bank of the St. John river, just above the railway cantilever and the suspension bridges that span the St. John river where it empties into the St. John harbor, and is a natural mill site, as just behind the point on the upper side is a larger bay, in which any quantity of logs can be held and floated to the mill at any time of the year. Admirable piling grounds and wharves line the upper side of the point, from which vessels take in their cargoes for any port.

Before steam became the recognized power for sawing lumber, some Americans took advantage of the location, and on account of water power to be had during a part of the time—owing to the ebb and flow of the tide giving a

and a very complete electric light plant which supplies light to the mill, wharves, pond, yard and offices. The city laid water pipes to the mill and several hydrants are conveniently placed, which, with plenty of hose, would seem to make the fire risk a safe one.

The mill proper is 226x60 feet, three stories high, built on a stone and brick foundation. The power is taken by a double leather belt four feet wide through the side of main mill to a line of shafting running lengthwise of the mill, from which leads belts and gears to drive all the machines which are placed on the floor above. On the same floor as the shafting are the saw-dust, refuse and slab conveyors, the saw-dust going to the boilers and the refuse to a large and long conveyor leading to the fire dump.

The sawing equipment consists of the following: Two

most approved patterns for their respective requirements. Underneath the floor, conveniently placed in the center of log bed, is a steam jump-up saw 60" diameter for cutting the logs to any desired length, and for trimming the ends of logs that are gravelled or "rocked" in driving, saving the band saw many a bad tooth.

The filing room is nicely situated one story above the mill floor and equipped with an engine to drive the various grinders, toothers, rolls, etc., for keeping the logs in order. The location, arrangement and equipment are very convenient and complete in all its parts.

The building of this mill has put a large amount of money in circulation in St. John, and was a boon to the men employed in its construction as well as to the founders and machine shop owners who supplied part of the outfit, some \$20,000 being spent in the

St. John. The superintendent in charge of construction was Mr. Frank H. Jobson, of Portsmouth, Virginia, who has had a large experience in such work in the United States, and he has admirably succeeded in reaching Mr. Cushing's ideal as to what an up-to-date saw mill should be. The mill has been running night and day most of the time since early in the summer, and has been a success from the start, which speaks well for the management, to whom this style of mill was comparatively new. The capacity is in the vicinity of 40,000,000 superficial feet per year. Mr. Theophilus Cushing is the general superintendent

out of a fire or fires at Katrine, near Parry Sound, on the 7th and 8th of May last, when the mill and a large quantity of lumber and other property were destroyed, and some cars belonging to the Grand Trunk Railway Co. Mr. J. J. C. Thompson was the manager of the lumber company, and made a statutory declaration as to the loss, that the fire on the 8th of May was caused by embers from the fire of the previous day; also that the fires were not caused by any wilful act or neglect of his or by his procurement, means or contrivance, or by any officer of the Katrine Lumber Company. The defendant companies claimed that these statements of Manager Thompson were untrue, and that the statements about the fire, loss, etc., were fraudulently made. They claimed that if the fires were not caused directly by Manager Thompson they were the result of his negligence in not having his property properly watched, and they further alleged that his claims for damages were largely in excess of the actual losses. There being a disposition for settlement his Lordship gave counsel time to consult their respective clients, and the outcome was a settlement reached about 5 o'clock, when Mr. Osler stated:—The parties have arrived at an agreement which will involve, in the first place on the part of your Lordship, an order consolidating all the cases into one and treating them as one. In the event of the sum of \$38,000, the amount agreed upon to be paid by the defendants to the plaintiffs as the amount of the loss, not being paid within ten days from this date, judgment may be entered against all the companies in the consolidated actions for such amounts as each should bear proportionate to the amounts under the different policies as the sum of \$38,000 bears to the losses computed at something over \$39,000. And in making this statement of the agreement arrived at to your Lordship, I think it is right I should say something in regard to the circumstances leading up to the payment of the losses at this stage of the case. Shortly after the fire, in May last, a letter, which can only be characterized as a blackmailing letter—I need not specify it more particularly—was sent to the plaintiffs by a man who had occupied the position of yard foreman and general superintendent outside at the mill, making statements and insinuations, and indicating that he had such knowledge as if divulged would implicate the plaintiffs, and particularly the manager of the plaintiffs, Mr. J. J. C. Thompson, as having practically committed the crime of arson, and burning the buildings with the object of collecting the insurance. I do not think I am putting that too strongly as the charge in the letter referred to. It is only fair to Mr. Thompson to say that immediately on receiving that letter he forwarded it to the companies; that letter was received by the companies from Mr. Thompson, who sent it on with a letter stating as it was but a black-mailing scheme he would take no notice of it, but he thought it right to place it before the companies, so that they might have an investigation if they so desired. The companies did not make the investigation, but other parties who had lost by the same fire undertook an independent investigation subsequent to that. The result of that was the obtaining of statements from a considerable number of witnesses, these statements were prepared to be signed by these parties, these being witnessed by independent persons, and without passing through the hands of the persons who got them placed in the hands of the insurance companies. These statements professed to carry further the statements implicating the plaintiffs contained in the letter referred to. Further investigation resulted in further similar statements. Upon these statements the defences were placed upon the record and particulars ordered from time to time. The defence and particulars were entirely based on these statements. Since the case has been upon the list, and more particularly yesterday and to-day, I myself personally have examined and cross-examined these witnesses on their statements, and it is only fair to say that in so far as these statements profess to implicate Mr. Thompson in any way the witnesses have contradicted them; they have stated that they were not correctly taken down; in other words, they failed to bear out the statements signed by them and sent to the companies. That having been the case counsel can only say they think the evidence as it now appears to them, and as it would appear if brought before your Lordship and the jury, would show these statements were entirely without foundation in fact, and we are very glad to say that is the case, and that that would be the result of the verdict of the jury there is not the slightest doubt. Upon communication with the companies advising them of that fact the

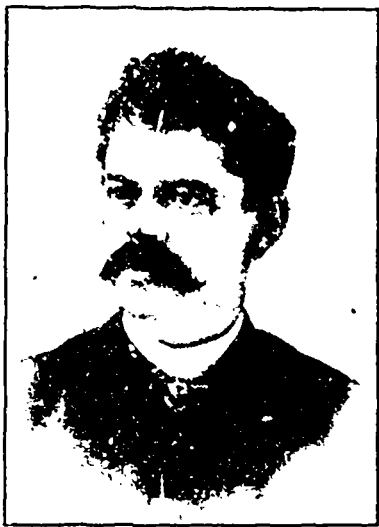
companies have instructed counsel to agree to the payment of the losses, and in saying so I may say the question of the difference of amount between the sum to be paid and the sum claimed is not to be regarded in any way as a compromise. The companies having ascertained the position in that way are paying the amount of the claim, and the amount of \$38,000 is agreed upon as the amount of the loss which the companies ought to pay here. I need scarcely add that all charges or allegations of any kind implicating Mr. Thompson in the pleadings and particulars are of course withdrawn, or charges or allegations made in connection with anyone connected with the company. His Lordship expressed himself as satisfied and directed that an order be drawn up embodying the terms of the judgment and issued.

EFFECTS OF THE PROPOSED TARIFF.

THE following communication on the proposed lumber tariff appears in the Detroit Tribune: DEAR SIR,—I notice that an attempt is being made by a large number of lumbermen in the Western and Southern States to have a duty of at least \$2 per M placed on lumber entering the United States for consumption. The lumber business is not a new industry, and should certainly now be able to stand on its merits; and I do not think class legislation of this kind can be of any possible benefit to any country. It is a general well-known fact that the lumber trade is in a very depressed condition. There are several causes for it. First, in my opinion it is the very low market price of cereals that has prevailed for several years, which would greatly lower the purchasing power of the country at large. Second, expensive habits have been gradually fostering themselves on the community until they began to exceed legitimate income, and a time for retrenchment has forced itself on the country. Lumber entering largely into any improvements at once feels heavily any retrenchment of the general expenditure. Third, manufacturers of lumber have not fully realized the contraction of the purchasing power of the country at large, and have continued the practice of getting out full stocks, causing a surplus of lumber far beyond the requirements of the market. Being mostly manufactured for home markets, it is not suitable for export, consequently large stocks have been thrown on the market at a figure below the actual cost of production. Under these conditions your lumbermen are looking to their good mothers, the tariff commissioners, to come to their rescue, and hope to enlist their sympathy by saying it is cheap labor and cheap lumber from Canada which is causing all the trouble. What are the facts? I will state a little of my own experience. I have been in the lumber business upwards of 30 years in Canada, and purchased all my stock in our home markets until 1894, when the duties on lumber were removed by both the Canadian and the United States governments. I made a tour through some of the principal lumber districts of your country and purchased a portion of my stock, and have continued to do so ever since. During 1896 I purchased nearly all my stock in Michigan, Minnesota and the Southern States, at lower prices and better suited to our requirements than any we could secure in our own country. A large quantity of lumber is shipped from our country to the United States, but it is principally from our lower provinces to the eastern markets, where the delivery is materially affected by freights. It must be to the advantage of the consumer to be able to purchase what he may require in the nearest market. Should the proposed duty be placed on Canadian lumber, certainly its equivalent will be placed on the export of Canadian logs, which will have the effect of closing a number of your large mills on the border states and stimulate its manufacture in this country. Your manufacturers again would have to meet our lumber in competition in foreign countries. We do not think the difficulties of your lumbermen would be improved by the course of legislation proposed, and verily believe that they might as well endeavor to lift themselves up by their own boot straps as to endeavor to improve their condition by the course proposed.

Yours truly,
CHATHAM, Jan., 9th, 1897. JOHN PIGGOTT.

Mr. E. W. Bennett, of Detroit, states that the Canadians are taking kindly to yellow pine. Last season he executed a Montreal order for eight car loads of 22 x 26 x 36 ft., and also sold 2,000,000 ft. in another Canadian city.



MR. G. L. PURDY, Book-Keeper.

ent, Mr. Gilbert L. Purdy the book-keeper, and James S. Gregory chief clerk. The firm are in a position to manufacture spruce lumber for any market, and being wide-awake, shrewd and business-like naturally sell where they get the best returns. Personally Mr. George S. Cushing, the chief member of the firm, is a whole-souled man, whom it is a pleasure to meet. In business affairs his boldness is nicely blended with caution. Of keen reasoning powers, good judgment and decision of character, he easily and quickly arrives at correct conclusions.

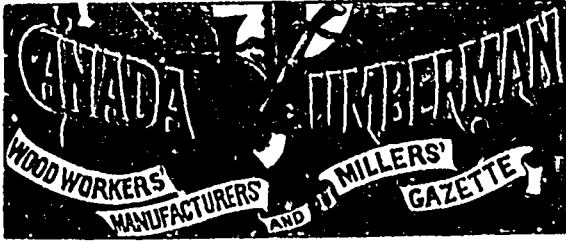
INTERESTING INSURANCE CASE.

Judgment has been given in the long-pending suit of the Katrine Lumber Co. against the different insurance companies to recover the amount of insurance on a saw mill at Katrine, Ont., destroyed by fire last summer.



MR. FRANK H. JOBSON, Millwright and Builder.

The decision is in favor of the Katrine Lumber Co., and is as follows: Katrine Lumber Company v. The Union Assurance Society, \$5,346 25; Phoenix Insurance Company of Hartford, \$2,775; Liverpool, London & Globe Insurance Company, \$17,860 65; Insurance Company of North America, \$5,000; Lancashire Insurance Company, \$8,85; total, \$39,266 90. These cases came up for trial at the Assizes at Hamilton, before the Hon. Judge Rose. Mr. Wallace Nesbitt, of Toronto, and Mr. S. F. Washington, of Hamilton, appeared for the plaintiffs; Mr. D'Alton McCarthy, Q.C., and Mr. H. S. Osler, of Toronto, appeared for the insurance companies. The claims arose



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ADVERTISING RATES FURNISHED ON APPLICATION

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

Special pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trader in Canada information on which it can rely in its operations. Special correspondents in localities of importance present an accurate report not 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 writer we will give them a fair opportunity for free discussion as the best means of eliciting the truth. 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 25 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

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

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.

OUR FOREIGN TRADE.

CANADIAN lumbermen have in the past year succeeded in extending their trade with many foreign countries, which, in the face of the depression in the United States, is particularly encouraging. The eastern provinces have catered largely to Great Britain, South America and the West Indies, while the statistics which appear in our Annual Review show that British Columbia is reaching out with success for foreign trade. The largest shipments were made to South America, South Africa, Australia, Great Britain and China. Unfortunately, Ontario has made little apparent advancement in the direction mentioned, apart from Great Britain, although it is quite possible that a larger percentage of our lumber was shipped to the United States for re-shipment to foreign countries than heretofore.

Canada is, however, apparently slowly awakening to the necessity of controlling her own export trade, instead of allowing it to be conducted by the United States without any credit whatever being given to Canada. In this connection we note with pleasure the published statement that next season vessels will probably sail be-

tween Montreal and Australian points, as recommended by Mr. J. S. Larke, Canadian Commissioner for Australia. At Cape Town, in South Africa, a bureau for the representation of Canadian goods has been established, where every facility is afforded the Canadian exporter.

Until direct steamship lines are established between Canada and foreign countries the development of our foreign trade is likely to be somewhat slow. The difficulty in this direction has been in obtaining profitable cargoes both ways.

As a means of extending the Canadian lumber trade, we commend for consideration the suggestion made by Mr. Haynes, of the Timber Trades Journal, that we should increase our manufactures of wood. The high carrying charges practically prohibit the exportation of low grade lumber, but were this lumber manufactured into furniture, etc., it could be placed upon the foreign market at a profit.

EFFECTS OF OVER-PRODUCTION.

IN the past the tendency of lumber manufacturers has been to almost entirely disregard the law of supply and demand, and produce a large output without giving consideration to the condition and requirements of the market. In his desire to annually increase the returns from his business, stimulated by the surmise that his neighbor will curtail operations, the average manufacturer has, year after year, continued to operate on a large scale. The natural effect of this has been to depreciate values and to depress trade in general. Owing to the lower prices obtained, the manufacturer finds at the close of the year that, while he may have succeeded in disposing of his entire output, the profits accruing therefrom were so small as to reduce the net receipts to a lower figure than the preceding year, when the volume of business was considerably less. This, in a measure, accounts for the depression which has prevailed in the lumber trade of the United States and Canada during the last few years, although it must be admitted there have been other influential agencies at work. Over-production must of necessity be followed by a weakening of the market. Manufacturers find themselves unable to hold their stock, and consequently, to secure capital, are obliged to dispose of it at a low figure.

A striking illustration of the effect of over-production is shown in the case of birch timber. During the winter of 1895-96, as the result of a firm market for birch in Great Britain, there was manufactured a very large quantity of this class of timber, several small operators entering the field who had not previously taken out square timber. Quebec houses contracted for 18-inch average at 27 cents per cubic foot, for delivery in the summer of 1896. The result was the overstocking of the British market and a sharp decrease in prices towards the close of the season, the effect of which is manifesting itself in the transactions for next year. While 27 cents was freely paid last winter for birch of 18-inch average, the same class of timber has been offered at Quebec within the past two weeks at 22 cents, and refused by buyers. It will require some time for the birch timber market to regain its position, in spite of the fact that consumption is active.

Notwithstanding the above facts, it is encouraging to observe that lumbermen are gradually becoming convinced of the necessity of curtailing

operations to a point in keeping with the demand, as is shown by reports which have reached this office from over fifty manufacturers in Ontario. Referring to the extent of operations in the woods, these reports state that the output of logs will be fully fifty per cent. less than last winter. Some manufacturers are not operating at all, while others are putting in a very light stock. These remarks do not apply to the Ottawa valley, where the production will probably be equal to last season, or to the north-western section of Ontario, which supplies the Manitoba market.

This decreased output must have an appreciable effect upon the market, and should the year of 1897 develop satisfactorily, the over-production of lumber now upon the market will become a thing of the past.

EDITORIAL NOTES.

THE Dominion Rifle Association have selected plans for the proposed Canadian headquarters building, to be erected the coming spring. The building, estimated to cost \$7,500, is to be constructed entirely of Canadian wood, and should serve to show the adaptability of lumber for building purposes. Canadian lumbermen should not allow this opportunity to pass without taking steps to secure the erection of such a building, such as will be a credit to Canada. This may be accomplished by having the timber of woods utilized in its construction.

THE necessity of obtaining as much first-class lumber as possible out of a stock of logs is never more apparent than at the present time. While coarse lumber has been a drug on the market and has depreciated in value during the period of inactivity, the better grades have been in good demand at firm prices. In the case of white pine this has been particularly noticeable. To meet the extreme competition, it is not necessary to reduce the cost of manufacture in every possible manner, but also to thoroughly study the demands of the market, and endeavor to supply such stock as will meet with a ready sale at remunerative prices. Had more attention been given to this matter in the past, it is probable that the large stocks of coarse lumber now on the market might have been turned to a profitable account.

A COMPARISON for the past fifteen years of the number of sailing vessels leaving Quebec shows how rapid has been the decline of the business at that port. According to J. Bell Forsyth's statistics, 459 vessels, with a capacity of 380,186 tons, cleared from Quebec in 1881. In 1886 the number was reduced to 325, in 1891 to 205, and in 1895 to 86 vessels. The season of 1896 is credited with an increase, the total sailing vessels being 103 and the aggregate tonnage 82,622. The number of steamers was also larger, the total being 90, against 58 in the previous year. While Montreal is likely to maintain its position as a shipping port, it is quite probable that some of the old-time vigor will be restored to Quebec as a result of the extension of the lumber industry, much of the raw material for which is found in the adjacent districts. Direct connection with the west and the improvement of the shipping facilities at the harbor would assist in this direction.

THE LUMBER TRADE IN 1896.

VIEW OF THE BUSINESS OF THE YEAR. STATISTICS OF THE VARIOUS PROVINCES. A MARKED INCREASE IN THE VOLUME OF FOREIGN TRADE.

GENERAL SURVEY.

THE year 1896 was one of unusual uncertainty in business circles. It was a year of political disturbances both in Canada and the United States, and in the latter country the depression in the commercial interests was aggravated by the fact that the adoption of a national monetary standard was made the basis of the election. The lumber trade suffered as a consequence of these conditions. The closing down of industries followed the Presidential nominations across the border, and this in turn caused a falling off in demand for lumber. Large stocks were held at the mills in the white pine districts, and as a result prices gradually weakened, until before the close of the year they had reached the lowest point known for many years. Wholesale dealers were not disposed to purchase on a declining market unless good prospects were presented of placing their stock, and the only lumber which met with ready sale was the better grades. Large failures in Michigan induced still greater caution on the part of purchasers.

The foregoing presents the conditions of the trade so far as the United States market is concerned. The year did not pass, however, without its encouraging features. The depression in the United States was counteracted to a large extent by an increased foreign demand, as will be observed by the statistics of the various provinces published below.

The British market was particularly active, and large quantities of spruce and pine deals and boards from Ontario and Quebec and the Maritime provinces were placed at good prices. A larger amount of thin lumber was shipped than heretofore. The trade is fast declining from the port of Quebec, although the sailings in 1896 show a slight gain over the previous year. The annual report of the Harbor Master at Montreal shows that there were shipped from that port during the year, to the United Kingdom and Continental ports, 219,032,178 feet b. m. of lumber, showing an increase of 50,360,150 feet, and to River Plate, 7,790,166 feet, a decrease of 583,834 feet from the previous year.

The foreign trade of British Columbia was of a wide distribution and considerably greater in volume than in 1895. The formation of the Central Lumber Company enabled manufacturers to obtain better prices, but unfortunately the combine has been broken and the market is now in a state of uncertainty. The Manitoba market was firm throughout the year.

Speaking generally, the lumber trade of the year was not characterized by the severe depression which is generally believed. All things considered, it must be admitted that the volume of business was satisfactory. What conditions will prevail in 1897 it is difficult to predict, although indications point to an improvement unless tariff regulations should disturb the market.

ONTARIO.

The unsettled financial conditions which prevailed in the United States account in a large measure for the depression which characterized

the lumber trade of Ontario in 1896. Taking the province as a whole, lumbermen look back upon the year as one of unsatisfactory results and disturbing features. Although the output of logs in the winter of 1895-96 was less than the previous season, and notwithstanding the fact that many mills were not operated, the quantity of lumber placed at the disposal of purchasers was too great for the limited demand, and prices suffered in consequence. The volume of trade compares favorably with that of the previous year, but profits have shown a wide diversity.

Manufacturers in the Ottawa valley catered largely to the British trade, and succeeded in closing contracts in the fall of 1895 for a large portion of their output of the following season at satisfactory figures. In the west, particularly in the Georgian Bay district, where large stocks were held by both Canadian and American pine manufacturers, sales necessarily depended largely upon the United States market. Late in the spring season the demand increased somewhat and continued fair until early in the summer, when the effects of the then approaching Presidential election across the border simply demoralized trade in general. This condition continued until after the election early in November, during which time prices were reduced to almost the cost of production. This was particularly the case in the lower grades of white pine, of which there were very large stocks at the mills. After the election a better feeling prevailed, and sales increased as a result of a desire to obtain stock before the close of navigation, but the improvement proved to be only temporary, and the closing month of the year exhibited little activity.

Our enquiries from manufacturers regarding the season's trade met with a hearty response. From these it is learned that the total output of lumber was slightly less than the previous year. Sales also show a falling off, while 75 per cent. of the replies tell the one story of small profits. Pine stocks carried over at the mills are large, and consist principally of box and common lumber.

In hardwoods a noticeable feature was the enquiry for mixed lots, indicative of the hand-to-mouth policy which purchasers had pursued throughout the year. Maple and elm sold quite freely early in the season, the latter for bicycle purposes.

The shingle trade was not active early in the year, but during the fall there sprung up a demand which pretty well cleared out stocks and placed the industry on a stronger footing.

The absence of transactions in timber limits was a feature of the year. No sales of any importance were negotiated. The sale in Toronto in July of 110 square miles, to close up the partnership existing between Messrs. Beck, McSherry and Spohn, proved almost a total failure. The Ontario government placed upon the market 60,000,000 feet of burnt timber in the Nipissing district, and received satisfactory returns.

The cut of the mills in the Ottawa valley compares favorably with the previous season, being, perhaps, a few million feet less. The production in 1895 was 627,000 feet, while the estimate given below for 1896, although not including one or two of the smaller mills taken into account in

the 1895 calculation, places the cut at 614,250,000 feet.

PRODUCTION OF THE OTTAWA VALLEY IN 1896.

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

The export of forest products from the consular district of Ottawa to the United States, as furnished by the United States Consulate General, shows a difference in favor of 1895 of \$289,361.53. The detailed figures are as follows:

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

ARTICLE.	Or ending March 31.	Or ending June 30.	Or ending Sept. 30.	Or ending Dec. 31.
Bark	\$ 6,477.70	\$ 28,102.29	\$ 6,548.00	\$ 4,215.00
Lath and Shingles	151,751.37	586,114.47	24,908.55	29,239.84
Logs and Timber	3,583.69	17,232.95	1,587.26	1,717.25
Lumber	1,420.20	17,232.95	35,341.07	597,993.64
in bond for export				47,046.93
Match Blocks	17,572.57	18,219.19	14,428.94	19,309.10
Pulp, Sulphite	1,420.20	3,650.73	3,250.00	3,250.00
Pickets	450.00	5,950.10	3,397.30	4,848.40
Railroad Ties				
Total	\$381,245.46	\$761,482.88	\$715,303.99	\$704,312.80

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

ARTICLE.	Or ending March 31.	Or ending June 30.	Or ending Sept. 30.	Or ending Dec. 31.
Bark	\$ 1,704.00	\$ 27,497.94	\$ 27,415.38	\$ 22,283.65
Lath and Shingles	3,572.20	638,803.82	54,979.02	505,229.41
Lumber	297,365.15	12,112.28	8,039.53	3,762.12
Pulp, Sulphite	16,078.95	50.00	14.75	15,178.25
Cordwood	50.00	2,160.05	6,651.19	6,651.19
Shingles	2,160.05	4,459.84	838.20	6,500.00
Railroad Ties	4,591.81	425.83	749.96	974.74
Logs	129.00	5,191.96	3,183.73	3,704.62
Timber	425.83	2,739.45	731.25	900.00
Pickets	5,191.96	93.00	357.50	297.00
Curtain Sticks				
Match Blocks				
Posts and Poles				
Pulpwood				
Total	\$333,349.02	\$720,228.95	\$569,223.34	\$548,401.52
Total, 1895			\$2,460,352.23	
Total, 1896			\$2,170,990.80	

The total output of saw logs in the Ottawa valley during the season of 1895-96 was 480,000,000 feet, b. m., and the estimated cut this winter is 375,000,000 feet, or 22 per cent. less than last year. In other sections of the province the production is being curtailed to a greater extent, and probably not more than half the usual quantity of logs will be taken out. With a fair demand a more prosperous season is therefore looked for, although tariff changes may affect the market to some extent.

QUEBEC.

The trade of the province of Quebec has depended almost entirely upon the markets of the United Kingdom, which have remained firm for nearly every class of Canadian goods. The shipments of pine and spruce deals have been made largely from the port of Montreal, and were slightly less than in the previous year, but prices advanced early in the season, and business was conducted on a more remunerative basis than in 1895. From the United States the principal demand was for spruce wood for the manufacture of pulp.

The following table will show the quantity of

lumber in St. Petersburg standards shipped by several firms from Montreal to the United Kingdom:

	Pkg. stds.
Dobell, Beckett & Co.	27,490
W. & J. Sharples	22,134
Robt. Cox & Co.	13,123
Watson & Todd	12,821
J. Burstall & Co.	12,260
McArthur Bros. & Co.	9,551
A. Lemay	4,716
Total	102,095

The square timber trade, which must naturally be considered in a review of Quebec operations, has been characterized by a healthy demand, and light stocks are held at British ports in nearly every class except birch. The production of this wood last winter was too great for the demand, and consequently prices have dropped about 3 cents per cubic foot. Contracts for a large portion of the 1896-97 production of square and waney timber have been closed, and the opinion is quite general that no abatement in consumption in Great Britain will take place until after the first six months of the year at least.

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

	1894. Cubic Ft.	1895. Cubic Ft.	1896. Cubic Ft.
Waney white pine	2,267,749	3,086,469	2,879,879
White pine	838,168	273,771	316,093
Red pine	59,053	108,601	50,609
Oak	1,256,890	1,006,139	1,139,155
Elm	528,761	596,137	416,625
Ash	183,626	149,077	83,749
Basswood		659	728
Butternut	276	642	327
Tamarac	393	554	138
Birch and maple	133,658	240,818	252,424

We are indebted to the annual circular of J. Bell Forsyth, of Quebec, for the following data bearing on the Quebec trade:

The past season has shown a marked improvement in business with the United Kingdom, both in volume and satisfactory results, fully justifying our last year's prediction of brighter times ahead with a probability of some good years of business prosperity. In the United States, the uncertainty that preceded the Presidential election delayed for a time the business improvement, which has since set in with marked benefit to the sawn lumber trade.

Shipbuilding in the United Kingdom is in a flourishing condition, all the yards being very busy with orders for home and foreign account.

Instead of a fast line of twenty knot steamers with Quebec as a summer terminus, there seems some possibility of slower boats being subsidized for Montreal business with Quebec as a port of call only, unless a more active interest is taken by Quebec citizens in this important matter.

Delegates from the shiplaborers met representative shipping merchants, early in the spring, and conceded the use of steam in loading and discharging steamer cargoes, with distinctly beneficial results to the business of the port.

Low water in the St. Lawrence during part of the season has again occasioned inconvenience to Montreal shipping, as large steamers for a time were unable to complete cargo at that port, and had to finish loading here.

WHITE PINE.—Without any great change in the supply as compared with last year, the increased shipments of past season have reduced the stock to much the lowest quantity on record. The estimated production, though probably sufficient for present reduced business, is by no means excessive for anticipated market requirements. The wintering stock, with trifling exception, is in the hands of the shipping merchants, who have also bought on contract a considerable portion of the present winter's manufacture.

	Supply.	Export.	Stock.
1896 { Square	316,093	4,251,800	{ 537,013 Square. 1,474,168 Waney.
{ Waney	2,879,879		
1895 { Square	273,771	2,838,080	{ 1,090,892 Square. 2,254,717 Waney.
{ Waney	3,086,469		

RED PINE.—The stock is very small and manufacture has almost ceased. The price obtainable for this wood in markets of the United Kingdom has of late years been quite inadequate.

	Supply.	Export.	Stock.
1896	50,609	139,160	82,069
1895	108,661	326,080	154,120

OAK.—An active demand in the United Kingdom has stimulated the export, and reduced stock under last year. The quantity wintering above Quebec is unusually small, being only 25,000 feet, as against 300,000 feet at Garden Island and Collin's Bay last winter.

	Supply.	Export.	Stock.
1896	1,145,564	1,382,880	637,348
1895	1,006,139	869,560	790,486

ELM.—The present strong demand, with active shipbuilding, will no doubt continue. The wintering stock is very small; the production will be moderate, as suitable standing timber is difficult to secure, and the end of next season may see an absolute scarcity.

	Supply.	Export.	Stock.
1896	416,625	501,000	78,374
1895	596,137	537,120	218,871

ASH.—The stock is much reduced, but ordinary wood is not in demand unless at very low prices. Large average ash of fine quality and color will, no doubt, be required as usual to a limited extent.

	Supply.	Export.	Stock.
1896	83,749	113,680	42,694
1895	149,077	146,360	118,127

BIRCH.—The markets of the United Kingdom have been oversupplied with cheap wood, sawn and in the log, from the Maritime Provinces, and by heavy shipments of western birch from Montreal. As consumption is good, price is only kept down by excessive production being forced on the markets.

	Supply.	Export.	Stock.
1896	251,430	319,200	9,470
1895	240,818	200,160	5,156

STAVES.—Quebec has lost the stave trade, which is now done through United States ports.

PINE DEALS.—Though the business remains largely in the hands of Quebec houses, who control it, shipments are principally made from Montreal, and to some extent from Three Rivers and other shipping points above Quebec. This will continue until Quebec people take the necessary steps to complete the contemplated rail connection with the west, through the Canada Atlantic and Parry Sound roads. If something is not promptly done in this connection, any action will soon be too late. The cuttings for next season are now all placed at last year's prices, or in some cases at an advance.

	Supply.	Export.	Stock.
1896	657,264	400,343	142,410
1895	823,665	501,200	135,489

SPRUCE DEALS.—The marked advance in prices here, which last year we spoke of as certain to come, has taken place. From the strong tone of markets at chief centres of consumption, and from figures obtained for Baltic goods for next year's delivery, still higher figures at no distant date seem almost certain.

The steadily increasing demand for spruce for pulp wood, for which it is unquestionably specially suitable, continues to advance the value of spruce limits.

	Supply.	Export.	Stock.
1896	3,915,455	3,828,258	573,413
1895	3,878,142	3,471,700	736,216

SAWN LUMBER.—South American spruce lumber has continued in fairly good demand and business has been active in that wood. Shipments have amounted to about the same as last year, principally from the Maritime Provinces, the Saguenay and the Lower St. Lawrence ports. No appreciable advance over last year's prices has taken place up to the present, but a considerable improvement is looked for next season.

FREIGHTS.—Sail opened at Clyde seventeen shillings, Liverpool nineteen shillings, for timber cargoes, and showed no improvement as season advanced. By steam season opened at forty shillings to forty-two shillings and six pence, Montreal to leading ports in United Kingdom, and advanced towards close of season to fifty shillings, and even higher figures paid for small quantities. For timber carrying steamers sixty-

five shillings were paid early in season for Qu loading. Rate for Clyde fell to sixty shilling summer, but advanced again in fall to six shillings and even higher rates.

STATEMENT SHOWING THE QUANTITY AND VALUE OF WOOD EXPORTED FROM THE PORTS OF MONTREAL, THREE RIVERS, BATISCAN AND SOREL, FROM MARCH TO NOVEMBER 30TH, 1896.

PORTS.	ARTICLE.	QUANTITY.	VALUE.
Montreal	Pine Deals	57,648 Std. H.	\$
	Spruce Deals	6,648 "	\$
	Deal Ends	5,701 "	\$
	Planks, Boards, Etc.	32,691 M. ft.	\$
	Other Headings, Square Timber	12,033 Tons.	\$
		Total value.	\$
Three River and Batiscan	Pine Deals	5,849 Std. H.	\$
	Spruce Deals	6,189 "	\$
	Deal Ends	369 "	\$
	Planks, Boards, Etc.	21,097 M. ft.	\$
	Spruce Pulp-Wood		\$
		Total value.	\$
Sorel	Pine Deals	1,774 Std. H.	\$
	Spruce Deals	2,636 "	\$
	Planks, Boards, Etc.	4,134 M. ft.	\$
		Total value.	\$

For the year ending November 30th, 1896, there was brought to the port of Quebec by the Quebec and St. John Railway, 2,925 cars of deals and lumber, 402 cars of ties, and 2,214 cars of coal.

MARITIME PROVINCES.

The European and South American trade in the maritime provinces in 1896, the depression in the United States causing shipments to that country to decrease materially. To South American shipments totalled over twelve million superficial feet. Eleven ports in New Brunswick ship across the Atlantic, and the statistics for 1896 show that the total exports were 366,000 superficial feet, an increase of about 95,000 feet over the exports of the previous year. John shows an increase of 40,000,000 feet at Miramichi of 24,000,000 feet. Only Lunenburg and Shediac are responsible for a falling record. Manufacturers of spruce lumber report a satisfactory season's trade, better being realized throughout the season than in the hardwood as was taken out also met with sale. The condition of the shingle trade is less encouraging, depending, as it does, on the local and United States markets. The price of shingles is ruled low, and it was difficult to dispose of the surplus. The shipments of deals from Nova Scotia show an increase of 13,791,976 feet over the previous year.

The annual circular of Hon. J. B. Snodgrass, Chatham, N. B., furnishes the following interesting statistics of exports from the various ports.

The present winter has been so far favorable and the prospects are that the output will be an average one for the force employed, which is not larger than last year.

There are two pulp mills in operation in the maritime provinces, using about fifteen million superficial feet of logs annually in the manufacture of sulphate.

The government of New Brunswick has 4,536,320 acres of timber lands under lease against 2,780,800 acres in 1892. In the Miramichi section nearly everything available has been taken up, and lands so poorly stocked they would not be looked at a few years hence, now eagerly sought for. Fifteen years ago brought to market were not considered of good quality if it took over eight pieces to make a thousand superficial feet of deals, etc. The present pieces to the thousand superficial feet considered fair stock. This, taken with the reduction in our export referred to elsewhere, looks as if our forests were overworked. I consider the above remarks applicable to New Brunswick and Nova Scotia, present prices do not bring an adequate return for the forests depleted.

The stock of merchantable spruce lumber in the port of St. Petersburg stands at 6,000 St. Petersburg standards.

standards last year. The stock at present at St. John is estimated to be 20,000 standards. The export of wood goods to France under the low tariff has hardly come up to expectations. There was shipped from this province this year to France and French Algerian ports 15 cargoes, containing 12,398,000 superficial feet, against 16 cargoes last year, containing 10,240,000 sup. ft. The general depression in business in the United States last year about stopped shipments to that country, and put a large extra quantity on the British market. As there are signs of business confidence being restored there, we may expect a renewal of shipments, particularly from St. John and Nova Scotia ports, to the relief of other markets.

SHIPMENTS FROM MIRAMICHI FOR 12 YEARS, FROM 1885 TO 1896, INCLUSIVE.

Sup. Feet.	Sup. Feet.	Sup. Feet.
1885-87 millions.	1889-91 millions.	1893-96 millions.
1885-87 72	1889-91 88	1893-96 82
1887-88 68	1891-92 72	1895-96 82
1888-93 73	1892-95 75	1896-106 86

The average shipment for the above 12 years is 86 million superficial feet per year. The average shipment for the 12 preceding years, viz., from 1873 to 1884 inclusive was 118 million superficial feet, an average falling off of 27% in the volume of our business. As we have not any new country to draw on for supplies, this decreased export will have to continue. From St. John previous to 1884 the average shipment was 100,000,000 superficial feet, and since 1884 it has fallen to an average of 146,000,000 sup. ft.

SHIPPERS FROM THE PORT OF MIRAMICHI, SEASON 1896.

Shippers.	No. Vessels.	Tons.	Sup. ft. Deals.	Palings.
J. B. Snowball	43	34,273	31,795,851	1,339,555
W. M. McKay	31	27,609	30,379,493	18,000
D. & J. Ritchie	21	12,893	12,547,058	108,400
Ernest Hutchison	12	12,420	12,861,020	12,000
F. E. Neale	15	11,183	11,000,398	
Geo. Burchill & Sons	8	6,827	7,517,000	17,000
Clark, Skillings & Co.	2	2,111	136,000	
J. W. & J. Anderson	1	802		
8 Shippers	133	108,118	106,147,420	1,494,955

Spool Wood—W. M. McKay, 404,078 sup. ft.; Clark, Skillings & Co., 1,574,597 ft.; J. W. & J. Anderson, 468,392 ft.

DISTRIBUTION OF MIRAMICHI SHIPMENTS.

Country.	No. Vessels.	Tons.	Sup. ft. Deals.	Palings.
Great Britain	65	60,032	59,780,812	1,355,755
Ireland	51	35,803	34,886,631	139,200
France	10	6,756	6,645,000	
Spain	4	2,419	2,137,682	
Africa	2	1,597	1,570,692	
Australia	1	1,511	1,126,603	
Totals	133	108,118	106,147,420	1,494,955

Great Britain, 2,447,067 sup. ft. spool wood.

In addition to above there were shipped to Buenos Ayres by J. B. Snowball three cargoes, containing 1,445,000 superficial feet of deals, boards, etc.

ST. JOHN, N. B., SHIPMENTS OF DEALS, &c., TO TRANS-ATLANTIC PORTS, DEC. 1st, 1895, TO DEC. 1st, 1896.

Shippers.	Sup. ft. Deals.	Timber.
Alex. Gibson	61,360,952	2,104
W. M. McKay	95,793,265	128
George McKean	4,342,742	6,632
Watson & Todd	5,749,483	
Jarvis Wilson		1,156
Total	167,246,442	128

DISTRIBUTION OF ST. JOHN, N. B. SHIPMENTS, DEC. 1st, 1895, TO DEC. 1st, 1896.

Ports.	Sup. ft. Deals.	Timber.
British Channel	38,910,655	
Fleetwood	6,494,716	
France	4,181,557	
Glasgow	12,973,289	500
Ireland	25,382,251	
Liverpool	66,916,588	128
London	4,676,698	1,156
Manchester Canal	5,489,193	
Wales	2,221,495	376
Total	167,246,442	128

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

Year.	Sup. ft. Deals.	Timber (tons)
1885	152,543,026	13,769
1886	138,934,392	7,354
1887	118,450,590	5,197
1888	153,184,187	4,721
1889	180,167,488	7,221
1890	132,608,516	1,311
1891	122,242,682	5,004
1892	146,529,309	10,200
1893	156,653,334	5,294
1894	153,473,076	5,015
1895	126,449,707	8,374
1896	167,246,442	9,892

TOTAL TRANS-ATLANTIC SHIPMENTS OF NEW BRUNSWICK 1895 COMPARED WITH 1896.

Ports.	No. Vessels.	Tons.	Sup. ft. Deals.	Timber.
Miramichi	133	108,118	106,147,420	10,020
St. John	8	7,518	167,246,442	10,020
Bathurst	8	7,518	8,188,078	
Richibucto	26	11,374	11,191,062	
Dalhousie and Campbellton	60	41,631	36,600,980	105
Shediac	23	11,545	11,054,978	
Sackville	30	19,843	19,999,978	
Outports of Hillsboro				
Moncton Harvey	22	20,246	25,614,039	
Alma				
Totals			386,039,977	10,215

1895

Ports.	No. Vessels.	Tons.	Sup. ft. Deals.	Timber.
Miramichi	116	89,771	82,457,575	
St. John	117	149,226	126,449,707	8,698
Bathurst	12	8,987	8,817,000	20
Richibucto	9	4,561	4,420,210	
Dalhousie and Campbellton	42	30,264	25,56	164
Shediac	23	11,456	11,250,009	
Sackville	19	9,009	9,083,501	
Outports of Hillsboro				
Moncton Harvey	22	22,532	23,336,282	434
Alma				
Totals	300	325,806	291,382,574	9,316

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

Sup. feet.	Sup. feet.
1887-250 millions	1892-325 millions
1887-277	1893-312
1889-369	1894-326
1890-293	1895-291
1891-253	1896-386

SHIPMENTS FROM NOVA SCOTIA, 1896.

Ports.	No. Vessels.	Tons.	Sup. ft. Deals.	Timber.
Outports of Amherst	32	23,048	19,827,000	
Halifax	47	39,634	41,755,060	650
Ship Harbour	1	424	404,447	
Sheet Harbour	8	6,245	6,276,707	
St. Margaret's Bay	2	2,678	2,790,966	
Parrsboro	33	42,935	43,315,254	
Pictou	10	7,889	4,946,000	3,658
Sherbrook	4	3,766	3,800,955	
Totals	137	126,619	123,116,389	4,308

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

Sup. feet.	Sup. feet.
1887	1892
82,959,589	87,861,398
85,070,005	109,252,930
92,605,488	106,327,250
99,512,924	109,324,393
78,603,742	123,116,389

BRITISH COLUMBIA.

The excellent quality of the British Columbia timber is becoming more widely known each year, which accounts for the substantial increase made in 1896 in exports of lumber to foreign countries. The following table, although not quite complete with regard to the quantity and value of cargoes, will serve to show the scope of distribution:

BRITISH COLUMBIA LUMBER FLEET, 1896.

Name.	From	For	Cargo Ft.	Value.
Crown Prince	Vancouver	Volgaster, Ger.	776,772	\$13,181
Hindustan	Vancouver	Iquique	1,200,000	0,000
Nineveh	Moodyville	Sydney	827,500	7,800
Prince Regent	Vancouver	Liverpool	977,800	9,079
Clan Buchanan	Vancouver	Delagoa Bay	1,594,966	12,100
Mooltan	Vancouver	Adelaide	1,310,386	1,567
John Gambles	Vancouver	Freemantle	828,286	6,757
Birkdale	Vancouver	Freemantle	1,519,467	9,417
Altcar	Vancouver	Valparaiso, f. o.	943,059	9,905
General Gordon	Moodyville	Sydney	1,205,264	10,120
Prince Albert	Vancouver	London	1,190,000	13,790
J. D. Bischoff	Vancouver	Plymouth, Eng.	1,216,255	17,807
E. K. Wood	Moodyville	Tientsin	653,077	5,730
Eclipse	Moodyville	Shanghai	1,972,067	8,576
King Cyrus	Moodyville	Shanghai	86,582	7,382
Lake Lemah	Moodyville	Pisagua	767,819	6,664
Aida	Moodyville	Shanghai	68,241	5,910
Puritan	Moodyville	Shanghai	738,841	7,718
W. H. Talbot	Westminster	Shanghai	972,050	7,787
Sikhongon	Vancouver	Algoa Bay	846,759	7,174
Glenbank	Moodyville	Buenos Ayres	1,119,411	7,014
Inch Keith	Vancouver	Iquique	690,992	10,945
Forest Queen	Vancouver	San Francisco	541,602	5,521
Queen City	Westminster	Kobe		
Rosalie	Vancouver	Sydney	469,972	4,234
Volunteer	Chemainus	Tientsin	799,284	8,474
Tanner	Vancouver	Oakland	320,040	2,059
Chas. F. Crocker	Vancouver	Shanghai	935,700	7,782
Nonantum	Vancouver	Melbourne	714,783	5,577
Empire	Moodyville	Sydney	797,021	5,819
Philadelphia	Vancouver	Algoa Bay	1,373,075	
Orient	Vancouver	London	1,268,000	14,397
Eureka	Vancouver	San Francisco	288,957	2,013
Antonieta	Moodyville	Valparaiso, f. o.	800,302	6,965
Hesper	Chemainus	Tientsin	804,748	8,603
Carrier Dove	Chemainus	Shanghai	89,064	8,129
Guardian	Vesuvius Bay	Santa Rosalia		

Name.	From	For	Cargo Ft.	Value.
Laura May	Vancouver	San Francisco	409,433	26,111
Arranmore	Chemainus	Sydney	1,472,851	11,732
C. F. Sargent	Victoria	Sydney	1,182,982	10,725
John Smith	Chemainus	Shanghai	654,192	5,900
Desdemona	Vancouver	Valparaiso, f. o.	1,135,171	10,725
Aldena	Chemainus	Tientsin		4,142
Melrose	Maple Bay	Santa Rosalia	157,149	3,800
Benj. Sewell	Moodyville	Shanghai	1,045,176	8,386
Quickstep	Tientsin	Tientsin	495,159	4,589
Jane L. Stanford	Chemainus	Shanghai	1,144,111	9,711
E. K. Wood	Moodyville	Tientsin	654,847	6,000
Chichal	Moodyville	Shanghai	776,109	9,285
King Cyrus	Chemainus	Taku	2,201,197	19,900
Elsa	Chemainus	Antofagasta	827,000	8,000
Wreath	Westminster	Melbourne	595,847	
Corolla	Moodyville	Freemantle	977,814	
India	Vancouver	Valparaiso	797,141	7,134
Alex. McNeill	Maple Bay	Santa Rosalia	116,000	
Jessie Osborne	Chemainus	Geraldton	810,269	7,892
Magallanes	Vancouver	Iquique		
Guinevere	Chemainus	Valparaiso	74,180	6,983
Holivia	Moodyville	Port Erie	797,500	
Beechley	Vancouver	Buenos Ayres	1,074,791	17,021
Katie Flecking	Vancouver	Kobe	594,627	
City of Adelaide	Westminster	Melbourne	695,000	
Prince Viktor	Vancouver	Gibraltar	732,000	5,866
Americana	Vancouver	Gibraltar	1,015,000	11,450
Erol	Moodyville	Adelaide	1,120,000	10,000
Kosciusko	Chemainus	Adelaide	895,954	6,842
Mario Berg	Vancouver	Granton, U. K.	303,000	5,494
Colorado	Chemainus	Melbourne	841,546	7,317
Senator	Vancouver	London	1,087,000	11,500
Henrietta	Vancouver	Dieppe, France	1,017,000	10,235
Clairmont	Vancouver	Delagoa Bay	511,327	
Hindustan	Vancouver	Iquique	1,155,546	11,935
Trowbridge	Moodyville	Greenock		
Bundateer	Chemainus	Freemantle	697,307	5,999
Ariel	Moodyville	Valparaiso	697,686	
F. S. Redfield	Vancouver	Kobe		
Port Adelaide	Vancouver	Delagoa Bay	922,762	9,687
Ariadne	Vancouver	Valparaiso, f. o.		
City of Delhi	Vancouver	Valparaiso, f. o.		
Wythop	Vancouver	Delagoa Bay		
Khorsan	Vancouver	Guayaquil		
Speke	Moodyville	Sydney		
Blair-gie	Vancouver	South Africa		
Lyderhorn	Chemainus	Sydney		
Verbenia	Moodyville	Adelaide		
Addenda	Chemainus	Tientsin		

It will be observed that there has been a gain of 12 per cent. in the number of ships carrying lumber to foreign markets, while the total tonnage has increased from 76,316 to 93,394. Of the 86 vessels, 39 loaded at Vancouver, 23 at Moodyville, 16 at Chemainus, 4 at New Westminster, 2 at Maple Bay, and one each at Victoria and Vesuvius Bay.

During the year there was also a good local demand, arising from the requirements for mining purposes. Some revival in the shingle trade took place, but unfortunately prices remained very low. Shipments to the eastern provinces kept up well throughout the season.

At the beginning of the year a gigantic lumber trust was organized to control the foreign trade, and to be known as the Central Lumber Co. It embraced nearly all the principal mills on the Pacific coast. The operations of the trust were successful early in the season, and prices were advanced to a remunerative basis. But towards the close of the year some of the members showed a disposition to withdraw from membership, and this finally culminated in the breaking up of the combine, with what result remains to be seen.

In 1897 a still greater foreign trade is looked for. Japan, Europe and South Africa are likely to be heavy purchasers. China is at present making tests of British Columbia timber for railway purposes, and efforts are being made to extend the Australian trade.

MANITOBA.

WOOD PULP DEPARTMENT

THE DUTY QUESTION.

MUCH attention continues to be given both in Canada and the United States to the question of a duty on pulp wood and the manufactures thereof. The paper manufacturers across the border are urging protection against the importation of both paper and pulp, and this is being opposed by the publishers. Before the Ways and Means Committee at Washington Mr. John Morris, of the New York World, explained that as his paper consumed one-thirteenth of all the paper used in the United States, or 110 tons on every mill day, he thought he voiced the sentiments of all newspapers. He continued:—"I appear to formally apprise this committee of the fact that the 24 or 25 manufacturers of white paper in the United States are perfecting their arrangements for a combination, and every newspaper shall be at the mercy of a central agency, by which these manufacturers shall receive an additional profit of four or five million a year, and tax knowledge to that extent." The manufacturers, Mr. Norris said, now had a protection of 10 per cent. ad valorem on pulp, and 15 per cent. on finished paper, and were sending their surplus paper to a foreign market, while as the duty on paper was prohibitory, none was imported. The purpose of the trust was to keep the price of paper at about 2½ cts., while the present ruling price was about 2 cents, and by cutting off various concessions to newspaper publishers, increase their profits in that way also. The paper and pulp manufacturers had acquired a monopoly of the best water powers and tracts of cedar for pulp. The possible denudation of the forests might be a matter for Congressional action.

Ex-Senator Warner Miller, of New York, claimed that many of the paper mills were doing business at a loss, and few were making money. He did not believe that Congress would permit a paper to establish a mill on one side of the Sault Ste. Marie and bring pulp across from Canada free of duty. The manufacturers asked only for 15 per cent. on paper, and about \$2 per ton on wood pulp, a lower rate than free traders would favor on most commodities. Most of the money invested in paper mills was making less than 6 per cent. interest.

ANOTHER OPINION.

A writer in the Paper Mill takes exception to Mr. Norris' views in the following remarks: "I want to call attention to one point which would be dangerous if the Ways and Means Committee were to accept Mr. Norris' suggestions. In the course of his remarks, he asserted that if the duty on paper were taken off, Canada would, if necessary, supply the American market. Canada could not, under present conditions, supply the American market, or even sell a pound of paper in this country, even if the duty were removed. In the first place, all the mills in Canada which are manufacturing news to-day would make comparatively little impression on the American market. In the second place, Canadians are

even now complaining that American competition there recently has forced the price of news paper from 2¾ cents down to something below 2½ cents in the American market. If Canadian manufacturers are hurt by having the price established at something less than 2½ cents in Canada, how, in the name of all that's good, are they going to sell paper in America at two cents, or less, duty or no duty?

"Canada cannot supply the market to-day; but here is the point to be considered. Canada is contemplating placing an export duty on pulp wood of \$2 or \$3 a cord. If it should impose such a duty, and the American Congress should place news paper on the free list, modern paper mills would spring up on the Canadian water powers like mushrooms, and in a comparatively short time, the conditions being continued, Canada would be in a position to ruin our industry. With the present disposition on the part of the Canadians, any action on the part of our Congress towards taking off the duty would not be simply in the nature of removing an unnecessary protection; it would be in the nature of throwing down defences and inviting the enemy to come in. It would be strengthening Canada's own policy of protection at our expense. This, however is purely speculative, because happily no such danger exists, but it is a danger to which Pulitzer and Norris would lead us, if they could have their own way."

A CANADIAN'S VIEW.

Mr. E. B. Eddy, the large Hull manufacturer of paper, pulp, woodenware, etc., appeared before the Tariff Commission at Ottawa requesting a duty of \$4 per cord on pulp wood. He said that sixty-nine per cent. of the spruce used for paper in New York came from Canada. Canadian raw material in spruce logs and lumber was being exported from Canada. Canadian forests were being denuded to build up American villages.

At present about a million cords of wood were being exported to the United States, which was worth from \$3 to \$4 per cord.

Sir Richard Cartwright pointed out that the government returns showed only value for about a hundred and fifty thousand cords. Either the estimate given by Mr. Eddy was greatly exaggerated or the returns were greatly out.

Mr. Eddy replied that the returns were certainly not correct.

THE DEMAND FOR SPRUCE.

TIMBER cutters in the Adirondacks and elsewhere in this country are now confronted with the unique condition that spruce is worth more in the market as material for wood pulp than as lumber. Spruce is the only wood that is in demand at the pulpmill as well as the sawmill. The cutting of spruce is stimulated by the increasing demand from abroad for American wood pulp, and it is an industry that the framers of the Dingley Tariff bill deemed worthy of protection. If Congress passes that bill, a duty of \$1.20 per 1,000 feet will be placed on Canadian spruce.

A recent calculation, made by experts in the lumber trade, shows that at least 65 per cent. of all the spruce cut in the forests of this country this year will go to the pulp mill. The competition of Canadian lumbermen has for a long time been a serious drawback to the profit-taking of

American timber cutters, consequently the imposition of a stiff duty on Canadian lumber would meet with eager approval in certain quarters. Ex-Gov. Russell A. Alger, of Michigan, has visited large lumber interests in Canada, and while in Montreal, a few days ago, he is said to have expressed the belief that the McKinley Administration would favor a "conciliatory policy toward Canada. The exportation of American wood pulp to Great Britain, it is said, will probably be largely increased during the coming year in consequence of a proposed advance in price by Scandinavian manufacturers. Formerly the Scandinavian wood pulp had a monopoly of the British markets, but the American product has been making headway in that direction steadily for the last few years.—New York Times.

PULP NOTES.

Five thousand cords of pulp wood are being gotten on American account by one contractor at Stanhope, Ont.

The Dominion commercial agent at Christiana, N. Y., describes a new machine which an inventor placed on the market there, the purpose of which was to wash off, instead of planing off, the bark on pulp wood, thereby effecting a great economy.

The Burgess Sulphite Fibre Company, of Berlin, Hampshire, is looking about for pulp wood in the vicinity of Quebec. It is offering to contract for spruce pulp wood in lots, large or small, to be loaded on cars and shipped during 1897. Liberal supplies will likely be drawn from about Coaticook.

A company of Buffalo men are said to have decided to establish pulp and paper mills at Petawawa, seven miles from Pembroke, Ont. The Guerton property has been purchased and operations will be conducted on an extensive scale. The Petawawa section is rich in spruce wood of every description.

Mr. F. H. Clergue, President of the Sault Ste. Marie Pulp and Paper Company, of Sault Ste. Marie, Ont., in Toronto a fortnight ago. He states that the manufacturers will shortly hold a meeting, and will concert in requesting the Dominion Government to place an export duty on pulp manufactures sent to countries which do not allow these goods in on the same terms as their goods are admitted here.

The total output of wood pulp and cellulose in Canada and Sweden amounts to 750,000 tons per annum. There is a disposition towards associated effort in the control of the export trade. The manufacturers of pulp in Scandinavia feel that they are doing business on too small a profit, that the possession of immense tracts of forests growing pulp wood, the ownership of valuable water powers, entitles this traffic to a larger percentage of profit.

A pulp wood case came up before the Superior Court of Quebec last month. Garneau, the plaintiff, had made a contract to deliver 2,000 cords of pulp wood to the Eddy Company, the defendants, the company agreed to pay him \$4 a cord when delivered at Hull, and to add \$1 a cord as the wood was made, laid up and marketed by the company. When the plaintiff had about 300 cords piled in the bush he applied to the company for the advance, but they refused, claiming that the advance was not earned until the wood was piled on the banks of the Coulonge, the nearest stream. The plaintiff was depending on these advances to go on and complete his tract, and by reason of the refusal of the company to make them was forced to abandon his work. The court decided that the plaintiff had established his case, awarded him \$2,000 and costs, finding that the plaintiff would have realized a profit of at least \$1 a cord.

A POINTER FOR YOU.

Messrs. Reid Bros., Hepworth Station, Ont., "Would you kindly leave the "200 M. feet Dry Wood" out of the advertisement which we have in this paper, as we have disposed of a good deal of it, and find THE LUMBERMAN a good medium through which to find out the wants of the trade.

THE NEWS.

—Alex. McKay will, it is said, build a saw mill at Rosebery, B. C.

—H. T. Wilson, Franktown, Ont., will erect a saw and shingle mill in the spring.

—M. Brennan & Sons are removing their saw mill from Huntsville, Ont., to Sturgeon Falls.

—R. T. Smith has requested permission from the Ottawa city council to open a lumber yard at the corner of Bay and Queen streets.

—Mr. Eldoras Todd, of Brantford, Ont., is endeavoring to form a company, with a capital of \$50,000, to operate a fancy wood-work factory.

—The mills of the Ottawa Lumber Co. at Calumet, Que., closed down on the first of December, after a run of 169 days, during which 210,340 logs were sawn.

—J. M. Taylor, of Portage la Prairie, Man., is making additions to his planing mill and adding new machinery thereto, for the manufacture of sash and doors, etc.

—An exploring party fitted out in October last by the Owens Lumber Co., of Monte Bello, Que., to examine mineral deposits near Lake Innethaka, struck two veins which are said to be the richest in the province.

—The lumbermen of Tonawanda, N. Y., are making a vigorous kick against the scheme put forward by the Grand Island bridge projectors. The lumbermen claim the proposed bridge will greatly interfere with the navigation of lumber rafts. It is probable a large arch bridge or a suspension bridge will be built as a compromise.

—The first load of lumber drawn over the street railway tracks at Ottawa was hauled between W. C. Edwards & Co.'s Lumber yards and the C. A. R. freight yards. The electric locomotive for hauling purposes is not yet ready and a street sweeper was rigged up to draw the lumber. The lumber was piled on an ordinary railway flat car.

—A new tariff schedule, prepared by the government of the Argentine Republic, has been received by the Department of Trade and Commerce at Ottawa. By a fixed valuation the duty becomes specific instead of ad valorem. White pine, unplanned, is valued for duty at 35 cents per square metre, the duty remaining at 15 per cent.; the duty on plain lumber is 25 per cent. on a fixed valuation of 50 cents per square metre.

—A deputation from the counties of Northumberland and Durham waited upon the Dominion Minister of Public Works and requested the removal of a dam in the Trent river, which was constructed fifty years ago, and was formerly used by the Gilmours, Rathbuns and other lumbermen. It was pointed out that the dam was no longer a requisite in lumbering purposes, as the timber areas which the Trent river served were practically exhausted. The Government promised to consider the matter.

—The Serpent River Improvement Company applied to the Ontario Commissioner of Crown Lands for a supplementary charter, limiting the term of the existence of the company to 15 years, or to such other term as the Government might see fit to grant. The application was resisted by Hale & Booth, of Ottawa, who claimed that 15 years was too short for the lumbering firms paying tolls for the improvements. They asked that the term be not less than 25 years, as they claimed that it would take that long to cut all the timber in that section. The Commissioner reserved his decision.

—The lumbermen working in the shanty of Mr. E. J. Doyne, of Ottawa, situated about four miles north of Old Chelsea, had quite an unpleasant and exciting experience recently. The cabin they were sleeping in caught fire, and the flames were well under way before being discovered. The men finally awoke, but it was then so late they barely managed to escape, without being able to save anything. One of the men, Mr. Jno. Brown, who lives at Rochesterville, had his boots burnt and had to walk over a mile through the snow in his bare feet.

—Mr. W. H. Marcon, of the Toronto Hoop and Veneer Company, is said to be arranging for starting a factory at Toronto Junction, where he will manufacture cloth or rolling boards for export to the United States, England, France and Germany. These boards are rolled or veneered of basswood logs, and by this means there is no

waste in the cutting, as when sawn. The demand for these goods by woolen and cotton manufacturers is very large, and large capital is now secured to manufacture under the various patents which Mr. Marcon took out some months ago.

—Mr. Adam Beck carries on an extensive business at London, Ont., manufacturing cigar boxes, veneer and thin lumber. The main factory is a brick building, 40 x 80 feet, three storeys high, with a two-storey extension 41 x 42 feet. In the rear are two "Progressive" dry kilns, built after Mr. Beck's own design. He also put in two new power nail machines, a new Leonard Ball automatic engine of 200 horse power, and a number of other machines. The building is heated by steam and lighted by electricity, and fitted with every appliance for the expeditious manufacture of the various lines. Eighty-seven persons are employed.

CASUALTIES.

—J. Legallais was killed at Glencoe, N. B., by a falling tree, while cutting sleepers.

—A young man was recently frozen to death in the woods while making his way from one shanty to another. He was in the employ of the Gilmour Company.

—George Bushey, of Waubushenc, Ont., was engaged in felling a tree, when it fell in an unexpected direction, breaking his leg and severely injuring his spine.

—While working in a mill at Grand Mere, Que., a man named Tontout was caught by a planer, which literally tore one arm from his body, causing death shortly after the accident.

PERSONAL.

Mr. Angus McLeod, lumberman, of Bracebridge, has been chosen by the Conservatives to contest North Ontario for the House of Commons.

Mr. C. Berkeley Powell, of Ottawa, a director of the Upper Ottawa Improvement Co., was a successful candidate for alderman at the late municipal election.

Mr. James Russell Elliott, of London, Ont., was recently married to Miss Emelne Williams Mills, daughter of Nelson Mills, the millionaire lumberman of Marysville, Mich.

Mr. Alexander Sutherland, at one time an extensive timber merchant, died at Canifon, Ont., late in December. He was 73 years of age, and a native of Caithness, Scotland.

Mr. Thomas Bryce, lumber merchant, of Toronto, although unsuccessful in securing election as alderman for ward 2, received a gratifying support, coming in as fifth man.

Mr. David McLaren, of Ottawa, left early in January on a trip to Australia. He is largely interested in the British Columbia saw mills, and will endeavor to learn the requirements of the Australian timber market.

Mr. John Heard, sr., of the firm of John Heard & Co., spoke and heading works, St. Thomas, Ont., died early in January, at the age of 74 years. He was born in Devonshire, England, and came to Canada 50 years ago.

Ex-alderman Crannell, secretary of the Bronsons and Weston Lumber Co., made a strong fight for the mayoralty of Ottawa, being defeated by a small majority. There were three contestants, and Mr. Crannell was second in the race.

Mr. Thomas Meredith, of Yorkton, N. W. T., was recently in Ontario renewing old acquaintances. He conducts a retail yard in the town named, dealing in Douglas fir, red cedar shingles and white pine, and reports trade increasing as the result of better prices for farm products. Dressed fir retails at \$28 to \$30, and rough boarding at \$17.

American lumbermen are beginning to consider economical methods. Several have already discovered that the saw is preferable to the axe in felling trees. Another important step is to prevent waste in slabs. This can be minimized by adopting a common European method. Generally in America a log is squared and then sawn into boards of the same width. In Germany the log is not squared, but sawn directly into boards. These boards are sorted according to their widths. The two edges are then sawed separately. This is a slower but more economical method.

REMARKS OF A BANKER.

In an address before the Canadian Club at Hamilton, Mr. B. E. Walker, manager of the Canadian Bank of Commerce, referred to the question of forestry. He regretted that our timber lands had already been denuded of oak, elm, sycamore and walnut, the former wood being now imported from Minnesota. In white pine, however, Canada was in the lead. There was no white pine outside of America, with the possible exception of Siberia, and though in the aggregate there was a large quantity left in Michigan, Wisconsin and Minnesota, the great bulk of the world's supply was in Canada. What we had would last for 100 years if any care was taken of it. The belt commenced at the southern edge of Algonquin Park, and moved west and north to the Gatineau, Coulonge and Black River districts. In the latter localities it was rapidly reproducing itself. The Rainy River pine, although coarse and small, was also worth a great deal. The most valuable timber asset we had, however, was the spruce timber. Reproducing itself as it did, it was practically inexhaustible, and, in addition, it was of a much better quality than that which grew in Europe. Canada already supplied Europe with timber for pulp for the best paper, and the next step should be to make the paper itself here. The British Columbia forests, with their immense trees, could not literally be said to be inexhaustible, but the quantity was so great that that was practically the case. This timber in British Columbia was a very good example of the third class of available raw material before referred to—that which could not now be profitably made use of on account of its geographical position. Mr. Walker also advocated the adoption of a forestry system. Something besides ranging was necessary to guard against the danger and results of fire.

PRESERVATION OF TIMBER.

OBSERVATIONS upon the preservation of timber have shown that the more warm and humid the atmosphere, the more rapidly the wood deteriorates, also that timber felled in winter is more durable than that felled in summer, and that timber raised in cold climates is more durable than that raised in warm climates, while the best timber is produced on meager soil. When under water, the most lasting woods are oak, alder and pine, the least so being birch, linden and willow; in the air, timber is exposed to the ravages of insects, this being the case with sap wood more than the hardwood; woods rich in resin, like the elm and poplar, are not so much troubled as those like the alder, willow, birch, yoke, elm and red beach, which have an abundance of sap and are rapidly deteriorated. Timber construction which is protected from heat and humidity is only endangered by worms, and, on the contrary, that which is in a damp and badly aired place injures by rotting, which is really the result of microscopic vegetable growths. The primary cause of the decay of wood is the presence of albuminoid substances in the sap and incrusting materials, these naturally affording nourishment to insects and microscopic vegetations and their destructive work.

"Advertising is to business what steam is to machinery—the grand propelling power."—Lord Macaulay.

THE RETAILER AND Wood-Worker

A LONDON RETAIL YARD.

The largest retail lumber yard in the "Forest City" is that of Kernohan, Webster & Ferguson, situated at the corner of York and Ridout streets. The individual members of the firm are Messrs. G. N. Kernohan, R. J. Webster, and A. Ferguson, each of whom are energetic and enterprising business men. They keep constantly on hand a large stock of lumber, lath, shingles, cedar posts, etc., and being situated in close proximity to the Grand Trunk Railway, the shipment of lumber is greatly facilitated. Owing to their extensive trade, they are enabled to supply stock at short notice, and during the building season the yard presents a continual scene of activity. The business has been conducted by the present firm since 1893, but in that comparatively short space of time they have established a wide connection.

BUYING GOODS ON CREDIT.

The following suggestive extract is taken from an address delivered before an association of credit men by Mr. Henry Wollman, of Kansas City:

"Suppose a man comes to you and says he wants to buy goods on credit. You say to him, 'Well, how much can you sell?' He always puts it high enough. 'All right; put that down. How much profit can you make?' He always makes that high enough. Find out whether he thinks the profit is on the basis of the selling price or the cost of the goods. You will always find that it is really on the cost, but he thinks it is going to be on the selling price. Figure it out either way and put that down, and then you have the gross amount that he can make. Now, then, add up the items of what he tells you his expenses will be, and then deduct one from the other, but be sure you don't let him fool you or himself on the item of expense. When he tells you that he is going to live on \$30 or \$40 a month, when you know that nobody else in his circumstances does, don't believe him, but be sure that you get it reasonably correct, and then figure a little something for interest that he is going to pay for borrowed money during the year—he never thinks of that and be sure to take something out for depreciation in value of the goods at the end of the year—you will find out that he never figures in advance that his goods are going to depreciate at the end of the season, and then see if you can't determine for yourself that that man, if he is a beginner, is or is not going to be a good and safe risk. You will find that nine times out of ten, if you will take his own figures for it, you can see that, without knowing it, he has demonstrated to you in advance the impossibility of his succeeding."

CHANGING METHODS.

It has been quite a study with me for a long time whether or not we should confine ourselves rigidly to one rule, or system, or style of doing things in planing machine practice, either in fastening belts, setting and grinding cutters and knives, or, in fact, anything that pertains to planing machine work. In the matter of fastening belts, we read how a great many lumbermen seem so devoted to the worship of one system that, like the ancient martyrs, they would hold onto it if they had to sacrifice their lives to maintain their cause and show faith in their system.

It is all very well to be firm in any faith, but to this faith we must add a consistency, to show that it is correct in practice as well as in theory.

Anything to be valuable must be practical, and if it lacks the element of usefulness, it will sooner or later be lost in the sea of oblivion.

But many old theories die hard, if they ever entirely go out of existence. There are persons so absorbed in belt lacings that I believe if they were shown some other style of fastening infinitely superior in every way to lacings, they would still use them. That they are good in their place no sane person will attempt to deny, but that they are the best in every place it seems as if in these days of progress no one will be so obstinate as to affirm.

The same may be said of every known device for fastening belts, from the poorest to the very best.

Let me show you an instance. Quite a few years ago I was in a place where at 4 p. m. I was obliged to cut the lacings to a twenty-inch three-ply belt. Every day this was done, and when the engine stopped at 8 p. m. that same belt had to be released with new lacings, which were made by cutting two strings from the longest part of a large hide. Now those who are posted in the cost of hides can probably figure out how much these strings cost.

In this case, however, the cost was not an item, as "Uncle Sam" footed the bills, but the point to be made is all the same. There is but one belt fastening that could fill the bill under the conditions, and that is the Blake's belt stud. If we had had the oo Blake stud, they could have been re-used day after day almost indefinitely and the cost of two lacings a day could have been saved. That same stud was in use then, but we were intensely wedded to lacings and there was no officer or lawyer who could divorce us from it.

I simply bring in this single case to show that in all ordinary cases we can and should adjust ourselves to cases and conditions, and not be so riveted to an idea that we can, among the great multitude of good things, find but one to which we can resort.

It has not been a long time since all were got up by the slow process of the win and the "Yo heave O." Since the introduction of steam a better and quicker has been found, and sailors are forgetting the old hoisting song "the good old way."

Now, while I am an intense believer in the Blake belt stud, I believe there are many places where even leather lacings are better, and adapted to the work. I believe in riveting nearly all heavy belts, but I don't believe in every case lapping and riveting is the best. There is a steel hook on the market that goes through and clinches on the inside that I think is a good deal of. These are made in several kinds and sizes, and for double and single belts, in many cases I would use them. Often a belt breaking tears straight or very nearly straight across. It is as tight as it will bear now, but we cannot cut for hooks or even lacings, but can butt the ends together and use these fastenings, which can be done in very little space and is a very strong fastening. Often we have a belt torn part way across and these fastenings are admirably adapted to these places.

The common flat steel hook is also very useful in some instances, and I always keep an assortment on hand to use where they suit my convenience better than anything else.

I have used wire lacings and they make a very even, quiet-running belt, but I do not keep them in general use.

I have spoken more at length on belt lacings, because there is a much greater variety of places and conditions where they can be used, and are used, to good advantage. The policy to be made is, that it is not good policy to be wedded to one particular system when it is so much better to have several methods to resort to.

Now, in the matter of knife grinding and setting, it is in my opinion not policy to wed yourself to one style, especially if you have several different kinds of work to do on the same machine.

On common, ordinary white or yellow stock should grind a fairly generous bevel. If the stock was kiln-dried, I should use a narrow bevel, and in some cases I would bevel both sides. The under-side bevel makes one of the best-known chip breakers and saves wear on the lip of the cylinder, the style employed by the millwright in setting the knife back into the head.

I often do this on kiln-dried yellow pine and get the best results, and, while it does nice work, it also serves the lips on the cylinder, which is a good thing that every planing machine operator ought to attend to, for when they get so that shavings drive under the knives, bad shavings often follow, and a broken machine is not a desirable thing to have on hand. The lesson about this grinding business is that many concerns think that any more than a few sets of knives is an expensive luxury, and should be allowed only under the most urgent circumstances.

I believe in keeping a rack full of knives, good, long half-dozen sets, more or less.

It is not good policy to use up a set or two of knives clear up to the slots before ordering more. Old knives may do for light work, but when heavy stock is in the mill, no one will stand and feed a machine for fear the knives will go up the blower spout. And not only t

you want knives that you can grind for the different kinds of work that come to hand.

In the matter of side cutters two lumbermen should not confine themselves to any one style. If they do they will many times find they are in the condition the slang phrase "get left" so nicely expresses.

Shimers are good. Solid bits are very good, but you are not in fine shape for everything that comes along till you are well fitted up with three part bits. The three kinds taken together with a few spare heads gives you a confidence in yourself that you are fully prepared for business of any kind. In bench sawing, too, a good variety and style of saws is just what is necessary to do all kinds, and to pinch yourself here is to spite your face by biting your nose off.—John Shaw, in Lumber.

NUMBER AND ARRANGEMENT OF CYLINDERS.

REPLYING to the question "How should lumber be dressed?" referring especially to the number of cylinders and their relative arrangement, a correspondent of Sawing Wood says: "That depends. If the lumber is sawed with a circular, two cylinders placed most any practical way would surface both sides well, for the reason that any ridges left by the saw teeth would extend more or less lengthwise the board, and give some bearing all the time under the first cylinder. If the lumber be band or gang sawed any ridges—and there are many—would run across the board, and while the opposite face between these ridges is being dressed it is poorly done, because that space does not lie on the bed. Hence, if I were to select a double surfacer for doing fine work on both sides of band sawed lumber, I should require three cylinders, two upper and one lower. The first cylinder on this kind of lumber can not possibly dress it smoothly, for reasons given above, but could give a comparatively even surface to rest on while being dressed on the other side by the next cylinder. This cylinder would do smooth work because of the fine bearing the lumber would have, and would, of course, give a perfect foundation for the third or finishing cylinder, which would operate on the face first operated upon, and give as a result two perfect faces.

"Some people advise running lumber face down. Of course it makes no difference in surfacing only, but when matching it is difficult and unnatural to run flooring face down, as you never can see what the machine is doing until the board is completely out of the machine, and then you must turn it over."

DRYING LUMBER.

A SUBSCRIBER of THE LUMBERMAN wishes to know the best way of drying lumber in a kiln by means of a stove. If any of our readers have experimented in this direction, we would be pleased to learn the results of their efforts.

ONE OF THE BEST.

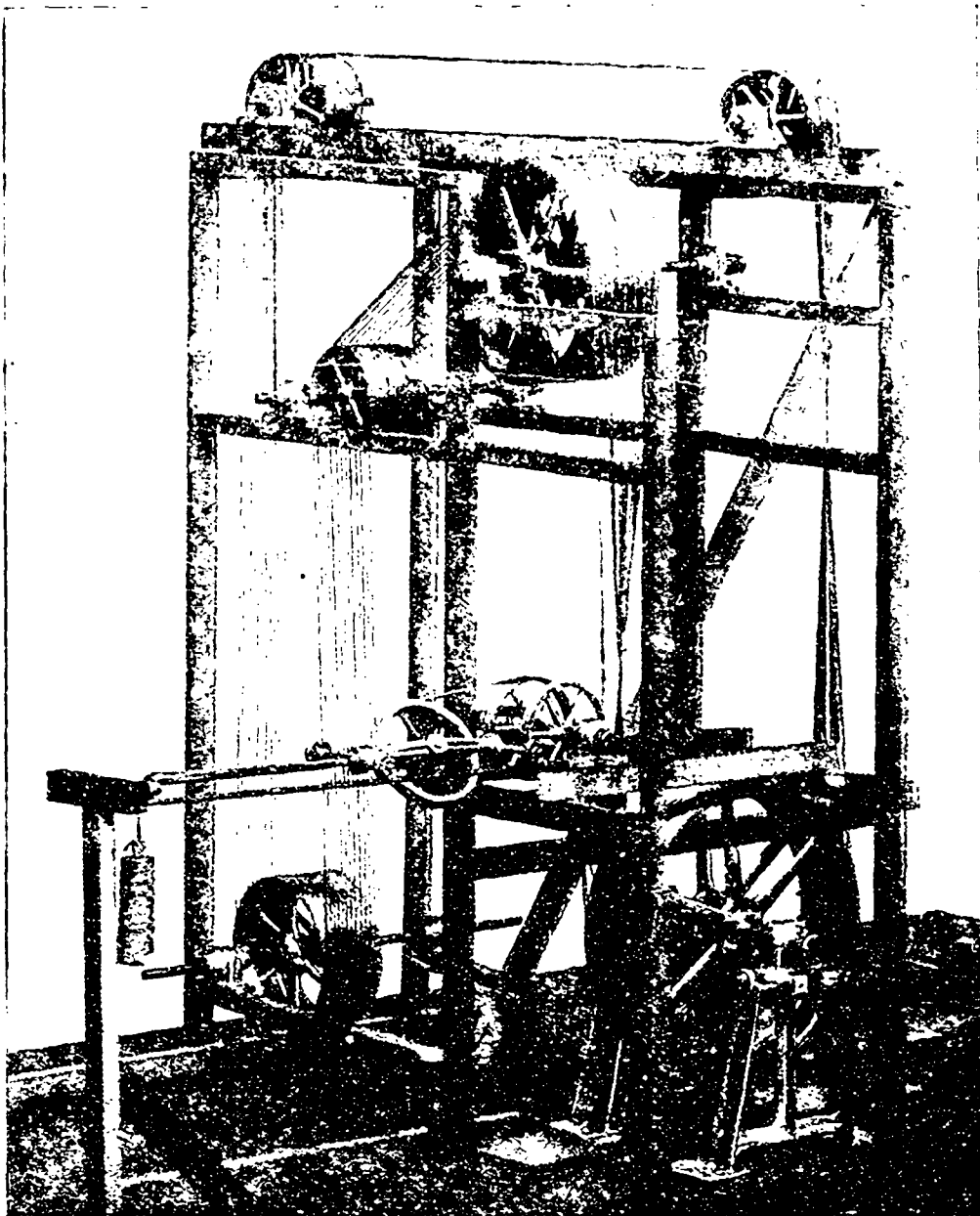
MESSRS. Reid Bros., Hepworth Station, Ont., in renewing their subscription to THE CANADA LUMBERMAN, write:—"We consider THE LUMBERMAN one of the best papers we get, and would not be without it."

ROPE TRANSMISSION.

THE illustration given below was taken from a model of the Dodge Patent American System of Rope Driving, designed to transmit power as required in a large mill, and at the request of the mill owners designed to avoid the use of the ever-troublesome and expensive gearing which would be necessary to otherwise accomplish the results herewith successfully attained. This illustration demonstrates the simplicity with which a shaft may be run at right angles to the driver, and with little or no loss of power. It is a well known fact, however, that with gears there is a great loss of power from friction, and many other disagreeable points of contention; also, with a belt and set of mule pulleys, there is great loss by imperfect contact of the belt with the pulleys, journal friction, and other annoyances sufficient to condemn it. On the contrary, with the manilla rope system, under the

of transmitting power) in this case is of the horizontal type. The idler sheaves near the rope tightener carry up and over to the travelling carriage, and are so placed that this carriage always keeps the rope at an even and correct tension (governed by the amount of weight used, see left of illustration), so that the rope will always follow the grooves, and is thus carried to and from the driven sheaves and the driver, always keeping its alignment. The tension weight serves a double purpose in taking care of all slack caused by stretch of the rope or by atmospheric changes, and by keeping a continual and proper tension on the rope.

In the United States, during the past ten years, rope driving has gained a wonderful precedence. Its former opponents have been convinced of open merits and are now the strongest advocates of this system of transmitting power. Belting has its place; driving by means of ropes has its place in mechanics. The latter, however, has two great advantages over the former: the first, the ease



DODGE PATENT AMERICAN SYSTEM OF ROPE TRANSMISSION.

Dodge patents, a shaft may be driven at right angles to another with the same efficiency as two parallel shafts are ordinarily driven.

This drive is peculiar to itself; the double right angle driving being a feature not frequently brought to notice. The driver on the engine shaft makes 70 R.P.M., operating the transmission in either direction, and carries fifteen wraps of one and one-quarter inch manilla rope to the driven sheaves, both at right angles to the driving sheave on the engine. The first driven sheave is 36 feet above the center of the engine shaft, makes 90 R. P. M. and transmits two hundred H. P. The second right angle drive is six feet below the center of the engine shaft, makes 140 R. P. M. and transmits three hundred H. P. The arrangement of the ropes is nicely shown in the illustration and needs no further explanation.

The travelling carriage or automatic slack rope take up, (one of the valuable features of the American System

with which it overcomes any of the knotty problems frequently met with in power transmitting engineering; the second, its great cheapness as compared with any system of belting or gearing. A rope will always do the work of a belt, but there are, in daily operation in all portions of the United States, rope drives doing excellent work which, if replaced by any combination of belting, would simply evolve a most disastrous failure.

The very low first cost of rope transmission is an indisputable fact, and likewise is the cost of maintenance where the drive is designed and erected by parties whose trade mark is formed by long experience and excellent workmanship. Dodge Manufacturing Co. have designed, manufactured and installed rope transmissions of their Patent American System for the past twelve years, and the success of their work is now depicted in every state in the Union.

The merits of this system are, its simplicity, great efficiency, cheapness, and wonderful saving in journal friction as compared with gears or a heavy belt with mule pulleys. The sole manufacturers in Canada are the Dodge Wood Split Pulley Company, 74 York street, Toronto.

THE CARE OF LOW GRADE STOCK.

HARDWOOD saw mill men are apt to neglect the proper care of cull and mill cull stock when they shut down for the season. In many a yard that has been shipping through the fall all the culls and mill culls that have been thrown out of better grades can now be found scattered in promiscuous piles all along the alleys and in the rear of the stacks, often criss-cross between piles. In many instances where the low grades have been wanted to ship, it has appeared easier for the foreman to go to regular piles already made rather than take the trouble to pick up and sort over the miscellaneous rejects thrown out in shipping.

This is all wrong and a waste of stuff which, if it is worth anything is worth taking care of, as by neglect, carelessness and exposure to the weather, what was pretty good shipping culls may easily be reduced to mill culls, and what was good, saleable mill culls may as easily be rendered worthless for shipping.

In all well regulated saw mill yards there is some one whose business it is to see that all rejects from the regular piles during each day's shipping are picked up, sorted to the proper lower grades, and if not wanted for shipment on orders already booked, are run to the appropriate pile and stacked. Some parties make special piles for these outs as they are generally rather better than the average grade made in sorting the green lumber, and buyers some times prefer them sufficiently to pay 50 cents or \$1 more for them.

Cull and mill cull oak gets worse very rapidly if thrown into promiscuous piles and allowed to remain for even a few days, if the weather is wet or snowy or very hot. This is a matter that is too often neglected by the saw mill man, who cuts only from 5,000 to 15,000 feet a day, and as he plugs on year after year, he wonders why his business does not show any profit over and above a bare hog and hominy existence. -Hardwood.

A PACIFIC COAST SPLINTER.

PACIFIC-COAST slabs and slivers are gigantic things. For example, in New Whatcomb, a seaport town and the county seat of Whatcomb county, the north-west county in Washington, and in the United States, is erected on the outer edge of a sidewalk on one of the principal street corners an immense slab or section of one of Washington's biggest red fir trees. The slab, being cut directly across the diameter of the tree, like a butcher's cutting-block, is set on edge, the greatest diameter extending upward, the bark being on its entire circumference. A stranger naturally feels inclined to walk up to the slab and measure it by his height, and he is surprised to find that it would take another man standing on his head to extend to the top of it. Then he steps back a pace and reads the following inscription, neatly printed on a board attached to the face of the slab: "Tree from Loop's Ranch, Whatcomb county, Washington. The tree was 465 feet high, 220 feet to first limb, and 33 feet 11 inches in circumference at the base. If sawed into lumber it would make 96,345 feet. It would build eight cottages two stories high, of seven rooms each. The tree is about 480 years old,

according to the rings. If sawed into inch square strips it would fill ten ordinary cars, and the strips would reach from Whatcom to China. The section shows the tree sound to the core.

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MANUFACTURER
 OF
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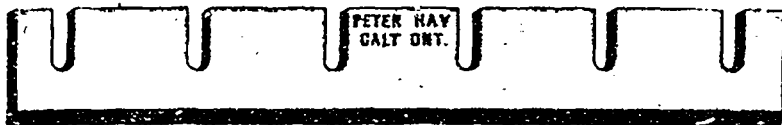
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TORONTO 20 FRONT ST EAST TELEPHONE 475

THE J.C.McLAREN BELTING CO. MONTREAL

HARDENING SAWS.

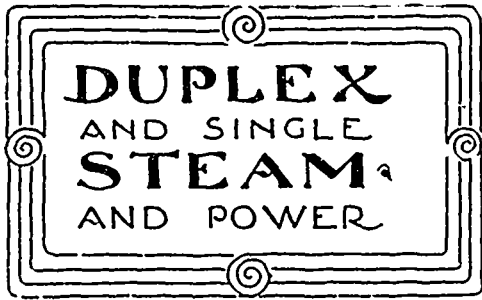
Saws are generally hardened in mixtures of oil, tallow, wax, and other substances, says the American Manufacturer. It should be noted, though, that the hardening mixture loses its properties after a certain time of continual use. The saws are heated in long furnaces and then dipped in horizontal position with the tooth edge into long troughs filled with the hardening substance. As soon as the saw is cooled sufficiently, it is taken out and wiped lightly with a piece of

leather, so as to remain still greasy; then it is placed over a bright coke fire until the grease coating inflames and has burned off with a bright flame. This burning off produces the necessary elasticity.

A good hardening mixture is obtained by melting five quarts of train oil, two pounds of tallow and a quarter pound of beeswax thoroughly together. This mixture is excellently adapted to hardening all kinds of steel. By adding one pound of resin heavier articles can be hardened,

but care should be taken that the proportion of resin is not exceeded, as otherwise the objects may become too brittle and crack. If the saws are too especially hard, only a part of the grease coat is allowed to burn off; if softer, more. In the case of springs, burning is allowed to continue until the flame goes out. If the objects are of irregular thicknesses, the burning process is repeated, altogether or partly, until there is reasonable assurance that the object is of equal hardness at all places.

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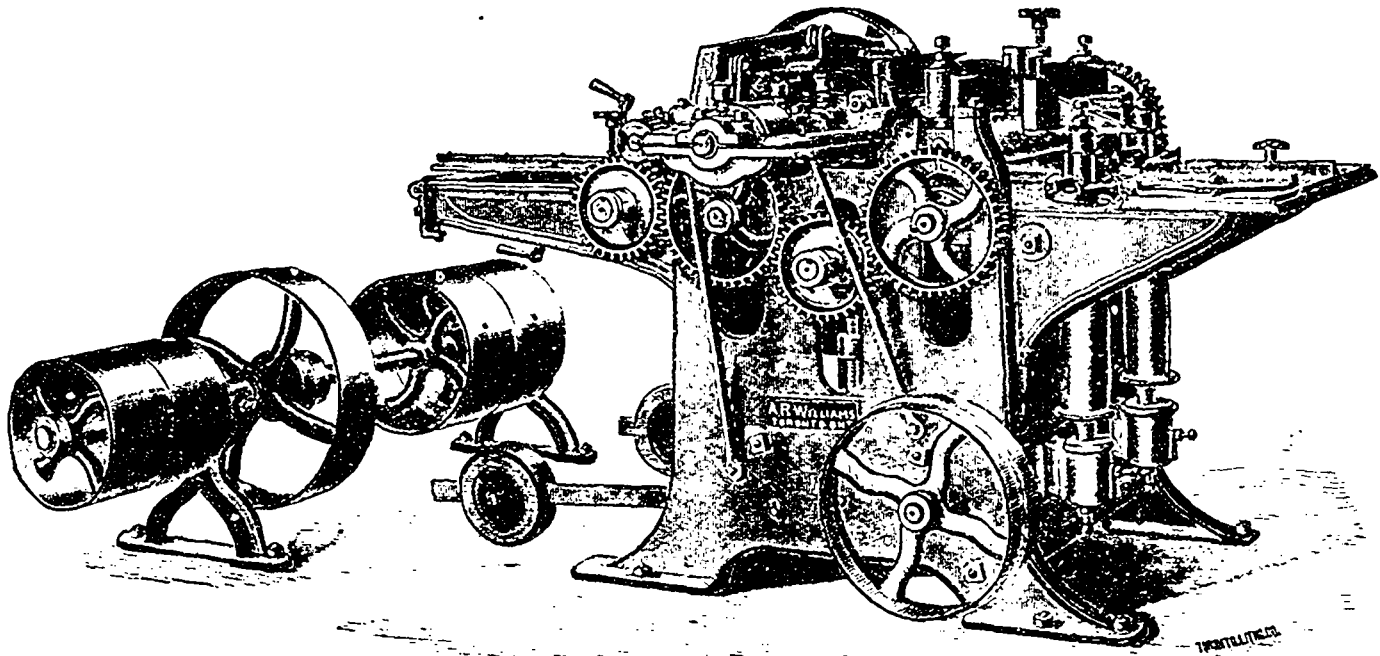
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QUEBEC CROWN LANDS.

The report of the Commissioner of Crown Lands for the province of Quebec, covering the year ending June 30th, 1896, shows the total receipts from that source to be \$1,045,310.19. Of this amount forest lands account for \$951,098.92, an increase over the previous year of \$178,763.36. Timber dues amounted to \$705,260.31, ground rents to \$143,485.73, bonuses to \$83,255.20, and transfer bonuses to \$4,239.47. The following is a comparative statement of the timber manufactured during the last two years, as compiled from the commissioner's reports:

	1895	1896
Pine at 26c. per 200 feet	276,865,800	307,195,720 feet B.M.
Spruce at 13c. per 200 feet	21,123,200	27,015,600 " "
Small pine logs	64,293,783	110,650,244 " "
Room timber	2,547,210	477,016 " "
White pine	15,515,9	1,446,384 cubic feet
Red pine	2,111	1,788 " "
Birch, etc.	12,012	40,785 " "
Cedar, etc.	26,208	201,193 linear feet
Firewood	8,112	7,953 cords
Pulp wood	7,712	11,79 " "
Spool wood	1,907	5,074 " "
Railway ties	110,105	308,312 pieces
Lath wood	177	19 cords
Shingles	13,754	3,082 M.
Henlock bark	679	202 cords.
Rails	7,870	20,563 pieces.
Telegraph poles	2,503	1,157 " "
Pickets	12,967	14,877 " "
Knees	544	8 " "

It will be observed that there has been a considerable increase in the production of pine, spruce and pulp wood, while shingle manufacturing has been reduced from nearly fourteen millions to slightly over three millions.

Mr. Paul Blouin, Superintendent of the Woods and Forests Branch, reports that the season of 1896 was an exceptionally dry one, but owing to the activity of the forest rangers no serious fires occurred. Fifty-six fires were extinguished by the staff, most of which resulted from settlers clearing lands, others from lightning, a few from sportsmen neglecting to properly extinguish their camp fires, and one from a passing train.

tion, to be the iron heads of tomahawks, or so similar weapons. Search was made in the old logs and several more weapons were found. The wood had grown twelve inches or more thickness over the missiles, which must, therefore, have been imbedded in the wood for many years—probably before the white man invaded the forest solitudes of the new world.

The London Timber Trades Journal says: Many curious discoveries have been made in the saw mill when opening logs, both animate and inanimate objects having been found in the interiors of trees, and the saw sometimes meets with strange obstacles. At Messrs. D. Norton & Sons' saw mills, Wharf road, City road, some time ago, when cutting some swamp oak shipped at one of the ports of a southern state of America, the saw encountered some hard metal objects in the centre of a log, which proved, on examina-



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

Prepared by the Editor of the
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Toronto, Canada
C. H. NORTIMER, Publisher
1895

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Yours respectfully,
MACPHERSON & SCHELL
Alexandria, Ont.,
April 6, 1891.

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Staves, Heading, Shingles, &c

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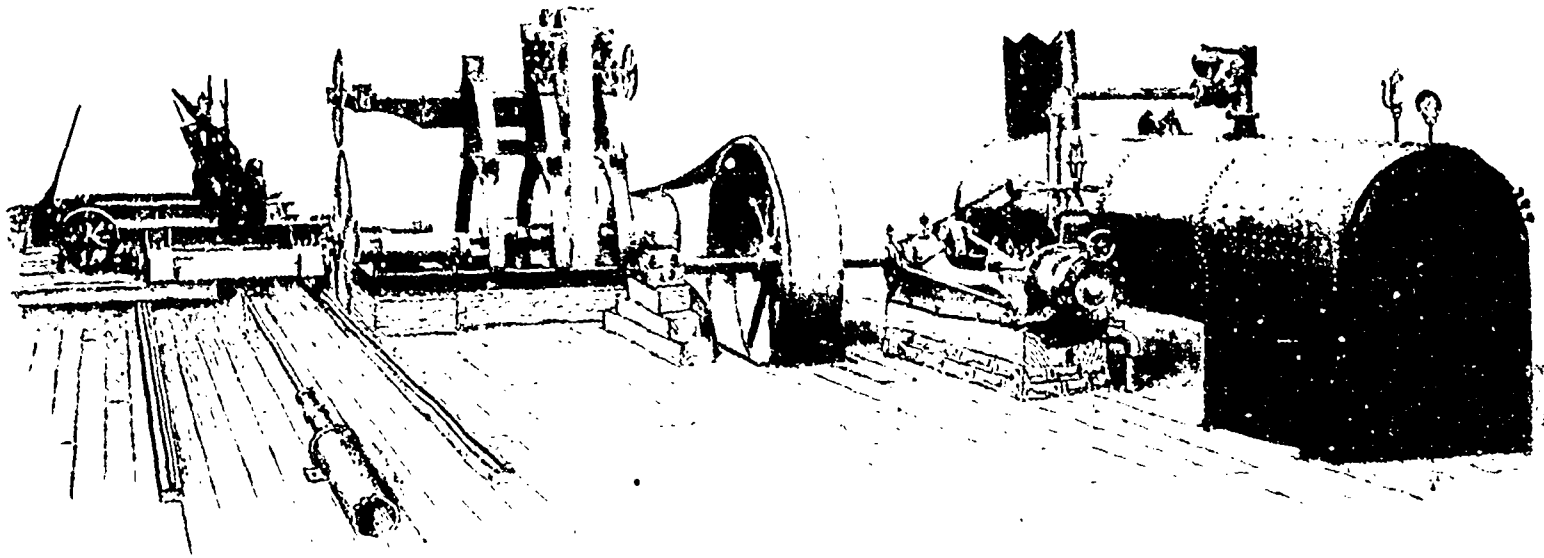
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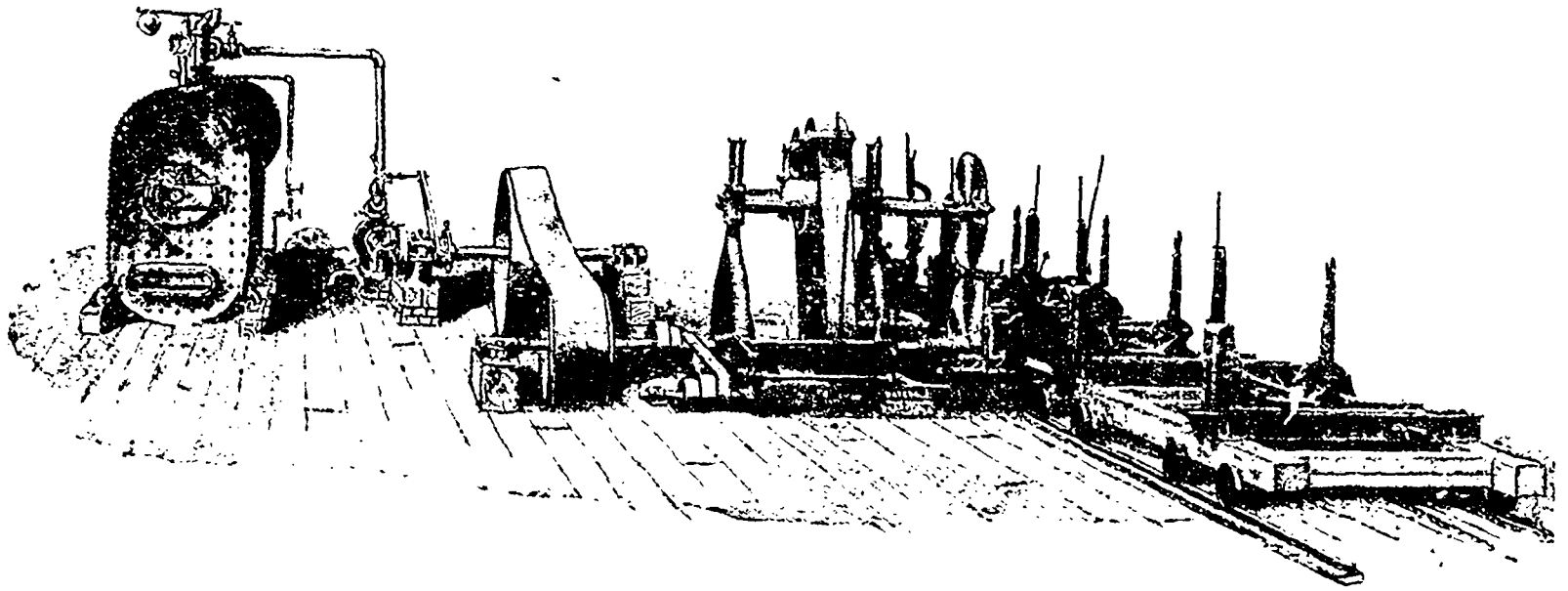
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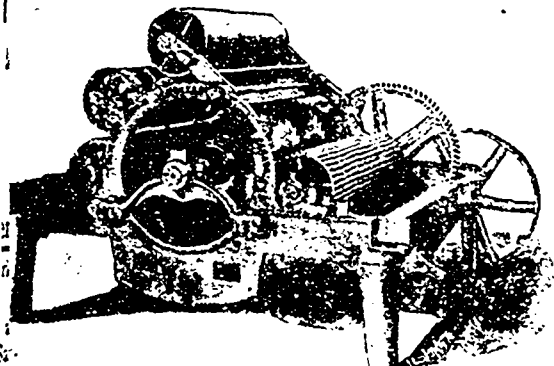


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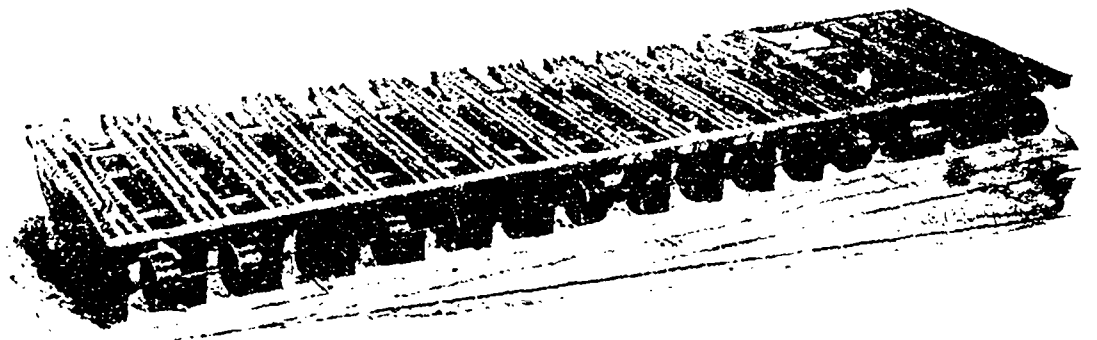
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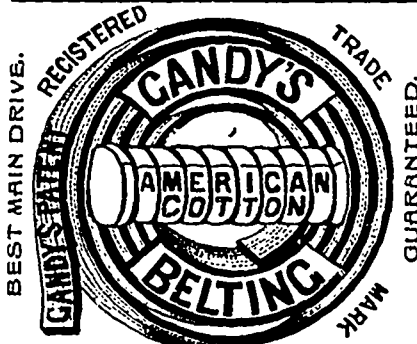
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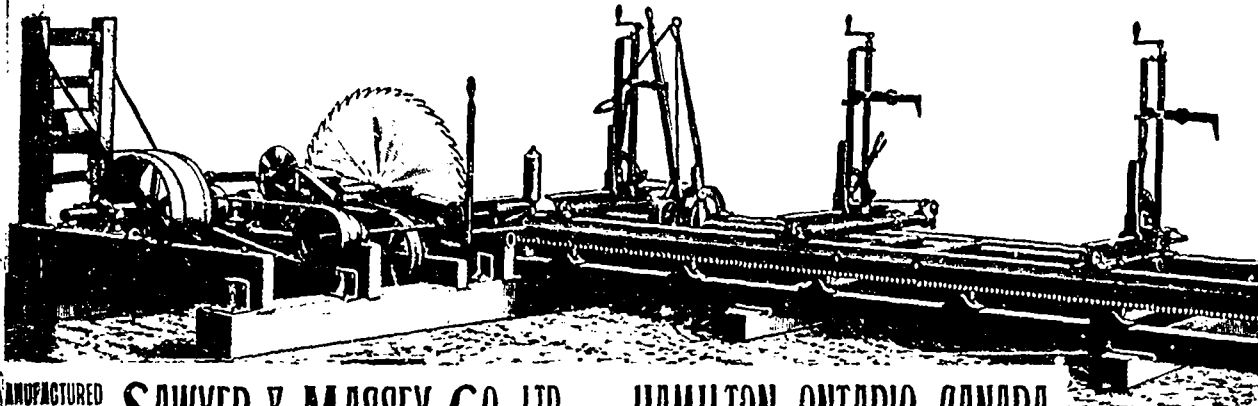
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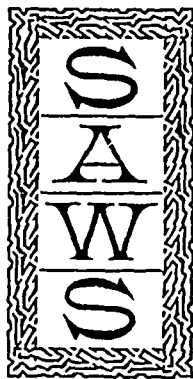
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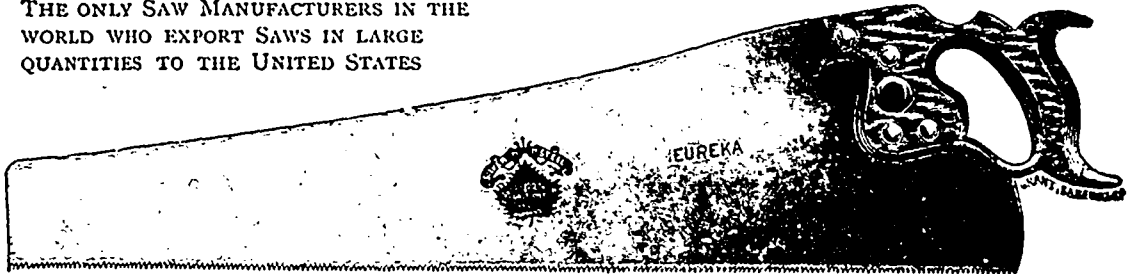
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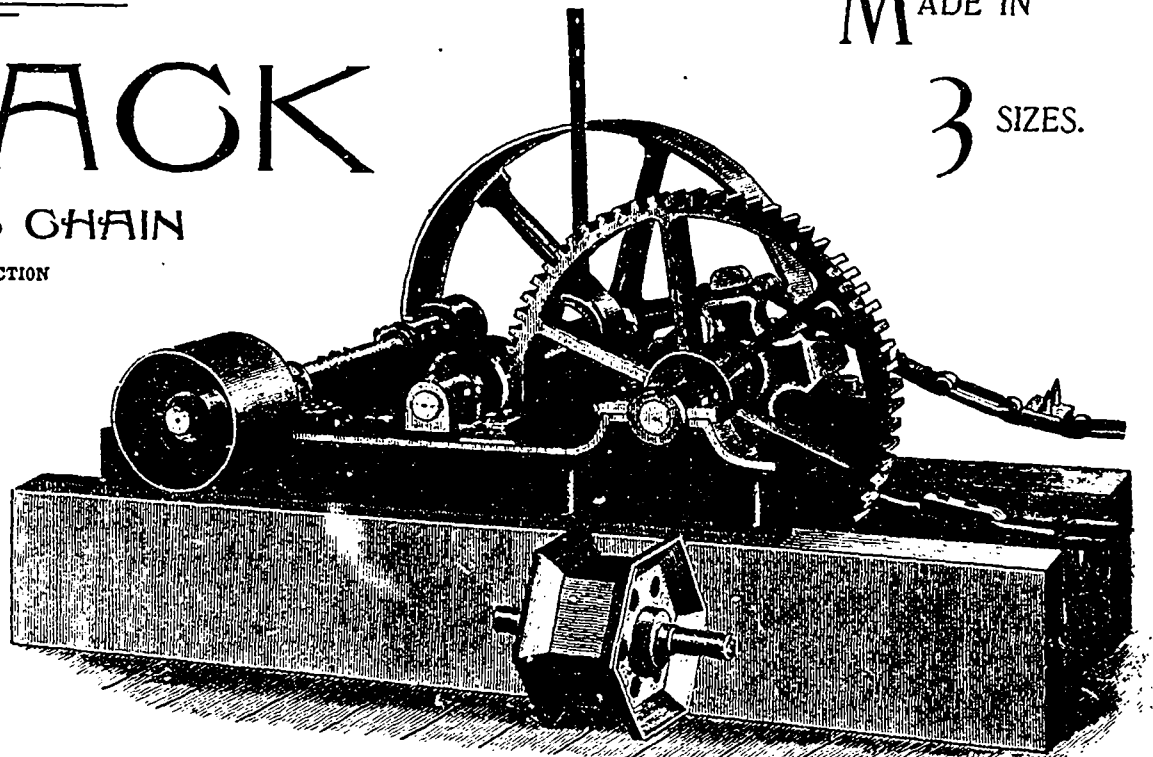
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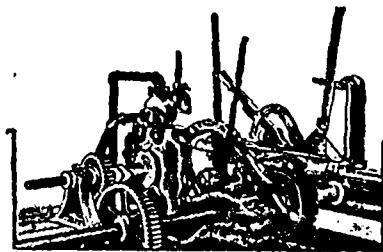
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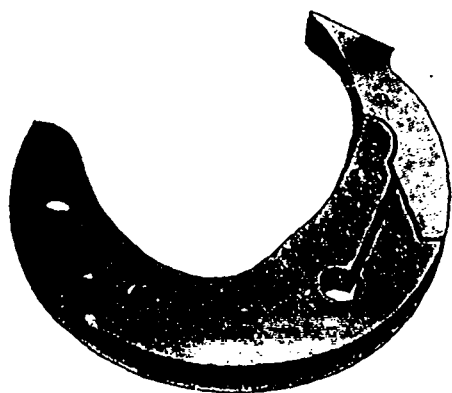
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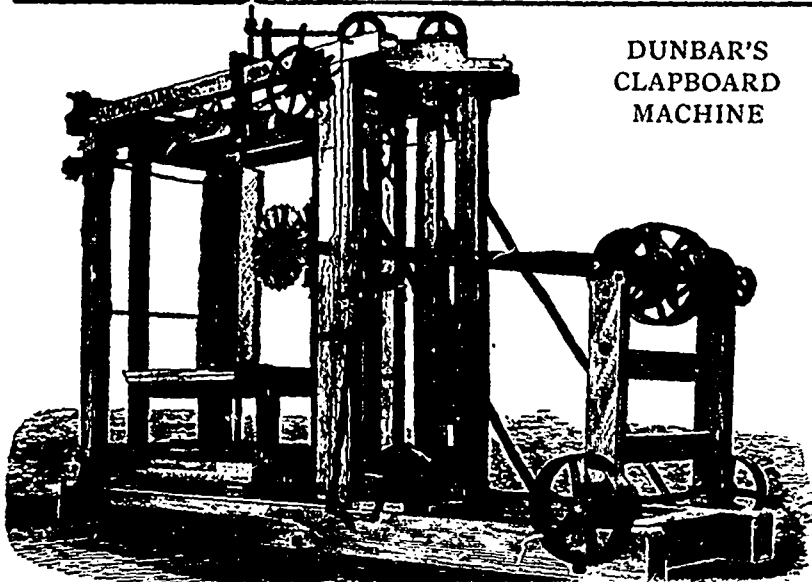
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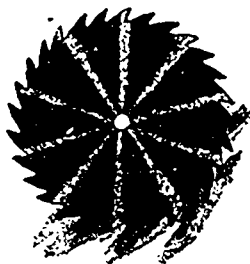
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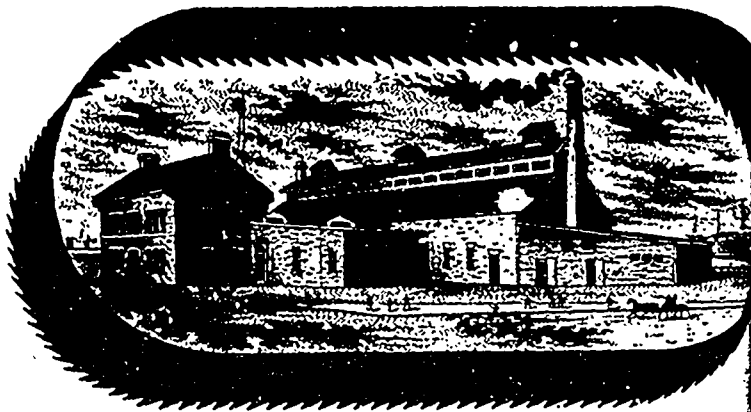
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