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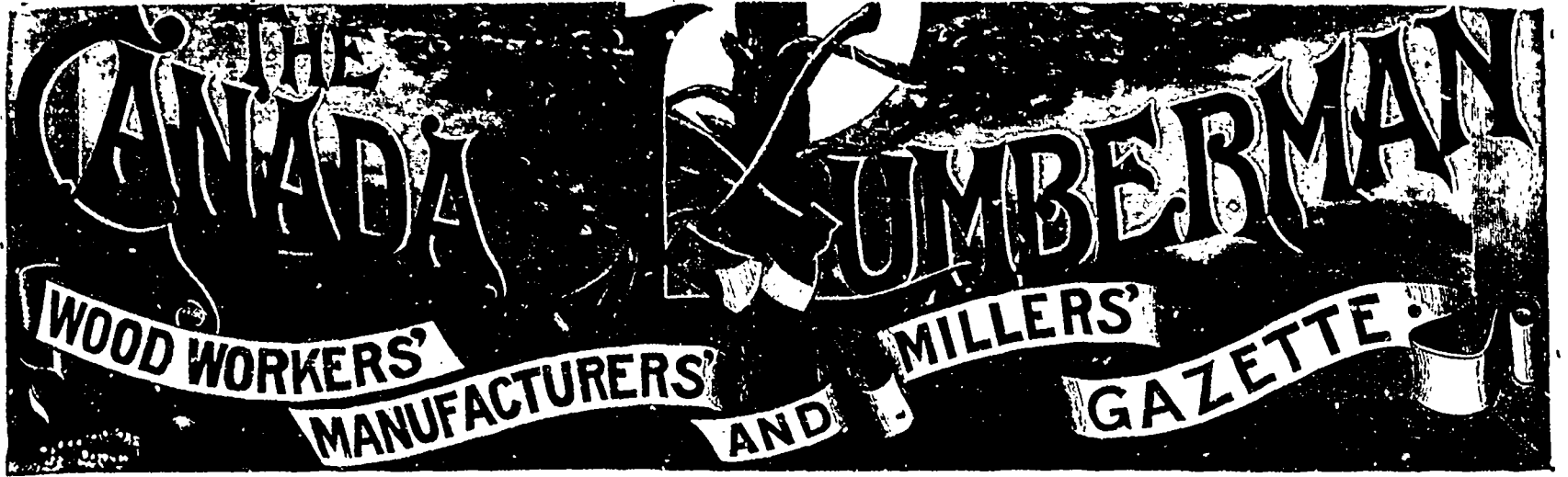
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VOLUME XXI.
NUMBER 1.

TORONTO, CANADA, JANUARY, 1900

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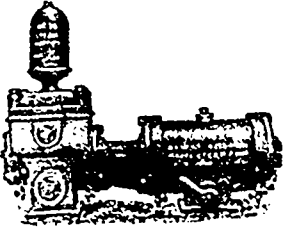
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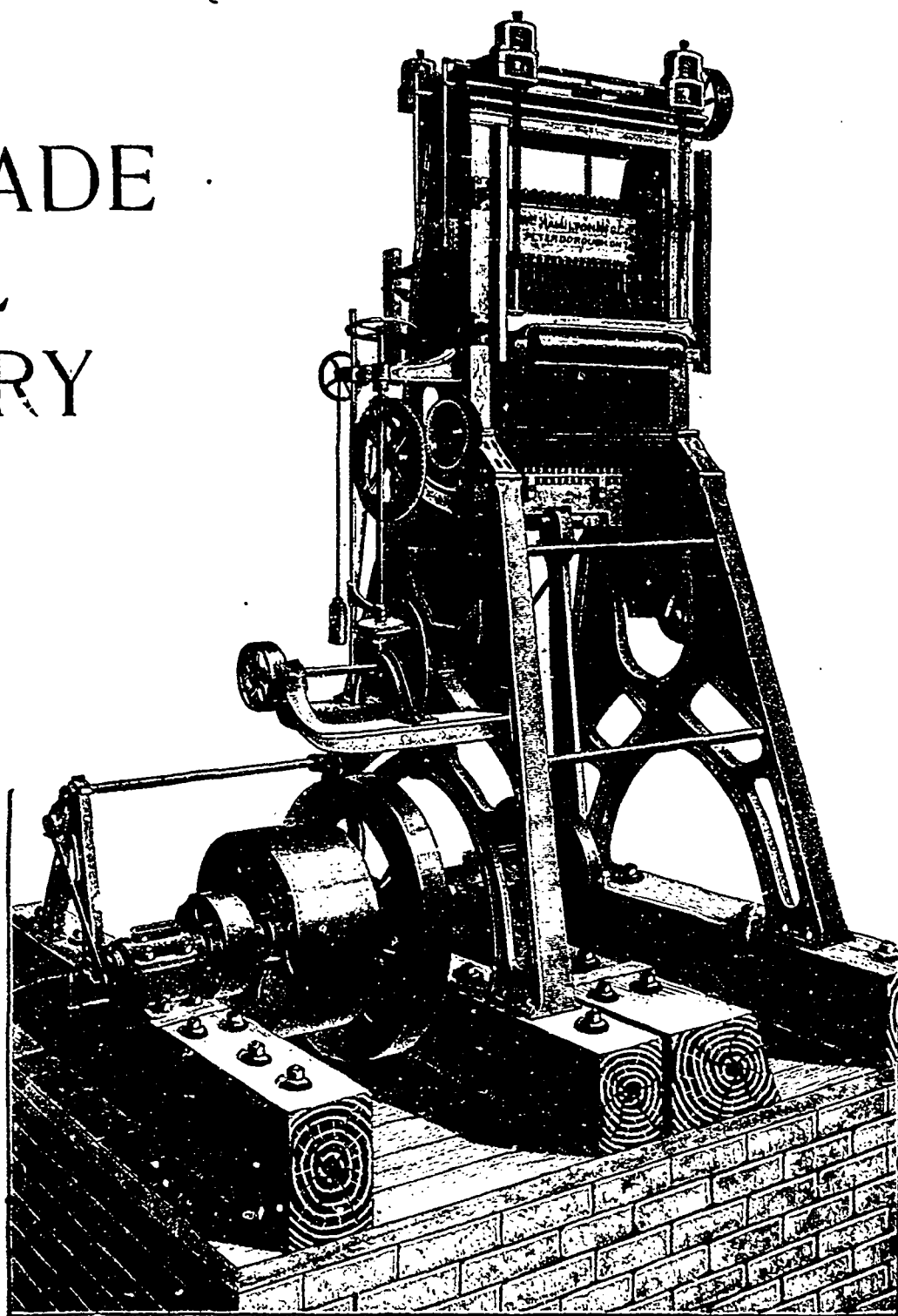
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MILL STREAM, QUE., on I. C. R'y, Decemer 17th, 1894.

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Yours very truly, JAMES MCKINLAY.

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

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DEAR SIRs,—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.

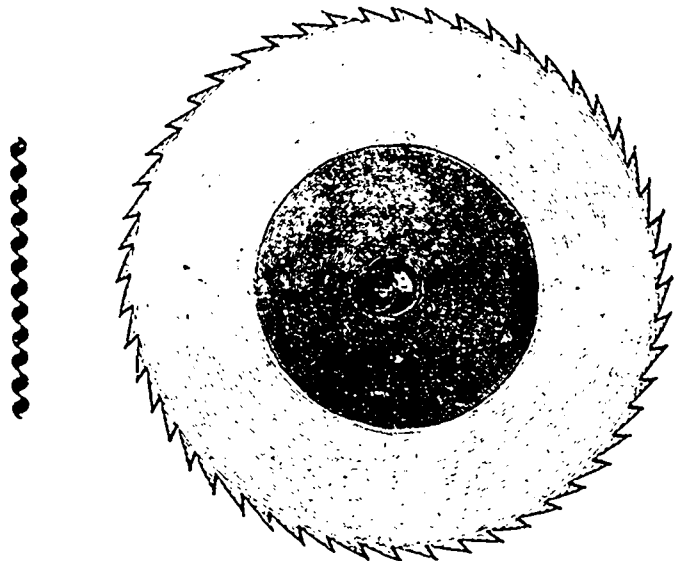
CLAVERING, ONT., May 3rd, 1897.

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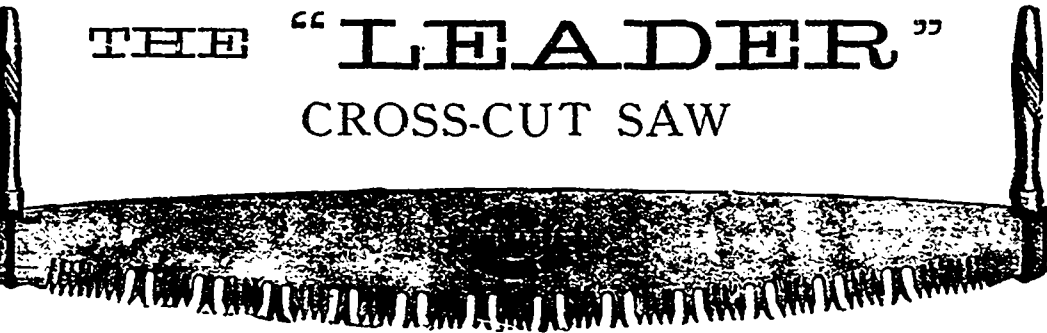
GENTS,—In reply to your letter asking me how I liked the 62" SIMONDS Saw, I must say in all my experience I never had a saw stand up to its work like the one purchased from you last month. Having used saws for the last 22 years, and tried different makes, I can fully say it is the best saw I have ever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



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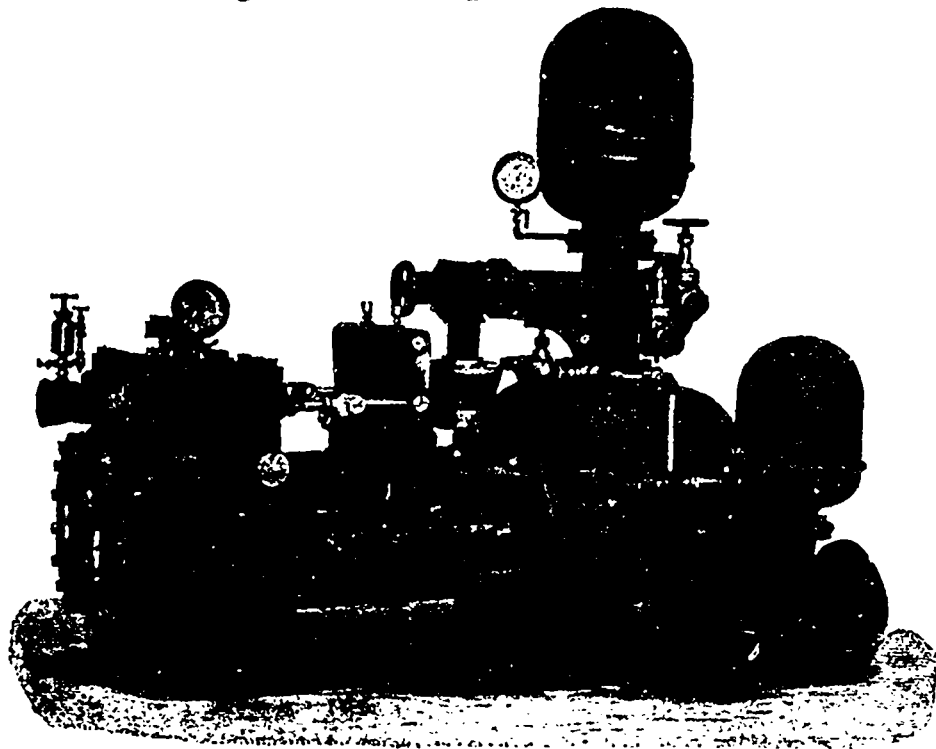


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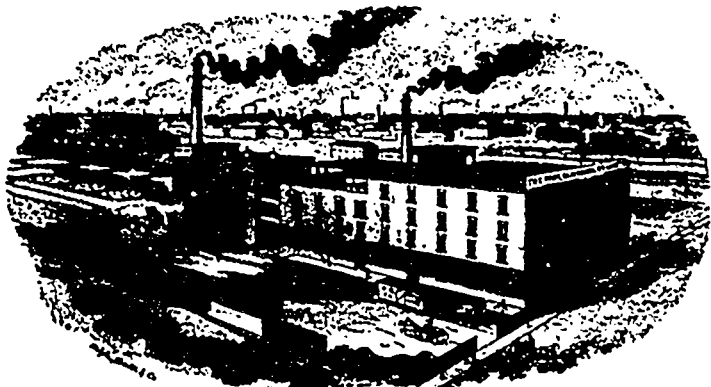
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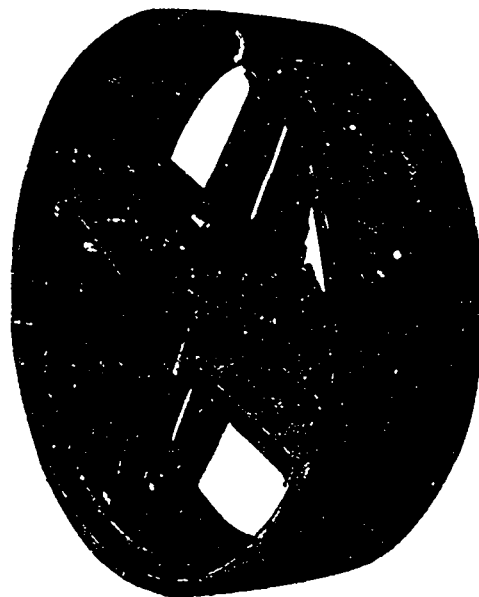
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THE CANADA LUMBERMAN

VOLUME XXI.
NUMBER ...

TORONTO, CANADA, JANUARY, 1900

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THE TIMBER RESOURCES OF THE RIVER COULONGE.

The Coulogne river is one of the many large tributaries of the Ottawa, and therefore a great lumbering centre. It takes its rise about 125 miles to the north, not very far from the head waters of the Ottawa itself, and joins it about 80 miles above the capital, at the village of Fort Coulogne, one of the most beautifully situated spots on the Ottawa, with picturesque surroundings in the way of water falls, rapids, and many pretty islands.

The village of Fort Coulogne is also interesting as having been a trading station of the Hudson's Bay Company—that was in the early days. The old post is still standing on the banks of the river a mile or two from the village. It is now occupied as the residence of a retired Hudson Bay Company trader. The village is still the home of the Brysons, a family widely and favorably known on the Ottawa, where for fifty years they have been intimately connected with the lumber trade.

The Coulogne river is a continuous series of rapids and falls from its source to the outlet. Some of the falls are of considerable height, especially the last one, a few miles from the mouth. This one has been overcome by the erection of extensive dams and slides, the latter being thousands of feet in length. These improvements

were made by the government to facilitate the driving of logs and timber, and have been in use for over thirty years. They were the first and only improvements on the main stream until quite recent years.

In 1895 the late John Bryson organized an improvement company, called the Coulogne and Crow River Boom Co., for the purpose of improving the upper stretches of the river. Prior to this time the log drives from that part of the stream rarely got out in one season; but after the company spent a considerable sum of money in making reserve dams and side piers along the river, the difficulties of driving were greatly reduced, and now logs and timber run into the boom at the mouth in from

thirty to forty days from the very head of the stream.

THE COULOGNE A GREEN COUNTRY.

Any person who has travelled up other tributaries of the Ottawa, either by canoe or by the roads, must have often wondered where the lumbermen continued to get their supply of logs and timber, for as a rule there is not much else to be seen, from the usually travelled route, but brule waste in many places veritable seas of dry pine. A trip up the Coulogne is a refreshing change in this respect. One sees very much less evidence of the passage of the destroyer of pine the forest fire, which has wrought greater havoc than ever the axe has done.



SCENES ON THE UPPER COULONGE.—A LUMBER PORTAGE ROAD IN THE FOREST.

This contrast is especially noticeable on the upper section of the Coulogne, where, owing to the inconvenience of access, the squatter has not yet reached, and whose presence, it is to be hoped, the government and the lumbermen will not encourage.

The accompanying illustrations of scenes on the upper Coulogne will give the reader some idea of the vastness of the timber resources of this district. These illustrations were reproduced from excellent photographs and are of more than ordinary interest.

Supplies are put into the woods there during the winter months, and invariably and necessarily for one year in advance, as there are no summer roads into the upper country. Keep-overs are

built at various points on the limits where it is intended the next season's operations shall be, and the supplies are delivered to them from a central depot. The men are taken in early in the fall in boats and canoes just as they used to be forty years ago. Extra hands required for the drives to replace those of the winter hands who may not wish to stay for the drive are taken up in the month of April, just before the break-up.

The Coulogne belongs to that pine belt which lumbermen speak of as a country which stands cutting. For upwards of forty years the axe has been at work there. Katt upon raft and logs by the hundreds of thousands have been continuously coming down this river, and yet it is not cut

out; in fact, it stands to-day the most important of all Ottawa's feeders.

The quantity of standing pine may safely be put down as at least one billion feet board measure, besides which there are large quantities of spruce and cedar.

As previously mentioned, the head waters of this stream and the Ottawa are not far apart. Lumbermen have not yet made the last move north. When they do it is not unlikely that a railroad of about thirty miles length will be built to connect the waters of these two streams and divert about five hundred millions of pine into the Coulogne. A saving in the drive could be effected of about 300 miles.

RE-FORESTRY.

A year or two ago we heard much about re-forestry, and the planting of young pine on waste lands was advocated. There are thousands of miles on the Coulogne, Black and Dumoine and other streams where no planting would be necessary, for it is already growing up with a second crop of pine, which, although it may never reproduce the class of trees now being cut away (for that would require a couple of hundred years growth), will furnish a supply of eight and ten inch logs useful for local requirements in about thirty or forty years, providing fire is kept out. If our government would properly inform themselves in regard to these areas of young pine, and spend some money in protecting them, it is said

THE OTTAWA VALLEY.

(Correspondence of the CANADA LUMBERMAN)

that they need never trouble themselves about doing any tree planting.

This present government system of fire ranging is indeed an excellent one, but not extensive enough to take in this young pine. The force would require to be doubled, but it would pay in the end. We will admit that there is about ten billion feet of pine standing in Ontario, of a growth sufficiently large to produce an average

THE Ottawa Lumbermen's Association promises to become an important factor in the business. It has been formed with a view to establishing a uniform system or scale of culling, to be known as the Ottawa Culling Standard. Heretofore purchaser's agents have been stationed in the mill yard, where they decided the grading of the lumber their employers were securing. English buyers were particularly exact in this respect, and frequently raised the grade, thus lowering the price, for

date the business done, and they will build on a larger scale in Hull. The Hull council was approached, and has agreed to grant the company a bonus of \$15,000 as well as give concessions in the matter of taxes, etc. A by-law will be drawn up and presented to the ratepayers at an early date, by which means the loan will be procured. In the new establishment \$35,000 will be invested in buildings and machinery. It will have three times the output of the present works, and will give employment to 40 men. All styles of saws and files will be turned out. Swedish iron will be used in the new establishment, and is found more suitable to the purpose than other kinds. A member of the firm is now in New York arranging for a steady supply of this ore.

Mr. Edward Mackerall, Canadian representative of Watson & Todd, the Liverpool lumber merchants whose Canadian headquarters are at Ottawa, returned to his home in England early in December for the Christmas season.

Since taking possession of the planing factory of J. A. DesRivieres & Co., Ottawa, in July last, Mr. S. R. Poulin has doubled the output and business done. This is attributed to the brisk building operations carried on throughout the city. The staff has been increased to 45 hands and prospects are good for next season.

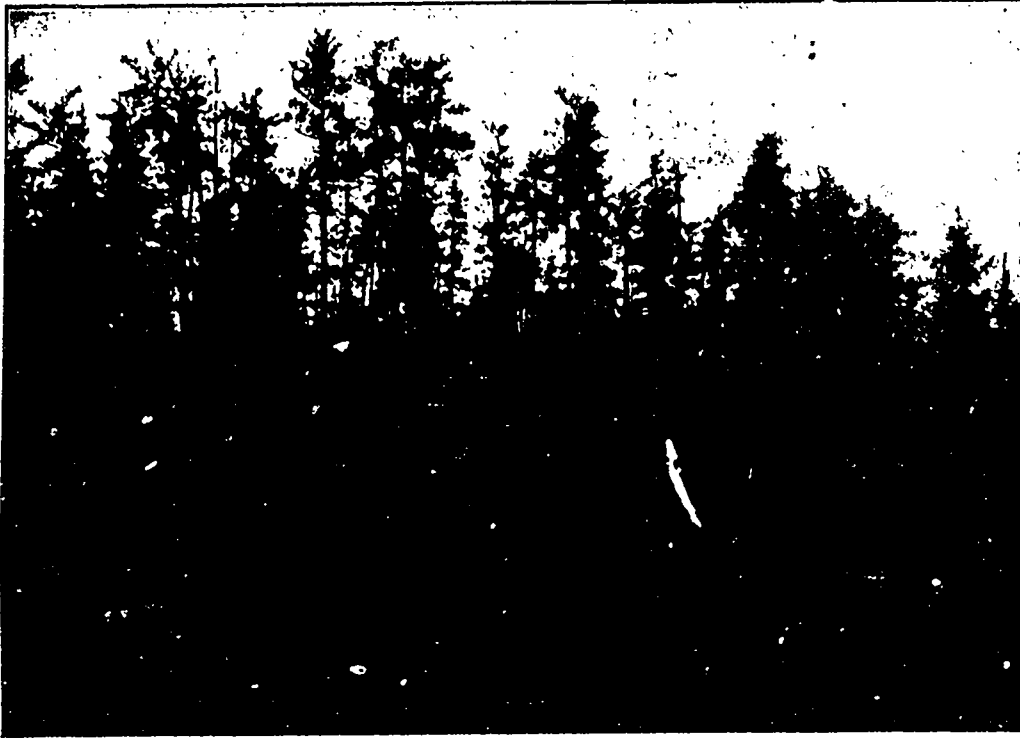
Smith & Heney, of this city, have secured a \$30,000 contract from the Dominion government, to build a wharf at North Bay, Cape Breton island. The timber used will be North Carolina [pine, treated chemically to prevent decay due to the action] of the water.

A factory is to be erected in Ottawa for the manufacture of cotton rope and twine. This rope, which will displace the manilla, will also be used in mills and factories to transmit power.

The kilns just completed by the E. B. Eddy Company at their Hull factories are now running in full blast. The kilns are built of stone and are circular in shape, all three being covered by the one roof. By a new system of heating, the wood placed in the kilns is dried thoroughly, no matter what position it occupies, as the temperature is the same throughout the kilns. Neither the grain or color of the wood is much affected, and the wood after treatment is much more durable and suitable for manufacturing purposes.

The place of honor in the city office of the Ottawa Lumber Company at Ottawa is given to a rusted and battered tomahawk. This was secured in the heart of a 25 pine log, and judging from the workmanship of the hatchet, and the size of the log itself, the hatchet must have lain in the log for 75 years, having probably been imbedded when the tree was a mere sapling. On either side of the tomahawk can be noticed the marks where the wood had apparently eaten well into the wood.

Mr. J. R. Booth will in all probability erect a factory at no distant date, in which saw dust will be chemically treated for certain acids and oils to be found in this ap



SCENES ON THE UPPER COULOGNE.—A QUIET SPOT IN THE FOREST WHERE THE AXE HAS NOT BEEN.

of 12 logs to the thousand feet B.M., distributed as follows on lands under license :

Georgian Bay waters.....	3,000 millions.
Kippewa, Temiscamingue and upper	
" - Ottawa head waters.....	1,500 "
Mattawan.....	200 "
Amable du Fond.....	100 "
Dumoulin.....	800 "
Petewawa.....	500 "
Bonnechere.....	100 "
Madawaska.....	800 "
Black.....	300 "
Coulogne.....	1,000 "
Gatineau.....	500 "
Lievre and Rouge.....	500 "

Total..... 9,600 millions.

The annual cut is not likely to be much less than 800 millions. That means a supply of good sized logs for twelve years. Unless our young pine is protected, therefore, where is the future supply to come from?

True, the Ontario government has still considerable pine in the northern part of the province, but have they enough to supply many years cutting?

Among the pioneers of the lumber trade on the Coulogne may be mentioned: John Osborne (succeeded by the Gillies Bros.), the Brysons, Alex. Fraser and Perley & Pattee.

Those principally interested now are J. R. Booth, Gillies Bros., Bryson & Fraser, W. C. Edwards & Co., Fraser & Co., McLachlin Bros., Alex. Barnet, the Eddy Co., and McLaurin & MacLaren.

Engineers sometimes blow down their boilers while the engine is running. In such a case the feed pump should be stopped, for otherwise a portion of the capacity of blow-off pipe will be used to convey fresh water away, thus reducing the rapid flow from the boiler, which is desirable for good effects.

what the mill owners thought insufficient reasons. To remedy this, for what they claim is their own protection the Ottawa mill owners have formed the aforesaid association or board. A uniform system of culling will be adopted, and should the buyer complain of receiving lumber inferior to that of the particular class being bought, the matter will be dealt with and decided on by two or more members of the board. They will inspect the lumber in dispute and decide the merits of the buyer's and seller's contentions. Their ruling will be final. The association will both arbitrate between buyer and seller and facilitate the business. With American



SCENES ON THE UPPER COULOGNE.—A LUMBER HEADQUARTERS' DEPOT.

shipments the local dealers state they have little trouble, but on the English market, where the highest grades are accepted, the reverse is the case.

Messrs. James and R. J. Davidson, of the firm of Davidson & Thackery, have again both been nominated for positions at the Ottawa council board. Both brothers sat in the council last year, and their prospects of reelection are good.

Steps are being taken to establish the Ottawa Saw Works in Hull. The promoters of this established industry find the present premises too small to accommo-

parently useless product of the saw mill. Under Mr. Booth's orders experiments have been conducted for some time, and the lumber king and chemists interested are now fully satisfied that their theories are correct and that valuable by-products can be obtained. The processes are of course secret, but it is understood that the saw dust is first burned in retorts, and the smoke driven off confined, and from it the acids and oils are obtained. Carbon, it is expected, can also be secured as well as oil of tar, etc.

OTTAWA, December 27th, 1899.

THE FOREST WEALTH OF SIAM.

In a little booklet issued by the Philadelphia Commercial Museum, we find the following reference to the teak forests of Siam and the methods of lumbering: The teak forests of Siam are of immense extent. They are situated in the north, and the most productive region at pre-

IMPORTANT JUDGMENT AFFECTING BUSH FIRES.

Mr. Aubrey White, Deputy Commissioner of Crown Lands, as referee appointed by the high courts to decide a claim by O'Neil & Ferguson, railway contractors, against the St. Anthony Lumber Co., has given an

PERSONAL.

Mr. W. N. McEachren, lumber merchant, of Toronto, was a candidate for school trustee at the recent election in Toronto.

Mrs. Hurdman, wife of Mr. Robert Hurdman, lumberman, of Ottawa, died in that city on December 3rd, from an attack of paralysis.

We are pleased to learn that Mr. E. W. Rathbun, president of the Rathbun Company, Deseronto, Ont., who has been indisposed for some time, is now on the road to recovery.

Mr. E. Stewart, chief of the Timber and Forestry Department of the Dominion Government, has recently returned from attending the annual meeting of the American Forestry Association at Washington.

Mr. C. M. Becker, of the British Columbia Mills, Timber & Trading Co., Vancouver, left on December 6th for China. It is understood that he will tender for the supply of timber for the construction of the Tientsin railway.

MONTREAL LUMBER SHIPMENTS.

The lumber exported by the principal shippers to the United Kingdom from Montreal, during the seasons of 1898 and 1899, was as follows:

	1898.	1899.
Watson & Todd.....	44,819,842	55,779,706
Dobell, Beckett & Co... 76,924,116	53,421,275	
W. & J. Sharples.....	62,488,502	52,180,549
R. Cox & Co.....	39,626,140	35,732,949
J. Burstall & Co.....	30,802,571	26,887,315
McArthur Bros.....	35,395,533	24,368,952

These figures show a decrease for the season of 1899 of 41,885,958 feet, as compared with 1898. Five of the above shippers decreased their shipments against 1898 by some thirty million feet. The firm of Watson & Todd, however, increased their shipments over eleven million feet. It is understood that the past season has proved to be one of the healthiest in the trade for many years.

TO NON-SUBSCRIBERS.

This issue of the CANADA LUMBERMAN will be received by a number of persons interested in the lumber business, who are not regular subscribers, it being the aim of



SCENES ON THE UPPER COULOGNE.—A DRIVING CAMP—SECOND LUNCH.

sent may be included in a circle, which, drawn round Chengmai and Phree, encompasses all the head waters of the Meping, Mewang (Lakon river) and Meyom. The right bank of the Meping, from the Melayan down to the Klong Kong below Kampeng, is also a very productive district. Both sides of the range of hills here are scattered over with teak forests, the timber on the west side being floated down the streams to the Thougyengh and thence into the Salween, and that on the east side into the Meping, and finally to Bangkok.

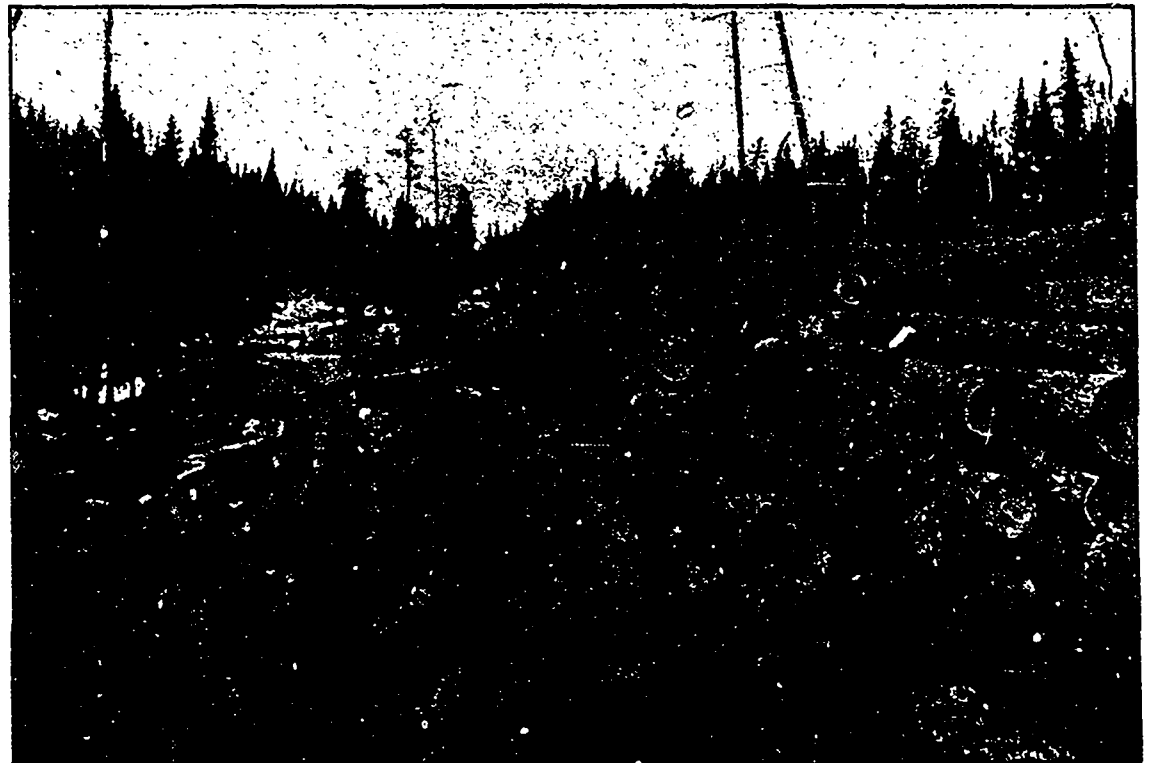
The lessees of by far the largest proportion of the forests in Siam are Burmans; a few forests are leased by Siamese and a small one by a Dutchman; but practically nearly the whole of the extensive teak forests of Siam are in the hands of British subjects, either by virtue of original leases or by an arrangement for working which is almost equivalent to handing over a lease.

An important item in the carrying on of the teak industry is the cost of elephants, which do all the dragging and arranging of the logs. The best elephants in the teak forests of Siam cost from 2500 rs. to 3000 rs. (\$550 to \$650), ordinary elephants 1000 rs. (\$200), and as many as fifty or upwards are required in some forests.

To estimate the amount of capital which lies locked up in the teak forests is a matter of some difficulty, as it is of course impossible to ascertain the capital of each individual firm. But, roughly speaking, it can be calculated from the production. The average production of full-sized marketable logs, i. e., logs over 5 kam (21 1/4 inches) in semi-girth, may be put down at say 60,000 and valued at 35 ticals a log, which makes a total of 2,100,000 ticals (\$630,000). A period of four years on an average elapses in the teak trade before any turnover is made; that is, capital invested now will not be realized on till four years hence, when the timber is actually in the market. Therefore, multiplying 2,100,000 ticals by 4, we arrive at 8,400,000 ticals (\$2,520,000), which is necessary to work out the logs which are brought down to the Bangkok market.

Taking the average of the timber that floats into the Salween from Siamese forests at 40,000 logs, which is, if any, below the mark, we arrive at another sum of 5,000,000 ticals (\$1,680,000). This sum, with the Bangkok capital, represents about \$4,200,000 invested in the teak forests of Siam, by far the largest proportion of which is British.

important decision of interest to lumbermen. The contractors were constructing a section of the Parry Sound railway when a fire broke out in the St. Anthony Co.'s limits near Whitney. At the request of the Ontario bush rangers the railway men fought the fire, about 200 men being engaged on and off for a week. The contractors asked the lumber company to pay the actual wages of the men



SCENES ON THE UPPER COULOGNE.—A LOG DUMP.

for the time so employed. The request was refused on the ground that the railway contributed to the fire, and that the bush rangers were not agents of the company.

There was a great bulk of evidence, and judgment was given against the St. Anthony Lumber Company for \$653. Mr. White found that the rangers have power to call for assistance in the event of fire at the expense of the lessees.

the publishers that every lumberman in Canada should be come acquainted with the paper. Those who are not subscribers are asked to peruse this number carefully, when we feel satisfied they will commence the new year by investing the sum of one dollar in a subscription. For this they will receive both the weekly and monthly editions. Send in your name to-day.

HISTORICAL OF THE LUMBER TRADE.

TWENTY years ago the CANADA LUMBERMAN made its bow to the lumber trade of this Dominion—a new venture, but relying for its support on a class of business men of whom generosity is a characteristic trait.

contributions of trustworthy correspondents, trade circulars etc., will be freely used, to give our readers the best, the earliest, and the most reliable information that can be obtained, concerning the important branch of business to which this journal will be especially devoted;

In short, it will be our endeavor to make the LUMBERMAN worthy of its title in every respect; and, while giving special attention to the great staple industry to which it is devoted, it will also furnish a carefully selected amount of general reading that will make it a welcome visitor in every family.

Advertisers, especially those dealing in mill, mining, and lumbering supplies and machinery, will find the LUMBERMAN a very favorable

the amount of space devoted to the forestry question and to the advocacy of a proper system of reforestation. Twenty years ago the necessity of taking steps in the direction of perpetuating our forests seems to have been as fully recognized as it is to-day, and it must be admitted that in the intervening period very little has been accomplished.

The Commissioner of Crown Lands for Ontario, in his report for 1879, shows the quantity of square pine taken out in the ten years from 1868 to 1877 to be 119,254,441 cubic feet. He estimates that the waste is equal to one-third of the total, namely 39,750,140 cubic feet, or round numbers 477 million feet, which, valued at \$7.50 per thousand, represents a loss to the province of \$3,577,500.

A sale of Quebec timber lands was held on October 15th, 1880, at which \$280,000 was realized. Among the purchasers were W. C. Edwards, James Connolly, Fitch and S. Lynch.

Wm. Quinn, supervisor of cullers at Quebec, gave the following statement of timber, etc., measured and culled at that port up to October 22nd for the three years 1877, 1878 and 1879:

Table with 4 columns: Timber Type, 1878, 1879, 1880. Rows include Wancy white pine, White pine, Red pine, Oak, Elm, Ash, Basswood, Butternut, Tamarac, Birch and maple, Masts and bowsprits, Spars.

In the issue of October 30, 1880, under the heading of "A New and Valuable Invention," it is stated that Finlay Ross, of Byng Inlet, Ont., has invented and patented a gang of circular saws which will probably supersede the ordinary stock gangs of upright saws.



SCENES ON THE UPPER COULONGE—A RAFT ON ITS WAY DOWN THE OTTAWA.

associated with the lumbering industry, as gleaned from early numbers of the journal. This latter feature will serve to recall to the older members of the trade incidents which Father Time has well nigh blotted out, while to the younger members it may perhaps prove both interesting and instructive.

We reproduce on opposite page, to a somewhat smaller scale, the original heading of THE LUMBERMAN. It was first published as a semi-monthly journal, at the subscription price of two dollars per year, by A. Begg, of Toronto, whose introductory read as follows:

INTRODUCTORY.

In bringing before the public a new journal specially devoted to lumbering interests, and incidentally to milling, manufacturing and mining, as being kindred forms of development of the national industry, there is little apology needed.

It is for this reason that specialists in Journalism have in many cases achieved such remarkable success. Not to speak of the religious journals, whose existence depends on the zeal of the sects, there are others, such as the Bullionist, the Scientific American, the Grocer, &c., that represent special interests in trade and science, and they all receive a more or less generous support, from their own class—from those who are interested in the specialties they represent.

Though much attention has been given to the lumbering interests by the press of Canada, yet it is felt that a special organ, which would concentrate the views of those who understand the business, and present them to the public in a way in which they could be fairly discussed, with a full comprehension of the value of the vast interests involved, would not merely serve those who are engaged in the trade, and their employees, but also the country at large.

It would be out of place in this "Introductory" to enter into details as to the vast resources of Canada as a timber producing country. It has not unfrequently been sneered at as a "wooden country," and the taunt is neither without foundation, nor is it one to be ashamed of.

But we are not ignorant of the great responsibility of starting this journal. Devoted as it is to a special class of operators, it must mainly look to them for support. It has not the whole of the reading community to appeal to directly, and hence must depend for success on the earnest and liberal support of those in whose interest it is published.

medium of reaching their customers, as it will circulate among these classes, and receive more attention from them than they have the time or inclination to bestow on a general newspaper.

In March, 1881, THE LUMBERMAN was purchased by Toker & Company, of Peterboro', to which place the office of publication was removed. Toker & Company continued its publication twice a month until October, 1886, when it was purchased by A. G. Mortimer. It was then changed to a monthly publication and the subscription price reduced to one dollar per year.



SCENES ON THE UPPER COULONGE—IMPROVEMENTS ON A CREEK. (In the early days less of this was done than at present, now the tendency is to shorten the haul by improving the streams.)

spring of 1894 Mr. Mortimer disposed of the journal to the present owners, who, on January 1, 1895, commenced the publication of a weekly intermediate edition, the subscription price, however, remaining at the sum of one dollar per year.

The character of the journal in late years is so well-known as to make any comment superfluous. Glancing at the early numbers, one is immediately impressed with

Mills on the Georgian Bay in 1880 were those of the Coltingwood Lumber Company, incorporated about 1871 at the instance of Hon. Mr. Dodge, of New York, and others under the management of Mr. D. G. Cooper; Georgian Bay Lumber Co., including the Waubaushene and Severn mills, under the management of T. W. Buck; the Parr Sound Lumber Co., managed by J. C. Miller; and the Magnetawan Lumber Co., under the management of Mr.

H. Buck. These mills were incorporated as one concern under the general supervision of Mr. T. W. Buck, of Waubausiene.

Issues of THE LUMBERMAN in the year 1880 contain the advertisements of the Waterous Company, Branford, Ont., Wm. Hamilton Mfg. Co., Peterboro'; F. E. Dixon Co., leather belting, Toronto; and J. Neill & Sons, saw mill machinery, foot of Esplanade street, Toronto.

In 1880 the principal firms carrying on lumbering operations on the Gatineau were Hamilton Bros., Gilmore & Co., and G. B. Hall & Co. Of these three firms only Gilmour & Co. are doing business to-day.

The annual report of Hon. Mr. Adams, surveyor-general of New Brunswick, for the year 1879 names 175 firms as operating in spruce and pine, of which the largest were Adams & Co., Cushing & Clark, J. S. Farley, A. Gibson, G. C. King, Wm. Muirhead, Geo. McLeod, J. B. Snowball, J. D. Ritchie & Co., Stephenson & McGibbon, P. R. Whit- and John Young.

In the season of 1880 the cut of lumber in the Ottawa valley was as follows: E. B. Eddy, 40,000,000 feet; Cronson & Weston, 37,000,000 feet; Perley & Pattee, 20,000,000; J. R. Booth, 30,000,000; Gilmour & Co., 20,000,000; Sherman, Lord & Co., 25,000,000; Capt. Young, 13,000,000; McLaren & Co., 15,000,000; McLeimon & Co., 10,000,000.

J. Bell Forsyth & Co.'s wood circular for 1880 gives the following list of timber coves at Quebec, together with the names of the owners: Jacques Cartier Mills—L. Sewell. Alexandria—J. Bell Forsyth & Co. Cap Rouge—P. & W. Comy. Dalhousie—Forsyth & Dalkin. Victoria—M. Rockett. Ring's End—E. H. Jackson.

Moore; Hugh Sutherland; Stephen H. Fowler; Dick & Banning; Patrick Kelly; and Pratt & Smith, few of whom are now connected with lumbering operations.

The Quebec government, in December, 1880, put in effect new timber regulations, reducing the fee charged on each transfer of timber limits from \$4 to \$1 per mile, and increasing the stumpage dues on pine saw logs from 15 cents to 26 cents on large logs and from 10 cents to 12½ cents on small logs. The lumbermen, in a body, objected to the increase in dues, and pointed out that in Ontario the dues were 75 cents per thousand, while the new tariff in Quebec would be equal to about \$1.50. No immediate action, however, was taken by the government.

In the CANADA LUMBERMAN of April 15th, 1881, the formation of a lumbermen's association in Ontario was advocated.

A description of the process of making pulp from wood appears in THE LUMBERMAN of May 16th, 1881. This issue also contains an account of the sale of the Cook & Wadwell timber limits on the Chippewa river. Mr. I. B. Tackaberry was the auctioneer. Sixty-eight square miles were sold to S. S. Cook for \$88,400, or \$1,300 per square mile, fifty miles to Gilmour & Co. for \$40,000, another fifty miles to same parties for \$32,500, and thirty-eight miles to E. B. Eddy for \$6,460.

Theodore W. Buck, manager of the Georgian Bay Lumber Co.'s business at Waubausiene, Severn River, and Magnetawan, died in May, 1881. He was succeeded by G. S. Peckham.

A company is about to be organized to utilize the saw-dust produced by the different saw mills throughout the province of Nova Scotia by turning it into pulp, out of

Wm. Quinn, Supervisor of Cutlers at Quebec, died early in August, 1881.

A large sale of timber limits in the Muskoka and Parry Sound districts was held by the Ontario government on December 6, 1881, under the direction of Hon. Mr. Pardee, Commissioner of Crown Lands. The auctioneer was C. D. Cowper, of the Crown Lands Department. The limits aggregated 1,411 square miles, of which 1,281 miles were sold for a total of \$717,176, or an average of \$560 per square mile. The highest price paid was \$2,500 per mile for berth 2 in the township of McConkey, by J. M. Masten. Among the purchasers were I. G. Blackstock, Cook Bros., Mossom Boyd, A. Hill, McArthur Bros., H. H. Cook, T. Murray, M.P.P., R. Thompson, J. R. Booth, T. Mackay, J. L. Burton, M. Brennan, R. Gaffrey, and D. Moore.

We learn that C. H. Edwards, lumber dealer, has been shipping several car loads of dressed lumber from Toronto to Winnipeg. April 1, 1882.

Rose & Co., of Quebec, are shipping board timber from Michigan to St. Ignace, Que., the ultimate point of destination being the European market. It is said that they will ship about \$1,000,000 worth of board timber this season. May 1, 1882.

The Lumberman's Gazette, of Bay City, Mich., in June, 1882, comments on the rapid exhaustion of the Michigan pine timber and refers to the possibility of obtaining a supply for the mills from the Georgian Bay district. This, it states, could only be accomplished by water transportation and the adoption of some method by which the logs could be towed in large rafts.

Thos. Moore, in THE LUMBERMAN of July 1, 1882, advocates the building of pole roads for lumbering operations instead of iron tramways. He estimated that a good pole road could be built for \$120 per mile, and planked with slabs and covered with saw-dust for \$50 additional.

A noteworthy feature of Chicago trade is the shipment of 75 cars of lumber to Manitoba. Mr. Getchell, of Getchell, Armour & Co., is entitled to the credit of working up this trade. The lumber forwarded was all dry stuff.—August 1, 1882.

On September 20th, 1882, a meeting of prominent men was held in the city of Montreal for the purpose of considering the formation of a Canadian association for the promulgation and protection of forests. The speakers included James Little, convener of the meeting, Hon. Mr. Joly, Hon. Mr. Lynch, Dr. H. Howard, Hon. Mr. Perraault, Hon. J. K. Ward, Henry Lyman, Dr. Alloway and W. Drysdale. It was decided to organize "The Canadian Forestry Association of the Province of Quebec," a committee for the purpose being appointed.

An account is given in October, 1883, of a large raft of logs which was taken from St. John, N.B., to New York. The raft was 1,200 feet long, 24 feet wide, and 12 feet deep, and comprised 11 sections, each of which contained 500 logs. The distance which they were towed was 650 miles. Severe weather was encountered and a vessel was sent to the rescue of the supposed lost raft. The arrival of the raft in New York occasioned great interest among shippers, it being the first undertaking of the kind attempted.

Hon. James Skead, a pioneer and prominent lumberman of the Ottawa valley, died in July, 1884. He was a director of the Ottawa Association of Lumber Manufacturers and of the Madawaska River Improvement Company.

On July 1st, 1884, an International Forestry Exhibition was opened at Edinburgh, Scotland. The late Edward Jack represented the New Brunswick government and the New Brunswick Land & Lumber Company, and made an exhibit of pine, spruce and hardwoods.

James Conmee has purchased the mill and lumber business of Thos. Marks at Fort William. It is rumored that he is also about to secure the mill of the Algoma Lumber Company, situated on the Kaministiquia. July, 1885.

In August, 1885, Hon. Mr. Costigan introduced a bill in the Dominion parliament to amend the act relating to the culling of timber in the provinces of Ontario and Quebec.

McBeth Bros & Co., of Craighurst, Ont., have purchased an extensive timber limit in the vicinity of Huntsville, and intend taking out board timber for the Quebec market.—September, 1885.

At the annual meeting of the American Forestry Congress, September, 1885, Hon. H. G. Joly, ex-premier of Quebec, was elected vice-president.

The Ontario government held an auction sale of timber limits on December 15th, 1887, at which \$1,312,712.50 were realized. The buyers included: Wm. Murray, Pembroke, T. H. McAt, Pembroke, Albert Pack, Osceola, Mich.; Jos. Riopelle, Ottawa; Wm. Fraser, Westmeath; A. Barnett, Renfrew; Callahan & Montrose, Alpena, Mich.; N. Dymont, Barrie; Alex. McArthur, Toronto; J. Cockburn, Gravenhurst; Wm. Mackey, Ottawa; Longford Lumber Co., Longford Mills.



REPRODUCTION OF ORIGINAL HEADING OF THE CANADA LUMBERMAN—1880.

New London—O'Connell & Co. Union—M. Stevenson & Co. Sillery—R. R. Dobell & Co., Safety & Bridgewater, Sharples, Bros. & Co., James Bowen. Pointe a Pizeau—R. R. Dobell & Co. St. Michael's—Cook Bros. & Co. Woodfield Harbour—S. Connolly. Spencer—Knight Bros. & Co. Wolfe's—John Roche. Cape and L'Anceles Meres—George Robinson. Stadacona—J. & W. D. Brown. St. Charles—John Home. New Waterford—A. F. A. Knight & Co. Montmorency Mills—G. B. Hall & Co. St. Nicholas Mills—W. G. Ross & Son. Chaudiere Basin—J. Breakey. North Liverpool—Ritchie Bros., Benson Bros., Hamilton Bros. Etchemin—H. Atkinson & Co. Hadlow West—G. B. Symes Young. Mill Cove—S. J. Bennett. Hadlow—Price Bros. Co. St. Lawrence—W. Dock & W. Co. Windsor—G. B. Symes Young. South Quebec—Warehouse Co. Indian Cove—A. Gilmour & Co., James Patton & Co., J. McLaren & Co.

The quantity of logs to be taken out in the Muskoka and Parry Sound districts during the winter of 1880-81 was estimated as follows: Georgian Bay Lumber Co., 20,000,000 feet; British Canadian Lumber & Timber Co., 16,000,000; T. Smith & Sons, 15,000,000; Rich Power, 2,000,000; Muskoka Mill & Lumber Co., 12,000,000; C. Miller, 15,000,000; Ontario Bank, 9,000,000; J. Thompson, 12,000,000; Dominion Bank, 6,000,000; Toronto Lumber Co., 7,000,000; Wm. Tait, 5,000,000; Meikle, 4,000,000; J. M. Dollar, 4,000,000; Cockburn Sons, 4,000,000; Woodstock Lumber Co., 5,000,000; W. Taylor, 11,000,000; Wm. Bee, 3,000,000; S. S. Cook, 1,000,000; J. H. Hull, 2,000,000; A. Marshall, 1,000,000; B. Colwell, 3,000,000; G. Chase & Co., 1,500,000; other manufacturers, 10,000,000; total, 258,500,000.

A statement of timber limits granted in the North-West and Keewatin up to 1881 contains such names as: Richard Fuller & Co.; Macauley, Ginty & Sprague; Capt. H. S.

which paper is to be manufactured. The headquarters of the company will be at Bridgewater. June 1, 1881.

Gilmour & Co.'s saw mill at Trenton, Ont., built in 1852, was wiped out by fire on May 18, 1881, but was rebuilt in the same year.

John Thompson, manager of the Longford Lumber Co. at Longford, Ont., died on June 5th, 1881. Mr. Thompson was one of the first subscribers to THE LUMBERMAN.

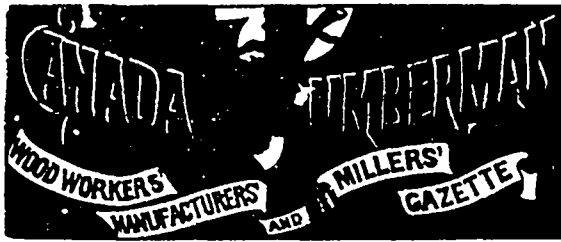
On May 22nd, 1881, 30,000,000 feet of logs became jammed in the Miramichi river, causing one of the largest jams that has ever been known.

In the spring of 1881 the demand for coarse lumber exceeded anything that had been previously known in the trade. It was difficult to purchase mill culls, dry or green, and shingles and lath were scarce. The conditions, it will be observed, are much the same as those existing in the trade at the present time.

E. B. Eddy, of Hull, adopted the electric light in his factories in the summer of 1881. Upon the opening of the building it was crowded with visitors, and the event was freely commented upon by the local press. The Northwestern Lumberman, about that time, in a leading article, draws attention to the possibilities of electricity as a means of illuminating saw mills.

The Canadian Lumber Co., of Midland, was organized in 1879, with a capital of \$1,000,000, under the presidency of H. H. Cook, now of the Ontario Lumber Co.

The Midland & North Shore Lumbering & General Manufacturing Co. commenced its existence in August, 1881, the directors being Dalton Ulyott, of Peterboro', Malcolm McDougall, of Parry Harbor; R. C. Smith, of Port Hope; J. A. Barron, of Lindsay; A. P. Pousette and C. A. Cox, of Peterboro'; J. H. Beatty, of Thorold; and Hon. T. M. Gibbs, of Oshawa. The capital stock was \$750,000, and the head office was in Lindsay, Ont.



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ADVERTISING RATES FURNISHED ON APPLICATION

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

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

Special correspondents in localities of importance present an accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome, but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way affecting it. Even when we may not be able to agree with the 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 25 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

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

1880-1900.

THE first of the above numbers represents the year in which the CANADA LUMBERMAN was introduced to the lumber trade of the Dominion. The initial issue of the journal was somewhat unpretentious in character, although perhaps comparing favorably with other trade papers of twenty years ago.

During the intervening years the methods of lumbering have changed, year by year improvements have been introduced, until to-day the saw mill of 1880 would be considered of an antiquated character indeed.

Of the many improvements in saw mill equipment recorded in THE LUMBERMAN, and which were tardily adopted while in their experimental stage, but quickly applied after their success had been demonstrated, the most important, in our opinion, was the double acting band mill, introduced in Canada for the first time in the year just closed. This innovation may be said to have passed beyond the experimental stage, and it is certain to form a feature of the equipment of large mills containing band saws which may be built in the future. This is as it should be. Why should not the saw cut on the backward as well as on the forward run?

While aiming to chronicle interesting events

affecting the important industry which it represents, this journal has also striven to so adjust itself to changed conditions as to be of the greatest value and usefulness to the trade. With the expansion of our export trade, it was felt by the publishers that a more frequent means of communication between the manufacturers and buyers of lumber was a necessity. Hence the weekly edition was established five years ago. More recently the publication of export numbers has been undertaken, in view of the manifest desire on the part of foreign importers for information regarding our timber products and manufacturing capabilities.

The CANADA LUMBERMAN is now cosmopolitan in character, with readers in nearly every civilized country in the world. The number of foreign subscribers added to our list during the past year is very gratifying. There is also ample evidence that the journal is appreciated by the lumbermen of the Dominion and by the manufacturers of lumbering appliances.

We refrain from promises regarding the future. It will, however, be our aim to further increase the value of this journal to its readers, and we hope to enter the new century with the names of almost every lumberman in Canada on our subscription list.

To our readers we extend New Year Greetings, and the wish that the era of prosperity which now characterizes the lumber trade may long continue.

MASS MEETING OF LUMBERMEN.

THE first mass meeting of lumber manufacturers of the United States was held in the city of St. Louis last month. The meeting is regarded as one of the most important events that has ever taken place in connection with the trade. A portion of the proceedings have a common interest for both United States and Canadian lumbermen.

Reports were submitted covering all sections of the country and all classes of lumber, showing the stocks on hand late last fall in comparison with the stocks of one year ago. The great scarcity of low grade lumber was a remarkable feature of these reports. While low grade stock is entirely cleaned out, stocks of the upper grades are about an average. The secretary of the Mississippi Valley Lumbermen's Association reported that returns from 68 concerns showed a total shortage of 334,477,000 feet of pine lumber on December 1 last, as compared with one year ago. In the territory covered by the Mississippi Valley and Wisconsin Valley Associations, it was estimated that the shortage was 506,000,000 feet. The shortage in yellow pine, as reported by the Southern Lumber Manufacturers' Association, was given as 337,000,000 feet. The reports covering the hemlock field were rather incomplete, but corresponded in character to those already given. In Canada the situation is much the same as in the United States.

These conditions have been brought about by an increased demand from manufacturing establishments rather than by the farmer's trade, which is an important factor in the lumber

business. While there has been a wonderful expansion in city trade, the demand for lumber from the farmer has not undergone a corresponding improvement.

Much time was devoted at the convention to the discussion of a tariff resolution memorializing the American Commissioners of the United States and the British Joint High Commission not to remove the present duty on lumber or to reduce such duties beyond the proposed twenty per cent. reduction agreed to by the representatives of the American lumbermen at Washington in January, 1899. A statement was presented from the treasury department at Washington showing the imports of Canadian lumber for the fiscal years ending June 30 from 1888 to 1899. Our readers are familiar with these figures, excepting, perhaps, those covering the latter year. For the year ending June 30, 1899, the imports were 423,000,000 feet, while for the previous year they were 353,000,000 feet. But for the few months since July, 1899, the imports have been 324,000,000 feet, as compared with 148,000,000 feet for the corresponding months of 1898. The reason for this increase is shown in the following table of lumber values for the two years:

	1898	1899
July.....	\$9.78	\$9.85
August.....	\$10.03	\$10.31
September.....	\$9.60	\$10.75
October.....	\$10.00	\$11.10

These values are taken from the official report, but notwithstanding this, we believe they underestimate both the value of the lumber per thousand feet and the increase in value which took place during the year.

In discussing the tariff resolution, some of the speakers seemed to attribute the present prosperity in the lumber trade of the United States to the import duty on the Canadian product, while others took a more rational view and admitted that the importation of a few hundred million feet from Canada into a country producing several billion feet annually could have but little effect upon the market.

A COMMENDABLE TIMBER POLICY.

STEP by step the Ontario government is adopting a timber policy which will eventually accomplish two desirable objects—first, the establishment of extensive saw milling and wood working plants within the confines of the province; and, second, the perpetuation of a timber supply necessary for the existence of such plants. The adoption of the manufacturing clause was the first step in this direction. The legislation has been upheld by the lower courts and by such a clear and decisive judgment that even should an appeal be taken to the Imperial Privy Council, no fear of a reverse decision is entertained. But granting that this legislation should be declared void, it is certain that some other means the exportation of logs from the province will be prevented.

Michigan lumbermen holding limits in the Georgian Bay district are again operating this winter. They will either erect new mills or contract to have their logs sawn at existing mills adjacent to the limits. In either case the great benefit to the province, in comparison with the logs being exported, is apparent.

The second step in the direction above referred to was taken by the Department of Crown Lands in connection with the sale of timber

mits held on the 20th ultimo. The conditions governing the sale of the limits contained the following clause: "The said timber berths will be sold subject to the further condition that no license for the cutting and removal of pine trees shall issue after the expiration of ten years from the 30th of April next, and that all pine trees remaining on the limits after the expiration of ten years from the 30th of April next shall be the property of the Crown." This is the first instance in which a clause of this character has been embodied in the regulations governing the sale of timber limits. It is one of paramount importance to the province and to the public, particularly in view of its relation to the forestry problem.

Heretofore the licensee of a timber limit could, by paying the annual ground rent, maintain the limit in his control for an indefinite period. In some instances the limits have been purchased entirely for speculative purposes, the licensee paying the ground rent and renewing his license each year, relying for his returns upon the growth of the young timber on the limit. This prevented the government from applying any system of reforestation to the property. In other cases lumbermen have taken off the most valuable timber, but still retained possession of the limit, without, however, adopting the necessary precautions against fire. As a result the young timber has frequently been destroyed.

Under the new regulation the land will revert back to the government at the expiration of the ten years lease, when, it is only reasonable to expect, all the timber of value will have been cut off. The government will then protect the young timber from fire by employing the necessary fire rangers. In this way, the timber supply will be perpetuated. This new condition will also, we believe, have a tendency to reduce the quantity of timber offered to the public by the government, as in order to realize the full value of the timber, the quantity sold to be taken off the land within ten years will have to bear some relation to the demand for timber products during that time.

There is little doubt but that this provision will be embodied in all future licenses for the cutting of timber on Crown lands. So far, then, as timber lands sold heretofore are concerned, the government will be placed in a position to apply a practical system of forestry. The next question to be considered, therefore, is the perpetuation of the supply on Crown lands sold previous to the adoption of the ten-year clause in the regulations. A partial solution of this question might be found by putting into effect the recommendations made by the Ontario Forestry Commission in their preliminary report presented to the legislature in the spring of 1898. Clauses 3 and 4 of the recommendations read as follows:

"3. That for all unworked limits on which the ground rent shall be two years in default on the termination of the present license year, the license shall not be renewed, but that the berths held by the Crown as forest reserve."

"4. That license holders be not allowed to cut any trees or logs smaller than will measure 12 inches across the stump two feet from the ground, unless under special forest conditions, with the sanction and under the supervision of the district forest ranger."

It must be gratifying to the members of this commission that the government have taken a

step in advance of the recommendations. In their final report which will be laid before the House at the forthcoming session, a line of policy will no doubt be outlined which will greatly assist the government in their further work of reforestation.

EDITORIAL NOTES.

In this issue will be found an article contributed by one of our readers outlining a method of piling clear red pine so as to prevent staining. This is a problem to which much consideration has been given, and the publishers are indebted to the writer for discussing the question in our columns. It is our wish that other readers also should submit their views, and that THE LUMBERMAN may become a means by which those actively engaged around saw mills may learn of the methods and experiences of others and profit thereby. Contributions on practical subjects are solicited.

BRITISH importers of wood goods from Canada complain that inconvenience as well as expense is sometimes caused owing to the vessels from the St. Lawrence arriving at destination before their papers. It is difficult to understand why this should be the case, as mail steamers almost invariably make greater speed than freight vessels. There is a possibility that the papers are not always dispatched with promptness, and it so, we would suggest that shippers give this matter the attention necessary to avoid further complaints. But a more certain remedy would be the inauguration by the Dominion government of a fast steamship mail service.

WEST INDIA ISLANDS.

Writing to the CANADA LUMBERMAN from Grand Turk, Turk Islands, West Indies, Mr. W. Stanley Jones says: "There are very few merchants dealing in lumber in this small place, the principal being Messrs. Frith Brothers, J. D. Murphy, and myself. The trade being small, it is not advisable to solicit consignments from your manufacturers. The small lots imported are always paid for as soon as received. The total quantity of white pine and spruce lumber imported last year (1898), was only 136,950 feet, of which 50,459 feet came from the United States and the balance from Nova Scotia and New Brunswick. From 1894 to 1898 (5 years) the whole quantity imported was 639,830 feet, an average of 127,966 feet annually. Of this quantity Nova Scotia and New Brunswick furnished 416,176, or about 65 per cent. You will see by these figures, which are correct, as they come from the blue book, that the business is small, as compared with other West India Islands."

Writing from St. Kitts, West Indies, Messrs. S. L. Horsford & Co. say:

"The lumber in this Island has fallen off very considerably during the last few years. Formerly there was a large demand for spruce boards for heads of sugar hogsheads, but bags having taken the place of the latter, there is now very little enquiry for this description of lumber. For building purposes, preference is given to New York white pine shipping boards, though possibly a good deal of what is shipped as such is really Canadian lumber. The ordinary Nova Scotia white pine, however, which in former years was almost exclusively used for building as well as for heads of molasses puncheons, is not now enquired for, and when imported is neglected in favour of the so-called Albany boards shipped from New York. In the matter of scantling, yellow pine from Florida is still exclusively used for framing. There is no enquiry for spruce scantling or deals.

"On the other hand, there is a growing demand for spruce and cedar laying shingles, in bundles of 250, a large quantity of these having recently been required owing to the damage to the labourers' houses by the late hurricanes, and there is nearly always a fair sale for them."

MAPLE BLOCKS WANTED.

Mr. John Mitchell, of Liverpool, England, has been in Canada recently purchasing maple blocks. These maple blocks, which are about 26 inches long and 6½ inches through, are used in England for the making of rollers for wringing machines. These machines are manufactured of iron, with wooden rollers two to each machine, and as some 350,000 are manufactured yearly in England, there are required 700,000 rollers. Formerly sycamore was the wood used as rollers, but this becoming scarce in England, as an experiment Canadian hard maple was tried and it proved a success.

Canada does not, of course, supply all the maple required, as there is considerable export from the United States. Much of the wood that is sent from Canada, however, is secured in three counties—Huron, Bruce and Grey—as they seem to produce just the class of hard maple that is suitable. We understand that there is also a large quantity of hard maple in the province of Quebec, particularly in the Eastern Townships, which abound in all kinds of hardwoods. The rollers require the choicest hard maple, and according to Mr. Mitchell, the demand for these blocks has resulted in an advance in the price of maple, in some instances from \$10 to \$12 per thousand having been paid for the logs.

THE LIVERPOOL STAVE MARKET.

A correspondent furnishes to Barrel and Box the following answers to questions asked concerning the stave market at Liverpool, Eng.:

Query No. 1—Estimate the value of staves used in this market at from £250,000 to £300,000 per annum. It would be difficult to give an approximate estimate of the number of staves used, as a portion of those imported are sold on the basis of St. Petersburg standard of 165 cubic feet, while others are sold in bundles called shooks, each shook containing the sufficient quantity to make a cask, and others again are sold per mille of 1,200 pieces.

Query No. 2—The kind of staves in greatest demand are made from oak, elm and fir timber.

Query No. 3—Oak staves are largely imported from the United States, Russia and Austria; elm staves from Canada; fir staves from Norway and Sweden. The cost to consumers of oak staves is from £10 to £25 per mille of 1,200 pieces, according to size and quality and point of production; elm from £1-10s to £2-10s per mille of 1,200 pieces; fir from £6-10s to £7-10s per St. Petersburg standard of 165 cubic feet.

Query No. 4—The larger portion of oak staves used in this market are preferred in their roughly rived state (not manufactured or dressed). Elm staves are used, manufactured and shaped in the same condition as used in the United States, and the fir staves roughly sawed, flat and square edges.

Query No. 5—Oak staves are used from 26 to 72-in. long, and varying in thickness from ½ to 3-in.; elm from 20 to 33-in. long, and varying of about the same dimensions as oak.

Query No. 6—Oak staves are preferred in thickness from ½ to ¾-in.; fir staves are required rived from timber reasonably free of defects, and which has been felled in the winter, or at a time when the sap is most inactive. Elm and fir staves should be cut from reasonably clear timber.

Query No. 7—Supplies of nearly all classes are at present about equal to the demand. An exception may be made in the case of elm staves, the scarcity of which is driving consumers to the use of fir staves for the time being.

Query No. 8—By far the larger percentage of oak staves used in this market comes from the United States of America.

As regards other information not called for by the above questions, it may be of interest to your government to know that the oak staves used in most English breweries are obtained from Russia, and at prices considerably in advance of those paid by other consumers for United States staves. The reason of this is that the Russian timber is said to be free of tannic acid (which affects the color and taste of the beer) than is the oak timber from the United States.

When the pointer of a steam engine vibrates violently, the cock in the pipe connection should be partially closed in order to prevent it, as such action will do the gauge no good, to say the least.

THE RECENT SALE OF TIMBER LIMITS.

The legislative chamber in the Parliament Buildings at Toronto proved inadequate to accommodate the large number of lumbermen who gathered there on December 20th, in response to the announcement of an auction sale of timber limits situated in the districts of Nipissing, Algoma and Rainy River. Lumbermen were there from all parts of the province, as well as from Michigan, the number probably reaching 150. Mr. Peter Ryan, the king of timber limit auctioneers, wielded the gavel, while on his right sat Hon. E. J. Davis, Commissioner of Crown Lands, and on his left Mr. Aubrey White, Assistant Commissioner.

Among the prominent lumbermen present we noticed the following: John Bertram, John Waldie, J. B. Miller, W. A. Charlton, M.P.P., Wm. Smith, H. H. Cook, E. L. Weller, Joseph Oliver, Geo. Cook, Geo. F. Marter, M.P.P., Toronto; E. C. Whitney, Alex. Fraser, R. Hurdman, Ottawa; Thos. Murray, T. Mackie, M. P., Geo. Gordon, J. W. Munro, Alex.



Peter Ryan

Gordon, Robt. Booth, R. Shannon, W. R. Russell, J. W. Munro, jr., Pembroke; Jas. McFayden, John Ferguson, A. Barnett, Rensfrew; A. Hill, Maurice Quinn, Saginaw, Mich.; Joseph Turner, J. W. Ritchie, B. W. Morgan, Bay City; S. O. Fisher, Alpena, Mich.; Peter McArthur, Detroit; J. H. Bishop, Wyandotte; N. Dymont, M. Burton, F. A. Lett, Barrie; C. Mickle, Gravenhurst; Mossom Boyd, Bobcaygeon; A. Sharples, W. Powers, Quebec; C. Beck, Dr. Spohn, Penetanguishene; W. J. Sheppard, Waubauskene; James Playfair, Midland; H. Brennan, Hamilton; John Conlon, Thos. Conlon, Thorold; D. G. Cooper, John Long, Thos. Long, W. T. Toner, Collingwood; H. L. Lovering, Coldwater; W. R. Beatty, M. P.P., Parry Sound; Angus McLeod, Geo. McCormack, M.P.P., Bracebridge; J. E. Murphy, Hepworth Station; H. L. Graves, Buffalo; Wm. Irwin, Peterboro; W. E. Bigwood, D. McDougall, Wahnapiatae; C. MacPherson, Orillia; D. M. Robertson, H. E. Kennedy, Wm. Margach, Rat Portage; F. Cochrane, T. M. Kirkwood, Sudbury; P. McDermott, South River; John Collins, S. A. Marks, Sault Ste. Marie; Hon. John Charlton, Lynedoch; T.

Charlton, Tonawanda; Geo. Cormack, Whitby; C. A. McCool, Geneva Lake; Jas. McBurney, Simcoe; John Loughrin, M.P.P., Mattawa; J. H. O'Leary, R. Sylvester, Lindsay; H. Cargill, M.P., Cargill; F. J. Gillespie, Uptergrove.

After a few introductory remarks as to the growing value of pine limits, the auctioneer read the terms and conditions of sale, which included a clause that after ten years the land and timber should revert back to the Crown. This is a new regulation.

In response to a question regarding mining locations, it was explained by the assistant commissioner that grants of mining lands had always included with them the right to cut the necessary timber required for mining purposes, and that the regulations of the sale did not differ in this respect from the conditions governing former sales.

From the beginning the bidding was brisk, and it was evident that the lumbermen were prepared to buy. Of the 398 1/4 miles offered, 360 miles were disposed of, realizing the total of \$723,550, or an average of almost \$2,010 per mile. For the berths in the Rainy River district the bidding was chiefly confined to H. H. Cook, Wm. Power, D. M. Robertson and H. W. Kennedy, the two latter, it is understood, representing the Rat Portage Lumber Co. For berth No. 4, in the township of Harty, the two chief contestants were H. L. Lovering, of Coldwater, and Thos. Mackie, of Pembroke, the latter being successful in securing the berth. The heaviest buyer of timber was Mr. Mackie. Although there were several Michigan lumbermen present, they did not, so far as is known, purchase any limits.

The complete result of the sale, as compiled from the departmental books, is as follows:

Locality.	Area in Square Miles.	Purchaser.	Bonus per Mile.
Bowell Township.....	7 1/2	F. Cochrane, Sudbury.....	\$4,100
Bowell.....	9	W. J. Sheppard, Waubauskene.....	1,000
Bowell.....	13 1/2	Dr. Spohn, Penetanguishene.....	100
Foy.....	36	Booth & Shannon, Pembroke.....	500
Harty.....	9	Victoria Harbor Lum. Co., Toronto.....	2,200
Harty.....	9	Victoria Harbor Lum. Co., Toronto.....	2,300
Harty.....	10	Thos. Mackie, Pembroke.....	3,600
Harty.....	10	Thos. Mackie, Pembroke.....	7,200
Lumsden.....	31	F. Cochrane, Sudbury.....	2,400
Ryan.....	28	John Collins, Sault St. Marie.....	675
Craig.....	40	Booth & Shannon.....	700
Moncreiff.....	2	T. M. Kirkwood, Sudbury.....	200
Davis.....	8	Geo. Gordon & Co. Pembroke.....	100
Norman.....	7	C. Beck, Penetanguishene.....	3,600
Norman.....	5 1/2	C. Beck, Penetanguishene.....	7,400
Norman.....	9	G. G. S. Lindsay, Toronto.....	8,500
Norman.....	9	H. H. Cook, Toronto.....	3,700
Capreol.....	9	Geo. Gordon & Co., Pembroke.....	5,000
Capreol.....	9	Holland & Emery Co., Wahnapiatae.....	4,400
Capreol.....	9 1/2	J. W. Munro & Son, Pembroke.....	6,600
Widdifield.....	4	P. McDermott, South River.....	2,300
Widdifield.....	6 1/2	T. W. Murray, Pembroke.....	1,400
Widdifield.....	5 1/2	H. H. Cook, Toronto.....	4,000
Widdifield.....	4	H. H. Cook, Toronto.....	2,000
McCampbell.....	1 1/2	H. W. Kennedy, Rat Portage.....	300
Pipestone Lake.....	3	D. M. Robertson, Rat Portage.....	800
Pipestone Lake.....	18	Wm. Power.....	400
Lake Rowan.....	7	Wm. Power.....	400
Pipestone Lake.....	5	H. W. Kennedy, Rat Portage.....	300
Pipestone Lake.....	12 1/2	D. M. Robertson, Rat Portage.....	60
Clearwater Lake.....	3	H. W. Kennedy, Rat Portage.....	250
Kingford.....	2 1/2	D. M. Robertson, Rat Portage.....	1,100
Pipestone Lake.....	8	Dr. Spohn, Penetanguishene.....	325
Long and Storm Lakes.....	3 1/2	Stewart & McLellan, Wabigoon.....	450

Berths G6 on Rainy Lake, G7 on Jack Fish Lake, and G11 east of pipestone Lake, were withdrawn.

CANADIAN FORESTRY EXHIBIT.

In addition to the list published in our December issue, the following have contributed material for the forestry exhibit at Paris: J. H. Still, St. Thomas, handles and whiffletrees; Hawkesbury Lumber Co., Hawkesbury, square timber and deals; W. C. Edwards Co., Ottawa, parquet flooring, and material for sashes and doors.

We learn from Mr. Macoun, who has charge of the exhibit, that the Canadian Commissioners have instructed him to prepare a weekly circular letter during the exposition, which will include the names and addresses of all who make enquiries about lumber and wood special-

ties. These circulars will be sent to all who have contributed to the forestry exhibit.

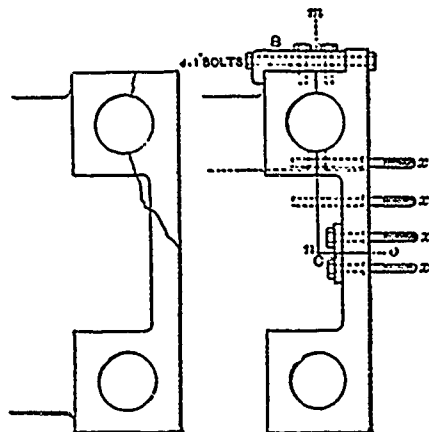
We understand that although everything necessary to make the exhibit a complete and representative one has been procured, room can still be found for additional exhibits if application for space is made at once. This is, as we have before pointed out, a growing demand in England for chair parts and other hardwood specialties and in these lines especially full exhibits should be made. A word to the wise should be sufficient.

OUR REVIEW NUMBER.

The February number of the CANADA LUMBERMAN will contain the annual review of the lumber trade for the year 1899—a year which passes into history as one of the most remarkable known by the lumber trade. In this number it is hoped to present such statistics and other information as will be of value to the trade. Circular letters have been sent to mill owners throughout the Dominion, some of which have been returned with the necessary information. It is hoped that those who have not responded will kindly do so as early in the month of January as possible, in order that there may be no delay in the preparation of our review. While specific questions are asked by these circulars, the publishers will appreciate any additional comment or information which will serve to give an understanding of the conditions which existed during the year.

REPAIRING AN ENGINE.

An interesting repair job undertaken at the Corlies shops at Providence is shown in the accompanying illustration from Power. An engine, probably from an overdose of water, had knocked out the cylinder head, carrying with it a portion of the flange and of the steam valve bonnet as shown in the left-hand sketch. The broken mechanism was planed away along the central lines (mn no) of the valves and cylinder bores and a casting made to replace

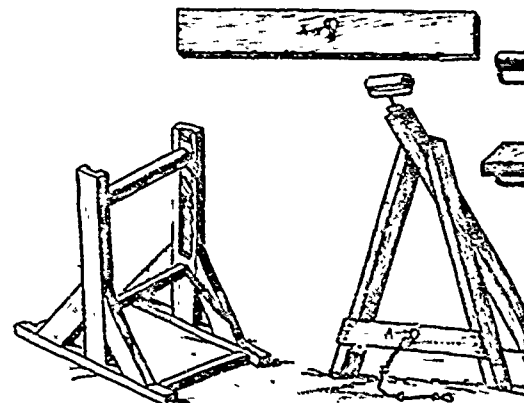


REPAIRING AN ENGINE.

the missing section now regular in shape. Fourteen collar studs were put in the end as shown (x), four of which passed through the port. The joint was made of copper. After the patch was in place the cap (B) was put on and the valve chamber rebored. Links were shrunk on C to make the joint on the plane (no). The engine is now running regularly and giving no trouble.

A PAIR OF HANDY CONTRIVANCES.

The engravings show a couple of very handy contrivances for mill and yard use. Fig. 1 is a movable stand arranged to carry a roll, the roll to be raised and lowered as desired. The stand is designed to carry a board after it leaves the planer, to prevent the board sagging



ROLLER STAND.

LUMBER JACK.

after the greater part of it has passed the knives. The sketch shows the construction.

Fig. 2 shows an adjustable lumber jack, which can be easily adjusted to different heights. The timber carrying the roller works as on a hinge on the bolt between the two legs, the rope preventing the tripod spreading.—American Lumberman.

CORRESPONDENCE

Readers are invited from our readers on matters of practical and timely interest in the lumber trade. To secure insertion all communications should be accompanied with name and address of writer, not necessarily for publication. The publisher will not hold himself responsible for opinions expressed by correspondents.

A WORD FOR BEECH LUMBER.

THE CANADA LUMBERMAN:

DEAR SIR.—If you will allow me space in your valuable paper, I would like to make a few remarks on one feature of the hardwood trade which is no doubt felt by lumbermen dealing in the undermentioned commodity, the low price of beech lumber compared with other hardwoods. It must be acknowledged that for manufacturing purposes it is equally as good as birch or maple. Why, then, has the price not advanced with other similar kinds of wood? Our firm has sold beech lumber this season at the same price for the same grade as ten years ago. There is certainly something wrong somewhere, and the man who produces the lumber, in my opinion, the one who is most to blame. We must get beech up to its proper standard with other hardwoods, and not have timber, which for some purposes is valuable, cut almost entirely into firewood. If this matter was placed before the trade and discussed somewhat, there is no doubt but that it would result beneficially to all concerned.

Yours truly,
"HARDWOOD."

THE EUROPEAN DEMAND FOR HARDWOODS.

ALEXANDRIA, ONT., Dec. 20, 1899.

THE CANADA LUMBERMAN:

DEAR SIR.—After some years of quietude I again take liberty of imposing upon the readers of your excellent paper a few impressions regarding the lumber industry of Canada.

Some years ago I wrote your journal a number of letters pointing out the advantages of the European market for Canadians, and urging that some definite and practical action should be taken to improve our position with regard to new markets, but no concerted action was taken with regard to the hardwood trade. At that time I persistently dwelt upon that theme, and to such an extent that I felt I was liable to be considered a crank, and I desisted from writing further on the matter and acted on my own ideas. Anything I then wrote I would to-day emphasize still more strongly, and will only say, for example, basswood, birch, beech, soft elm and ash, there is a market in Europe which will absorb our output in large quantities of boards and planks, and also the smaller stock in articles manufactured or wholly manufactured articles. It remains for Canadians to fill the demands, either with rough lumber or the finished goods.

As stated before, and have not changed my views, that the hardwood industry of Canada, if properly and well developed, would be found to benefit a larger number of our people—farmers, loggers, saw mill men and factories and their employees—than the much vaunted pine industry of Canada. While the pine interests are becoming yearly more concentrated in the hands of comparatively few large companies and firms, the hardwood trade is so divided amongst small operators that it is not given the prominence the pine trade enjoys. The day of the hardwoods, however, is fast coming, and in a few years factories for turning out goods of all kinds from butchers' knives to print rollers, and from spools to furniture, will develop just as fast as the energy and enterprise of Canadians will develop. Canadians have too long depended upon the will, the pleasure or the whim of the American buyer, manufacturer or market, and until the hardy Government stiffened their backs and passed the manufacturing clause in the crown lands regulations, it looked as though politicians and lumbermen were liable to convene and talk—some sense and more nonsense—and waste their energies on agitating what each speaker would think for the moment would be his best interest in the matter.

When we leave the Americans to their own devices for raising the value of their raw material, whether the duty be one or four dollars per thousand feet on lumber and ten or forty per cent. on manufactures, and boldly and ingeniously handle the resources of Canada in the best interests of Canada, both for the present and the future, we, as a people, will have turned our faces in the right direction.

The most righteous wars have left corpses upon the

battle field, but the results have always been in the end beneficial.

When our legislatures over this country place such manufacturing clauses on their statute books as did the Ontario Government, both in regard to pine, spruce, pulpwood and hardwoods, it will be of greater benefit to Canada than many of us can appreciate to-day. Such laws will help our manufacturing, will be the best help to conserve and reproduce, where possible, our forests, and enhance to the fullest value the product of our forests, and employ the greatest amount of labor, but there may be some corpses.

The time has now arrived when the people of Canada may safely decide that they need not be hewers of wood and nothing more—so far as the lumber industry is concerned—as the European, United States and Canadian demands for wood products will leave something more than a bare existence to those engaged in that line of business, both in soft and hardwoods. It is well to say high prices used not to be expected in European markets, but a steady trade is open. It will take time to form connections and establish the trade, but the trade is to be had. The Canadian section of the Imperial Institute, under the charge of Mr. Harrison Watson, and the columns of your journal, are means to an end that may be profitably employed by Canadians.

Yours truly,
J. T. SCHELL.

OPERATION OF BAND SAWS.

BY JAMES RYAN.

I AM a sawyer on band saws. We have here at Savanne one of the new Allis band mills, with latest improvements, all worked by steam. In sawing pine lumber I find the best method of getting the upper grades of lumber out of a log is to place the good side of the log to the saw first, as you can then saw until you get all the good lumber out; then you can turn the log and size it to any size you wish without wasting any timber or having any thin cuts such as you often see as a result of improper loading of logs on carriage.

As to the care of band mills: To do good, fast and true work, the saw must be in proper line with carriage track and kept clean. Take off the face plate on the bottom wheel every two weeks and rake out all the sawdust that has accumulated between wheel and hood, as this causes the wheels to get dirty and the saw will not travel in the same place; it will run all right for a time, but will very soon go back too far and you will have to keep tilting your wheel to keep it in place, which is a waste of time. Of course, it is necessary to employ a practical filer, otherwise the sawyer cannot do good work no matter how skilful he may be. Another necessity is that the sawyer and filer should work harmoniously together.

THE PROPER PILING OF CLEAR RED PINE.

BY "PINEWOOD"

As every man engaged in the lumber trade knows, it has always been a problem to save clear red pine lumber from staining. I beg leave to offer the following method, which has had numerous trials at Ottawa, when the lumber was piled off high tramways, and when piled in the way suggested there has been but a very small percentage of it stained.

My method is as follows. We will take a pile of 12x6 x 16 clear red pine for an illustration. To start, you make your pile bottom about 4" higher in the front than behind so as to give your pile a certain pitch all the way up, and as the pile goes up, should the pitch become flat, it should be raised again by an extra cross piece in the front. The first row of this pile is commenced with 17 pieces, thus leaving about 3" of space between each board, you then put on your cross-pieces, one in front and one behind, none in the centre. Right here I would like to say that I do not believe in three cross-pieces in green lumber, as it breaks the air space and causes lumber to stain. This pile is carried on up to its finish with the same number of pieces in each row (i.e., 17), and each piece is placed directly over the other so that the air space between each row is not closed up. Now, when this pile is finished, it should be covered at once with good covering boards not less than 8 1/2" wide—12" is better. The covering boards should be of uniform length, so that no water can run into the pile. In the case of this pile I would have all my cover 16' long.

To protect the rear end of the pile I would pull out, in

the last row, the two outside boards and the centre board at least two feet. I would then take a 16' board and lay it on the edge of this 2' crosswise of the pile, and lay another one on top of it, lapping it about 3" or 4" and so on until I reached the pile, having the last board come over the pile about 6" or 8". Then raise the front cross-piece up, and commence to lay out cover on, and when finished I would use hooks to fasten cover in its place, thus making sure that the pile would stay covered. Now, should I open this pile when dry to ship, say 2,000 feet, when I was through I would cover it up again.

Not wishing to encroach on your valuable paper for more space, I will add in conclusion that I would like to see lumbermen go into this subject through the medium of your valuable paper.

THE CARE OF BAND SAWS.

BY "PRACTICAL"

IN accordance with your request, I will write a short treatise on band saws, and will confine my remarks to one point which I notice has not been discussed in your paper. I would say, however, that I do not altogether approve of such articles, for the reason that there are a great many persons who have had some knowledge of the work, and by reading up treatises written by experts who have worried and worked their way up to a level with older and experienced men, they come to the conclusion that there is nothing in this business. They will accept the first position offered them, at perhaps two or three dollars a day less than the former man had been paid. They think they have a cinch till their work commences, when very shortly there is a complaint of bad lumber. Next the saws begin to break, for no plate will stand snaking through the cut. Very soon he is obliged to abandon his position, after destroying the company's saws and thousands of dollars' worth of lumber, disgusted with himself and the trade; he never goes back.

Through your columns I have read several articles written by Mr. Burton, which I can vouch for to be genuine, in fact, he has described very near as much about the saw as can be said in words, but there still remains a great deal to contend with outside of the fling room. One of these things is the cross line, and this is the only point to which I will refer this time in connection with the mill. In this case we are coming in contact with the patentees and the manufacturer, but that cuts no ice; they don't have to stay in the mill and take the blunt of the every day work to the end of the season. Common sense will teach that, when the pulleys of the band mill are set square with the track, the wheel is cross-lined to make the saw run in the desired place. There is a twist in the cutting part of the saw, which running in this position will cause the saw to twist all the way round, usually called a line twist, which is a very difficult thing to take out, as it cannot be discovered with a straight edge. I will venture to say that half the men in the mills cannot take it out even all the way round. Another thing, should the plate be leading a trifle one way, and it is necessary to throw the pulleys in the same direction, it will cause the saw to lead that much more. Some men argue on the ground that when the pulley is set to the proper pitch they should not be tilted, as it will either throw too much strain on the front or on the back of the saw, as the case may be. My experience is that if the saws are all put up alike and the wheels are kept clean, they will all run in the same place, and the mill will never have to be moved to any extent only when an accident occurs. Of course, it is necessary to use it then to save the saw from coming off, but when another saw is put on the wheel I will have to come to the same place as before.

I have, in my younger time, used the cross-line, and always had more or less trouble with cracked saws. Since I have abandoned it and used the tilt altogether I have not had cracked saws nor line twists, and none of this crown ridge on the back of saw. One thing is necessary, and that is good plates.

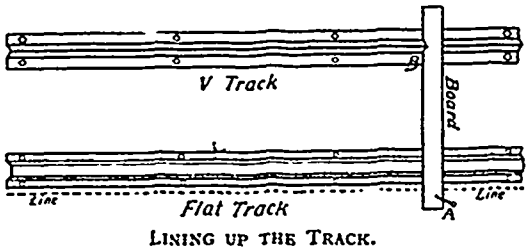
I cannot close without making one statement in reference to our saws. I have been employed by the Rat Portage Lumber Company for the last two years. Since I came here we have been supplied with saws from Shulby & Dietrich, of Galt, which have done good work on the Rainy River saw logs. Last spring we got six new saws; with those six and the few we had to commence with in the spring, we cut in the neighborhood of twenty-eight to thirty million feet of lumber, with two band mill machines and a gang, running part of the season night and day. In the manufacturing of this lumber we only had to cut those saws five times for cracks, and three of those cracks were in one saw, which I consider is a fairly good record for band saws.

POOR MILL PLANS AND POOR MILLWRIGHTS.
By A. J. BURTON.

Not long ago I took charge of a new mill, beginning a few weeks before it was completed, so I could set up the filing room machines, and have the saws in order when the mill started. The mill owners told me they had a full filing room outfit, a nice room, etc., but I didn't find it so, at least in my opinion. The filing room was only 20x18 feet, about the size of the dining room in an old-fashioned southern plantation dwelling. The owners couldn't see where more room was needed, and as a matter of course there was friction. There were not enough machines to do such work as they wanted done, so I made out a list of machines necessary besides those already there, as follows: One lap grinder, one blow forge, one 12x16 inch anvil, one retoothing, long and cross shears, patch machine, band saw swage, one dozen emery wheels, and six ounces of silver solder. Experienced men will thus see how complete the outfit was when I began. When the company saw I would not go to work without these machines, they were ordered.

With the arrival of the machines came trouble. The mill owners could plainly see then why more room was necessary; there wasn't enough room for the machines, to say nothing of room to work in. After twelve feet had been added to the length of the filing room, and the machines placed, we had as nice a room for fitting the saws of a one-band mill as one could wish.

The point I wish to make is that cheap millwrights are usually expensive in the end. The



LINING UP THE TRACK.

millwright who built this mill would have a better taster in a wholesale liquor house—he would have longer hours, with less pay, but more tastes. He had been "under the weather" most of the time while the mill was building, hence the work was not done well and the machines were not well placed. This, however, being none of my business, I said nothing.

About the time the mill was ready to start this millwright "loaded up" and was discharged. Next day the superintendent requested me to look over the band mill, carriage, live rolls, slasher, turner, etc. I found the driving pulley on the slasher had been put on wrong end to, so that the key could not be driven. Considerable time was spent in taking down the shaft and turning the pulley around. The live rolls were neither level nor in line; they had to be taken out and rebabbitted before they could be started. The carrier chains in the slasher table were too high and the table had to be rebuilt. There were no two pulleys in line, one with the other, in the entire mill. I lined up the band mill and tried to line up the head blocks on the carriage, but to my surprise, found the carriage had been set a half inch too near the saw. The blocks were hard back in their slots and I could not move them further. When the offset moved forward the rests struck the bed husk of the band mill.

I explained this to the mill owners, who thought

I could make it work by chipping off the rests with a cold chisel, for by this time they were getting tired of making changes, and I didn't blame them. We finally got ready to start, but had a freight train load of trouble with the belts because the pulleys were so out of line. I had to build a new tightener frame, for the first one was so tight that the motion caused the tightener pulley to dance so much that it led the belt on the band mill pulley and would have spoiled the belt if used. We made a new tightener frame and could then adjust the belt properly.

After a lot of other minor changes we got the mill started, but only ran two days, broken time at that, for, as stated, the carriage was too close to the saw and would not allow full throw in the offset, while the dogs in the offset would not release at the end of each throw, as they should do, and caused so much friction that half the time the trucks would not turn round and the offset would heat and stick fast.

The superintendent was an easy-going kind of a fellow, and had little knowledge of the successful operation of saw mill machinery. He came to the filing room and asked me to go out and try to fix the offset. I told him it would never work right until the V-track was moved a half inch away from the saw. This was Saturday night, and I went home to see my family. The superintendent told me he thought they would not run Monday, as they had some repairing to do, so I did not get back to the mill till Tuesday morning. They had decided to move the track over, and had it nearly done. They did not use a line at all, but used a rule, measuring over a half inch, marking it, moving the track over, and using drift bolts to hold the track down.

When I arrived the boys asked me what I thought of it. I asked them if they had set the track at right angles with the band wheel shaft. They said, "Why, no, but we have it just as it was, only over a half inch." I decided to put lines on and find out for myself whether they had it in line with the saw and straight, or not, knowing full well I could not make the saws make good lumber if the track was out of line. After placing the line on it, it was not necessary to do any talking to convince them they were not right, for it was out of line, and so crooked as to remind one of a narrow gauge railroad in the mountain regions of Pennsylvania. We had to take the track up again and put it down straight and in line, which took another day, before we got started.

Let me try to explain how I line up a track. Reference to the sketch will show that it can be done quickly, easily and well. We will suppose the V-track is further from the saw. Get a piece of white pine board four inches wide by one inch thick, and long enough to reach from one track to the other. Lay it across both tracks and cut a v-shaped notch to fit the V-track exact, in one edge of the board, as at B. Place the board on its edge, letting the other end rest on the flat track. Now draw a line parallel with the saw, over flat track. In this way you will have no lines over the V-track to interfere with your work.

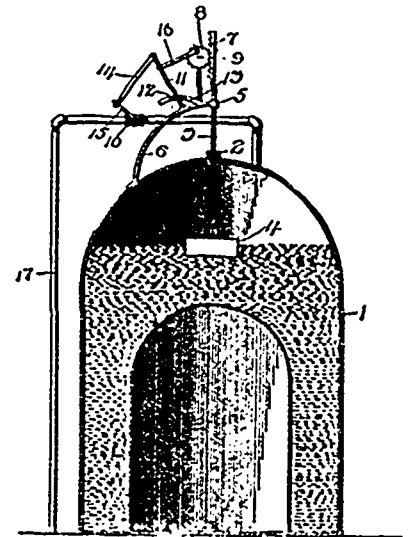
Place the V-shaped notch in board on the V-track and drive a nail in the board close to the line over the flat track, as shown at A. This will be a tram or gauge to set the V-track by, and if you keep the nail close to the line the full length of the track, your track will be straight, provided you are careful to have the V-notch down tight

on the V-track all the time. The dotted line shows the line to work by.

After the track was set over the offset work without heating, and the carriage caused no trouble. The mill finally got to doing work but not until it had been entirely overhauled and the machines reset. The mill, when I left, was cutting 50,000 to 65,000 feet per day of eleven hours, from small hemlock, red and white oak logs, running eight and nine logs to the thousand. This mill must have cost its owners nearly twice as much as it would had they had good mill plans and a competent millwright from the start; besides, they could have begun sawing one month earlier. I would advise mill owners to employ only reliable millwrights.—The Wood Worker.

WATER FEED REGULATOR FOR BOILERS.

Mr. W. H. Tobey, of Tupperville, Ont., has been granted a patent in Canada for a water feed regulator for boilers, as shown in the accompanying illustration, which he makes the following claim: The combination with a boiler, having a water inlet supply pipe and a valve located in said supply pipe to regulate the passage



WATER FEED REGULATOR FOR BOILERS.

water into said boiler, of a float mounted to have a vertical movement within said boiler, a pinion mounted to have an operative connection with said float, whereby a vertical movement of said float will impart a rotary movement to said pinion, and connections operatively connected to said pinion and the handle of said valve, whereby the movement of said pinion will serve to impart an oscillatory movement to said handle, substantially as described.

CANADA'S COMMERCIAL AGENTS.

FOLLOWING is the official list of Canada's Commercial Agents in Great Britain, British possessions and foreign countries:

- J. S. Larke, Sydney, N.S.W., agent for Australasia.
 - G. Eustace Burke, Kingston, Jamaica, agent for Jamaica.
 - Robert Bryson, St. John, Antigua, agent for Antigua, Montserrat and Dominica.
 - S. L. Horsford, St. Kitts, agent for St. Kitts, Nevis and Virgin Islands.
 - Edgar Tripp, Port of Spain, Trinidad, agent for Trinidad and Tobago.
 - C. E. Sontum, Christiania, Norway, agent for Sweden and Denmark.
 - D. M. Rennie, Buenos Ayres, Argentine Republic, agent for Argentine Republic and Uruguay.
- In addition to their other duties, the undermentioned will answer inquiries relative to trade matters, and the services are available in furthering the interests of Canadian traders.
- J. G. Colmer, 17 Victoria street, London, S.W., England.
 - Thomas Moffat, 16 Church street, Cape Town, South Africa.
 - G. H. Mitchell, 15 Water street, Liverpool, England.
 - H. M. Murray, 40 St. Enoch Square, Glasgow, Scotland.
 - Harrison Watson, Curator, Imperial Institute, London, England.

THE NEWS.

John Hanna has opened a lumber yard at Crandella, Man.

The W. Kinsman Co. have planted 1,000 trees at Hammond, N.S.

A saw mill has been started at Mud Lake, Ont., by Mr. Ghee N. Graham.

W. & Humberstone are building a new saw mill at Timonon, N.W.T.

John Bros. are building a shingle mill about twenty miles from Harrison, B.C.

A lumber yard will be opened at Carlingville, Man., by S. Jackson, of Hamiota.

A. W. Skinner, of Gore, Ont., has purchased a saw mill in the vicinity of Weedon.

Guthrie & Grier, of Parry Sound, Ont., are installing a new buzz planer in their mill.

Robert Jones & Co., of Kars, N.S., are doing a considerable business in spruce lumber.

L. H. Todd & Sons are placing a new shingle machine in their mill near St. Stephen, N.B.

During the past season Wm. Peter's saw mill at Parry Sound, Ont., cut 17,000,000 feet of lumber.

Parker & Howe, of Dixville, Que., are taking out a large quantity of hardwood logs this winter.

It is the intention of E. J. Taylor, of Thurso, Que., to make improvements to his mill this winter.

The Hanbury Manufacturing Co., of Brandon, Man., contemplate extending their plant next year.

Pringle & McNeely have commenced the manufacture of butchers' skewers at Churchdale, Ont.

Wm. Lees, of Falbrook, Ont., has set up a portable mill about two miles from Watson's Corners, Ont.

James Hoyt & Sons, of Gaspereau Station, N.B., are lumbering near South Branch Lake this winter.

R. U. Irwin and Wm. Birge are preparing for a big cut of logs this winter. Their mill is at Horning's Mills, Ont.

The Brunette Saw Mill Co., of New Westminster, B. C., are building a new planing mill, 70 x 150 feet, at Sapperton.

The Little Sturgeon River Timber Slide Company has been granted an Ontario charter, with a capital of \$50,000.

Moore & Connell, of Hawkestone, Ont., have purchased Mr. Burton's saw mill at Rugby, Ont., and are re-fitting it.

The North American Bent Chair Co., Owen Sound, Ont., recently received an order from Australia for 130,000 chairs.

A. J. Stevens has purchased the saw mill of John McWhinney at Wilson Lake, and intends moving it to Loring, Ont.

It is said that the Rathbun Company, of Deseronto, will erect saw mills at Baptiste and Wilberforce, Ont., for sawing cedar.

W. & J. McKinlay, who have been engaged in taking out spool wood near Red Bank, N.B., have decided to cease business.

Weiler & Son, of Formosa, Ont., are installing a new boiler in their saw mill. They also intend adding a hoop and stave machine.

It is the intention of G. W. Ashley, of Colebrook, Ont., to add a shingle machine and box machinery to his saw mill equipment.

Two American firms are reported to be negotiating for sites in the vicinity of Vancouver, B.C., on which to build large saw mills.

The Ontario Bureau of Forestry has lately received some fine specimens of spruce timber from the Lake Temiscamingue district.

Cimon & Co., of Murray Bay, Que., are getting out large quantities of spool wood, which will be shipped to Great Britain next spring.

F. H. Heaps & Co., of Vancouver, B.C., are building another saw mill. The building will be 80 x 50 feet, and equipped with modern machinery.

For the fiscal year ending June 30th, 1899, the United States exported unmanufactured wood to the value of

\$36,087,584, and manufactures of wood to the value of \$5,593,416. The imports for the corresponding period were: Unmanufactured wood, \$11,880,679; manufactured wood, \$2,618,808.

The saw mill at Burks Falls, Ont., operated for some time past by the Magnetawan Tanning Co., has been purchased by the Knight Bros. Co.

W. Craddock, of London, Ont., has lately added an automatic carriage and other machines to his mill for the manufacture of broom handle stock.

It is understood that Henry Aylmer, of Melbourne, Que., purposes building a sash and door factory and saw mill, to be operated by electric power.

Timber Inspector Murray, of Vancouver, B.C., has secured a fine section of timber for the Paris Exposition. It will be 8½ feet in diameter and 4 feet long.

H. J. Bartlett, representative of the Skillings, Whitney & Barnes Lumber Co., Boston, Mass., has opened an office in the Victoria Hall building, Orillia, Ont.

The red mill at Little Current, Ont., has been purchased by McArthur Bros., who will put it in shape and operate it next season. This mill has been idle for several years.

The Keewatin Lumber Co., of Keewatin, Ont., purpose carrying out extensive improvements to their mill this winter. They will put in a new band saw and deepen the flume.

Wm. Young, who for many years operated a saw mill at Warton, Ont., has disposed of his business to Simon Bros., furniture manufacturers, who will conduct it in future.

The Pacific Coast Lumber Co., of New Westminster, B.C., have applied for foreshore rights at Vancouver. It is understood that the company have in view the erection of a saw mill.

In Elgin county, N.B., W. J. McKenzie and E. P. Eastman have started a saw mill at Goshen. J. R. Collier is putting up one at Ferndale, and John Long has started one at New Ireland.

The Orillia Export Lumber Co. are negotiating with the town council of Orillia, Ont., with a view to the erection of a factory for the manufacture of wooden specialties for the European market.

J. L. McKay, manager of the Elk Park Ranch, is taking out this winter 4,000,000 feet of first-class larch and fir timber for his saw mill at Athalmer, B.C. The company intend adding a dry kiln.

The saw mills of the Rat Portage Lumber Co. closed down last month, after cutting 50,000,000 feet of lumber. The sash and door factory of the company at Rat Portage will be kept in operation all winter.

The Dickson Company's shingle mill at Peterboro', Ont., closed down for the season a fortnight ago, having cut about nine million shingles. P. Doris, of Peterboro', had the contract of sawing the shingles.

The Midland Box Shook & Planing Co., of Midland, Ont., have commenced the erection of a saw mill at Doltartown. The mill will have a capacity of 8,000,000 feet per annum, and will cost about \$50,000.

Sawyer's mill at Woodstock, N.B., closed down on November 4th, having cut 6,000,000 feet of long lumber and 7,500,000 laths. During the season about 50 men were employed, and the wages aggregated \$110,000.

A company, to be known as the Gash Point Milling Company, has been formed at Fort Francis, Ont., to take over the saw mill at Emo, on the Rainy river, and remove it to Gash Point. Daniel Mosher will be manager of the company.

D. A. Huntley, of Parrsboro, N.S., is carrying on extensive lumbering operations at Bonny River, N.B. He intends building a saw mill this winter, and will get out a quantity of piling. During the past season his mill at Bonny River cut 8,000,000 feet.

Steps are being taken in Ottawa to establish works for the manufacture of cotton duck transmission rope and smaller ropes and twine. It is said that six acres of land will be purchased for the buildings and yards, and that two hundred men will be employed.

Thos. Hollis, of Damascus, Wellington county, has set up a large portable saw mill near that place. It is fitted with double edger, slab saw, live rollers and shingle machines, and is the largest portable mill in that section.

The engine is 12 x 14, with a 50 h.p. boiler mounted on wheels. The machinery was built by the Waterous Company, of Brantford, Ont.

The Wahnapiatae & Metagamishung Lumber Co. is seeking incorporation, to carry on a general lumbering business and to construct a waterway to connect lakes Wahnapiatae and Metagamishung, in the district of Nipissing. Bowlby & Clement, of Berlin, Ont., are solicitors for the company.

A company is being formed to build a factory in Montreal to treat wood by a process controlled by the Electric Fire-Proofing Co., of New York. It is said that by means of this process the wood is rendered non-inflammable. Samples of the wood are on view at the offices of R. Wilson-Smith and Meldrum & Co., in Montreal.

CASUALTIES.

Geo. Brown had his leg broken while working in his father's saw mill at Lennoxville, Que.

Wm. Bradshaw, of Thurlow, Ont., was killed by a falling tree while working in the woods in that district.

Walter Cavers, proprietor of planing mills at Dutton, Ont., had his cheek bone broken by being struck by a piece of board.

In J. B. Atcheson's saw mill at Cornwall, Ont., Robert Atcheson fell against a revolving saw. His right arm was cut off close to the shoulder.

Nicholas Giebel, employed in Graham, Horne & Co.'s lumber camps near Fort William, was killed while decking logs by the hook striking him in the head.

R. M. Ellis, driver for Milne & Pratt, lumber dealers, Stoney Creek, Ont., lost his life by a load of lumber falling upon him. The accident was caused by the breaking of an axle.

M. T. Couvrette, a jobber in the employ of J. R. Booth, of Ottawa, was found dead in the woods in the Black River district. It is supposed that death was caused by an epileptic fit.

TRADE NOTES.

The Truro Foundry & Machine Co., of Truro, N.S., have shipped a rotary saw mill to Cameron Bros., of West River.

The Dodge Manufacturing Company purpose making an exhibit of their pulleys and other apparatus at the Paris Exposition.

W. A. Fleming & Co., of Montreal, have been awarded a large contract for belting by the Dominion Iron & Steel Co., of Sydney, C.B.

Lumber and shingle manufacturers will be interested in the announcement of the Independent Cordage Co., of Toronto, which appears for the first time in the advertisement pages of this number.

The McEachren Heating & Ventilating Co., of Galt, Ont., recently shipped a car load of hot blast heating apparatus to the British Canadian Timber & Manufacturing Co., at Kearney, Ont. They have also put in two large fans and refuse conveyors for the Gilmour Co., of Trenton.

Mr. Jas. S. Neill, of Fredericton, N. B., by means of his advertisement in this number, calls the attention of our readers to the patent lumberman's calk, of which he is the manufacturer. Lumbermen would do well to investigate the article, by writing Mr. Neill for descriptive circulars.

Mill operators should be interested in the announcement of the Syracuse Smelting Company, of Montreal, which appears for the first time in the advertisement pages of this number. The company direct attention to the excellent quality of their babbit metal, and invite readers of this journal to write them for further particulars.

Saw mill owners who may require new pulleys or shafting, self-oiling or plain bearings, hangers, friction clutch pulleys, friction couplings, paper frictions, tight and loose pulleys, belt tighteners, link chain belts, sprocket wheels, or anything in the power transmission line, should send for one of the Dodge Manufacturing Company's 270-page catalogues. The demand for Dodge pulleys among the saw mill people has very much increased during the last few years. Mill men have learned by experience that the factory-made split pulley is one of the most economical things in the mill. The Dodge pulley is manufactured only by the Dodge Manufacturing Co. of Toronto, Limited, Toronto.

AN OPEN POND FOR WINTER SAWING.

THE problem of keeping an open pond for logs, in order to permit of winter sawing, is one which is receiving some attention in the United States. The Mississippi Valley Lumberman publishes a description of the system used by the Yawkey Lumber Co., of Hazlehurst, Wis., which we reproduce, believing that it may offer some suggestions to Canadian lumbermen:

The mill of the Yawkey Lumber Co. was built in 1889, and has been operated every winter since that time. As Mr. C. C. Yawkey, the manager of the company, is one of the most enterprising and progressive lumber manufacturers of the north, it goes without saying that anything that has proven satisfactory to him must be about right, and an experience covering the sawing season of ten winters ought to make his system of sufficient value to recommend its adoption elsewhere.

As Mr. Yawkey says, each saw mill presents its own problems, and where a certain method employed would be all right for one plant, it might not meet the conditions of another. He says the first thing necessary to keeping a pond open all winter is to have a tight board fence around the pond and plenty of hot water running into it. It is also desirable to have the pond as large as possible so that the logs will lay for some

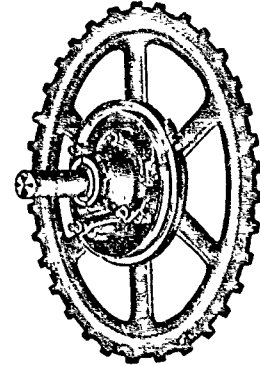
the exhaust steam entering the condenser, and with a sufficient supply of cold water they find that there is little or no back pressure.

The outlets from the condenser consist of two pipes. One of these is a large one entering the pond in front of the condenser, and the other a smaller one extending around the other side of pond, where it delivers water into the pond at two places.

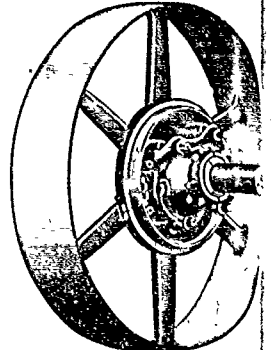
They also have a small pump which pumps water through their refuse burner, where it is heated and delivered into the pond in three different places along the shore. Inside the burner the outfit consists of eight iron cylinders, 14 inches in diameter and about 20 feet long, placed upright, and connected alternately top and bottom with three inch fittings. These cylinders are made from old drums, or flues, and hold considerable water which is heated as it passes through.

The suction for the pumps should be taken from the inside of the pond, so as to circulate the water. They have found out, however, that the water for the boilers should be taken from outside the pond, as the water in the pond becomes saturated with pitch and other impurities, and it is impossible to use it in the boilers after it has been in use a few weeks. The ends of the pipes through which the hot water is delivered to the pond are horizontal and on a level with the water

leading difficulty experienced in the use of clutches have loose, trappy parts and lever connections. An ordinary laborer, it is said, can easily erect and adjust the Dodge clutch. The extended sleeve is arranged so as to allow for its removal for repairs without disturbing the clutch or any of the line shaft equipments. In erecting making subsequent repairs, it is contended that a clutch may be handled at less than one-quarter the



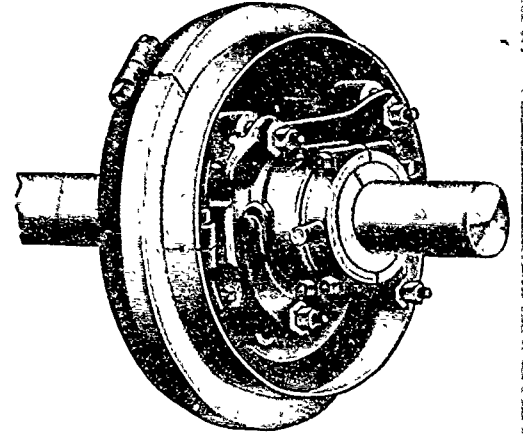
FRICITION SPROCKET.



FRICITION PULLEY.

pense of a solid clutch. In many cases the expense incurred is more than the first cost of the clutch.

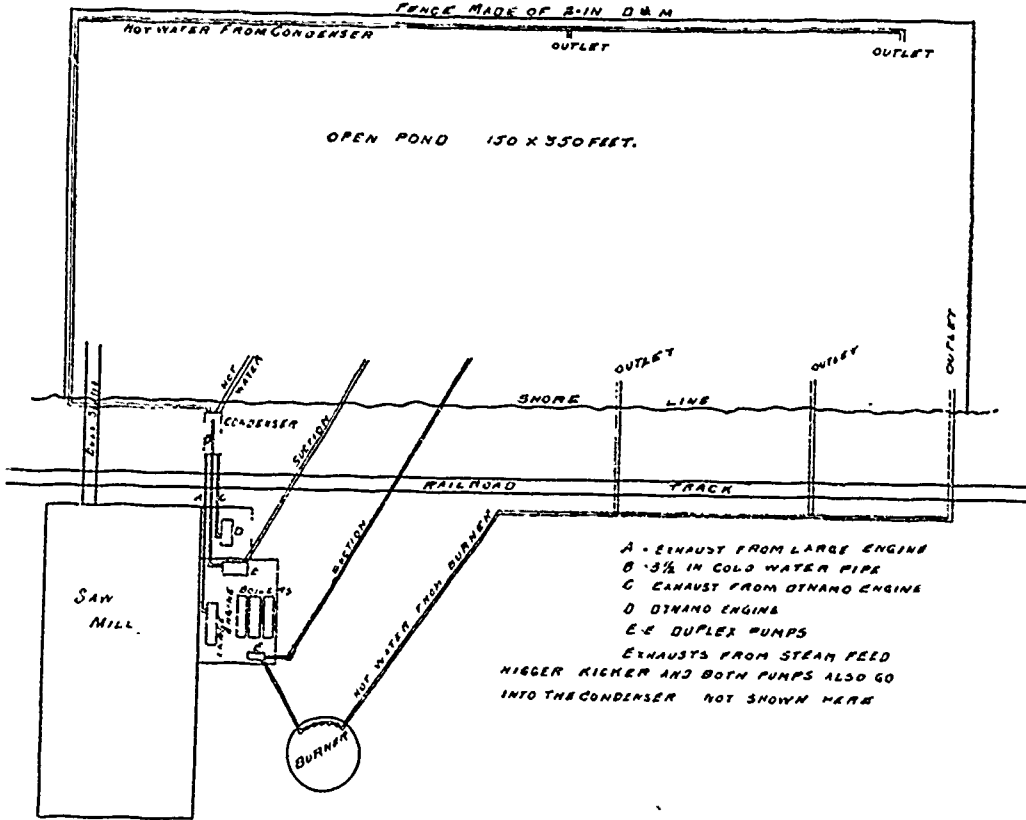
The frictional contact consists of two flat surfaces brought in contact by powerful levers with a heavy wood-filled disc which presents two "end grain" surfaces for compressional contact. The large area for friction gives positive results without straining or over-wearing any of the parts, and wear in the friction rings is easily taken



CLUTCH COUPLING.

by adjusting bolts. The toggle levers are not affected by centrifugal force, and the clutch will run successfully at any speed.

The clutch coupling is of great advantage in cutting out portions of the shafting, and departments when not in use, or where it may be desired to shut down quickly. The Dodge Manufacturing Company of Toronto are



time before passing into the mill, for in this way the frost is taken out of them more thoroughly.

The fence surrounding the pond at the Yawkey mill is built of 2 x 6 and 2 x 8 D. & M., which are driven into the bottom so as to make the fence perfectly tight. They have two methods of getting hot water, one by a condenser in which they condense the exhaust steam with cold water, and the other by passing cold water through their refuse burner, and thus heating it.

The condenser is made of an old two flue boiler, the tubes having been taken out and patches put on to make it tight. This condenser is placed on the bank of the lake, near the pond, and is set low enough so that the pipes connecting it can be brought through the ground under the railroad track. They have pipes carrying the exhaust steam from all the steam appliances into the end of this condenser. The exhaust pipes from both engines, steam feed, nigger, kicker and both pumps, all extend into the condenser, the idea being to utilize all of the exhaust steam about the mill. They have a large pump with a 3 1/2 inch water pipe extending to the condenser, passing through the head nearly through to the end. Inside the condenser this pipe is perforated so that the water passing from it is delivered into the condenser in a spray. The water is heated by

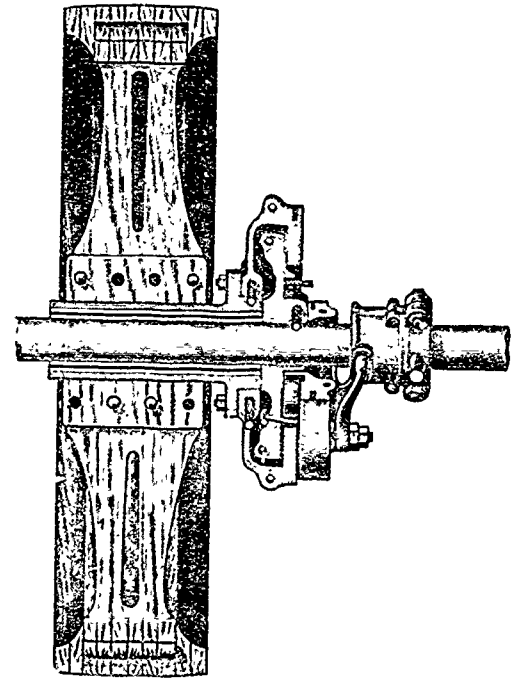
so as to shoot the hot water over the surface of the pond. The pipes are all placed underground with the exception of the one that delivers hot water to the opposite side of the pond. This is fastened to the fence after it leaves the bank.

With this system the Yawkey company is able to keep its pond open at no running expense. The cost all came when the system was put in. The exhaust steam and the waste heat from the burner do all the work. They have been able to keep the pond open in the coldest weather, even at forty or fifty degrees below zero, the water being warm even when the weather is coldest.

THE DODGE SPLIT FRICTION CLUTCH.

THE Dodge patent split friction clutch pulley and split clutch cut-off coupling is one of the most recent improvements in friction clutch pulleys. This clutch is admirably adapted for use with split pulleys which have become so popular during recent years. The Dodge clutch is particularly a compact and simple clutch in construction, with no trappy parts to get out of order. All parts are easily accessible, and not much space on shaft is required. The fact of the clutch being split, the manufacturers claim, makes it a ready seller, because the cost of a clutch or any shafting appliance does not cease until it is erected and ready to run. It is claimed that it will save many times its cost to the purchaser owing to its being split or in halves.

Each lever has two points of compression. This reduces the number of joints to a minimum and obviates the



SHOWING SPLIT CLUTCH IN SECTIONAL VIEW.

manufacturing friction clutch pulleys and clutch couplings for all purposes, and, we understand, are meeting much success. The Dodge clutch is in successful operation in some of our largest electrical plants, handling as high as 600 h.p., also small clutches handling as little as one and two horse power are turned out.

The Dodge Company issue a handsome 270 page catalogue covering their full line of power transmission machinery, and mail same free on application.

IMPORT DUTIES OF JAMAICA ISLAND.

The Tariff Act of 1899 placed the duty on lumber imported to Jamaica, West Indies, as follows: Wood, 1,000 feet of pitch pine, white pine lumber, or other lumber, in rough or sawed, by superficial measurement of each thick, 9d; wood per 1,000 feet of pitch pine, white pine, or other lumber planed, smoothed, grooved and tongued, ceiling and flooring boards, but not otherwise manufactured, by superficial measurement of 1 inch thick, 1s; shingles, cypress, more than 12 inches in length, per 1,000, 6s; shingles, wallaba, per 1,000, 6s; shingles, Boston claps, and all shingles not otherwise enumerated or described, per 1,000, 4s.

NEW TARIFF IN BRAZIL.

A new tariff is in preparation in Brazil, in which lumbermen of Canada are interested, inasmuch as Brazil is a heavy importer of pine lumber. There are two rates of duty, one the general tariff applicable to imports from the world generally, and the other a minimum tariff applied to articles imported from countries which admit Brazil products, notably coffee and rubber, at low duties or none, of which the United States is one. The duties on lumber will be assessed by the cubic meter, which is approximately 35 1/2 cubic feet, and the proposed duties are on oak \$8.25 minimum and \$11.55 general, and on pine \$2.32 minimum and \$3.37 general. The above values are an interpretation into American money of the Brazilian milreis.

PUBLICATIONS.

The World's Paper Trade Review, of London, Eng., has entered upon its twenty-first year. We are reminded of this by a special number just to hand, of which numerous illustrations form a most interesting feature.

Jack London writes in the Review of Reviews for January on "The Economics of the Klondike," forecasting, in a measure, the material progress of that wonderful region under natural conditions of development.

We are indebted to T. Sullivan & Co., of Buffalo, for one of the prettiest calendars which has reached our desk. This firm are wholesale dealers in hardwood lumber, with office and large yards at the corner of Niagara and Arthur streets.

Lumber Tool Catalogue A, 1899, has been received from Thos. Pink, manufacturer of lumber driving tools, boom chains, cant hooks, peavies, etc., of Pembroke, Ont. Mr. Pink is represented in Quebec, New Brunswick and

Nova Scotia by Bacon Bros., 377 St. Paul street, Montreal; in Toronto by Rice, Lewis & Son, in northern Ontario by Purvis Bros., North Bay, Sudbury and Webbwood; and in British Columbia by J. R. Hunter, Nelson.

The Merchants Cotton Co. has placed an order for all the belting in its new extension, to contain 500 looms and 20,000 spindles, with D. K. McLaren, Montreal. The order includes 155 feet, 50 inch, 3 ply; 160 feet 14 inch, 3 ply; 100 feet 10 inch, 2 ply; 800 feet 6 inch, 2 ply.

The Board of Trustees of the National Wholesale Lumber Dealers' Association have decided to hold their next annual meeting in the city of Baltimore during the first week in March next. This point can be conveniently reached by a large number of the members, and it is hoped that the meeting will be the means of getting interested in the Association a large number of manufac-

turers and wholesale dealers. Mr. J. N. Scatcherd, of Buffalo, is president of the Association, and Mr. E. C. Grant, of Ottawa, is a member of the Board of Trustees.

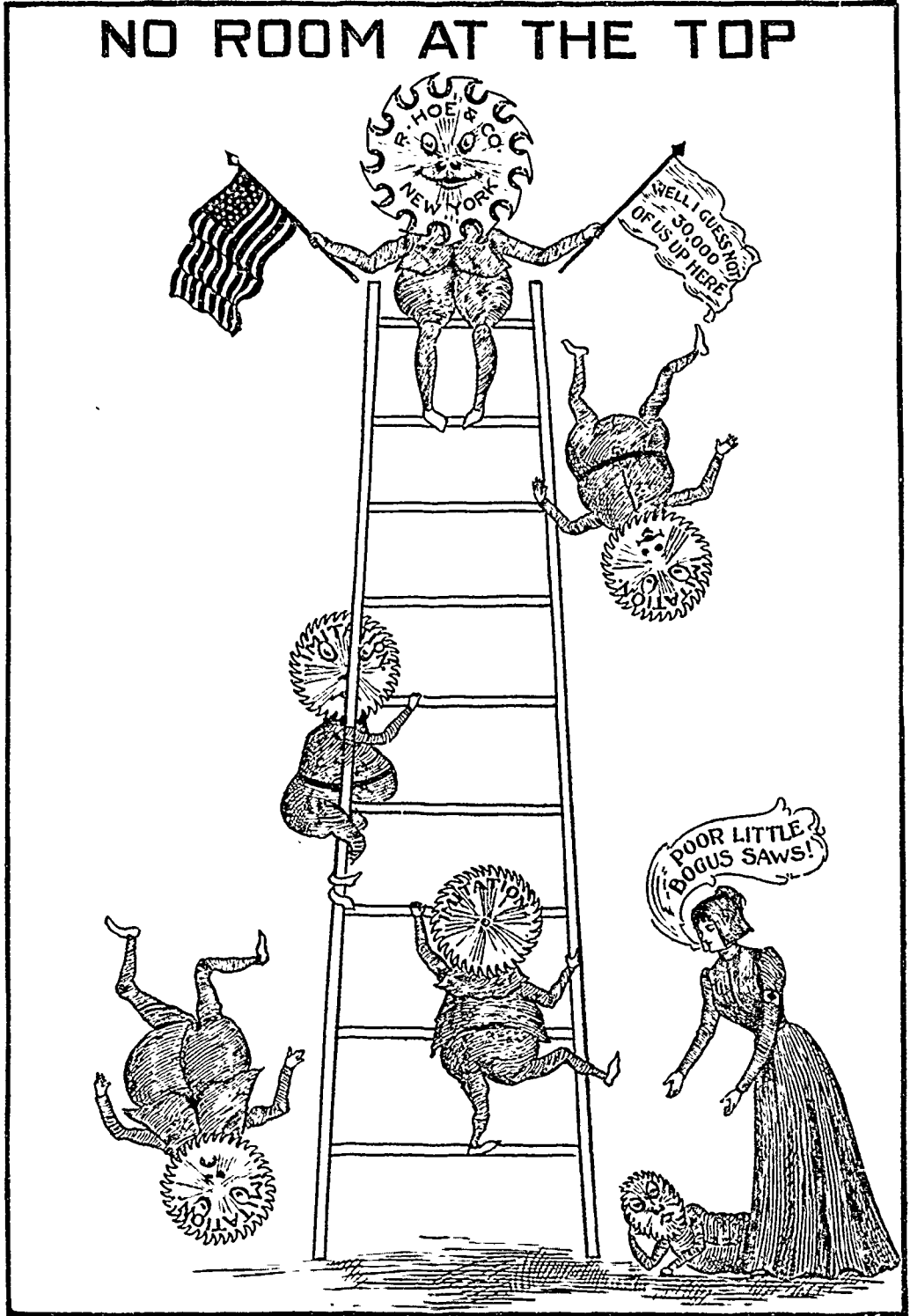
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WOOD PULP ~ ~ DEPARTMENT

FIRST PULP MILL IN CANADA.

Mr. John Macfarlane, president of the Canada Paper Co., Montreal, in response to an inquiry from THE LUMBERMAN, writes that the first manufacturers of chemical pulp in Canada were the Canada Paper Co., at Windsor Mills, Que., in the year 1873, and that the first manufacturers of ground wood or mechanical pulp were Alex. Bunting & Co., at Valleyfield, Que., about the same year. Thus it is less than thirty years ago that the manufacture of pulp was commenced in Canada.

PINE AS PULP MATERIAL.

ATTENTION having lately been directed in Canada to the advantages of pine wood as a material for pulp manufacture, it may be of interest to give a few particulars of the pine pulp industry lately inaugurated in the district of the Sologne by M. Perinet, the founder of the Salbris paper mill (Loir-et-cher), where two 68-inch machines are employed. This gentleman has succeeded in manufacturing from the material in question a sort of paper board, of a brown color, and useful for a variety of purposes, particularly for the production of boxes for sugar confections. The pulp used contains 75 per cent. of local pine fibre and 25 per cent. of rag and waste paper. The price of 8s. 9d. per cwt. is easily realized. Pine billets of six centimetres (say 2½ inches) in diameter and from one up to three yards in length are used, and three or four tons of pulp are made daily, 14 steres (one of which equals 1.31 cubic yards) of wood being consumed in the process. An ultimate daily production of 14 tons is aimed at, in order to diminish the general expenses, and it is estimated that 16,800 steres of pine wood will be required annually to enable this quantity to be turned out. The present price of

the timber is about 7s. per stere, delivered. The freight of the finished paper board (or of the pulp itself) from the mill to Paris is 1s. 4d. per cwt., but it is hoped that a lower rate will shortly be granted. — World's Paper Trade Review.

BRITISH OPINIONS.

SAYS the Paper Trade Review, of London, Eng.: British visitors to Canada appear unanimous in their verdict that that country has an excellent future before it in regard to the manufacture of wood pulp, and in the supply of the British and other markets. Mr. Becker, in speaking of the natural advantages enjoyed by Canadian manufacturers and the power to compete with the Scandinavians, simply endorses the opinions of Capt. Partington, Mr. A. E. Reed, and other prominent British papermakers, who are interested in Canadian undertakings. Mr. Becker thinks, however, that those Scandinavian mills turning out the highest quality of mechanical have nothing to fear from Canadian competition. The Canadians turn out a suitable pulp with a strong fibre for "news," and a better price is obtained compared with the common grades of Scandinavian mechanical. In the production of high-class mechanical the Canadians would have to engage additional labour, bestow more attention on wrapping, and with other expenses the cost of production would be greatly increased.

PAPER AND PULP MILLS IN CANADA.

WE have been favored with a copy of the twenty-fifth annual edition of Lockwood's Directory of the paper and stationary trades of 1899-1900. This work contains a complete list of the paper makers in the United States, Canada, Mexico, South America and Japan, paper and

paper stock dealers, wholesale and retail stationers and wall paper printers in the United States as well as a list of pulp mills in the United States and Canada, classified under different headings to show those in operation, in course of construction, and idle. According to this work there are ninety-three paper and pulp mills in the Dominion of Canada, owned or operated by forty-nine companies. Four of these are idle, one mill has been abandoned since last year, one was destroyed by fire but has been rebuilt, and two mills are under construction.

There is a variety of contents in the book, and it is valuable for stationers, paper makers, paper dealers and manufacturers of pulp and paper machinery. The publishers are the Lockwood Trade Journal Co., 150 Nassau street, New York city; price, \$2.00.

FREIGHT RATES ON PULP.

SOME weeks ago a conference was held between members of the city council of St. John, N.B. and certain pulp manufacturers, to inquire into freight rates charged on pulp by the Furness Line. Mr. M. F. Mooney, manager of the St. John Sulphite Pulp Co., stated that the Furness Line charged a higher rate from St. John than was charged from Boston, Montreal and Portland. He had been unable to secure space for a small quantity of pulp to go forward as a sample on which depended a sale to one person of 2,000 tons.

Mr. Wagon, manager for the Dominion Paper Co., Chatham, N.B., stated that he had to ship through St. John by the Furness Line because of the extra freight charged over what was quoted on measurement. He had to drop the London market and seek one in Canada or the United States, which he had done. He could secure lower rates via Halifax, Montreal or Portland, at which points they accepted the pulp weight of 2,240 pounds, while the Furness Line charged by the cubic foot. Were the rates right he could ship to London through St. John and make it pay. He claimed that pulp did not exceed 60 cubic feet to the long ton, while the company charged on 65, 67, and up to 70 cubic feet. He measured two of his bales, and the average

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was 56.2 feet. He advocated charging on ton weight.

Mr. Schofield, agent of the Furness Line, said that the figure he gave Mr. Mooney for a small shipment was 11s. He said that New Brunswick provided little good paying freight, while Nova Scotia provided much. This was the reason that a steamer intended to finish loading at St. John did not come further than Halifax. He said the steamers would load at St. John if the people would pay the freight rates. He pointed out that the bales differed greatly in thickness, the difference in a lot then at his warehouse being nine inches.

Mr. Mooney read a quotation of 7s. 6d. on pulp from Boston to London.

Mr. Schofield presented a table showing the value of deals and pulp as freight. This quotation of 7s. 6d. would mean, he said, 22s. 6d. per standard on deals, whereas from 45s. to 55s. could be obtained. Deals, he claimed, were also poor paying freight. He contended that pulp should pay a higher rate than deals because of its greater value and risk in handling. He had written to Montreal for rates on pulp and got the following: Dry pulp, Montreal to London, per 40 cubic feet, May 6th, 10s.; June 10th, 11s. 3d.; July 8th, 11s. 3d.; August, 12s. 6d.; September 9th, 15s.; October 3, 17s. 6d.; October 8th, 20s. This latter would be equal to 90s. on deals. Replying to a query, he said that he did not think the rate on pulp would ever be as low at St. John as at Montreal, owing to the larger shipping trade there.

The discussion which followed brought out the information that the pulp manufacturers would

be able to supply 800 tons a fortnight to the steamers provided the rate were satisfactory.

CANADIAN PULP MACHINERY.

Messrs. Carrier, Laine & Co., of Levis, Que., writing to THE LUMBERMAN on the question of obtaining pulp machinery in Canada, say: "We are prepared to furnish any machinery in the line of pulp mills, from the grinder to the baling press, as follows: Pulp grinders (New England grinder), horizontal and vertical, making 4 to 6 tons per day of twenty-four hours, for the varying price of \$600 to \$900 each; pulp wet machines, from 48 to 72 inch width, for \$800 to \$1200; straining machine, with duplicate sieves, from \$100 to \$200; pulp screening machine, from \$300 to \$500; pulp stuff pumping machines, from \$75 to \$150; pulp wood barking machines (Holyoke), from \$200 to \$400; pulp wood splitter machines, from \$200 to \$300; pulp hydraulic press machines, from \$400 to \$600; pulp baling press machine, from \$200 to \$350.

PULP NOTES.

The Spanish River Pulp Co. have purchased Doran's water power, near Webbwood, Ont.

Mr. Geo. West, of Chatham, Ont., representing the American Pulp Co., states that his company may erect a pulp mill at Midland, Ont.

Parties have been looking over the property of S. P. Benjamin, of Wolfville, N.S., with a view to building a large pulp mill on the Gaspereau lakes.

In the state of Maine there are in operation thirty pulp mills, with a daily capacity of 735 tons of ground wood pulp, 330 tons of sulphite pulp, 110 tons of soda pulp and 60 tons of leather board.

Mr. T. G. McMullen, of Truro, N.S., has not yet abandoned the idea of erecting a pulp mill, notwithstanding that the dam he had constructed was completely destroyed by a freshet some months ago.

It is expected that the mill of the Cushing Sulphite Fibre Co., at St. John, N.B., will be completed early next spring. In this mill it is proposed to make use of

slabs and mill refuse in addition to the ordinary pulp wood.

Engineers representing prominent American capitalists have just made a tour of inspection of the water powers in the Lake St. John district, province of Quebec. The object in view is the erection of large pulp mills.

Mr. E. C. Crawford, of Boston, who is understood to represent British capitalists, has acquired options on three water powers, one on the St. Maurice river in Quebec, one on a branch of the Ottawa river, and one at Grand Falls, N.B. It is possible that pulp mills will be built on each of these sites.

The St. John Sulphite Pulp Co., of Mispic, N.B., are said to have sold the bulk of their output for the next year. Their annual production is about 9,000 tons, of which 2,000 will go to Great Britain and 6,000 tons to the United States, leaving about 1,000 tons to be contracted for. The promoters of this enterprise are greatly encouraged at the prospects for successful trade.

The Sissiboo Pulp & Paper Co., of Weymouth Bridge, N.S., are now getting out timber for a dam and making plans for machinery for the proposed pulp mill. They are also arranging for the survey of the electric railway. It is not expected, however, that construction will be commenced before March 1st next. The mill now in operation is doing very successful work, and large quantities of pulp are being shipped to the United States.

Judgment has been given by the Court of Appeal in the case of John Livingstone vs. Frank Ross, reversing the decision of the former court. Suit was brought by the Dufferin Falls Pulp Co., including F. P. Currie, J. T. Shearer and John Livingstone, of Montreal, to compel Frank Ross to deliver to the plaintiffs certain property on the river Du Lievre, near Buckingham, Que., on which plaintiffs were given an option for the purpose of building a pulp mill. The final decision is in favor of the defendants.

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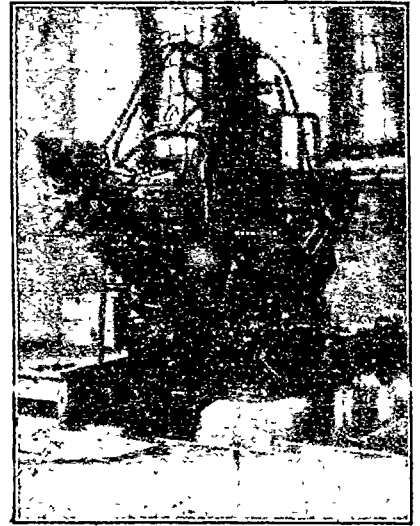
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THE KOOTENAY AND YALE LUMBER COMPANY.

It is reported from Rossland, B. C., that at a meeting held on December 1st, the Kootenay and Yale Lumber Company completed its organization by electing the following officers: President, Louis Blue; first vice-president, Peter Genelle; second vice-president, John Genelle; secretary, J. E. Poupore. The intention is to have offices in Rossland and Greenwood. The Rossland office will look after the business in the Trail Creek and Nelson sections, and the Greenwood office after the business of the company in the Boundary Creek country. The company which constitutes the combine is capitalized for \$500,000 in \$1 shares. Of the capital stock \$250,000 goes to Louis Blue and A. Fisher, and the other \$250,000 to P. Genelle & Co. In the property controlled by the combine are eight mills.

Regarding the combine Mr. Blue says: The mills include P. Genelle & Co.'s at Nakusp, capacity 150,000 feet every 24 hours; Genelle & Co.'s plant at Robson, capacity 150,000 feet, my plant at Rossland, capacity 70,000 feet, and my plant at Ymir of 35,000 feet. They will also include the four mills owned by myself and A. Fisher in the Boundary. Their location and capacity is: Phoenix 30,000 feet, Eholt 50,000 feet, Rock Creek 40,000 feet, and Long Lake 30,000 feet. In addition to these the company will erect four mills over the Boundary at points not yet settled. Our reserves are located all over the Arrow lakes and through the Boundary district. We have timber lands under Dominion and provincial grants, as well as by virtue of leases from claim owners and the railway companies. I should say that the amount of timber now standing on our territory is close to half a billion feet.

If there is a leak of steam around the piston rod of your engine, and the packing has been in use for several months, do not take off the gland and put in another ring or two of packing, but clean out all of the old and put in new throughout.

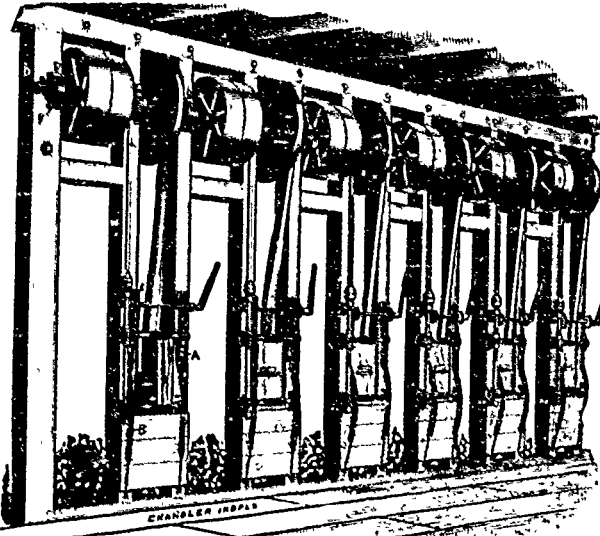
TIE SAWING MACHINE.

MESSRS. Kittredge, Smith & Co., of Sherbrooke, Que., have invented a tie sawing machine, which was tested last spring by sawing 27,000 ties for the Q. C. Railway Company. The machine is said to be a complete success, and will make 4,000 eight-foot ties per day, at a cost not exceeding one-half cent per tie, taking the logs from the water and delivering them in a finished condition, with no other handling than passing them to the carrier in the water and two attendants to properly adjust them as the logs are passing through the centring adjusters to the carrying belt, without loss of motion. Parties wanting such a machine may obtain particulars from the above firm, or the Jenckes Machine Co., of Sherbrooke.

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Persons having for sale or wishing to purchase a particular lot of lumber, a mill property, timber limits, second hand machinery, etc., in fact, anything pertaining to lumbering operations, will find a buyer or seller, as the case may be, by placing an advertisement in the "Wanted For Sale Department" of the CANADA LUMBERMAN Weekly Edition. Testimonials to the value of this department by those who have given it a trial state that results of advertisements were frequently better than anticipated. The cost is comparatively small. Lumber owners might, with profit to themselves, make use of this method of advertising their stock to a still greater extent.

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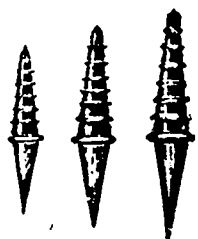
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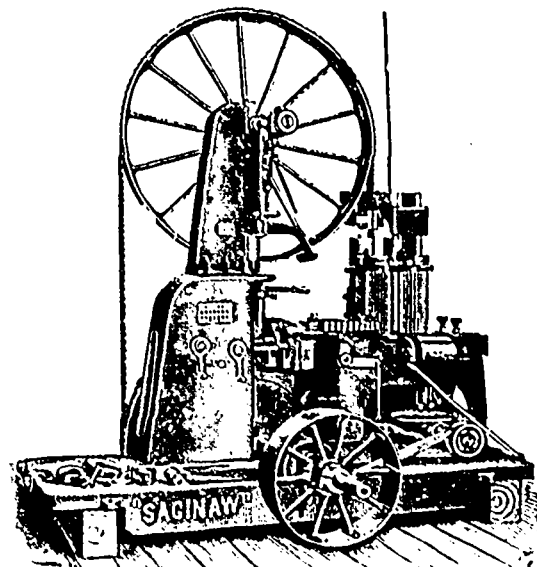
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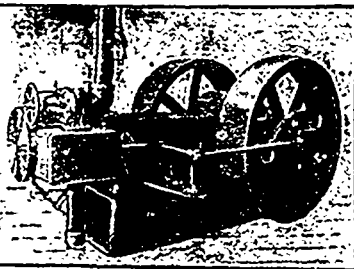
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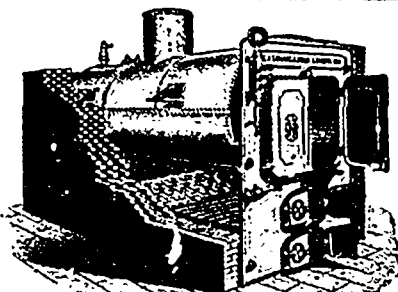
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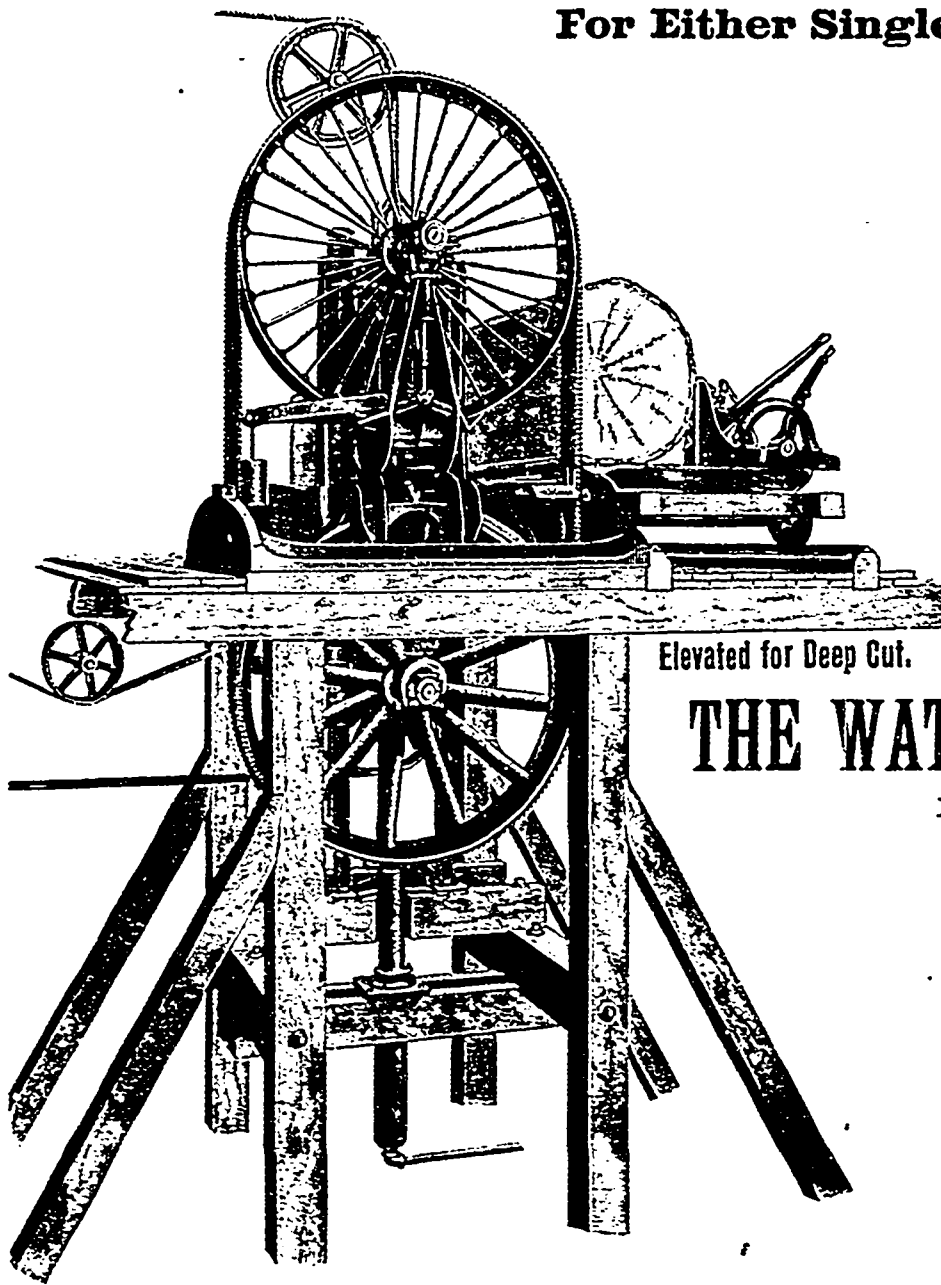
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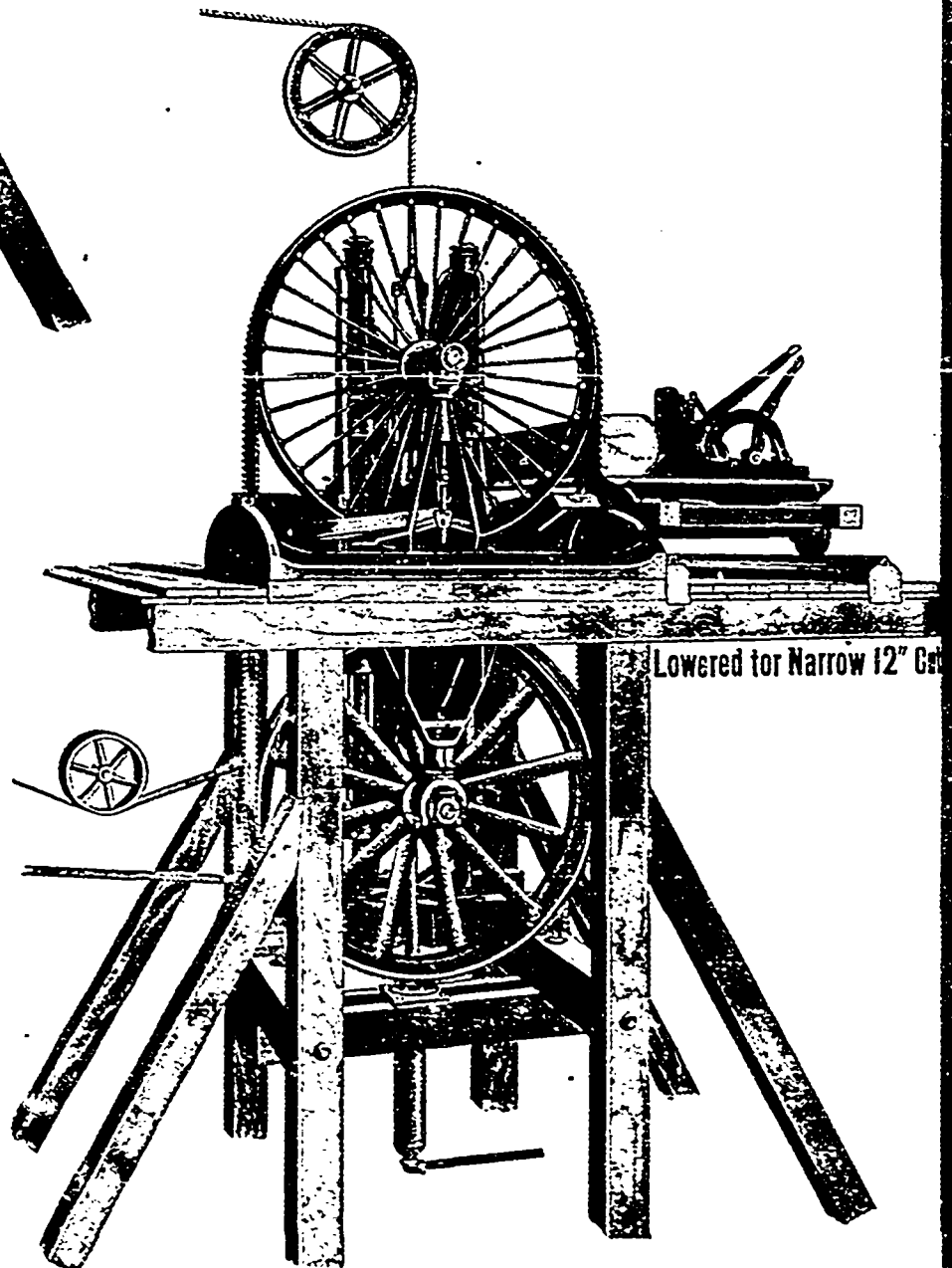
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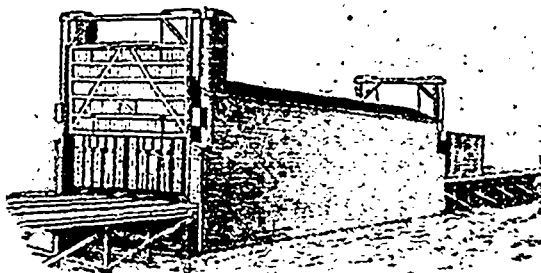
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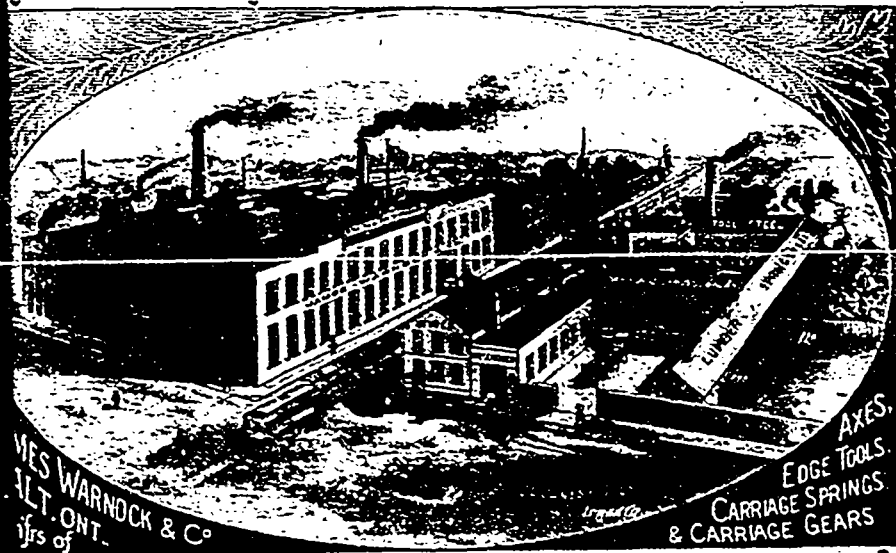
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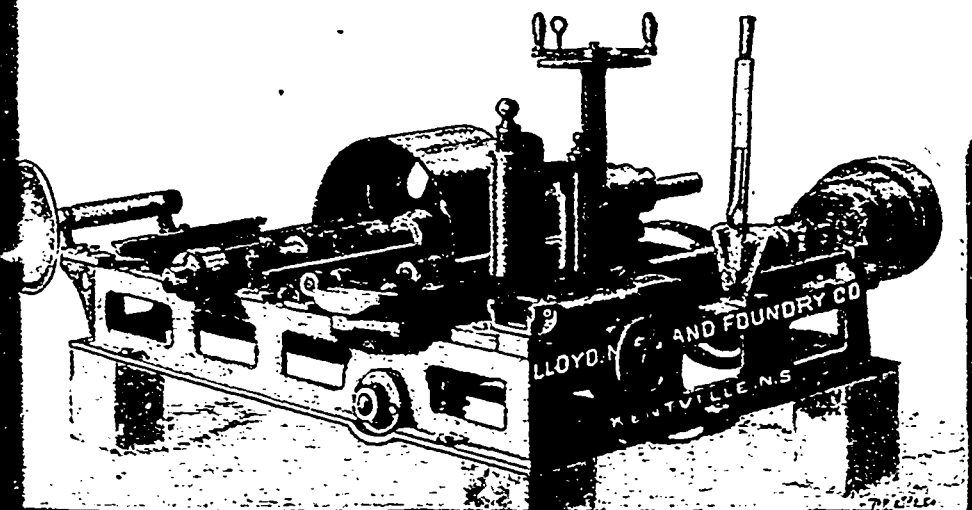
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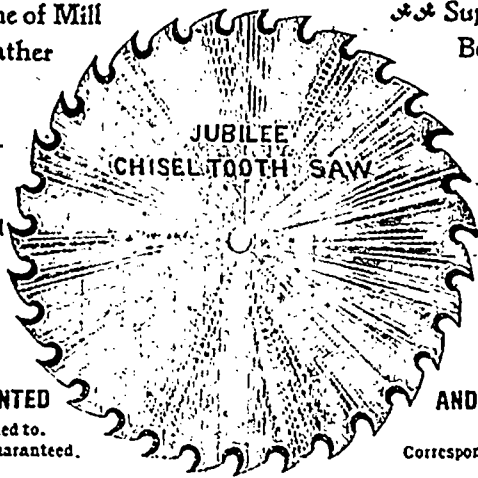
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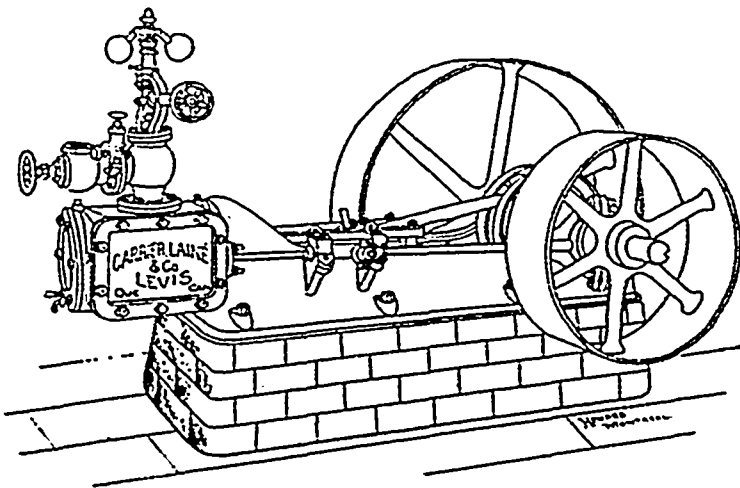
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