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# THE CANADA LUMBERMAN

WOODWORKERS' MANUFACTURERS AND MILLERS' GAZETTE

VOLUME XIX.  
NUMBER 5.

TORONTO, ONT., MAY, 1898

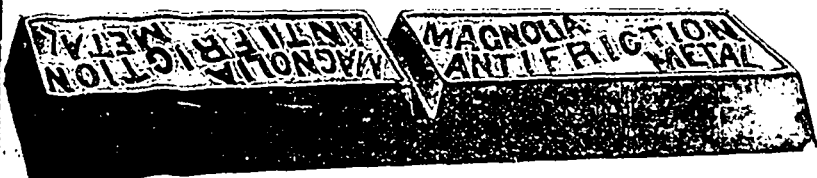
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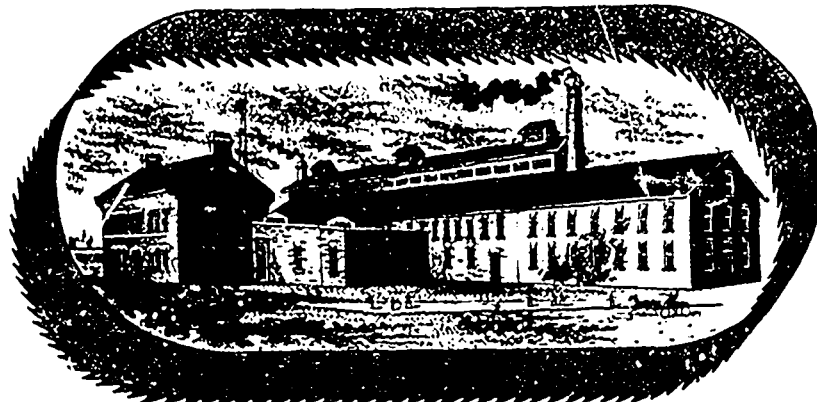


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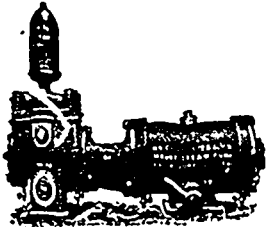
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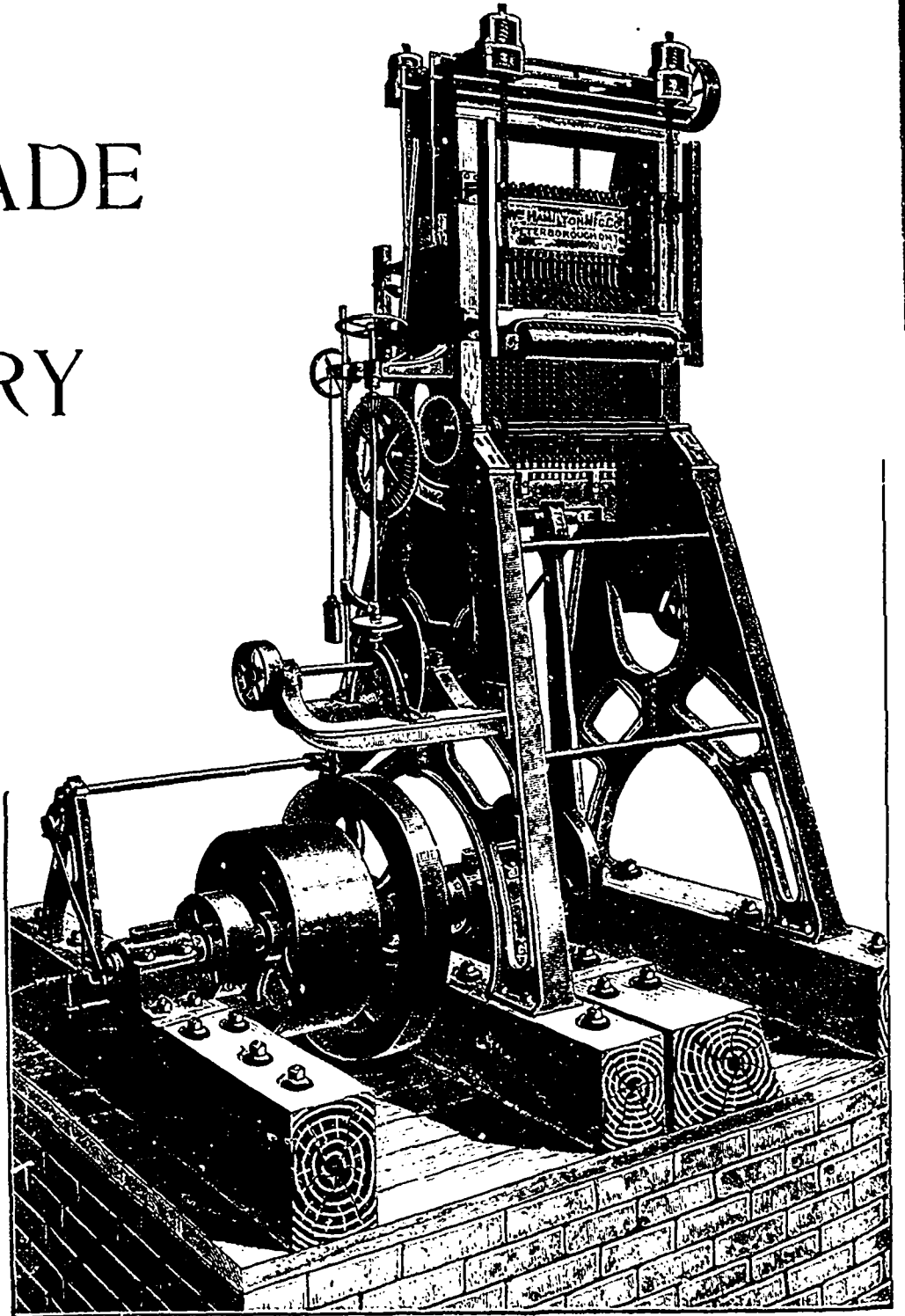
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# THE CANADA LUMBERMAN

VOLUME XIX.  
NUMBER 5.

TORONTO, ONT., MAY, 1898

TERMS, \$1.00 PER YEAR.  
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## CROWN LANDS OF ONTARIO.

The annual report of the Commissioner of Crown Lands for Ontario, recently issued, states that the total revenue from woods and forests for the fiscal year of 1897 amounted to \$1,327,140.08. Of this \$190,918.90 was on account of bonuses and \$54,166.62 on account of ground rent, leaving the net revenue from timber dues, etc., \$1,082,054.56.

The revenue from timber dues was larger than was expected at the beginning of the year. The accounts for timber dues accrue due in the month of December subsequent to the winter in which the cutting takes place, and are paid more or less promptly, according to the condition of the trade. The output of saw logs, etc., for the winter of 1895-96 was the largest in the history of the province, representing the sum of over one million dollars for timber dues alone. These dues did not become payable until December, 1896, and a considerable portion of them would not be paid until the year 1897. Owing to the continued depression in the lumber trade and the uncertainty prevailing as to the re-imposition of an import duty on sawn lumber passing into the United States, it was expected that payments would not

be made so freely and punctual as usual; consequently the estimate of revenue from woods and forests was not increased in proportion to the large increase in accruals. When it became evident that an import duty would be imposed on lumber passing into the United States, heavy purchases were made for that market, and some of our own lumbermen shipped their lumber over there and piled it up, this action being taken in advance of tariff legislation, the object in both cases being to escape the duty. The sales improved the financial position and consequently larger payments were made than was looked for, the result of which has been the increased revenue collected from timber dues.

For some time past, says the commissioner, there has been considerable excitement over the discovery of gold in the region lying north and east of Lake Wahnapiac, and large numbers of prospectors and miners had flocked into the

townships of Kelly, Davis, Rathbun and Scadding. These men had spent considerable money in developing the prospects which they had discovered, and in order to render them valuable and make sale of them they had been pressing the department for title. The department had been averse to opening these townships for sale, lease or settlement because the pine timber had not been sold, and it was feared that in clearing, etc., fire would be used to such an extent that bush fires would certainly ensue and the pine timber would be destroyed. Early last spring the department was very strongly pressed to allow titles to issue, and so pronounced did the

feeling become that threats were made through the press and in correspondence and otherwise that if the timber stood in the way of the opening up of the townships it would be burned up. In view of these facts and of the presence of such an army of prospectors as had rushed in, the position became acute and the department reluctantly concluded that it would be necessary to sell the timber in order to realize the bonus, put the timber under license, and then place on the shoulders of those who would buy it the responsibility of watching it and cutting from time to time whatever quantity might be damaged or was in danger. This course it was felt would relieve the intense feeling prevailing in the locality. The sale was held on the 17th of August last, and 280 miles were offered for sale, of which 159¼ were sold for \$265,102.50, or an average bonus of \$1,665.07 per square mile. Considering the quantity of pine on the limits and its charac-

ter, the showing was as good a one, so far as the price was concerned, as any previous one.

## STATEMENT OF TIMBER CUT.

The area covered by timber license is 16,400 acres. Following is a comparative statement of the principal kinds of timber cut during 1896-97:

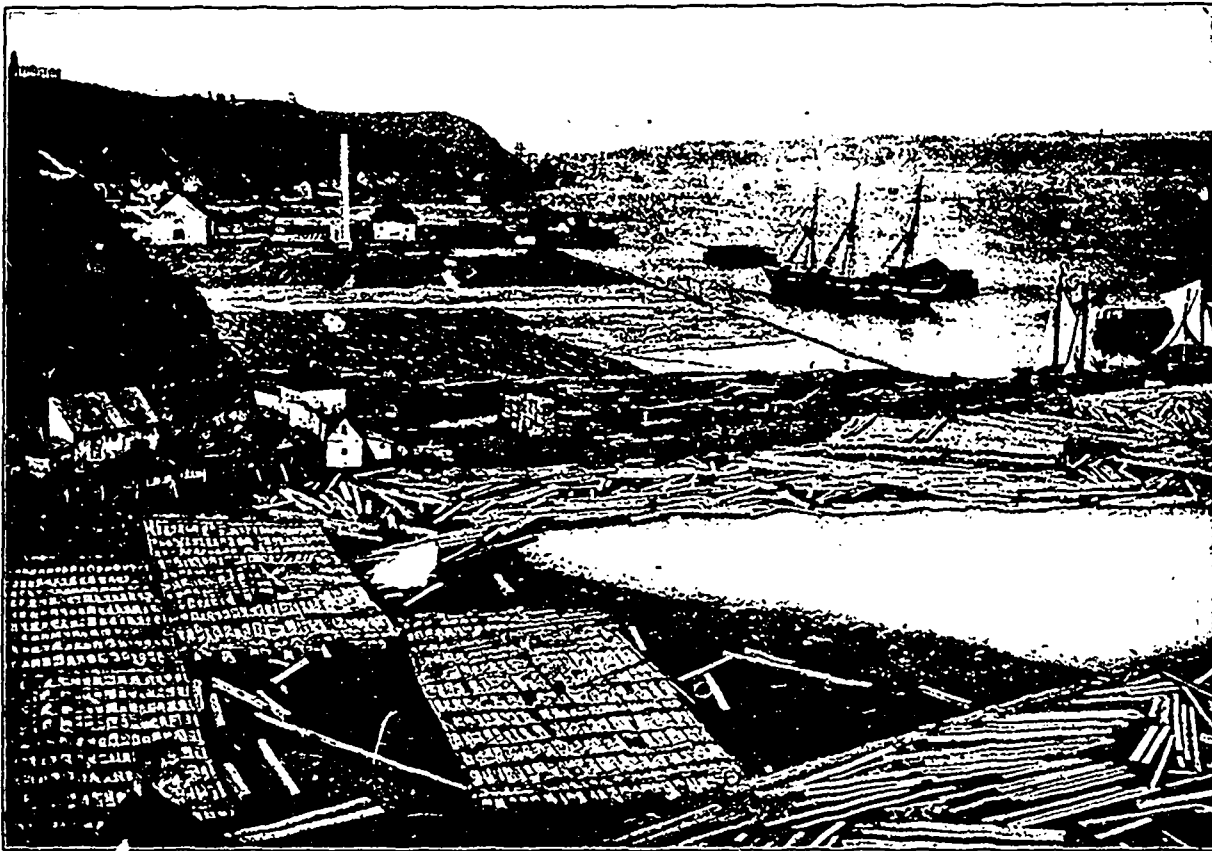
Pine saw logs	477,716,448 feet B. M.
Other saw logs	6,728,710 " "
Boom and dimension timber, pine	20,847,717 " "
" " " other	706,860 " "
Square timber, white pine	1,927,400 cubic feet.
" " birch, ash, oak	28,000 " "
Cedar	254,144 lineal feet.
Railway ties	278,985 pieces.
Telegraph poles	501 " "
Stave and shingle bolts	1,416 cords.
West India staves	7,700 feet.
Pulp wood	46,338 cords.

By surveys made it was ascertained that there

were to be found, in the township of Burwash, Nipissing district, white pine, red pine, balsam, spruce, cedar, tamarac, birch, poplar, maple, oak, black ash and elm, the last three in small quantities; in township of Cherriman, small poplar, birch spruce and balsam; in township of Jennings, second growth poplar, birch, spruce, tamarac and pitch pine on the high lands, and willow and alder on the low; in township of London, scattered white pine, small poplar and pitch pine; in township of Curtis, district of Algoma, cedar, tamarac, maple, birch, bal-

sam and spruce, the latter found in large quantities suitable for pulp wood; in township of Harrow, small jack pine, white birch, poplar, maple, beech and hemlock; in eastern part of township of Tupper, bird's eye maple, white and black birch, with small quantities of balsam and spruce; in township of Sanford, spruce, tamarac and small pine; in township of Zealand, Rainy River district, poplar, spruce, birch and cedar.

All the lumber mills in Washington are now running full time, and the increase in output will be greatly in excess of last year. During the past two months the shipments of lumber amounted to 1,050 carloads, against 780 for the same period last year. The shipments of cedar shingles during two months were over 1,200 carloads. The Alaskan demand for lumber is great, over 10,000,000 feet having been shipped this spring.



TIMBER COVE NEAR QUEBEC.

## LUMBERMEN'S ASSOCIATION OF ONTARIO.

NEW CONSTITUTION ADOPTED AND OFFICERS ELECTED.  
CHANGES IN THE CANADIAN LUMBER TARIFF  
ASKED FOR.

IN accordance with a resolution passed at the annual meeting on Tuesday, March 22nd, the Lumbermen's Association of Ontario convened in the Board of Trade building, Toronto, on Thursday, April 7th, to receive the report of the committee appointed to revise the constitution.

In the absence of the president, Mr. A. H. Campbell, sr., Mr. James Scott was voted to the chair, Mr. J. B. Miller acting as secretary. Among the members present were the following: John Bertram, Collins Inlet Lumber Co.; James Scott, Georgian Bay Lumber Co.; A. H. Campbell, jun., Muskoka Mill & Lumber Co., Toronto; T. Conlon, Thorold; John Waldie, Victoria Harbor Lumber Co.; J. B. Miller, Parry Sound Lumber Co.; C. Beck, C. Beck Manufacturing Co., Penetanguishene; N. Dymont, Mickle, Dymont & Co., Barrie; R. Cook, South River Lumber Co.; W. A. Charlton, M.P.P., Lynedoch; and C. H. Clark, Toronto.

The following new members were elected: Wm. B. Toner, of Toner & Gregory, Collingwood; T. A. Pickard, Pickard & Rowan, Owen Sound; Wm. Milne, Milne & Hefferman, Trout Creek.

The secretary read the minutes of last meeting, which, on motion of Mr. Beck, were adopted.

The committee appointed to revise the constitution presented its report, each clause being read and considered separately. The first and second clauses brought up the question whether the association should include dealers, the final decision being against their admission. It was pointed out that persons engaged in making board timber would be eligible for membership, and that there might also be a separate hardwood section.

Clause 5, relating to the annual fee, created an animated discussion, the result being that the fee for the first year of membership was placed at \$5, and for each succeeding year at \$2.

The constitution, as finally adopted, is as follows:

### CONSTITUTION.

1st. The object of the Association shall be to promote the interests and conserve the rights of those engaged in lumbering operations or in the manufacture of lumber, to hold meetings of the members for the consideration and discussion of questions affecting those interests, and by union and co-operation to build up and foster the lumber business.

2nd. Any person engaged in lumbering, in the manufacture of lumber, or holding timber lands in the province of Ontario, shall be eligible for membership.

3rd. Any person desirous of becoming a member of the Association may make application to the Secretary, and on payment of the proper fee shall immediately become a member of this Association, subject to the approval of a majority of the members present at the next special or general meeting.

4th. No member shall vote at any meeting of the Association who has not paid his fees, but when a member of the Association, who is entitled to vote, but is not present at a meeting, belongs to a corporation or firm, he may be represented by an officer of that corporation or a member of that firm.

5th. A fee of \$5.00 shall be paid by all members on their joining or being elected to the Association, and an annual fee of two dollars thereafter on the first day of January of each year.

6th. Any member who may wish to withdraw from the Association may do so by giving notice to the Secretary

and paying up his subscription to the expiration of the year then current, together with all arrears.

7th. The affairs of the Association shall be managed by a board of ten members elected at the annual general meeting of the Association, and who shall hold office for one year or until their successors are appointed. The board shall meet at such time and place, and so often as they may be called together by the President, or on the requisition of three members of the board, by giving five days' notice thereof, and stating the purpose for which the meeting is called.

8th. At the first meeting of the Board of Management in each year, a president, first vice-president and second vice-president shall be elected, who shall hold office for one year, or until their successors are appointed, and a secretary and treasurer, who need not necessarily be a member of the Association. The secretary and treasurer's remuneration and amount of security to be given by him shall be fixed by the Board.

9th. The annual general meeting of the Association shall be held in the city of Toronto, at such hour on such day in the month of February as the Board of Management shall decide, and notice thereof shall be sent to each member at his registered address at least ten days before the day fixed for such meeting.

10th. The Board of Management shall have power to call special and general meetings at such times as they see fit, the object for which the meeting is called to be stated in the circular convening the same.

11th. Seven members present shall constitute a quorum for the transaction of business at all meetings of the Association, four at meetings of the Board of Management, and three at all meetings of committees.

12th. In the event of any dispute as to the intent or meaning of any of the sections of this constitution, or of any by-law which may hereafter be made, the interpretation by the Board of Management shall be final and conclusive.

13th. The constitution and any amendments thereto which hereafter may be made may be altered by a two-thirds vote of the members present at any special or general meeting of the Association called for that purpose.

14th. The Board of Management shall have power to frame by-laws for the carrying on of the work of the Association, which shall be in force until the next general or special meeting of the Association, when they shall be submitted, and if not confirmed by a majority of the members present, shall cease from that date to have any validity.

The secretary read the report of a committee of the association which recently met a deputation of western lumbermen to discuss the question of an import duty. This report, on motion of Mr. Bertram, was adopted.

### ELECTION OF OFFICERS.

The association then elected the following Board of Management: James Scott, John Bertram, John Waldie, J. B. Miller, Toronto; W. A. Charlton, M. P. P., Lynedoch; N. Dymont, Barrie; Chas. Beck, Penetang; W. C. Edwards, M. P., Ottawa; Thos. Conlon, Thorold; R. Cook, South River. Subsequently John Bertram was chosen president, Jas. Scott first vice-president, and W. C. Edwards, M. P., second vice-president, the Board of Management appointing W. B. Tindall secretary-treasurer.

Mr. Beck read a series of resolutions which had been adopted at a mass meeting of the citizens of Penetanguishene, favoring an import duty on lumber.

It was moved by Mr. Waldie that the communication be received, and that the association approve of the general principle that they favor an import duty of \$2 a thousand on lumber, 30 cents on shingles, and 25 cents on laths a duty corresponding to the American tariff. A committee, consisting of Messrs. Bertram, Campbell, Charlton, Scott and Miller, was appointed to draft a resolution on the above lines, for presentation to the government, setting forth also that the lumbermen only wished to meet duty with duty, and

that they were willing to give free lumber and logs for free lumber.

Mr. Beck brought forward another grievance which Canadian lumbermen had to contend with. He stated that both British and American tugs towing logs from Canada to American mills were allowed to bring in large loads of coal in bond and dump it on the Canadian shore, and then come back and get this coal again, no duty being charged, whereas the Canadian tugs, towing to Canadian mills, had to pay a duty of 60 cents per ton on coal brought in from the United States. On motion of Mr. Waldie, the Board of Management was instructed to investigate the matter, and draw the attention of the government to the injustice.

The import duty question was again opened by Mr. Conlon, who expressed a fear that unless further action was taken the changes asked for in the tariff would not be granted. The secretary here read a letter from Messrs. G. & I. Prescott, of Albert, N. B., heartily endorsing the action of the association and expressing regret that the lumbermen of the maritime provinces had no organization.

The meeting then adjourned, and re-assembled in the afternoon, when by-laws were adopted and other routine business transacted.

### TARIFF CHANGES.

In accordance with the resolution passed at this meeting, the Executive Committee has forwarded to the Dominion government a memorial asking for certain amendments in the Canadian tariff. These amendments make the clauses read as follows:

CLAUSE 328.—Sawed or split boards, planks, deals, pine and spruce clapboards, lumber and timber hewn or sawed, creosoted, vulcanized or treated by any preserving process, planed and dressed on one or both sides, manufactured lumber and timber not elsewhere specified, \$2.00 per M. feet B.M.

CLAUSE 329.—Laths, pickets, palings, shingles of wood, staves not listed or jointed of wood of all kinds, firewood, handle, heading, stave and shingle bolts, hop poles, fence posts, paving posts, railroad ties, telephone, trolley, electric light and telegraph poles of cedar or other woods, 20 per cent. ad valorem.

CLAUSE 611.—Free goods: Timber or lumber of wood, viz., lumber and timber, planks and boards of amaranth, cocoboral, boxwood, cherry, chestnut, walnut, gumwood, mahogany, rosewood, sandalwood, sycamore, Spanish cedar, oak, hickory, whitewood, African teak, black heart ebony, lignum vitae, red cedar, redwood, satinwood and white ash, when not otherwise manufactured than rough sawn or split or creosoted, vulcanized or treated by any other preserving process; hubs for wheels, lat blocks, wagon, oar, gun, heading and all like blocks or sticks, rough hewn or sawed only; feloes of hickory wood, rough sawn to shape only, or rough sawn and bent to shape, not planed, smoothed or otherwise manufactured; hickory billets and hickory lumber sawn to shape for spokes of wheels, but not further manufactured, hickory spokes, rough turned, not tenoned, mitred, throated, faced, sized, cut to length, round tenoned or polished; the wood of the persimmon and dogwood trees; logs and round unmanufactured timber, ship timber or ship planking, not specially enumerated or provided for in this Act.

Mr. A. J. Burton, formerly of Cape Breton, has recently returned to Canada from Massonville, Pa., and has taken charge of the filing and hammering of the band saws in Gilmour & Co.'s mill at Canoe Lake, Ont. Mr. Burton is not unknown to his present employers, having filed for them one season at the Trenton mills a few years ago. He has had eleven years' experience as a band filer, and is known by mill men to be one of the best filers in the country, having made some good records. An article from his pen on "The Care of Band Saws" appears on another page.

## OBITUARY.

A. M. BURGESS.

The late Alexander Mackinnon Burgess, Commissioner of Dominion Lands, whose death took place at Ottawa on February 26th last, was a well known and most esteemed personage. He was perhaps best known throughout the country at large as the efficient deputy head of the Department of Interior for a period of fourteen



THE LATE A. M. BURGESS.

years preceding the advent of the present government.

Mr. Burgess was born at Strathspey, Invernesshire, Scotland, on the 21st of October, 1850, and was educated at the parish school of Advie, at the grammar school of Aberdeen, and at the University of Aberdeen. He did not graduate at the university, but came to Canada at the age of 21, possessed of a solid education, which fitted him for any career in which he might choose to enter. The career he selected was that of journalism, and one of his earliest engagements was as reporter on the staff of the Toronto Globe. He was not only an expert stenographer, but a facile and vigorous writer; and he soon began to make his mark in his profession. He reported for the Globe at Ottawa from 1872 to 1874, when he became editor and subsequently proprietor of the Ottawa Times.

In the year 1876 Mr. Burgess accepted the position of private secretary to the Hon. David Mills, then Minister of the Interior in the government of the Hon. Alexander Mackenzie, and thus entered upon the official career in which he was destined to achieve such distinguished success. Remaining in the Department of the Interior after the defeat of the Reform government in 1878, he was promoted four years later to the position of secretary, and in the following year to that of deputy. For some time after the formation of the present government Mr. Burgess continued to hold his office as deputy, under the Hon. R. W. Scott, as acting minister; but shortly after the advent to office of the Hon. Mr. Sifton, he was assigned, without change of salary, to the position of Commissioner of Dominion Lands.

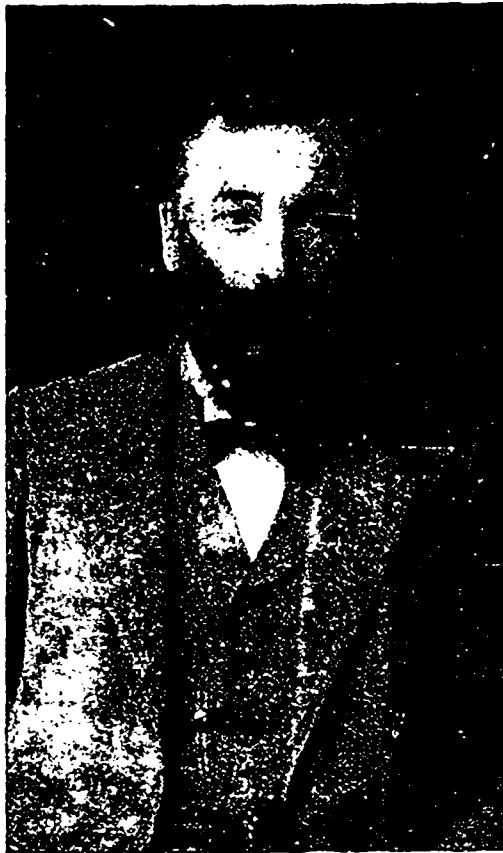
The Ottawa citizen thus refers to Mr. Burgess: No one who knew the late Mr. Burgess will dispute the statement that he was one of the most interesting figures that have appeared on the official scene in this country during the last twenty-five years. He was naturally a man of strong constitution and unbounded vigor, with

an active, enquiring mind and great capacity for work. One of his chief gifts was a remarkable memory, which served him in good stead in conducting a department, the work of which embraced an infinity of detail. The several ministers under whom he served as deputy head prior to the advent of the present government, received from him assistance of the very greatest value through the comprehensive and intelligent knowledge which he possessed of nearly every subject that was referred to in the departmental files; and it is doubtful whether the services of any deputy head in Canada were ever more highly appreciated than were his in the very highest quarters.

The subject of this sketch had many warm and sincere friends, and it was said of him that, in hours of social relaxation, he could drop his official duties and give forth a wonderful flow of genial spirits and of amusing anecdote and reminiscence. Mrs. Burgess and eight children survive him.

JAMES DOLLAR.

MANY readers of this journal will recognize the accompanying portrait as that of James Dollar, whose death occurred at Eureka, California, on the 17th of March last, after a serious illness of only three days. Mr. Dollar had been a sufferer



THE LATE JAMES DOLLAR.

from asthma for some time, and kidney complications set in, which caused his death.

The Dollar family were well known in Ontario, where they were highly esteemed by a host of friends. Previous to 1890 the three brothers, James, John M. and Robert, were prominently connected with the lumber trade of this province, but a few years ago they removed to the Western States. John M. purchased the Duncan and Markham mills in California, but his death took place at St. Rafael, Cal., in October, 1892. Robert Dollar, the surviving member, is now manager of the Usal Redwood Company's interests in California.

The subject of this sketch, James Dollar, was born in 1849. He came to Canada from Scotland when very young, and commenced operations in the woods on the Ottawa river, gradually working his way upwards. Subsequently he removed to Bracebridge, Ont., lumbering there on his own account. He became actively identified with the progress of the town, and was subsequently chosen as mayor. In the year 1892 he removed to California, and after the death of his brother John he associated himself with his brother Robert in the management of the Dollar Lumber Co.'s mills at Markhams, in Sonoma county, where he remained until the closing down of the business. With the closing down of that mill he went into lumbering in general, and about a month previous to his death he concluded a contract with McKay & Co., and went to Eureka to take charge of their large lumbering interests. On arriving there he saw the necessity of an extension of the railroad and other improvements, and although the weather was bad he was in the front rank overseeing all that was being done. His health, however, had been undermined, and in a short time he passed away.

The qualities of energy, honor and conservative management which Mr. Dollar possessed made him one of the most popular men in the large circle of lumbermen in California, as well as in Ontario. He was one of nature's noblemen, kind, affable and of an affectionate disposition. His honor and fidelity to a trust made his name one held in the highest esteem by all the community. There is in the hearts of all who knew him a profound feeling of sorrow.

## DIRECTIONS FOR BRAZING SAW BLADES.

THE following directions for brazing saw blades are obtained from the 1898 catalogue of W. B. Mershon & Co., Saginaw, Mich.:

The ends of the saw blade are first prepared by filing a true taper commencing back about  $\frac{3}{8}$  of an inch from the end, and filing the saw thinner as it approaches the end, at which point it should be only the thickness of a knife edge, one end of the saw being filed from the outside and the other from the inside. This being done, the saw should be placed on the brazing table, the back edge being brought against the back of the brazing table. This forms a straight-edge, and will bring the saw blade to a straight line. Now dust some powdered borax on the under end of the saw blade, and after cleaning a piece of silver solder of the proper size, slip this between the ends on top of the borax. Dust some borax as well on the silver solder. The saw now being in proper position, the ends lapping  $\frac{3}{8}$  of an inch, the brazing iron should be slipped over and one under the saw, and the screws adjusted so that the saw blade, when clamped, lies in a perfectly level position. Now withdraw the irons, only loosening the screws enough to allow of this and no more, heat the irons to a cherry red in a clean fire, again screw them into position and by means of the clamping screws firmly bring them to bear upon the saw blade. Leave in position until cool, when the saw may be removed and the joint dressed and hammered the same as the rest of the blade.

The Richmond Lumber Manufacturing Company, of Stephenson, B. C., has been incorporated.



MONTHLY AND WEEKLY EDITIONS

C. H. MORTIMER  
PUBLISHER

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ADVERTISING RATES FURNISHED ON APPLICATION

THE CANADA LUMBERMAN is published in the interests of the lumber trade and of allied industries throughout the Dominion, being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects 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 writers 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 15 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

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

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.

IMPORTS OF LUMBER INTO CANADA.

ACCORDING to figures published in the Northwestern Lumberman, and which appear to have been obtained from an official source, and must therefore be taken as correct, there were imported into Canada from the United States, during the year ended June 30th, 1897, over 58,000,000 feet of lumber, consisting of boards, deals and similar stock, having a valuation of \$809,250. These figures do not include the manufactures of wood, such as doors, blinds, furniture, etc., which represent an import value of more than one and one-half million dollars, or, to be exact, \$1,564,358.

Granting to the lumbermen and wood-workers of this country the same protection as is accorded the manufacturers of the United States, a right to which they are justly entitled, the duty of two dollars per thousand feet would practically retain the home market for Canadians, and the distribution of orders for some 58,000,000 feet, now supplied by United States manufacturers, would greatly tend to the betterment of their present position. It could scarcely be expected that

such a duty would exclude all American lumber, as such stock as walnut, mahogany, whitewood and oak would continue to be imported, but in such quantities as to be a small factor in the market.

It is refreshing to observe the sentiments expressed daily in favor of the utilization of home products in preference to those of foreign manufacture, for proof of which the reader is referred to the extracts from letters of piano manufacturers appearing on another page. In this industry whitewood is gradually being replaced by native woods.

The figures, \$1,564,358, as representing the value of manufactures of wood imported from the United States, show the importance of these industries, which may be classed as branches of the lumber trade, depending upon the product of the forest for their raw material. Does it not seem strange that Canada, with her vast timber resources, should import from the United States in one year manufactures of wood valued at more than one and one-half million dollars? The policy of allowing our raw materials to be exported, in many cases only to be manufactured into a finished product and shipped back to this country, is, we believe, responsible in a large measure for the position in which we find ourselves to-day.

Whether or not the Dominion government will place an import duty on lumber is, to say the least, problematical; certainly very little encouragement is found in a perusal of the budget speech, although the justice of the demands of the lumbermen in this respect is almost unanimously conceded. Replying to the financial statement, Hon. Mr. Foster expressed his regret that the government had not already taken some action to assist such an important industry. He pointed out that the present tariff arrangement was very unfair to Canadians. There is little reason to hope that any material change will be made in the near future in the United States duty on lumber; it therefore behooves our lumbermen to put forth every effort to increase the home demand, by promoting wood-working and furniture factories and similar establishments, and endeavoring to retain in Canada the two and one-half million dollars which are now sent annually to the United States.

RE-ORGANIZATION OF THE LUMBERMEN'S ASSOCIATION.

THE Lumbermen's Association of Ontario to-day exists in more than name only—it is now an active organization, and we hope we will not be considered too optimistic if we predict that in the near future it will become exceedingly useful in promoting the interests of the chief industry of the province. Since the formation of the association some years ago until recently, no questions were considered of such vital importance as to demand its special attention, the natural result being that the interest of the members in the welfare of the association gradually relaxed.

The developments of the past year have shown conclusively the necessity of always having an association in working order. While the action of the Ontario government in prohibiting the export of saw-logs after May next can undoubtedly be attributed to the influence of meetings of lumbermen held in Toronto, it cannot be disputed that there has also been felt the necessity for a

live provincial association. The circumstances which have necessitated prohibiting the export of saw-logs, as well as of imposing an import duty on American lumber, were the means of reviving the association. Matters of this character affect the trade in general, therefore it is to be hoped that lumbermen in every section of the province will see it to be to their interest to aid in building up the association, as a means of improving the condition of the lumber trade.

It augurs well for the immediate future of the association that its chief office is to be filled by Mr. John Bertram, a gentleman possessing in a high degree the qualifications of an efficient executive officer. In Messrs. Scott and Edwards the association have also two able vice-presidents.

A word as to the hardwood trade. There exists (as shown by letters received at this office) a strong sentiment in favor of some organization of hardwood lumbermen, whether it be in connection with the Lumbermen's Association of Ontario or as a separate body. To our mind, the formation of a separate association is the least desirable. As the existing association is intended to include manufacturers of lumber of all kinds, it would certainly be more advantageous to have one strong association than two smaller and weaker ones. It might be found desirable to form a hardwood section of the present association, and on this the CANADA LUMBERMAN solicits the views of the hardwood trade. The fee has been reduced to five dollars for the first year and two dollars for each succeeding year, the object being to secure a greatly increased membership. The secretary has issued a circular to lumbermen, requesting them to join the association, to which both hardwood and pine manufacturers should respond at once.

In a letter received previous to the recent meeting, a well-known hardwood manufacturer says:

"I hope a hardwood section will be organized, so that the entire lumber interest will be represented by this association. The hardwood men when left to themselves do not appear to be strong or energetic enough to organize for their own protection, and they are consequently forced to submit to occasional arbitrary rulings in the shape of increased freight rates of the most absurd nature. I trust you will continue to remind the lumbermen of the necessity of embracing the hardwood interests in the association."

Another correspondent of the LUMBERMAN, referring to the meeting, says:

"We are pleased to see the association re-organized, and hope that by the time we have another meeting we will have enough of the hardwood mill men interested that a few of them will attend and join our association. We think that if the association numbered hundreds instead of twenty, our voice as an association would be listened to and its influence felt, as was demonstrated last fall in reference to the export of pine logs. We would like you to drum up the hardwood mill men, and endeavor to induce them to join, as we believe there is work to be done in the interest of the hardwood trade that cannot be done by individuals nearly so well as through the association."

These and similar letters show that the movement in favor of organization is growing among the hardwood manufacturers.

## EDITORIAL NOTES.

The Dominion Government having made a grant of \$20,000 towards a Canadian exhibit at the Paris Exposition in 1900, it may interest our readers to know what is being done by other countries. France appropriates half the available space, and has voted over \$10,000,000. Germany has given \$1,250,000, Russia \$900,000, and Great Britain is discussing a proposed grant of \$375,000. In the latter country there is a strong feeling that the proposed appropriation should be considerably increased, otherwise the British display is likely to appear inferior. As to the Dominion grant, we regret that it was not larger, and hope to see the same supplemented by substantial appropriations from each province.

A QUESTION of national interest, and which is gradually reaching the serious stage, is the exportation of hardwood lumber. There are in Canada numerous industries dependent upon hardwood lumber for their raw material, but notwithstanding the duty of two dollars, American dealers have this spring purchased nearly all the available dry stocks of several kinds of hardwoods, with the result that the local consumers have, in addition to being compelled to pay high prices, been threatened with a scarcity of raw material to keep their factories in operation. Owing to the scarcity and consequently high price of elm, the Canadian Furniture Manufacturers' Association recently advanced prices of furniture ten per cent. It is very desirable that the life of Canadian industries should be prolonged, and this action of the Furniture Manufacturers' Association is to be commended, inasmuch as mill men will naturally sell in the best market, and Canadians wanting the lumber must meet the prices of American buyers.

In view of the war which has now been declared between Spain and the United States, by which Cuba will probably gain its independence, some figures of the Canadian trade with the Spanish Indies are interesting. Twenty-five years ago Canada exported to the Spanish West Indies goods to the value of \$1,614,312, the exports being confined to fish and lumber. In 1893 New Brunswick sent sugar boxes to the value of \$573,851, and general lumber to the value of \$189,835. This latter trade has practically died out. We still send a little lumber to the Spanish Indies, but the sugar box trade has gone to the Southern States. For the year ending June 30th, 1897, our sales to that country amounted to only \$93,309 worth of lumber. The trade in lumber is said to be capable of considerable expansion, and with the removal of the Spanish duties, it is probable that more of our lumber could be marketed there. Should Cuba be taken possession of by the United States, which is not altogether improbable, notwithstanding the avowed pledge of Congress that all that is sought is its independence, the Dingley tariff would simply replace the Spanish tariff.

If the charges of careless manufacture made against Canadian lumber by foreign consignees can be substantiated, there is vast room for improvement in the methods employed by some of our mill men. Notwithstanding the warnings that have been given, shipments continue to be

sent to foreign countries in such shape as to greatly injure the prospects of future business. Here is what Mr. J. S. Larke, Commissioner for Australia, says of a recent shipment: "A cargo of lumber from British Columbia, the North Riding, arrived this month. There is a claim on this, as on every cargo that has arrived this year. This timber was of good quality, but the charge is that some of it is badly cut. I did not see the rejected timber, as it had been removed when I visited the ship. I was told that there was a difference of half an inch in the sizes of the ends and centres of some of the sticks. As much of this timber is re-sawn, this irregularity materially affects the value. The battens are said to be of varying thickness. As these battens are used for slate roofs, a varying thickness is liable to break the slates. The British Columbia timber trade to this port must have been a losing one this year, and must continue to be so as long as it is conducted on the present lines. As the steamers are filled with cargo that pays better, they now carry no dressed spruce, and the trade is largely lost." A word to the wise is sufficient.

ARRANGEMENTS are well under way for the holding of what is termed a Greater Britain Exhibition at Earl's Court, London, next year, lasting from May until October. The undertaking, which is under the direction and management of the London Exhibitions, Limited, a company formed in 1894, and having a paid-up capital of £145,000, is receiving the approval and support of the Marquis of Lorne, Sir Charles Tupper, and other distinguished British and Colonial statesmen. The object, which is to bring together the products of the various parts of the British Empire, should commend itself to all who wish for a closer commercial relationship between Great Britain and her colonies. The Canadian government will be asked to grant an appropriation to cover the cost of a Canadian exhibit. Attention is called to the fact that exhibits intended for the Paris Exhibition of 1900 might with advantage and little additional cost be first shown at the London Exhibition. In view of the prevailing sentiment on both sides of the water in favor of closer trade relations, Canada should take advantage of every opportunity to make known her resources.

## CONSUMPTION OF LUMBER IN THE MANUFACTURE OF PIANOS.

WITH the object of learning the quantity of lumber consumed in the manufacture of pianos in Canada, and the extent to which foreign woods were being used, a letter was addressed by the publisher of the CANADA LUMBERMAN to each manufacturer, asking for the necessary information. Of the forty or more piano manufacturers throughout the Dominion only ten responded to our inquiries. From the data furnished, however, a fair estimate of the total consumption may be made.

According to the figures given, there were consumed by these ten manufacturers during the year 1897 in the neighborhood of 3,000,000 feet of all kinds of lumber. Of this amount about 400,000 feet was whitewood from the United States, 350,000 feet mahogany and walnut, and the balance chiefly Canadian woods. Allowing a proportionate consumption by the Canadian manufacturers who did not respond, it gives a

total of 12,000,000 feet of lumber consumed annually in the manufacture of pianos in Canada, 1,600,000 feet being whitewood and 1,450,000 feet mahogany and walnut. Nearly all the Canadian woods are used to a more or less extent.

It would appear that whitewood is not now used as extensively in the manufacture of pianos as in former years, owing to the growing desire to patronize home industries. The following extracts from six letters received will doubtless be read with interest:

"In reply to your favor re. lumber, we would say that we now use very little whitewood in our factory, having substituted therefor mostly birch and basswood."

"All our cases being veneered, we have little use for whitewood. Ash is cheaper and a better wood to veneer on."

"In reply to your favor of the 11th inst., would say, the only American woods we use now are whitewood and walnut, and we are using less of the whitewood than formerly, and use almost exclusively the Canadian lumber."

"Replying to your inquiry regarding prospects of American manufacturers selling certain kinds of lumber in Canada, we beg to say that the policy of this concern is to buy nothing from the Americans that we can do without. We have cast about for substitutes for whitewood, and are now using none of it, having succeeded in getting a substitute that serves even a better purpose, and in the lumber or wood line we are now buying nothing outside of Canada except the foreign fancy wood veneers. The principle we go on in this respect is that our finished product is shut out of their country by a high tariff, and their finished product in the way of lumber we will not accept. This may be retaliation of a puny kind, but it is our way of looking at the matter, and we are the parties who are 'paying the piper' and have a right to indulge in our fancy for this kind of thing. We follow the same policy for all other kinds of supplies."

"We may say that during the past few years we have adopted the use of whitewood very largely in place of pine; that is, in the better qualities of pine. We found it difficult to secure a quality of pine that was free from defects, consequently we commenced the use of whitewood, and have found it a very satisfactory kind of wood for our manufacturing, as it is absolutely free from shake and other defects, and we have also found that a good quality of whitewood can be delivered here, freight paid, quality considered, at a less figure than we can procure pine for, and I have no doubt that even where parties have been using pine, if they were to test the use of whitewood for the same purposes for which they use pine, they would at once see the advantages and economy in the use of whitewood."

"About the only lumber I get from the United States is walnut, usually culls and rejects, as the better grades are in so great demand for European trade that it puts the price beyond the reach of piano and organ manufacturers, especially at the price the goods have to be sold at. I have been quite successful in the cheaper grades of goods in substituting birch for walnut. With good stain it is difficult to detect the difference. I use but little whitewood to veneer on; basswood answers as well, and what is still better is the fine grained soft ash, which takes the glue better and is less liable to warp if properly dried. Whitewood is largely used to make a cheap grade of case work to stain, but to my mind soft maple is superior, as it takes the stain better and the wood is less affected by the weather. There is a good demand for whitewood cut from 1/2" to 3/4" thick, and glued up in three thicknesses, the centre with grain crossways. The demand for this kind of lumber is increasing, and if an enterprise of this kind should be started to cut basswood, cutting it around the log to dimension sizes and gluing it up all ready for use, putting the price where it could be used to advantage, the demand would be great. I am aware that basswood is cut in that way to some extent in Canada at present, but not to the extent to make the price so low that it can be used to advantage; in fact, it pays better to send to the United States and get whitewood, where whitewood is worth from \$25 to \$40 per M, while basswood can be had here at \$10. Quarter-cut oak is in good demand, and the consumption will be greatly increased."



## LUMBERING OPERATIONS IN NOVA SCOTIA.

[By a Travelling Correspondent.]

LUMBERMEN generally say that the past winter has been exceptionally good for logging, and so far stream driving is all that could be desired. While there has been no heavy rains, the snow has melted just fast enough to keep water up to a good driving head, and the prospects are that all the logs cut will be got into the ponds.

Prices, however, are no better than a month ago, while freight rates have stiffened somewhat, which, together with the great probability of war at present writing, is anything but encouraging for the lumbermen. Stocks of lath have been pretty well cleared out, advantage being taken of the fair prices going in New York and Boston early in the spring. Those who were situated so they could ship when the demand began realized fairly satisfactory prices, the late shipments not faring so well as regards price.

Just what effect the Spanish American war may have on lumber prices remains to be seen. Some new markets are being tested by maritime lumber merchants, and it is to be hoped that the results may prove satisfactory; care will need to be exercised in sawing to exact specifications and making the product conform to the requirements of the different markets. Their motto should be—until they get a foothold at least—"Quality, not quantity."

The Newville Lumber Co., Newville, Cumberland Co., N.S., took out four million feet last winter, which, with one and a half million carried over, gives them ample stock for their requirements. They have made considerable improvements in their saw mill. Mr. W. W. Block, of Amherst, is the manager, and Mr. Henderson millwright and filer. Mr. Harvey McAleese has charge of the company's office and wharf at Parrsboro.

T. G. McMullen & Co., Truro, N. S., will saw about eight million feet in their band saw mill at Hartville on the Dominion Atlantic Railway, and will have about twelve million feet sawn in their several portable mills at different places in Colchester, Pictou and Hants counties.

Alfred Dickie, Stewiacke, has at his steam gang and rotary mill at Dickie's Mill Siding about two million feet, which was landed there by people who had small lots of timber, and which is being sawn before his drive comes down river. This drive contains over eleven million feet, and is safe in the main river and reported to be coming along splendidly. Another week will put it in the boom at the mill. The capacity of the mill, sawing deals, averaged last year about seventy thousand feet per day, but quality is the consideration with Mr. Dickie this year rather than quantity. Mr. John A. Gillis is manager of Mr. Dickie's mill and lumber interests in Eastern Nova Scotia, and is a very capable man. Mr. Dan. Gillis is clerk, W. Killam millwright, and Mr. Thompson filer, and when the remark is made that they are all New Brunswickers it is clear evidence that Mr. Dickie understands the selection of men to carry on his business successfully. Mr. Dickie will also have eight million feet sawn by portable mills, making a total of twenty-one million feet.

Lantz & Co., Milford, will saw about one million feet; they saw dimension lumber for Halifax and local markets principally, and have a portable mill at Elmsdale, which they run in winter, sawing about one million feet of spruce and hardwood deals.

Young Bros. & Co., Limited, St. Margaret's Bay, will have eight million feet in pond ready to saw. They did not intend getting out so much, but the winter was so favorable that they had either to work half time or discharge their men, and as neither of the alternatives is good business, they kept on. Mr. B. F. Young, president of the company, resides at St. Margaret's Bay. Their mill there is steam power, and consists of gang, rotary, lath, shingle and planing machines. Last year they operated only the gang. Mr. D. P. Young resides at Ingram River, six miles further west, where a large part of their operations are carried on, and where they intend building a large mill in a year or so, to which can be rafted logs from all the streams running through their large lumber property. They also got out a larger quantity of piling and pulp wood during the winter.

The Gold River Lumber Co., Gold River, will saw about three million feet, principally English deals. They also saw lath and shingles and plane lumber for markets requiring it.

E. D. Davidson & Sons, Limited, are getting their

usual cut, ranging from twelve to fifteen million feet. Mr. Frank Davidson, the president of the company, has just returned from a visit to the English and Continental markets. Besides two large gang mills at Bridgewater, the company have a fine gang and rotary mill at Alpena Station, on the Central Railroad, the product of which is shipped to Bridgewater or Lunenburg, as required, for shipment abroad.

J. & J. Coop, Milton, will saw about seven hundred and fifty thousand feet. They put in a plant for sawing and barking pulp wood during the winter, and are now busy sawing for the Acadia Pulp Co. at Milton. The blocks are taken to the steam tram road at Liverpool and then to pulp mill about four miles up river.

Harlow & Kempton, Milton, will saw about four million feet during the year. They have improved their mill considerably the past year, putting in new water wheels and adding some machinery and labor saving appliances. The firm also operate a sash and door factory.

Eldred Minard & Son, Milton, will saw about one million feet for Colp Bros.

John Millard, Liverpool, has a gang and rotary mill and planer at Milton. He has about five million feet to saw. Mr. Millard also has a sash and door factory at Liverpool, where he carries on a large business in that line, besides shipbuilding, having a fine vessel on the stocks at present.

Henry L. Tupper, Milton, has a fine water power gang mill, planer and box making machinery. He expects to saw about four million feet during the season, principally boards.

Allan T. Freeman, Milton, merchant and mill owner, will saw about three quarters of a million feet of pine for West India market. Ira P. Freeman will saw about a million feet.

The Acadia Pulp Company, Milton, are using a large quantity of lumber in their business. They have about double their capacity and expect soon to be able to turn out seventy tons of pulp each twenty-four hours. The pulp is taken from the mill to the company's warehouse at Liverpool by the Liverpool and Milton Steam Tram Railway four miles—then sent by schooner to any place required. One large steamer loaded part cargo at Port Medway already this season, the pulp being supplied by the Acadia and the Nova Scotia Pulp Companies, Mill Village.

T. G. Nicol, Port Joli, will saw about one million feet at Mitchell Brook. He has a steam portable mill sawing and has also a water power lath and stave mill.

Frank G. Nicol, Granite Village, will saw about three quarters of a million feet in his water power rotary mill.

Hastings W. Freeman, Jordan River, is operating on a large scale, getting about five million feet of lumber, spruce and pine. The spruce is to be sawn into deals and the pine into boards for West India market. The drive at present time of writing is safe, as without freshets enough water is held in reserve in locks to run them to mill. Mr. Freeman completely remodelled his mill after close of last season, putting in a fine rotary outfit made by the Burrell-Johnson Iron Co., Yarmouth. Important improvements were also made in the gang, two new water wheels, manufactured and set in place by Duncan Buchannan, of Apohaqui, N. B., being added. During last season Mr. Freeman bought the large lumber and mill property adjoining his own from the Doull & Miller Estate, Halifax, and now has a very valuable lumber property.

Bower Bros., Shelburne, will saw a half million feet. They also manufacture dories for the fishermen and have established a very fine business in that line during the past two years. James R. Bower, same place, has a steam power rotary mill, and also makes shingles, barrel staves and heading, boat and dory timbers, band sawing, planing and a full line of house furnishings.

I. M. & J. A. McKay, Clyde River, have a water power saw mill and will saw this season about one and one quarter million feet. There is some talk of shipbuilding being revived at Port Clyde, four miles distant.

Dickie & McGrath, Tuskett, have eight million feet of pine and spruce, and the prospect is good for their whole drive reaching the booms at mill in good time. Mr. McGrath, the manager of the concern, keeps his eyes open for any improvements in saw mill practice. During the winter he installed the patent log haul up and live bed, which works like a charm; it was made by the Waring-White Co., of St. John, N.B. A steam jump up saw cuts

the logs to length. So much machinery has been added that the engine has all it can do, so Mr. McGrath is attaching a 24 x 24" cylinder and making a tandem compound. The mill consists of steam feed rotary, patent edger, live rolls and transfers, lath, box and planing machinery, sawdust carriers taking all dust to the furnace, and chain carrier taking all bark, edgings and refuse generally to a safe distance from mill to be burned. Mr. Dickie, of the firm, resides at Stewiacke, where he has large lumber interests.

Blackadars & Co., Methagan and Hectanooga, have a water power gang at the former place, in which they will saw three million feet, and a steam rotary mill at the latter place, where they will cut two million feet. They saw mostly for West India and South America.

W. J. P.

## CURIOUS GROWTH IN A TREE.

THE accompanying illustration represents a stick of birch in the possession of Mr. J. E. T. Armstrong, of Parry Sound, Ont., which was cut out of a living tree. The stick is 30 inches long, 11 inches wide and 4 inches



thick. The two pieces shown in the illustration fit together perfectly, the teeth engaging with each other like a dove-tail joint. It is regarded as a most remarkable freak of nature. The photo was taken by Mr. Armstrong.

## THE TIMBER TRADE OF THE UNITED STATES.

THE figures given below of the imports and exports of forest products will show the importance of the timber trade of the United States. For the year ending June 30th, 1860, the exports of forest products were valued at \$10,209,959. Twenty years later they had reached \$17,321,268, while last year they were valued at \$40,489,321, this being an increase of nearly \$7,000,000 over any previous year. Of this sum timber represented a valuation of \$9,217,432; boards, deals, etc., \$76,689,000 feet, \$13,076,247; other lumber, \$8,738,705; doors, blinds, etc., \$755,338; household furniture, \$3,785,143; other manufactures, \$4,051,935. The largest shipments of lumber were made from Puget Sound, the figures being 191,518,000 feet, valued at \$1,665,363. From New York, however, although the shipments were only \$4,746,000 feet, they represented a valuation of \$2,127,004. It is shown that the total exports of boards, deals, etc., from the United States to the Dominion of Canada last year were 58,075,000 feet, representing a value of \$809,250.

For the fiscal year ending June 30th, 1897, the imports of wood and manufactures of wood were 883,270,000 feet from Canada, valued at \$9,067,312, while less than 1,000,000 feet included the total importation of boards, plank, etc., from other countries. The Dingley Bill did not become law until after the close of the fiscal year, and therefore the effect of that tariff on importations from Canada is not indicated by the above figures.

W. R. Ridington, lumber dealer, Fox Warren, Man., has purchased the retail lumber business at that place managed by L. P. Westergard.

**THE CARE OF BAND SAWS.**

**J. J. Brown**, Head Filer for Gilmour & Co., Algonquin Park.

The writer has had a varied experience as a saw-filer and hammerer in numerous mills, cutting a great variety of woods, and will endeavor to impart to others some of the knowledge thus gained. While I know there are many other men just as expert on band saws as myself, I believe that a word from me of my experience and of what I practice daily will be interesting to the less experienced filers and also to mill men. The following is my best practice:

Suppose there are a lot of new saws in the filing room to commence on; in taking the saws out of the case, be careful not to bend the plate or knock the corners off the teeth, put saw on the hammering bench, and with straight edge held lengthwise of the saw, look it over, and if you find any lumps take the light cross-faced hammer, say 100 pound, and knock down all the lumps all the way round the saw with the long face, being careful not to give a blow except where it is needed. You might as well give a blow a quarter of a mile away as a quarter of an inch away from the lump. Do not place too many blows about testing the saw with straight edge. If you do too you will drive the saw through, and it will require time and labor to get it back. Next, put the saw up on the brackets over bench, and go over the inside in the same manner, always commencing on the outside and always finishing up on the outside, or log side. A beginner is liable to do a little too much, and if so, he will leave the last side worked on a little dished, and therefore it is better for the saw to be dished into the log than out of the log, although to be accurate it should not be dished or turned over at all, but perfectly flat on both sides.

After you have gone over the saw in this manner, go over again and apply the straight edge crosswise on the inside of saw; this will show you the lumps running lengthwise of the saw; stand in front of the levelling table or anvil, and with the cross-face of the hammer knock down any lumps that may be found, using care not to hit too heavy so as to make a dint in the plate. After going over saw in this manner put saw down and go over the outside in the same way. If you do this with care you will have a saw with a straight toothed edge and a flat surface. Now, take a droop level or tension gauge, use a No. 3 gauge with a 7 or 8" saw, a No. 6 for 9 or 10" saw, and a No. 8 for a 12" saw. Hold the gauge in the right hand and put the left under the saw, say 3 feet from the right hand, and mark with chalk the saw where the droop level or gauge shows darkness. Then with the saw stretcher roll the saw lightly the distance the gauge shows the saw to be stiff, and repeat until the saw conforms to the gauge from one edge to the other.

The Bolton stretcher and shear is the latest and most up-to-date machine, and if proper care is used will never dish the saw. After thus going over the saw and making it fit the gauge all round, examine the saw on the levelling table with straight edge to see if it has been dished at all; if it has you will have to level it again with the cross-faced hammer, but if you have a good stretcher it will not dish the saw unless you use too much pressure. Never allow the saw to pass through the rolls bent up or down, unless you wish to bend the saw. You now have a saw straight and flat with a good even tension all round it.

Next look at the back of saw. Use a back level 5 1/2 feet long. Have the edge to be used concaved 1/2 inch in the entire length. Mark every place where the level does not fit the saw, and roll the saw about 1 1/2 inches from the back edge, from mark to mark, but never roll longer at one time than the length of the back level. If the back edge of the saw is up to a tight fit to the back level it is good, but if not look at the tension, and if you have opened the saw any, roll next time 1/2" nearer the back edge; but if the saw is stiffer roll 1/2" nearer the centre. By following this method you can draw the back without altering the tension, and with practice you can make a perfect running saw and do all the tensioning with the roller.

Always look over the saw with droop level after you have put in the "back," to be sure you have no tight or loose spots; if the saw is too loose roll very lightly along both edges; by so doing you will not change the back. The saw is now ready to put on the sharpener. If you follow these instructions you will have a saw that will stay on the wheels without oscillating, and will stand heavy feed. Before putting a saw on a new or an un-

known mill you should examine the mill and see that the boxes are all right and that there is no lost motion. Line the face of the lower wheel parallel with the V track, and line the top wheel with the lower wheel; put on the saw and tilt the upper wheel until the saw runs 1/4 of an inch off the top wheel. Be sure to do this with the tilt device. Do not use the cross line, as it throws the saw in a twist so that it will rub against one guide more than the other, and probably cause it to crystallize and crack, besides causing an undue wear on the face of the wheels. Always have the tension even, whatever the droop or amount of tension used may be.

Do not open the saw too near the front edge, as it may crack in the gullet, and do not leave the front edge too stiff or firm, as the saw will snake in a hard log and go back on the wheels. Some filers leave their saws tight for 1 1/2 inches from toothed edge in order to avoid cracks, but I do not think this is the best way. If a saw shows a tendency to crack in front with the tension I have been using, I change the tension to a larger circle, which gives a little less tension, but I let it run from one edge to the other on a perfect circle, except that I leave a half inch strip on the toothed edge, so that the level will show dark for a half inch and then light from there to the back edge.

For hard wood and heavy feeds a saw requires more tension than for soft woods and light feed; therefore be sure to have the saw straight edgewise, for it will stand one-third more feed. For example: You cannot drive a bent nail in hardwood, but straighten it and you can easily drive it. A band saw is similar, and with the edges straight will cut better with less liability to dodge. Always run a little back or convexity in the back edge of the saw, about 1/32" in 5 or 6 feet, and if the saw is properly put up, it will run without oscillation and present a fine cutting edge, and not drive back in the cut. If the wheels are crowing, open the saw a little more where it rests on the wheels, examine the saw as it comes off the mill, and if any light or loose spots, or any long or cross faced lumps appear, take them out. By going over the saws frequently you have not so much work to do at any one time, and you have better cutting saws with less tendency to crack.

In this way a saw should run from 6 to 9 months without cracks, and if cracks occur they are probably due to faults of the filer.

Sometimes our best saw manufacturers make a saw that may crack, or the teeth may split, or it may be ground uneven, or it may be too hard or too soft, and cannot be tensioned to run without making snaky timber. In such cases, as the character of the saw can usually be easily discovered, its condition should be immediately reported to the maker. Saw makers should not be expected to send out saws to be used from three to nine months and then condemned. If defects existing in new saws are not promptly reported as soon as discovered, the fault lies with the filer; do not condemn a saw without giving it a good fair trial. Don't lead the saw with the guides; don't set guides too light; they should be set true to saw with a clearance of about the thickness of writing paper on each side. If the saw does not then run straight, it must be dished or the swage is too heavy on one side, the grinder does not grind square, the track may not be in line, the wheels may not be in line with each other, the face of the wheels may be uneven, or the tension may be uneven in your saw. Be careful in fitting and tensioning your saws at all times, but always see that the mill is in good order also. The best mills and the best sawyers meet with accidents, and saws get pulled off and twisted or bent, which makes extra work for the filer. But don't get angry—it must be put up with. In such a case, go to work, but take it easy; take a block 8 or 10 inches deep, and with a lever or pike 3 x 4 used as a pry, bend the saw back to place. Always apply the lever the way the bend runs, that is, if the bend is square across the saw, use the lever the same way, but if it runs at an

angle, from one edge to the other, this is a twist, and you must set the block so as to press with lever directly on twist or ridge. In this way you can bend it back nearly as good as ever; after this, a little work with the cross-faced hammer, placing all blows with the long way of blow parallel with the ridge, will remove it. Never try to level a saw that has no tension in it, but go over it with roller and put in some tension, and you can then level your saw perfectly easy.

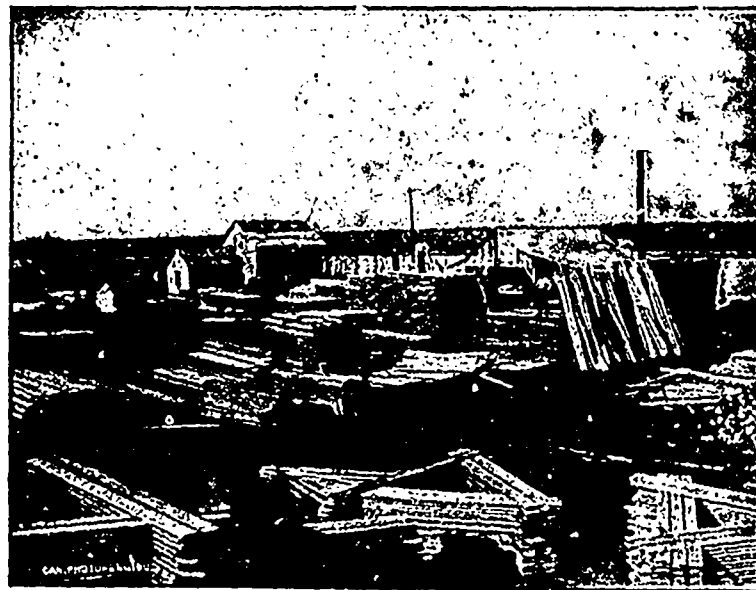
(To be Continued.)

**MILLS OF JAMES H. SANDERSON.**

ALTHOUGH the saw mills of the Northwest Territory cannot be compared with the gigantic establishments found in Eastern Canada, there are, nevertheless, several mills of considerable importance. At Prince Albert, Sask., the Moore & Macdowell mill is one of the finest. Smith & Co. have also a good-sized mill at the same place, and a third is owned by James H. Sanderson, a view of which is given herewith. Since this view was taken, however, the mill and yards have been greatly improved and extended.

Mr. Sanderson commenced his present lumber business in the year 1887, with four men, and now employs twenty-five the year round. Besides cutting a large quantity of lumber, chiefly spruce, he has a complete planing mill and wood-turning shop, in which all kinds of mouldings, sash, panel doors, etc., are made from the native spruce, which he claims to be superior in quality to the spruce further east.

The equipment consists of two boilers, two engines, saw mill (with a Wm. Hamilton No. 3 carriage and rope feed), lath and shingle machines. In the planing mill and workshop there are a surfacer, matcher, sticker, cut-off and rip saws, tenoning machine, and everything required for the manufacture of doors and sash. The capa-



LUMBER YARD AND MILLS OF JAS. H. SANDERSON, PRINCE ALBERT, SASK.

city of the saw mill is 20,000 feet per day, besides running the shingle, lath and planing mills at the same time.

The market there is principally local, but Mr. Sanderson states that trade is working up now on the branch line of railroad between there and Regina, as the country is settling up. He also ships lumber to several points on the main line.

No matter in what part of the Dominion you are situated, an expression of your views on any subject relative to the lumber trade is solicited by the publisher of this journal. No reader should wait for a personal invitation. Assistance thus rendered, as well as suggestions for making this journal more valuable to subscribers, will be much appreciated.

Col. James Domville, M.P., of St. John, N. B., is very enthusiastic over the lumber business which his company expects to do in the Klondyke. The estimated cut from the claims owned is two and one-half million feet. The lumber will sell for \$200 to \$300 per thousand feet. The colonel is now sending out a number of boat builders, and the boats will sell at from \$100 to \$200 each and will cost about \$40.

# THE RETAILER AND Wood-Worker

## THE EXHAUST FAN OR BLOWER.

SINCE the introduction of the exhaust fan in mills and factories for the purpose of carrying off the dust arising from the various machines, there is no place where its usefulness is better demonstrated than in the planing mill, as well as all other wood-working industries. Aside from the satisfaction of having the mill clean and at all times free from accumulations of dust and shavings, the cost of removing the same by this means to a convenient place for storage is much less than that attending the removal of the same by hand labor. The fact is, at the present time no first-class planing mill is considered complete without a shaving room in close proximity to the boiler room, and the exhaust fan with the necessary piping, not only to take the dust and shavings away from the machines, but also to deposit them in the shaving room. The unskillful manner in which the piping has been arranged in some mills has rendered the fan so ineffective, says a writer in the Age of Steel, that but little useful effect has been derived from it, and, to quote the language of a well known operator, "the fan does a little and the wheelbarrow the rest."

Now, there is no necessity for such a condition, provided a suitable sized fan is selected and run at its proper speed. But there is no part of the plant that requires more careful calculation and good judgment than this part of the outfit. The selection of an exhaust fan of the proper size and capacity is of the utmost importance, and this can only be determined by the size of the mill, the number of machines, and the distance to which the dust and shavings are to be carried; in the second place, the size and shape of the piping and the proper proportion between the intake and discharge of the main conduit. The location of the fan is not so important a matter so long as all the branch pipes are connected upon the exhaust side; but in practice it has been found, where the conditions are such as to admit of it, that the most effective place for its location is about midway between the points where the first shavings are received and the point at which they are discharged. The size of both portions of the main conduit should in all cases be governed by the size of the openings in the fan. The efficiency of this part of the output for performing its work in a satisfactory manner depends upon the velocity of the air as well as in the main conduit. If the main conduit is of a certain size with the fan running at a given speed, the velocity of the air will be in a certain proportion to that speed, provided it is not in any manner obstructed; and it is also important that the same relative velocity should be maintained in each one of the laterals. But if, as is

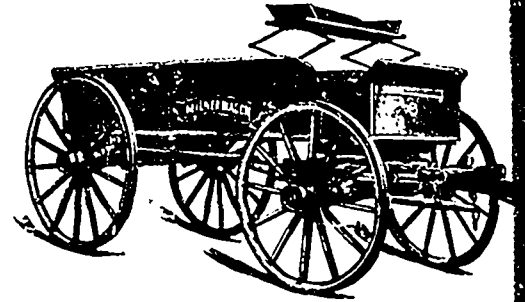
frequently the case, the combined area of the lateral pipes is greater than the area of the main conduit, then when all are in use, the air current will be less just in proportion to their combined areas. Another fault in the construction of the lateral pipes is in the manner in which they are connected with the main conduit, and although, as a rule, the machines are so arranged that the lateral pipes are necessarily at right angles with the main conduit, still the connection should be made in such a manner that the lateral will by means of a round bend enter the main conduit at an angle of from 30° to 40° in the direction of the current, so that instead of obstructing its velocity it will help to increase it. Again, the diameter of the laterals in all cases should depend upon the character of the material to be carried off. The shavings from a planing machine are much lighter than the sawdust from a resawing machine or a common saw table, and, while a moderate current of air would carry off the shavings from the former, a much stronger current would be required for the latter. Hence, where everything is in proportion to the size of the main conduit, it is found in practice that the pipes from a resawing machine should be of less diameter than those from the planer, in order to obtain greater velocity in the air. That portion of the main conduit leading from the fan to the shaving room is another point in which there has been a diversity of opinion. Some claim that it should be enlarged as it recedes from the fan in a certain proportion to its length. There is no good reason why such should be the case, and it is not warranted in mechanical philosophy. Now, with this part of the conduit as well as the other, its efficiency depends entirely upon the velocity of the air, and by enlarging it as it recedes from the fan, and thereby increasing its area, must have the effect of checking the current, and consequently it will have less power to carry forward the material.

Messrs. G. O. Gilbert & Son, Bishop's Crossing, Que., in remitting their subscription, write: "We never feel too busy to read THE LUMBERMAN as soon as it comes to hand."

A furniture manufacturer of very long experience gives this advice to those who finish and polish wood: Never thin your filler by guess; avoiddupois weight is safer. Vary the body of your filler to the pore of the kind of wood to be filled. If you have a good job to do, don't try to do it by using your filler extra heavy. Smooth work to begin with followed by well-filled pores starts your foundation aright. Remember that work started smooth and kept smooth will continue smooth to the end. Remember that, the smoother your work at the finish, the less scouring there is needed to get the result. Whiskers sand off easier after the filler than at any other stage. Filler can be coated over in 24 hours; it is always better to give it 48. Always shellac mahogany before you fill, if you desire an unclouded result.

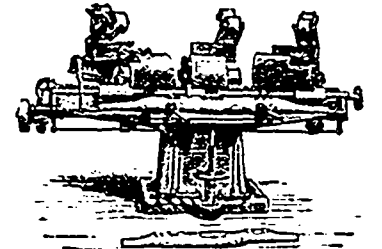
## A MODERN WAGON FACTORY.

THE pleasure was afforded us a short time ago of a visit to the Milner-Walker Wagon Works Co., Limited, of Walkerville, Ont., who have the largest and most complete works of their kind in the Dominion, embracing as they do a flooring capacity of sixty thousand sq. feet, together with 500 feet of dockage on the beautiful Detroit river, and a railway spur extending from the G.T.R. through the works to their dock affords excellent facilities for handling the incoming material and outgoing product. These advantages, together with some 60 different



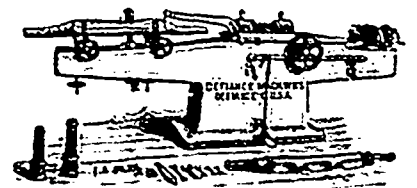
machines of the very latest improved designs, purchased from the renowned wagon woodworking machinery manufacturers, the Defiance Machine Co. of Defiance, Ohio, enables these works to produce from 25 to 30 wagons per day, each machine being able to turn out more than even their guaranteed capacity.

These new works have been very much encouraged by extensive orders from various parts of the Dominion; already they are shipping from three to five cars of wagons weekly, and nothing but praise is heard from all quarters regarding their



PATENT THREE-HEAD AUTOMATIC GAINING MACHINE.

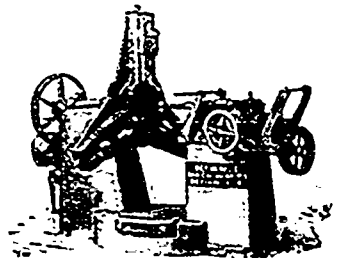
production. Canada, and especially the locality where these works have been established, certainly has reason to be proud of such an enterprise. We cannot speak too highly of the machines in these works. So solid are they that they do their work without the slightest tremble, thus ensuring durability. Much credit is due Messrs. Kitterring & Sons, proprietors of the Defiance Machine Works, who have so successfully during



NO. 2 PATENT AUTOMATIC SKEIN SETTING AND FITTING MACHINE.

nearly half a century brought into use many such valuable labor saving devices. This company deservedly rank among the most worthy manufacturing concerns of the great Republic to the south.

Mention should be made of the officers of the Milner-Walker Wagon Works Co. The general manager, Mr. Wm. Milner, whose fame as a wagon builder is well and favorably known over the entire continent, together with the world-



NO. 2 AUTOMATIC WHEEL BONING MACHINE.

renowned business gentleman, Mr. Hiram Walker, as president, and the well known financier, Mr. D. R. Pierce, as secretary and treasurer, makes success doubly certain for this enterprising concern.

The accompanying cuts represent three of the many machines supplied by the Defiance Machine Co. for these works, and which are necessary to accomplish the work of wagon making with accuracy and precision.

**BRITISH COLUMBIA LETTER.**

[Correspondence of the CANADA LUMBERMAN.]

The question in which the lumbermen of this province are most interested in at the present time is the securing of an import duty on lumber and shingles coming from the United States. To this end the aid of the provincial legislature was asked, and recently the Premier introduced in the House the following resolution:

Whereas the manufacture of lumber and shingles in this province forms one of the most important industries and furnishes employment to a large number of mechanics and laborers, who constitute an important portion of the population of the province; and whereas a large proportion of the supplies used in connection with the business is subject to customs duty, which largely increases the cost of production; and whereas lumber and shingles under the customs tariff of the Dominion are admitted free of duty; and whereas competition from the United States in the markets of the Dominion, since the removal of the customs duty, has deprived this province of a large part of the business formerly done in these products; and whereas the mining developments in the Yukon and northern part of British Columbia make it probable that important settlements and sea ports will be established on the northern coast during the present year, in which there will be an immediate and large demand for lumber and shingles, for the supply of which, under the present Canadian tariff, our lumbermen have no protection against the competition of the United States saw mills; and whereas, under the custom laws of the United States, a heavy duty is imposed on lumber and shingles from this province, which prevents shipments from this province into the United States markets, the duty in the United States being on undressed lumber \$2 per M, on flooring \$3.50 per M, and on shingles 30 cents per 1,000; and whereas it seems to be unjust to this important industry that while a large proportion of the supplies used by those engaged in it are required to pay duty, the products are not protected by any duty, and while the neighboring markets in the United States are closed against this province because of the heavy duty imposed, the markets of Canada are free to the products from the United States; Be it therefore resolved, that a humble address be presented by this house to the Lieutenant-Governor, praying him to move the Dominion government to take such steps as are necessary with the view of protecting those engaged in the manufacture of lumber and shingles in this province by imposing a duty on lumber and shingles imported into the Dominion of Canada equal to the duty charged by the United States on imports of these articles from Canada, in order that this important industry may be placed upon such a footing in competing with the neighboring mills in the United States as will compensate them for the disadvantages set out in the preamble to this resolution."

Speaking to the resolution, the Premier pointed out that the lumber industry was one of the most important in the province, and he hoped that every member would vote for the proposed measure. Speeches in favor of the resolution were made by Messrs. Riher, Semlin, Kennedy, Graham, Smith, Cotton and Hunter, and against the measure by Messrs. Sword, Forster and Macpherson. Mr. Sword thought that the remedy was to take off the heavy duties the lumbermen had to pay for their supplies. He took strong exception to the position that because the United States put on a heavy duty Canada should follow suit. It was not taking high enough ground in the matter. Mr. Forster claimed that the measure would put a heavier tax on consumers, and Mr. Macpherson made the weak argument that it would show Canadian mill men to be less capable than those of the United States. When the vote was taken the three members above referred to stood alone against the measure.

The lumbermen of British Columbia have petitioned the government for a uniform compulsory system of scaling. The petition, which is signed by 132 lumbermen, is as follows:

The petition of the undersigned lumbermen of the province of British Columbia, humbly sheweth:  
That your petitioners have been laboring under a want of system in scaling logs and timber, to the detriment of the timber trade and those relations of confidence which should exist between the buyer and seller  
That a uniform compulsory system of scaling should be adopted, alike just to the government, the buyer and seller, the cost thereof to be borne by the three interested parties in equal proportions. Scale of costs to be fixed by the Lieutenant-Governor in Council or by statute.  
We are of opinion that any competent person first obtaining the recommendation of three responsible lumbermen, who is capable of passing the necessary examination under the provisions of the "Official Scalers' Act, 1894," or like provisions, shall be entitled to an appointment as "Official Scaler."  
That official scalers should not be paid by salary, but only by fees for work actually done.  
No scaler to employ under wages of buyer or seller to act as scaler.  
Particulars of scale, as per form annexed, to be delivered to government agent, buyer and seller.

In case either party objects to the scale, he may immediately call in the services of a second scaler; if they do not agree the two scalers may name a third whose measurement shall be final and binding upon all parties.

**FORM OF SCALE.**

(1) Vendor ..... (2) Where cut, .....

(1) Registered Mark of Scaler .....

No. of Logs	Scaler's Mark	Length	Diam.	Conts. 1st Chg.	Conts. 2nd Chg.	Conts. 3rd Chg.	Culls	Remarks.

**NEW BRUNSWICK LETTER.**

[Correspondence of the CANADA LUMBERMAN.]

THE season for shipping lumber has now opened, and although the year is certain to be a quiet one, several vessels are now loading at different ports. There appears to be a scarcity of tonnage, some steamers having refused 45s. on deals from St. John to British ports. This will probably further curtail shipments.

The thirteenth annual meeting of the St. John Log Driving Company was held at Fredericton on April 6th. Among the lumbermen present were the following: W. H. Murray, of St. John; F. H. Hale, M.P., Woodstock; R. A. Estey, J. A. Morrison, and D. F. Fraser, jr., Fredericton; G. A. Murchie, Calais; R. A. Nixon, Houlton; C. A. Moore and W. S. Henry, Woodstock; W. A. McCallum, Houlton; B. F. Mallett and W. F. Cunliffe, of Fort Kent; Robert Kent, Hon. Jas. Holly, C. F. Woodman, F. D. Miles and J. Fraser Gregory, of St. John. The following were elected directors of the company: W. H. Murray, president; G. A. Murchie, vice-president; J. Fraser Gregory, secretary-treasurer; R. A. Estey, W. B. Mallett and Harry Hilyard. It was proposed that the driving of logs should hereafter be done by the corporation, the lumber to bear the expense, on the principle of which the Southwest Miramichi Driving Company operate, instead of being let to tender. The proposition seemed to meet with a hearty reception from several people, but the larger operators, who control the largest number of votes, defeated the motion. In the afternoon the tenders for driving were opened, and the contract awarded to Duncan McIntosh and Robert Aiken for a term of three years. Their tender is a bonus of 22 per cent. of the advertised rates, which amounts to four and two-fifth cents per thousand for driving from the upper points, namely, Grand Falls and Aroostook.

The Upper Southwest Miramichi Log Driving Company held a meet in Fredericton on March 30th. After routine business there was an election of a board of directors for the year. The old board—M. Welsh, Timothy Lynch and E. Hutchinson—were re-elected. At a later meeting of the directors Mr. Welsh was elected president and J. H. Barry secretary-treasurer. Messrs. Welsh and Lynch were appointed to look after the driving operations for the coming year. The company drive the logs and tax the lumber for the cost from the different points between the Forks and Hayes' Bar, a distance of 41 miles.

ST. JOHN, N.B., April 21, 1898.

**PUBLICATIONS.**

The story of the Swiss Government's purchase of the railroads, as authorized by the recent referendum vote, is told in the American Monthly Review of Reviews for April, by Mr. J. R. Macdonald.

It is not necessary that one should visit the west coast of the United States to know something of the lumber industry. In the special number of the West Coast and Puget Sound Lumberman, recently issued, is to be found data and illustrations which give a splendid idea of the magnitude and importance of the lumber industry of Washington, while considerable space is devoted to Oregon, California and British Columbia. The number is an attractive one, with green cover, and a liberal amount of advertising.

The twenty-first anniversary special issue of the Timber Trades Journal, of London, Eng., discounts all former attempts of the publishers, Messrs. Wm. Rider & Sons. It contains over 300 pages, the special feature being a very complete description of the export pine trade of the Southern States, to which sixty-six pages is devoted, and which was compiled by their special commissioner, Mr. Edwin Haynes, who, it will be remembered, visited Canada last year for a similar purpose. Other features make the issue extremely interesting and instructive.

**THE FACTS DISPUTED.**

VANCOUVER, B.C., April 5th, 1898.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR,—In your March issue a person, C. H. May, vouches for the yarn about an alleged English mill superintendent. These are the facts: No person connected in any official capacity whatsoever took a valet to Takush Harbor at any time; no Englishman was sent out to fill the position of mill superintendent. Seeing that your correspondent's alleged facts are not facts, and that they appear in your Eli column, you can infer what you like about the rest of his story.

Yours faithfully,  
ALBERT F. GRIFFITHS.

[The story referred to was not sent in by a correspondent, but appeared in a west coast lumber exchange, to which credit should have been given. THE EDITOR.]

**PERSONAL.**

Hon. R. R. Dobell, of Quebec, returned from England last month.

Mr. Samuel Campbell, mill owner, of Hartland, N.B., died last month, after an illness of a few weeks.

Mr. Dorat Leneux, son of Mr. Jos. Lemieux, lumber merchant, Hull, Que., was recently married to Miss Bertrand.

The death occurred on March 30th of Mr. E. L. Sewell, a retired lumber merchant of Quebec, at the age of 51 years.

Mr. Edward S. Waycott, book-keeper for Alex. Gibson & Sons, of Matysville, N.B., died recently, at the age of 44 years.

Mr. E. C. Grant, of the Ottawa Lumber Company, returned on April 1st from a business trip to Great Britain. He will probably visit Germany this summer.

Thos. Mackerel, representing the well known lumber firm of Watson & Todd, of Liverpool, Eng., recently arrived in Ottawa, to look after spring shipments.

Mr. Joseph Lemieux, the well-known lumber dealer of Hull, Que., was recently presented by his townspeople with an address, accompanied by a parlor set and a gold mounted pipe, on the occasion of his fiftieth anniversary.

Mr. W. A. Hadley, of the S. Hadley Lumber Co., Chatham, Ont., left on April 7th for Duluth, British Columbia and San Francisco, in the interest of the company. Before returning he will visit the Southern States.

By telegraph from Florida the death was learned recently of Mr. John D. Gilmour, who retired from the lumber firm of Gilmour & Co., of Trenton, about five years ago. He was a gentleman who was held in very high esteem.

Mr. C. J. Smith, general freight and passenger agent of the Canada Atlantic and the Ottawa, Arnprior and Parry Sound Railways, has been promoted to the position of general traffic manager of these two roads, and Mr. J. E. Walsh has been appointed general passenger and baggage agent. Mr. Smith is a young man to have attained such prominence in the railway world.

In a letter to the CANADA LUMBERMAN, Hon. J. K. Ward, of Montreal, states that fifty-three years ago on the 15th of March last he first went to work in a saw mill, and that he expects to finish up his connection with the same this year. Now 78 years of age, and for more than half a century connected with the lumber business, is quite an unusual record. It is our earnest wish, as well as that of lumbermen in general, that Mr. Ward may be permitted to enjoy the fruits of his labors for many years to come.

Mr. Robert Swim died at Doaktown, N.B., on March 21st. He did quite an extensive lumbering business, entirely on the south-west branch of the Miramichi river and tributaries from 1870 to 1893, when he sold out his lumber business, timber lands, stores and saw mill to Swim & Co., consisting of F. D. Swim, Alonzo Kelly and Henry Swim. He became the second largest stockholder in the Southwest Boom Co., which position he retained until his death. This stock was quite remunerative. After selling out his lumbering business in 1893, he built a wood-working factory and connected with it a carding mill, which he owned and operated also. In 1895 Alonzo Kelly sold out his interest in the business of Swim & Co. to F. D. and Henry Swim, who have owned and operated it since under the name of H. & F. D. Swim.

## THE SPRUCE GALL-LOUSE.

In view of its increasing prevalence, we give herewith an illustration of the spruce gall-louse which has within recent years been discovered in shade trees and hedges in Ontario, and which, it is feared, will find its way to forests. Numerous specimens have been collected from spruce trees growing in different sections, and there can be but little doubt that it is on the increase. The insect's mode of working is to deposit its eggs at the junction of the needle and the bark, when the wood grows over them, causing an ugly-looking bulb. The young insects feed on the wood until they have developed into flies, at which stage they come forth, and the operation is repeated. Thus, in the course of a couple of years, the tree is ruined.

Dr. Brodie, in a paper published in the last report of the Clerk of Forestry, describes the gall-louse as a very small insect, which causes burr-like galls on twigs of several species of evergreens; the galls are rough and scaly, often two inches long, and in diameter about twice the diameter of the twig on which they are found. They are greenish in summer, becoming brownish towards the fall season, gradually assuming the color of dead spruce foliage. Each gall has from thirty to over one hundred cells and each cell contains from ten to thirty lice, which feed and mature within the cells, and when full grown, about the end of July, the cells open, allowing them to emerge. They then assume wings and can fly a considerable distance. Each one lays from 25 to 50 eggs and dies before winter. They pass the winter in egg form, emerge in the following spring and commence the season's crop of galls.

The small twig on which the gall is formed is quite destroyed, thus retarding the growth of the tree, at the same time giving it a very sickly and unsightly appearance. It would appear, so far as reported, that most injury is done to young trees, such as nursery stock and young growing hedges, and as far as observed in Ontario, the galls were on young trees and on the middle branches of medium-sized trees. But there can be but little doubt that if once established in a spruce forest it would do immense injury. This is something to be apprehended and guarded against. A few insect enemies have been noted, and no doubt many of our smaller insectivorous birds, such as chickadees, nuthatches and warblers, prey on the gall-louse. But it would seem the main reliance must be on artificial methods of destruction. Spraying has been tried with fair results, but of all methods recommended, hand-picking of the galls toward the end of June, before the producers have emerged, is the surest and best. They are readily seen and should be snipped off with the scissors or knife and at once burned.

This destructive insect was first mentioned in American entomological literature in 1869, and since then it has been spreading, and now has a very wide geographical range. Unfortunately it is now in Ontario, and no doubt gradually moving northward towards our spruce forests. Our native trees liable to its attacks are the double spruce, *Picea nigra*; the white spruce, *Picea alba*; the hemlock, *Tsuga canadensis*; and it is altogether likely it will be found on the balsam fir, *Abies balsamea*; but so far as yet observed in Ontario it is most common on the imported European spruce, *Picea excelsa*. As yet there is no positive evidence that this insect will attack the upper branches of full-grown forest trees, but it is most likely it will do so anyway, there is no negative evidence.

*Chermes abietis* is a European insect, and has been imported into America on the European spruce; it is common in northern Europe and so is very likely to take readily to our northern forests.

It must be very obvious to every one that the most sensible and efficient way to combat any recently introduced injurious species is to attack it on its first recognition, before it spreads over a wide area. And it would be well for every one having spruce shade trees and spruce hedges to see that they are thoroughly cleaned of the galls of *Chermes abietis* in early summer, before the scales open and the producers emerge, and if this cannot be done the trees should be dug up and burned.

A. Gagnon, Victoriaville, Que., are adding one of the Jenckes Machine Co.'s standard boilers to their equipment.

William McVicar, McVicar, Ont., is putting a Dake steam feed into his mill. This feed was built by the Jenckes Machine Co., Sherbrooke, with whom the Phelps Machine Co., Eastman, Que., formerly Canadian manufacturers of the Dake engine, have been amalgamated.

Mr. W. N. McEachern, wholesale lumber merchant, Toronto, has removed from the Yonge Street Arcade to larger and more convenient premises at No. 1 Toronto Street. He states that the spring trade so far has been more active than for several years, the local demand for both pine and hardwood being good. The scarcity of dry hardwoods has restricted business to some extent, but the new cut will shortly relieve the situation.

## THE NEWS.

—McLachlin Bros., of Arnprior, Ont., recently added a lath machine.

—W. J. Chisholm has opened a lumber yard at Edmonton, N. W. T.

—Gillies Bros.' new mill at Braeside, Ont., will shortly commence operations.

—The Rathbun Company last week started up their large mill at Deseronto, Ont.

A large saw mill will be erected at Tusket Wedge, N. S., by J. H. Pothner & Co.

—J. R. Booth, of Ottawa, will have a staff of 1,300 men at work in his mills this season.

McIntosh Bros. are moving their saw mills from Lac La Pêche to Quesselle Forks, B. C.

D. Davidson, of Penetanguishene, Ont., whose lumber yard was destroyed by fire, is rebuilding the tramways.

—Messrs. Gilmour & Hughson, Limited, of Hull, are making general improvements to their mill and putting in "Dutch" ovens.

—Forest fires are said to have done considerable damage this spring along the line of the Kingston and Pembroke Railway.

Some fifty men left Pembroke, Ont., on March 24th, for British Columbia, where they are engaged for lumbering operations.

Wharton's saw mill at New Denver, B. C., is to be refitted with modern machinery, and its capacity increased to 20,000 feet a day.

—McLachlin Bros., of Arnprior, are making a number of improvements to their steam mill, and are increasing the height of the refuse burner.

—It is reported that John Law has purchased the lumber yard and stock of W. J. Mathers, at Neepawa, Man., and will continue the business.

—Mr. John Hendry, president of the British Columbia Mills, Timber and Trading Company, of Vancouver, B. C., has returned from England.

The mill at Lequille, N.S., recently destroyed by fire, is to be rebuilt and fitted as a saw, planing and stave mill, with Mr. G. E. Corbett as manager.

The Knechtel Furniture Company, of Hanover, Ont., are enlarging their dry kilns and making improvements which will lessen by one-half the time required to dry lumber.

—The Pacific mill at Tacoma, Wash., the largest shingle mill in the world, operated by Metcalf & Ware, was completely destroyed by fire recently. The loss will be about \$100,000.

—The price of rubber, which has been for some time advancing, is now so high that the Canadian rubber factories have resolved upon an advance in prices of rubber shoes and other products.

—Joseph Guilbert, of Windsor Mills, Que., is making extensive additions to his mill and has placed an order with the Jenckes Machine Co., Sherbrooke, for a large quantity of shafting, log handling apparatus, etc.

—A dispatch from Grand Rapids, Mich., states that the furniture manufacturers have adopted resolutions against the two dollar lumber tariff and have sent them to Congressman Smith. They want a reciprocity treaty.

—The largest mahogany log ever received at the timber yards at Liverpool, England, was recently on exhibition in that city. It was 21 feet long, six feet deep (having been squared), and weighed about 15 tons. It grew in Africa.

—Dr. Brodie recently brought to the Department of Forestry in Toronto a sample of a scale pest that is affecting pine trees. It is said to have been discovered only recently, and to have attacked Austrian, Scotch and red pine trees.

The Bronson & Weston Company, of Ottawa, will only operate one of their mills this season. They have completed the placing of the carriers for the disposition of the saw dust, which will probably be sold to the E. B. Eddy Company.

Messrs. Curry Bros. & Bent, Calder & Son and H. J. Crowe have been granted, by the Newfoundland government, the privilege of lumbering in Labrador over a section consisting of 320 square miles of excellent timber land. They will ship to the European markets.

The Rat Portage Lumber Co., of Rat Portage, Ont., are this spring expending in the neighborhood of \$13,000 in special improvements to their mill. These include a large Wickes gang in mill No. 1, and additional machinery and power in the planing mill and sash and door factory.

—An illustration of what can be accomplished by intelligent forestry methods is shown by an engraving in the March issue of the Forester, which shows a German spruce forest, sixty to eighty years old, ready for the axe, with no less than 400 trees and 12,000 cubic feet of solid wood to the acre.

—Mr. J. Fraser Gregory, who has been in the employ of Mr. W. H. Murray, St. John, N. B., for seventeen years, has been admitted as a partner in the business. The new firm will be known as Murray & Gregory, and will deal extensively in spruce and pine, as heretofore, their mills being known as the Marble Cove Mills.

—Knight Bros., of Burke's Falls, Ont., have been compelled to increase the capacity of their dry kiln. A hot air conductor has also been added, which provides for the hot air being blown from the engine room immediately in rear to the extreme end of the kiln, and a circuit of the kiln is sucked in by the same fan by which it was first emitted, thus doing away with the necessity of heating cold air periodically.

—The Weymouth Free Press tells of some record-breaking logging on the Sissiboo: Mr. Chas. Sprague with a yoke of cattle trailed four trees, equal to 1750 feet of lumber, on a four turn road at Chubb Brook. Saml. Thipault, with one yoke of cattle, trailed 8 trees, equal to 1646 feet of lumber, at Big Dead water. Livingstone, Steele & Gaudet, with one pair of small horses, hauled 10 trees on double sled, equal to 1700 feet of lumber, at Second Lake.

—Mr. W. T. James, of Hamilton, Bermuda, writing to the CANADA LUMBERMAN regarding the lumber trade, says: "Southern pitch pine from Georgia and Florida is chiefly used in Bermuda. Our houses are built of stone—no wooden structures. Joists, floors and roofs are of southern pitch pine; white pine is chiefly used for sash doors, architraves, mouldings, etc., being chiefly imported ready worked, and glazed sashes and outside blinds are also imported ready made. Considerable spruce lumber is used, such as inch rough boards, scaling of various sizes from 2 x 3 up to 4 x 12, also considerable pine, inch boards and 1/2" and 2" planks.

## CASUALTIES.

—Jacob Bloom, of Glencoe, Ont., was killed in his ore mill last month by being thrown upon a saw.

—A son of Mr. Gagnon, lumber merchant, of Quebec was killed by a pile of deals falling on him.

—By an accident at the sash and door manufactory of W. Baril, Montreal, Athanase Dubois had the bone of his left arm sawn in two at the elbow. A piece of timber which he was feeding to the machine slipped and flew his arm across the saw. Amputation was found necessary.

—David Hollowood, of Clarendon, had his right leg broken while working in Thompson & Avery's mills. His companions were in danger of being struck by a falling tree, so he put up a pike pole to divert its direction. The pole slipped and the tree fell upon him, was the above result.

## TRADE NOTES.

The E. R. Burns Saw Company, Toronto, will shortly be succeeded by E. R. Burns & Company.

The Shipton Electric Light and Power Co., of Daville, Que., have received a Crocker turbine from the Jenckes Machine Co., Sherbrooke, who are proceeding with the installation of the same, together with the pe-stock and draft tube.

Two more 252-inch looms for making felt have been recently added to the plant of Hamelin & Ayers, Lachine Mills, Quebec. This makes six looms of this size now working in their mills.

The Kenneth Mining and Development Co., at Rossland, are making an addition to their equipment in the shape of a 7 x 10 double cylinder hoisting engine, with boiler and all appliances complete, supplied by the Jenckes Machine Co.

The agency for Canada for Dick's Balata belting is now fully controlled by J. S. Young, 15 Hospital street, Montreal, by appointment of manufacturers. Orders will be attended to at once from a large and varied stock.

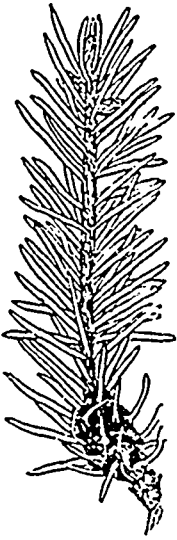
The Electric Reduction Co., Buckingham, Que., are proceeding to develop their water power, and as a first step have placed an order with the Jenckes Machine Co., Sherbrooke, Que., for a pair of their 45" Crocker turbines, to be installed complete, with wheel cases, draft tubes, governor, etc.

The Jenckes Machine Co., Sherbrooke, are furnishing the Canadian Rand Drill Company with a handsome compound Corliss air compressor, weighing some 33 tons, together with a large air receiver and other accompanying apparatus, bringing the total weight up to about 40 tons.

The Moore & White Co., of Philadelphia, manufacturers of clutch pulleys, couplings, etc., have appointed the Lancaster Machine Works, of Lancaster, Ont., as their representatives in Canada, from whom all particulars regarding these justly celebrated friction driving devices may be obtained.

The B. C. Goldfields Co., of Toronto, have recently placed an extensive order with the Jenckes Machine Co. for a ten stamp battery complete, with two vanners, two ore feeders, grizzly, Blake-Marsden crusher, and all the various apparatus making up a complete modern milling plant. The outfit is to be delivered at Nelson, B. C.

The Wm. Hamilton Manufacturing Company, of Peterboro', Ont., are supplying the entire equipment of a mammoth saw mill which the C.P.R. are erecting at Coi Creek, about 60 miles west of McLeod, in the Douglass district. The equipment of the mill is of the most modern type, and it will have a capacity of 100,000 feet in ten hours. The plant includes a battery of 6 boilers, bandsaws, etc.



SPRUCE GALL-LOUSE

# WOOD PULP DEPARTMENT

## PROPOSED PULP MILL AT MISPEC.

The St. John Sulphite Pulp Company, which is composed of Scotch capitalists, has commenced the erection of a large pulp mill at Mispec, near St. John, N. B. The manager is Mr. M. F. Mooney, of St. John, who returned last month from a visit to Scotland, where he completed the final arrangements with the directors for proceeding with the work.

The mill will be a large brick and stone structure, three hundred feet in length and one hundred feet high, and will be supplied with a modern pulp making plant. The large steel boilers and acid reclaimers will be imported from the United States, but as far as possible Canadian machinery will be used. The site on which the mill will be built is an advantageous one. It is not far from the Bay of Fundy, making the shipment of goods comparatively easy. The manufactured pulp will be conveyed to St. John in barges, and thence loaded on steamers and vessels for Glasgow. The site is most desirable also for the purchase of wood.

## THE MANUFACTURE OF SULPHITE FIBRE. WHITNEY, ONT., March 28, 1898.

DEAR SIR.—I am pleased to know that another sulphite pulp mill is to be built in New Brunswick this spring, at Mispec, by a Scotch company, and probably another in St. John, which I hope will materialize shortly, and possibly a large pulp and paper mill in the Province of Quebec. This goes to show that the Canadians are now beginning to realize that they really do hold the key to the pulp industry of the world. On this latter point I am thoroughly satisfied, provided there is an export duty put on pulp wood. It is pretty generally known, or I might say well known, that the Provinces of New Brunswick and Nova Scotia possess the finest black spruce in the world, which is the best timber for the manufacture of sulphite pulp. This wood possesses a long and strong fibre, which is no doubt due to the climate of the provinces. A large quantity of pulp wood has been shipped to France, for the large pulp mills there, and so it would appear that all that is wanted now is a few more pulp mills, so that the pulp can be manufactured in Canada and sent over to Europe in place of the raw material.

During the past year I have been asked many questions in reference to the manufacture of sulphite fibre by different parties who are considering the building of sul-

phite pulp mills, as to the cost of building, etc., and as your valuable paper no doubt reaches most of the parties interested, I feel sure that to give a few lines on the manufacture and cost of plant in your paper would be appreciated, if you will kindly give me space.

To manufacture a ton of first-class sulphite pulp requires 2 1/2 cords of wood, 400 lbs. of sulphur, and 280 lbs. of lime. In preparing the pulp wood it is first cut into lengths of from 24 to 30 inches, as desired, and the bark taken off by barking machines; then the wood is split by a splitting machine to see if the piece is sound, the knots are next bored out and the wood taken to the chipping machine, where it is cut up, and from this machine the chips are delivered into a breaking machine, which breaks them all up into a uniform size, then onto a screen where all the sawdust is shaken out, and from there on a conveyor to the chip bin above the digestors, where they will be ready for use. This plan of preparing the wood will be found to give the very best results, care, of course, being taken to have nothing but good sound wood.

Next comes the making of the acid, which is a very important part to have right in a sulphite mill, and great care should be taken to have the acid absorbing tanks and settling and storage tanks and all connections perfectly air tight, and with all made perfect not over 400 lbs. of sulphur should be burned per ton of pulp. The sulphur is burned in cast iron ovens made for the purpose, and the sulphur gas passes off into lead pipes, submerged in cold water, which is constantly being renewed, and as the gas passes through these pipes to the acid absorbing tanks, it is cooled down to a temperature of 80 or 90 deg. Fah. It then enters the acid tanks, where it is drawn through and mixed with the limewater, which flows continually through these tanks, and all brought up to the proper acid test, then to the settling and storage tanks ready for use.

In preparing the limewater for use 250 lbs. of lime is slacked in an iron or steel tank, then run into mixing tanks, where the necessary amount of water is added to bring it to the proper gravity, and from these tanks it flows through the acid absorbing tanks, where it is mixed with the sulphur gas.

Now, with the wood prepared and the necessary amount of acid made, the digestors are filled with chips, the necessary amount of acid put in, the steam turned slowly on, and the cooking goes on for 11 or 12 hours, until the pulp is cooked. It is then blown off into blow tanks, well washed with filtered water, then washed out and passed through coarse screens over the rifiers, through fine screens again and over the paper machine into paper pulp, ready for shipment.

All the machinery to equip a first-class pulp mill can be made in Canada, just as well as in any other part of the world. Messrs. John Bertram & Sons, of Dundas, Ont., can build as fine a paper pulp machine as desired, as well as all the wood-working machinery required in the wood-preparing room. The digestors can be purchased from several firms; E. Leonard & Sons, of London, Ont., can build them, also Carrier, Laine & Co., Levis, Que., and no doubt the Bertram Engine Works, of Toronto. The other machinery, such as engines, and boilers, etc., can also be obtained in many places in Canada.

In New Brunswick a 30 ton mill can be built for \$120,000. There is a great demand for sulphite pulp in England; a first class fibre will bring \$50 a ton, while the cost to manufacture in Canada is \$20 per ton, and freight to British port \$5 per ton. So I think, Mr. Editor, that

capitalists who would put money in a good pulp mill would make a good investment.

Respectfully yours,  
THOS. R. ALLISON.

## PULP NOTES.

The Dominion Paper Co., Kingsey Falls, are setting up a new wet machine, one of the Jenckes Machine Co.'s standard 72" wet presses, shipped them a week or two ago.

The importation of wood pulp into France during last year was practically the same as the year before, viz., about 115,000 tons. In 1895 it was 124,000 tons. It is not considered, however, that the activity of the paper trade has diminished, the reduced import being compensated for by home production.

The Jacques Cartier, Pulp and Paper Company have secured letters patent incorporating E. Goff Penny, M.P., Robert Archer, William Strachan, William Curtis and Robert Law, of Montreal, to carry on and operate the business of manufacturing pulp and paper in all its branches, and to build saw mills, railways, etc. The capital stock is \$50,000, and the proposed works will be located on the Jacques Cartier river, in the province of Quebec.

The Royal Paper Mills Company have recently added a complete rope drive to their transmission machinery at their East Angus mill. This was furnished by the Jenckes Machine Co., Sherbrooke, Que., who are furnishing the entire tank work, together with the accompanying machinery. East Angus presents a scene of great activity, carload after carload of material arriving and being placed in position. When completed this mill will take a prominent place among the producers in the pulp and paper trade.

In a recent address, Professor Fernow, chief of the forestry division of the Department of Agriculture, gave some statistics as to the development of the paper pulp industry in the United States, which has practically all been accomplished within the last dozen years. The first pulp mill in America was established thirty-three years ago, and the increase in production was slow, until a much later period. Now it is estimated that the product is over one and one-half million tons, about two-thirds ground and one-third chemical pulp, this product requiring in the neighborhood of 2,000,000 cords of wood. The product of 1896 was 91 per cent. that of 1882. Such an industry is fast making inroads upon the timber supply most suitable, spruce furnishing by far the larger proportion of it.

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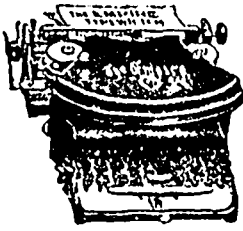
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It is reported that the Royal Paper Mills Company, of East Angus, Que., intend building a new pulp mill to manufacture pulp by the sulphite process. The location of the proposed mill will be higher up the river than the present mill.

The Cushing Sulphite Fibre Co., Limited, has asked for

a charter to erect a sulphite pulp mill and other necessary works in connection therewith. The head office is to be at Fairville, N.B., and the provisional directors as follows: Jos. Allison, Wm. H. Murray, Thos. McAvity, Geo. F. Baird, Geo. S. Cushing, Geo. McKean and James Fleming, all of St. John.



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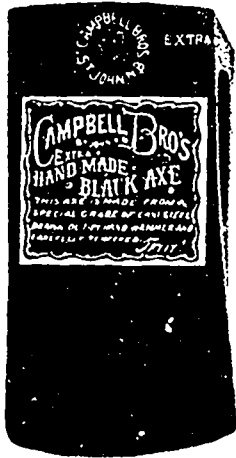
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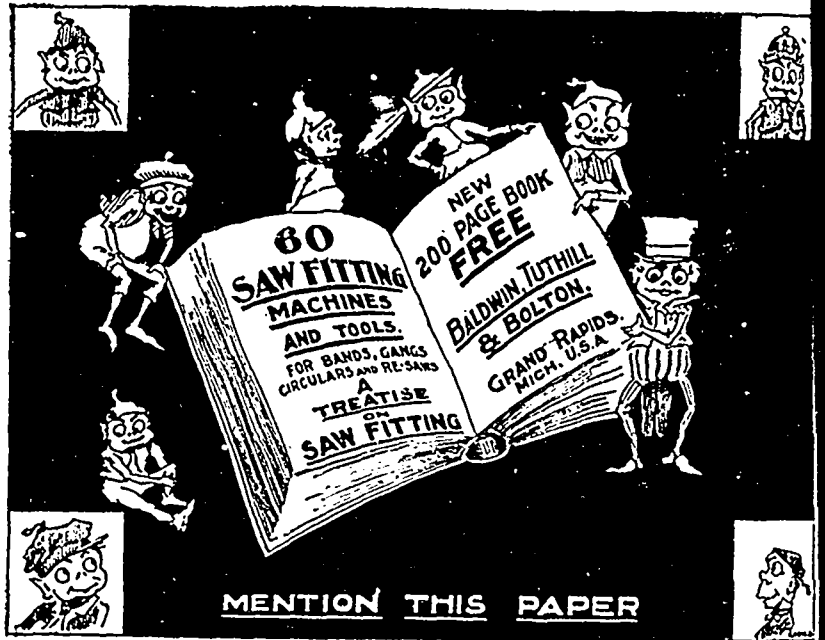
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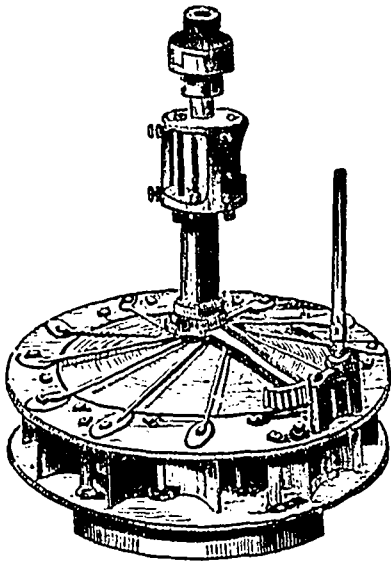
**Robt. Bell, Jr. : Hensall, Ont.**

At a recent sale of Quebec timber limits the Chicoutimi Pulp Company purchased several miles of spruce limits.

A bill incorporating a company to build and operate a pulp mill at Weymouth, N.S., has been passed by the legislature.

It is probable that a pulp mill will be built at Moose River, near Parrsboro, N.S. The property, which consists of about 15,000 acres, is owned by Ex-Mayor M. L. Tucker and Messrs. Huntley and Epps, and is said to be one of the very best sites for pulp wood in the provinces.

Readers are asked to contribute freely to the columns of the CANADA LUMBERMAN, and to send in items of news whenever possible. Let each subscriber resolve to report the news of his locality, such as changes of ownership, mill improvements, market conditions, etc., and the whole will comprise a valuable compendium of information.



NOW is the Hey-Day of the Water Power. Streams that flowed passively for ages are being turned to man's account by the Turbine Water Wheel. Of the making of Water Wheels there is no end, but the one to equal in EFFICIENCY, under any conditions, the

**"VULCAN" "PERFECTION"**  
AND **"LEFFEL"** HAS YET TO BE DESIGNED.

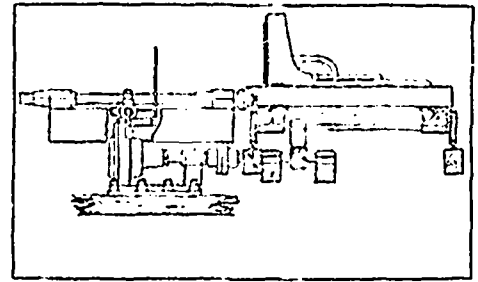
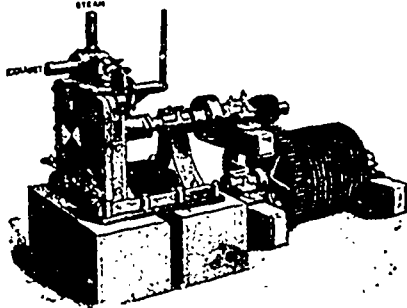
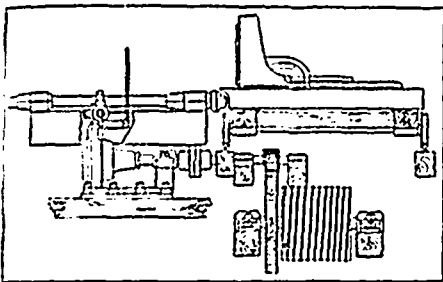
WHAT IS SAID OF THEM: "Some years ago we bought two 36-inch "PERFECTION" Water Wheels from Paxton, Tate & Co. I tested a "Little Giant" alongside a "Perfection," and the "PERFECTION" can BEAT the "GIANT" on every point."

Simcoe, Ont., 21st Feb., 1898.

(Signed) W. B. BROWNE & CO.

I also manufacture LANE IMPROVED CIRCULAR SAW MILLS, AUTOMATIC SHINGLE MACHINES, &c. Write and find out all about them to

**MADISON WILLIAMS,** Successor to PAXTON, TATE & CO.,  
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The movement of the engine in either direction is under the absolute control of the sawyer, thus accomodating the speed of the feed to the size of the logs.

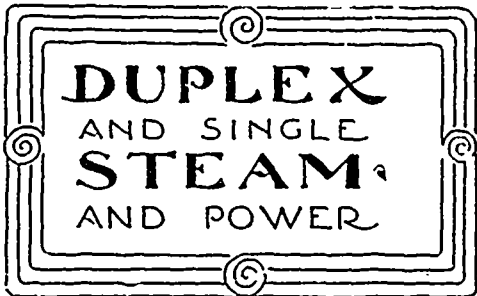
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Write for Catalogue and full particulars.

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**STEAM FEED**

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Succeeding the PHELPS MACHINE CO., EASTMAN, QUE.

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There is no process its equal for tempering circular saws. Other makers recognize this fact, as some of them, in order to sell their goods, claim to have the same process. All such Claims are FALSE, as the patentee in the U. S. and ourselves are the only firms in the world who use it.

MILL STREAM, QUE., on I. C. R'y, December 17th, 1894.

R. H. SMITH CO., LTD., St. Catharines, Ont.

DEAR SIR,—Driving a 20 in. 13 gauge saw into frozen hardwood, using a 9 in. 4-ply belt, if it can be done satisfactorily, is a very severe test. Your saws have stood that test better than any I have tried. I have been experimenting with different makes—both home and imported—during the last five years, and give yours the preference. Last order is just to hand and will report on them by and bye.

Yours very truly, JAMES MCKINLAY.

CAMPBELLTON, N.B., Nov. 17th, 1894.

R. H. SMITH CO., LTD., St. Catharines, Ont.

DEAR SIR,—In regard to your Shingle Saws, you can say that I have been using Shingle Saws of your make (Simonds) for the past four years, and they have given good satisfaction. I am running nine machines and use a good many saws, but have never had a saw yet that did not work satisfactorily. Before using your saws I used saws of American make, which worked well, but after giving your saw a trial have continued to use yours, as they are cheaper, and in regard to working qualities are all that is needed.

Yours truly, KILGOUR SHIVES.

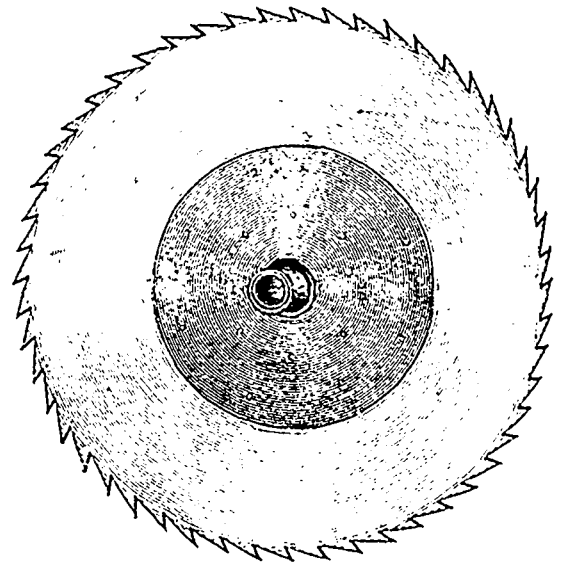
CLAVERING, ONT., May 3rd, 1897.

R. H. SMITH CO., LTD., St. Catharines, Ont.

GENTS,—In reply to your letter asking me how I liked the 62" SIMONDS Saw, I must say all my experience I never had a saw stand up to its work like the one purchased from you last month. Having used saws for the last 22 years, and tried different makes, I can fully say it is the best saw I have ever had in my mill, and would recommend the SIMONDS' Process Saws to all mill men in need of circular saws.

Yours truly, W. G. SIMMIE.

P.S.—I am sending you my old saw to be repaired; please hammer to same speed as new one. W.G.S.



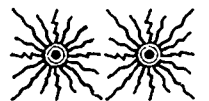
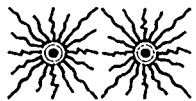
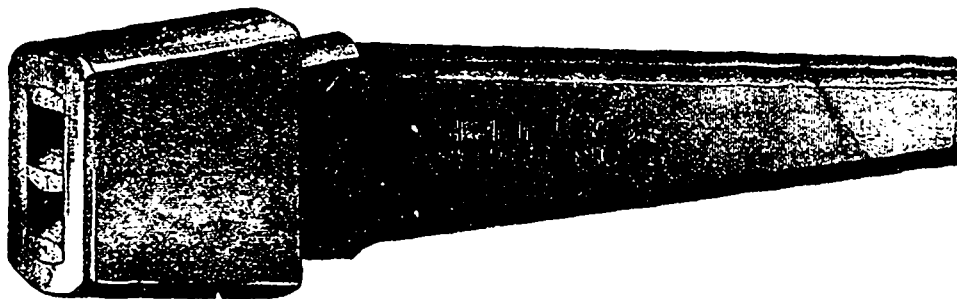
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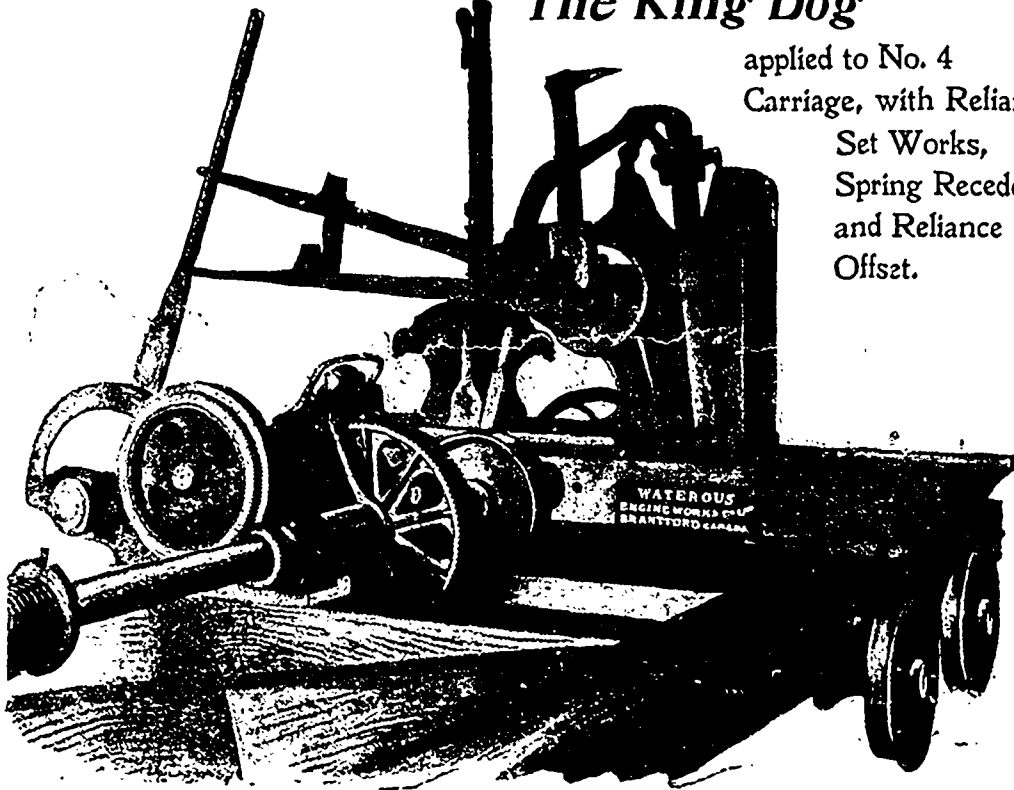
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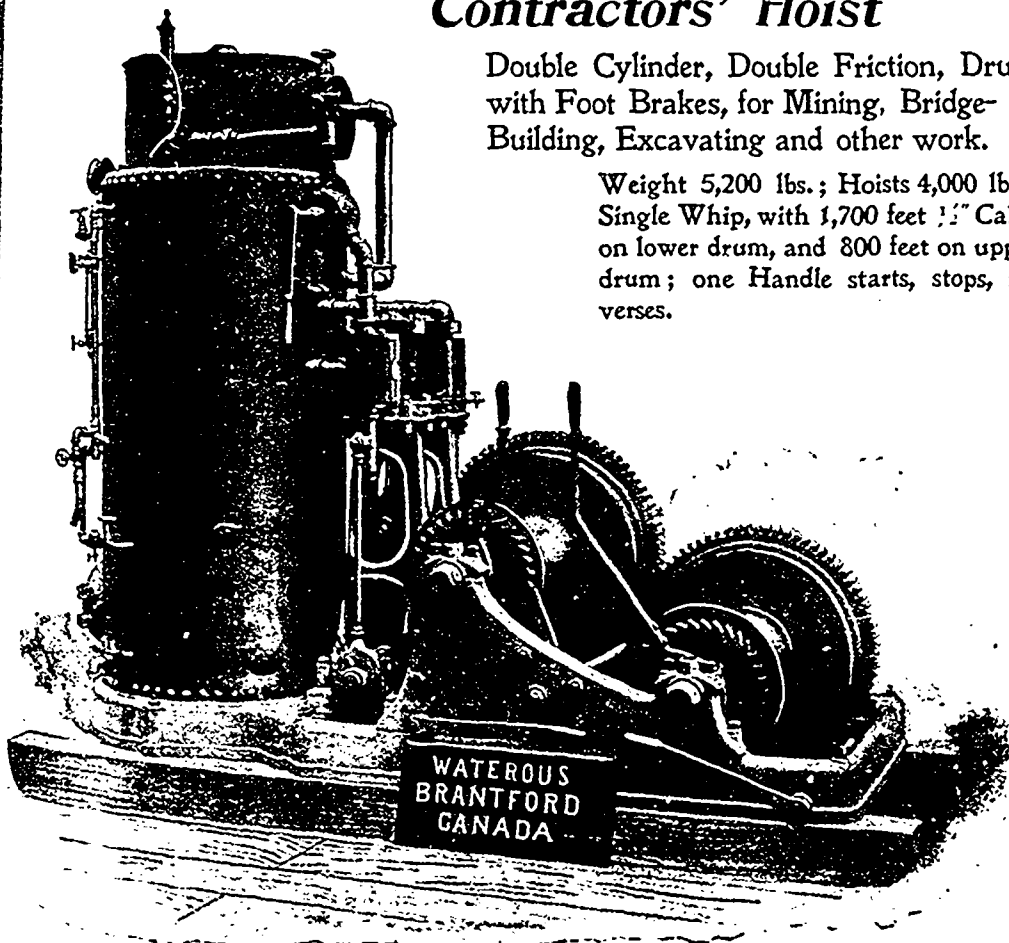
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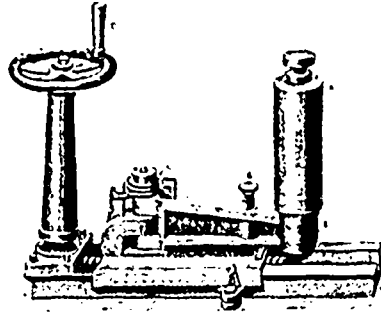
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## THE STAFFORD TIMBER GUAGE

COTEAU, QUE., April 16, 1898

DEAR SIR, Regarding the working of the Feed Roller you manufacture for the use of Saw Mills, I have no hesitation in saying it is the BEST I KNOW OF AND GIVES UNIFORM SATISFACTION. Yours truly, J. RAYBIRD.

LANCASTER MACHINE WORKS  
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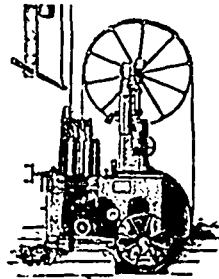
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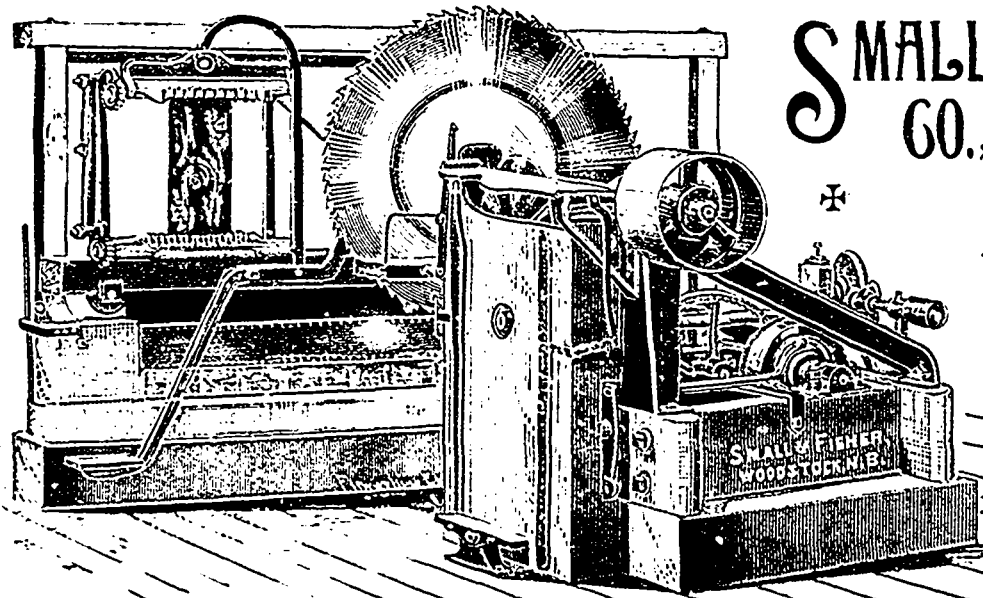
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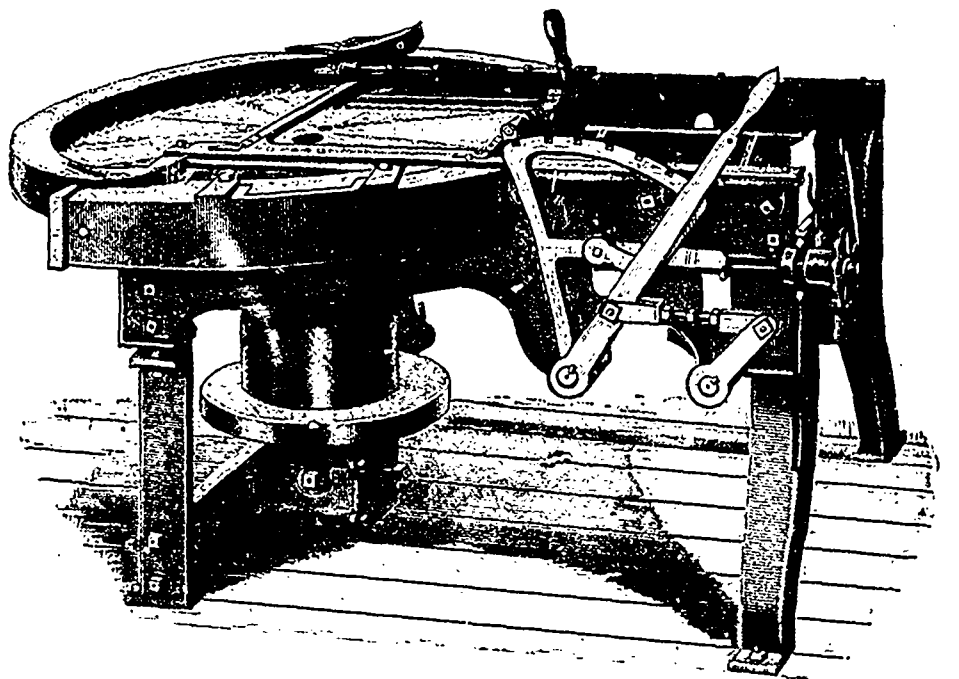
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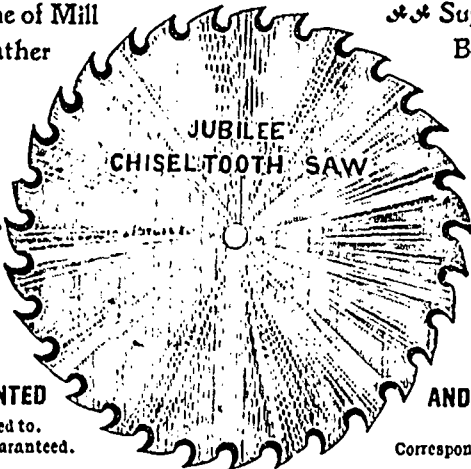
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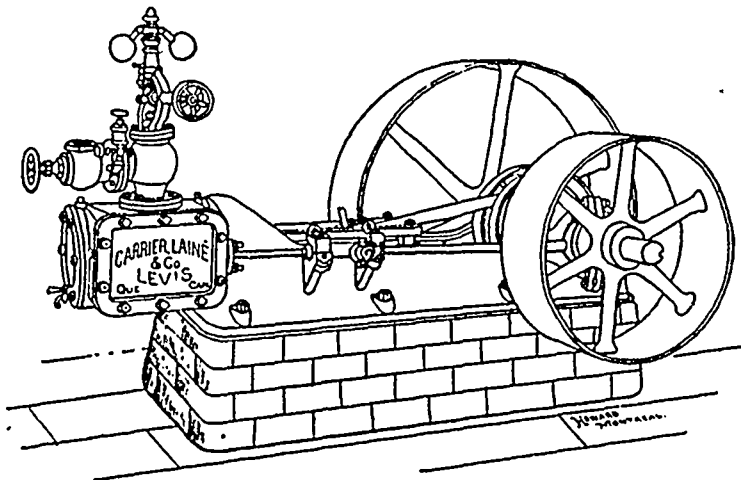
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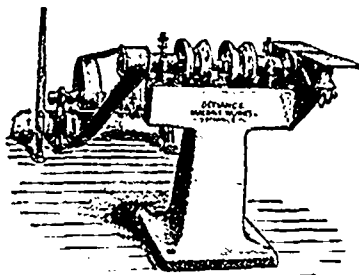
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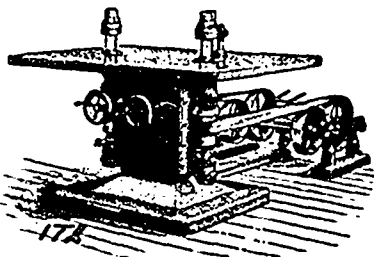
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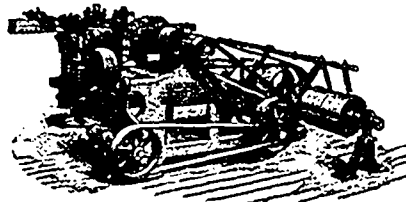
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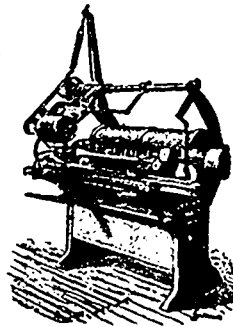
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