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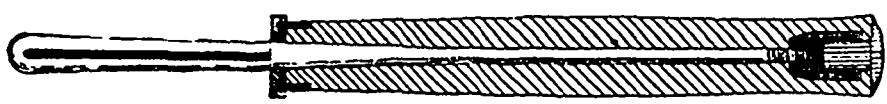
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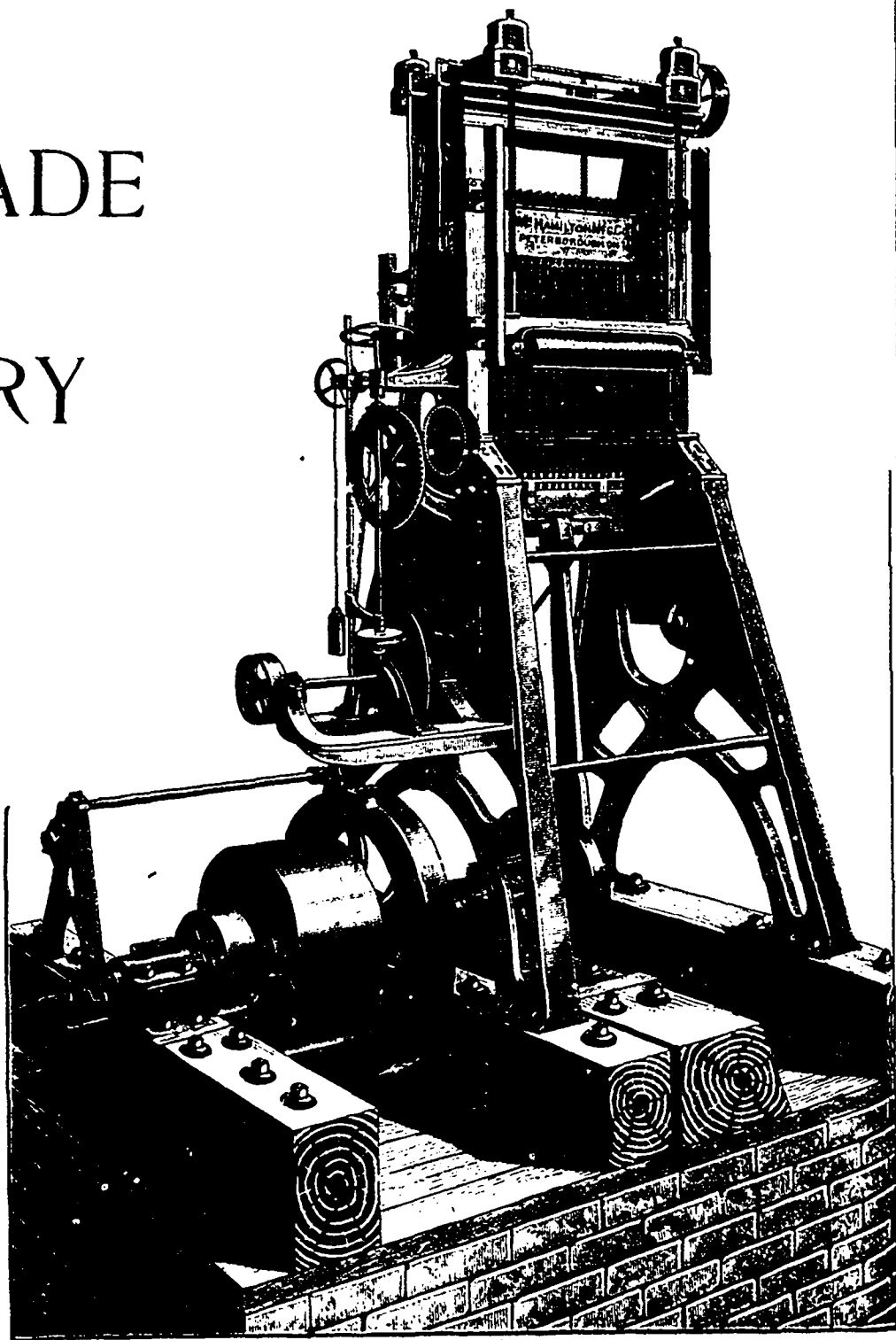
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FORESTRY AND THE LUMBER INDUSTRY.

By THOMAS SOUTHWORTH.

THERE appears to be an impression among many of the men engaged in the lumbering business in this country that the methods and aims of the advocates of a rational system of forestry are not only impracticable in Ontario, but would, if a serious attempt were made to carry them out, prove inimical to the interests of the lumbermen. This attitude of many of our lumbermen towards the forestry movement is based on a misapprehension of the methods and aims of forestry advocates, excusable, perhaps, but a misapprehension nevertheless.

On the other hand, it is only fair to state that many forestry advocates have been apt to look upon the lumbermen simply as ruthless despoilers of the forest, and failed to fairly take into account the surroundings of an industry attended with so much risk. Foreseeing the disastrous consequences that must inevitably follow upon the reckless and complete destruction of our forests by axe and fire, these men endeavored to arouse public opinion to the realization of the impending danger. They saw many of the older settled counties in the province being rapidly stripped of trees in some the percentage of woodland being as low as five per cent.; they found streams that once afforded considerable water powers drying up; they noticed that a period of dry weather has a greater effect on grain crops now than in former years; in fact they saw deterioration in the climate and resources of Ontario, and perceiving the cause they called for a cessation in the work of forest destruction. In their alarm it is, perhaps, not to be wondered at if some forestry advocates should seek first to stop the cutting of trees, overlooking the fact that forest trees are a crop to be harvested, and one that could and should be harvested in such a way as to secure successive crops of the same kind, where for various reasons it is desirable that a forest cover should be maintained, and a constant supply of timber for industrial purposes provided.

Forestry advocates do not now ask that lumbermen should cease their operations. They know they are engaged in harvesting a valuable crop that would go to waste except for them; they know the lumber industry is a very extensive one, employing a large capital and many men an industry absolutely essential to our economic welfare.

What they contend is that the present wasteful method of exploiting our forest wealth, in which only a small part of the timber is taken out and the rest burned up, is unwise and unnecessary. They believe that certain areas of this province, areas that are unfitted for general agriculture and are the sources of streams, should be kept tree-covered, and suggest that some more rational system, some application of scientific forestry, be adopted by the government and by the lumbermen, to the greater profit of the lumbermen, and with increased and continual revenues of the province. Lumbermen do not pose as philanthropists, neither are they in the business merely for their health. They know it would pay them better as a rule to take out only the trees of large growth, leaving the small ones

The saving effected in the past few years, both to the provincial revenue and to the limit owners who have employed fire rangers, has been very great, and there is reason to hope that not only will the government endeavor to protect the revenue by more advanced regulations and restrictions in future sales of limits, but that the present owners of pine limits will, with the added safety from fire, adopt more economical methods and prolong indefinitely the period of profitable working of their forest areas. This can only be accomplished with greater immunity from fire, and with a more thorough knowledge of the habit of growth and other sylvicultural conditions surrounding Canadian forest trees. Some other qualifications than knowing how to fell a tree quickly and saw it into logs will be required on

the part of foremen in the woods, just as some knowledge of scientific agriculture has been found advantageous in successful farming.

Where there has been so much naphazard and waste in our lumbering operations, it is interesting to know that there have been exceptions to the rule; that some, at least, of our lumbermen have pursued a different course, and, despite the added danger from the careless methods of neighboring limit holders, with considerable success. Among these may be classed The Rathbun Company, of Deseronto. Having secured timber limits on the streams tributary to Lake Ontario and the Bay of Quinte, this firm proceeded to



RATHBUN LIMITS—SHOWING BLOW-DOWN, AUGUST, 1896.

to grow to maturity, but their experience teaches them that what young trees are left are apt to be a total loss from fire, so the practice is to cut anything that will make fence posts, despite the greater waste in trees of small diameter. It is generally conceded that more timber has been destroyed by fire than has been cut by lumbermen, and it had come to be regarded as useless to save the young growth where the highly inflammable tops and branches of the coniferous trees were left by the loggers to spread the fire.

The first important step towards a rational forestry system was the adoption of the fire ranging system proposed by Mr. Aubrey White, Assistant Commissioner of Crown Lands. This attempt to check the ravages of forest fires was not at first very heartily approved of by the lumbermen, who were very doubtful of its success. The results have, however, been so beneficial that now few limit holders fail to take advantage of it, though it is optional with them to do so or not.

erect mills of a substantial character and at an expense that would scarcely have been warranted had they not considered it possible to protract their operations in these limits over a much longer period of time than has ordinarily been found practicable in this country. Having this idea of permanency constantly in view, their limits have been worked in a manner that would have been disastrous if the usual fire had followed the winter's cutting. Instead of taking out all the pine, large and small, the foremen were instructed to cut selected trees throughout the area to be cut over, and particular stress was laid on the necessity of taking out and utilizing everything that was down. No trees were to be left on the ground to decay or burn because of being partially defective. As their license included other trees than pine, they were able to drive to their mills all the floatable timber, and, after the introduction of railways, some that could not be floated was also utilized in various

ways. The necessity of disposing of all the fallen timber of every sort as a safeguard against fire and as a prevention of waste, necessitated an extension of their plant beyond a mere saw mill, and brought about the extensive charcoal, chemical, brick, cement, and other industries located at Deseronto.

The fact that this company is still operating in limits that have been worked for many years is not the result of chance. They have been saved because precautions were taken to protect them. The question of disposing of the waste after logging is a very serious one. We cannot dispose of it here as is done in Germany, where even the little twigs are used for firewood. It is extremely dangerous if left in the woods, yet the expense of taking it out renders that plan impossible. The plan followed by one or two Michigan lumbermen, of burning the tops and branches as they lie on the ground early in the spring, has been pronounced impracticable by many of our principal lumbermen, yet this plan has been in successful operation in the county of Hastings for some time. Mr. James Scantlin, chief fire ranger in Rathbun's Hastings limits, in reporting to the Department of Crown Lands on the season's work, writes :

"I have made it a practice for the past five years to burn all the tops and rubbish of our previous winter's cut as early in the spring as it is dry enough to burn, and watch it so that it does not burn into the green woods. In this way we have had no heavy fires in the summer. Another advantage I find is that the young pines, both white and red, come right up and grow well, but I find where the heavy summer fire goes it burns too deep into the soil and seems to burn all the seed of the pine, so that other kinds of timber grow up, poplar and birch taking the lead and outgrowing all the other trees."

Mr. Scantlin writes that if the fire rangers, after this early spring burning, would give careful attention to the young pines, another cut could be taken out from them in 25 or 30 years. While Mr. Scantlin may be slightly optimistic in his views as to the time required to grow a pine tree to timber size, his experience in preventing fires is valuable, and his conclusions as to the conditions of growth of young pine correct.

Does it pay? Would it not have paid the Rathbun Company better to cut off the valuable timber as soon as possible, and then buy other limits? This question is frequently asked by those among whom the Rathbun methods are known. I have no doubt more immediate profit could have been shown by the speedy method of getting over a limit and taking out the pine. The expense of logging and driving per thousand feet would perhaps be less and the returns on the investment quicker, but that method of figuring does not take into account the permanence of the business, and a visit to the Rathbun limits in the

township of Grimsthorpe will afford a fairly satisfactory answer to part of the query. The limits alongside have long been burned over, and the mills they supplied are idle, yet in this old limit that has been worked for many years it is estimated there is from 150 to 200 million feet of white and red pine still standing, most of it of good timber size. About ten million feet B. M. was taken out of it this season, and, to one not an expert no thinning out of the forest was apparent, except where a cyclone had left an extensive blow-down, which was cleared up by the loggers down to "anything that would make matches," as Mr. E. W. Rathbun's instructions to the efficient manager, Mr. Callahan, tersely put it. The photo appearing on the previous page was taken by the writer before the loggers had completed their work in the "blow down." Notwithstanding that many very small trees blown down in this cyclone were made into logs, thus reducing the average, I was informed by the government culler that the whole drive would



RATHBUN'S HASTINGS LIMITS, SHOWING CLEARING AROUND CAMP.

average 90 feet B. M. to the log, thus showing the timber to be of good average size.

Good permanent roads have been built all through the forest, and the camps are in better shape than would likely be the case if they were only intended for temporary use. Around each camp a space of about five acres has been completely cleared, as shown in the accompanying illustration, and I understand it is proposed to cultivate and seed to pine and other trees each of these five acre plots this spring. While I believe this method of lumbering has paid the Rathbun Company better than the other, there certainly can be no doubt of its greater advantage to the province in the increased stumpage dues on timber that is cut instead of burned up.

Have any changes taken place in the lumbering business in your locality? If so, write a few lines to the CANADA LUMBERMAN giving the particulars.

The most beautiful trays and cabinets which come from Japan are made of the dark, irregularly-grained and wavy-lined wood of the kiaki, a tree closely allied to the elm.

ONTARIO TIMBER LANDS.

A COMPARISON of the quantity of timber cut from the crown lands of Ontario in 1896 with that of the previous year shows a considerable increase in the output of white pine. Of hardwoods no definite returns are given. The following table, compiled from the reports of the Commissioner of Crown Lands, shows the estimated cut of different classes of wood :

	1895.	1896.
Saw-logs, pine.....	800,665,355	904,379,710 feet B.M.
" other than pine.....	12,917,017	15,197,757 "
Boom and dimension timber, pine.....	37,170,013	34,373,475 "
" other	1,854,051	2,056,670 "
Square timber, white pine.....	873,304	1,128,606 cub. feet
Pulpwood.....	31,115	31,057 cords
Railway ties.....	907,862	708,451 pieces
Telegraph poles.....	1,518	655 "
Stave and shingle bolts.....	2,430	1,339 cords
Piles and head blocks.....	69,354	55,623 feet.

In the year 1895 the area covered by timber licenses was given as 17,851 square miles, while last year only 13,722 miles were under license.

Regarding forest fires, the Commissioner in his report says :

"It has become evident that if the Crown domain is to be protected from forest fires some

organized system of fire ranging will have to be put in force on the unlicensed territory similar to that which is in operation on the licensed lands. Owing to the excitement which now prevails in connection with gold mining and to the wide area over which the precious metal has been found to exist, there will scarcely be a corner of the newer parts of the province in which the explorer will not be plying his vocation during the coming summer. Explorers, like others, are good or bad, careful or careless, and as they continually use fire for cooking, keeping off flies, lighting their pipes, etc., the danger to the forest areas will be considerably increased. Every precaution possible has been taken to

keep explorers out of the pine areas. Notices have been posted in the Rainy River district warning them not to survey or attempt to take up as mining lands areas which are covered with pine timber, and the surveyors have been instructed not to survey in pine areas. But notwithstanding all this it is found that explorers pay little attention to these regulations and notices, where they have reason to believe there is a prospect of finding gold. Nothing short of an active surveillance of the pine areas by a staff of fire rangers will have any deterring effect in preventing explorers entering upon pine lands in the prosecution of their search for gold. There is a large area of pine territory in an exposed position in the Rainy River district which ought to be carefully guarded during the coming summer, and in the territory north and east of Wahnapiatae there is understood to be an immense body of pine timber which ought to have some supervision, with the object of preventing its being damaged by fire."

Another log raft will be built on the Columbia river at Stella, Washington, for San Francisco.

THE CANADIAN TARIFF.

BELOW will be found the schedule of import duties on articles affecting the lumber and wood-working industries, as provided by the new tariff which went into effect on April 23rd last. The tariff is divided into four sections. By schedule "A" the following duties are imposed:

DUTIABLE GOODS.

- Cane reed or rattan, split or otherwise manufactured, n.o.p., 15 per cent. ad valorem.
- Corks and other manufactures of cork wood, or cork bark, n.o.p., 20 per cent. ad valorem.
- Lumber and timber, manufactured, sawed boards, planks and deals, planed or dressed on one or both sides, when the edges thereof are jointed or tongued and grooved, 25 per cent. ad valorem.
- Shingles of wood, 20 per cent. ad valorem.
- Pails and tubs of wood, churns, brooms and whisks, washboards, pounders and rolling pins, 20 per cent. ad valorem.
- Veneers of wood, not over three-thirty-seconds of an inch in thickness, 10 per cent. ad valorem.
- Mouldings of wood, plain, gilded or otherwise, further manufactured, 25 per cent. ad valorem.
- Wood pulp, 25 per cent. ad valorem.
- Manufactures of wood, n.o.p., 25 per cent. ad valorem.
- Fishing rods, walking sticks and walking canes of all kinds, n.e.s., 30 per cent. ad valorem.
- House, office, cabinet or store furniture, of wood, iron or other material, in parts or finished, 30 per cent. ad valorem.
- Belling, of leather, rubber or other material, 20 per cent. ad valorem; former duty, 32½ per cent.
- Saws, cant dogs, adzes, hammers, etc., 30 per cent. ad valorem; former duty, 32½ per cent.
- Steam engines, boilers, derricks, cranes and portable engines, 25 per cent. ad valorem; former duty, 30 per cent.

FREE GOODS.

Timber or lumber of wood, viz., lumber and timber planks and boards of amaranth, cocoboral, boxwood, cherry, chestnut, walnut, gumwood, mahogany, pitch pine, rosewood, sandalwood, sycamore, Spanish cedar, oak, hickory, whitewood, African teak, black heart ebony, lignum vitae, red cedar, redwood, satinwood and white ash, when not otherwise manufactured than rough sawn or split or creosoted, vulcanized or treated by any other preserving process; sawed boards, planks, deals and other lumber, when not further manufactured than dressed on one side only or creosoted, vulcanized or treated by any preserving process; pine and spruce clapboards; timber or lumber, hewn or sawed, squared or sided or creosoted; laths, pickets and palings; staves not listed or jointed, of wood of all kinds; firewood, handle, heading, stave and shingle bolts, hop-poles, fence posts, railroad ties; hubs for wheels, posts, last-blocks, waggon or gun, heading and all like blocks or sticks, rough hewn or sawed only; fellos of hickory wood, rough sawn to shape only, rough sawn and bent to shape, not planed, smoothed or otherwise manufactured; hickory billets and hickory lumber, sawn to shape for spokes of wheels, but not further manufactured; hickory and oak spokes, rough turned, not tenoned, mitred, throated, faced, sized, cut to length, rough tenoned or polished, the wood of the persimmon and dog trees and logs and rough round unmanufactured timber, ship timber or ship planking not specially enumerated or provided for in this act.

Shovel handles, wholly of wood.

Corkwood or cork bark, unmanufactured, and sawdust.

RECIPROCAL TARIFF.

The preferential resolutions are as follows: That when the customs tariff of any country admits the products of Canada on terms which on the whole are as favorable to Canada as the terms of the reciprocal tariff herein referred to are to the countries to which it may apply, articles which are the growth, produce or manufacture of such country, when imported direct therefrom, may then be imported direct into Canada or taken out of warehouse for consumption therein at the reduced rates of duty provided in the reciprocal tariff set forth in schedule "D." That any question that may arise as to the countries entitled to the benefits of the reciprocal tariff shall be decided by the Controller of Customs, subject to the authority of the Governor-in-Council.

NEW BRUNSWICK CROWN LANDS.

THE twenty-sixth annual report of the Crown Lands Department of the province of New Brunswick, for the year ended 31st October, 1896, gives the total receipts as \$143,867.33, a slight falling off as compared with the previous year. The following is a comparative statement of the receipts from timber lands:

	1895.	1896.
Sales of timber licenses.....	\$ 13,856.25	\$ 5,179.75
Renewals of timber licenses.....	25,974.00	27,238.00
Net stumpage.....	109,142.39	98,421.82

There was a considerable reduction in the sales of timber licenses, as fewer licenses were applied for and the competition was not so keen as usual. During the past winter, however, the competition for timber lands has been marked. The cost of scaling, collection and protection of lumber was \$9,337.27.

The statement below shows the quantity and kind of lumber cut from crown lands during the year, with the amount of stumpage charged thereon:

Kind of Lumber.	Quantity.	Stumpage Charged.
Spruce and pine logs.....	76,085,459 s. ft.	\$ 77,559 14
Hemlock logs.....	12,785,713 "	5,152 91
Cedar logs.....	14,279,880 "	11,474 85
Hardwood logs.....	301,499 "	301 39
Hardwood timber.....	40 2/34 tons.	397 79
Pine timber.....	302 tons.	302 00
Spruce timber.....	156 tons.	78 00
Wood, fire, stove, spool, pulp.....	1,423 cords	240 22
Hemlock bark.....	156 1/2 "	140 20
Sawn shingles.....	8,519 M.	888 80
Railway ties.....	117,440 pieces.	2,348 82
Cedar posts.....	1,700 "	6 00
Spruce poles.....	1,800 "	4 50
Telegraph poles.....	725 "	47 75
Boom poles.....	1,290 "	25 80
Brackets.....	200 "	2 00
Knees.....	2,525 "	219 40
Spool wood, white hickory.....	1,865,666 s. ft.	1,212 28
Stove wood.....	460 pieces.	7 83
Fence rails.....	5,160 "	22 50
Wier poles.....	800 "	8 00
Fir logs.....	11,000 s. ft.	5 50
Rafting pins.....	107 M.	10 50
Total stumpage charged.....		\$100,415 45

WHY TREES DO NOT THRIVE.

In the annual report of the Geological Survey Department, Ottawa, Prof. J. Macoun gives the following particulars of his observations in connection with the growing of trees:

"Later in the season I made collections at Prince Albert and in Southern Manitoba and was struck with what I shall call the hardness of the trees and shrubs in these regions. I had seen that the Canadian Pacific Railway gardens at Moose Jaw and Medicine Hat grew trees and shrubs without being winter-killed and that the cause of the want of hardness must be looked for in other directions than severity of climate. I had long suspected that the trees on the prairie died for the want of nourishment and exposure to biting winds and not from severe cold, and this year I became convinced of it. Were a supply of moisture given to trees, grown from seed, so that they could mature their wood in July or early August for a couple of years, and the grass allowed to grow around them without being cut or pastured over, enough snow would gather in the winter to give all the moisture needed for the next summer's growth. A study of any thicket on the prairie will prove this. Did the farmer but realize the importance of collecting the snow on his farm, he would begin at once to grow hedges around, say, ten-acre fields. These hedges besides being valuable wind-breaks, would be snow-gatherers, and in a few years belts of trees would spring from the seed sown within the hedge, and while the hedge would protect the young trees it would also gather the snow for the next year's growth. Success in tree planting will only be assured when steps are

taken to collect the snow by means of hedges or some other way, and successful tree growing means the settlement of the prairies."

ST. JOHN RIVER LOG DRIVING COMPANY.

THE above company held their annual meeting on the 7th ultimo. at which there were present W. H. Murray, J. F. Gregory, Geo. A. Murchie, John A. Morrison, B. W. Mallett, D. H. Nixon, D. H. Keswick, Donald Fraser, jr., C. F. Woodman, Edward McCollom and Cornelius Hagerman. The first business was the election of directors which resulted as follows: W. H. Murray, president; G. A. Murchie, Calais; John A. Morrison, Fredericton; B. W. Mallett, Fort Kent; D. H. Nixon, Hartland. Mr. J. Fraser Gregory was re-elected secretary.

It was resolved to continue in force the driving charges of last year, the actual sum to be paid by the operator for driving from Grand Falls being seventeen cents. All claims against the company on account of the drive of 1895 were settled, excepting that of F. H. Hale, who asked \$3,000 damages. The company passed a resolution asking Mr. Hale to put his claim in such a way that the company could take action upon it, either through arbitrators, a defence at law or a settlement by payment in full. Last year the company drove 146,668,657 feet, and the tolls amounted to \$23,810.36.

RUNNING CIRCULAR SAWS.

WHEN everything is right and proper the saws will run and make good lumber. If a saw gets mulish and won't go, I would like to see it explained as to the wherefores and whyfores; it may help some other fellow out, says a writer in the Woodworker.

Very few saw mills have sufficient power to drive a circular. There is half your trouble-motion up and down. You will find lots of thick and thin lumber. Why? Because your motion is up; your saw is strained up to its running motion when it goes into the log; when it comes out the motion is down. The sawyer gigs back and gets into the log before the saw has time to straighten up. If the saw happens to be laying out you will have a thin board; if it happens to lay into the log you will have a thick one. Superintendent comes around and goes for foreman; foreman goes to sawyer; sawyer says it is in filing; filer lays it to setworks. Every man has his excuses. Pretty soon your mill crew is at loggerheads, besides a poor lot of lumber. How will we remedy it? Take off your saw, hammer lightly on both sides close to rim; if you get it too much it will snake.

First, see that track and arbor are level, collars true, and saw has proper amount of lead—say one-half inch in 60-foot track. I have run without any lead and done good work. One half inch should be the limit. I can remember when they run 5/8 to 3/4-inch in 60 feet. A close observer can tell pretty quickly if his lead is right. If your saw heats on rim and doesn't snake you have too much lead; on the other hand, if the saw warms on the eye, there is not enough lead.

A correspondent writes that the make-shift saw grinder described in our March number is a dangerous piece of mechanism, and adds that it is just such contrivances that account for the injury of many persons.

CORRESPONDENCE

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

AUSTRALIAN FORESTS AND N.S.W. TIMBER TRADE.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR,—Those who saw the magnificent display of timber made by New South Wales at the World's Exposition at Chicago would imagine that this colony, at least, was well wooded with varied trees of great value. Their conception would be true so far as the variety and value is concerned, but not as to the quantity.

New South Wales is divided into three natural divisions. The first the Pacific slope, lying east of the coastal mountain range, a strip of country averaging, perhaps, forty miles in width. The second is the Table Land, and the third the comparatively dry Western Plains. The first section was fairly well, and, in some places, is now, densely wooded, but the soft, straight-grained woods, the colonial pine, cedar and rosewood, have largely been cut down. The Table Lands have some forests of valuable trees, but they are scattered. The central region has few trees except along the watercourses, and these are of no great value.

No forests largely composed of one variety are found here as in Canada. Sometimes they are dense and tropical in character, the trees being hung with creepers, but more frequently they are open and park-like. Here will be found a pine, there a cedar, interspersed with a variety of eucalypti or gums. The latter embrace a great range of hardwoods, many of them of great toughness and strength, beautifully grained, taking a high polish, and of great durability. Some of them are almost impervious to the attacks of the teredo, the white ant and other marine and land enemies of timber. The fact that their specific gravity is too great to allow of their being floated the distance which they require to be carted to reach a mill or shipping point, and so many of the logs being found to be defective through checks or decay at the heart, makes the timber expensive. Efforts have been put forth by the government and those engaged in the trade to build up an export in these hard timbers, particularly for wood-blocking, but the efforts have not produced, and are not likely to produce, large results. The total export trade of 1895 was less in value than \$150,000, and the major portion of this went to the other Australian colonies. The cut of timber in New South Wales in 1895 was less than six years ago. Queensland is somewhat better supplied with soft building timbers—nearly meets its own demand and yet exports a little. The export is rapidly diminishing, and were it not for the duty levied considerable quantities of building timber would now be imported. West Australia has its famous jarrah and karri, used in paving the streets of London, but is deficient in soft woods. Victoria and South Australia require both hard and soft woods.

What is the available forest area of Australia no one knows, but the government of more than one colony which deemed that it had sufficient timber for its own use and export for years to come, has awakened to the unpleasant fact that this is not so. Some effort is being put forth for the preservation of existing forests and the cultivation of new areas. Australia must, however, depend at an increasing ratio upon other lands for its timber supply.

The value of the importations into New South Wales in 1895 and 1891 were:

	1895.	1891.
Dressed Timber.....	£ 35,986	£ 147,018
Rough ".....	239,541	575,642
Laths and palings.....	6,432	9,643
Doors.....	7,224	25,537

This shows a great diminishment in 1895, owing in part to a lessened demand from the reduction of construction following the crisis of 1892-3, and a lowering in price. A portion of these imports were hardwoods and re-imports from other colonies. Excluding these the chief supplies came from the following countries:

DOORS.		
United States.....		£ 6,335
DRESSED TIMBER		
United Kingdom.....		£ 5,022
Canada.....		765
Norway.....		20,975
United States.....		2,690
New Zealand.....		929

LATHS.		
Canada.....		£ 1,240
United States.....		4,618
ROUGH TIMBER.		
United Kingdom.....		£ 2,611
New Zealand.....		60,111
Canada.....		19,112
Norway.....		2,820
United States.....		67,236

From South Australia there came timber to the value of £78,513. This, however, was almost wholly re-shipments originating in New Zealand, Norway and Sweden, Canada and the United States.

SHOOKS AND STAVES.		
New Zealand.....		£ 2,333
United Kingdom.....		788
Canada.....		47
United States.....		1,979

These importations were under a duty which was removed last year, the trade returns for which have not been published. An examination of these figures will prove interesting and will require some comment.

DOORS.

The doors shipped to this market are mainly from San Francisco, made from California redwood. As soon as the city recovers from the depression, which has not yet passed away, the demand must grow. I had hoped that British Columbia would have shared in the trade, and an attempt was made to introduce cedar doors from Vancouver. The result was unsatisfactory. There is some prejudice here against cedar on the ground that it is too soft. It necessarily follows that they must sell at lower figures than the redwood until a proper appreciation of the wood is secured or else some other means are used to properly bring them before the public. Then, I am bound to say that the samples sent, which I saw, were not equal to those from San Francisco. The mouldings were not as well finished or fitted, and in some, wood of a coarse grain had been selected for the mouldings which apparently had been worked with a dull tool and a little across grain. This, added to the notion regarding the wood, compelled the agent to whom they were consigned to sell at an unremunerative price. Some of those sent were sizes not often used, and this further tended to reduce the net return. I am still of the opinion, after making careful enquiry, that a good share of the trade can be secured by a courageous persistence of properly directed effort.

Some pine doors once came from Canada to Melbourne and even to Sydney, I am told, though I have not found anyone as yet who remembers them. Whether a trade can be made in them is a question. I have not the facts at hand to form anything like an opinion. It will depend upon price. Those who know pine say that a better price could be obtained for the pine than the redwood. Of that there is no doubt, but how much better cannot be told until an experiment decides. The quotations of the Sierra Lumber Company, of San Francisco, a little while ago, were as follows:

Size.		
2' 6" x 6' 6" x 1 1/4", double moulded	....	\$2.50
2' 6" x 6' 6" x 1 1/2"	....	2.75
2' 8" x 6' 8" x 1 1/4"	....	2.75
2' 8" x 6' 8" x 1 1/2"	....	3.00
2' 8" x 6' 8" x 1 3/4"	....	3.50
2' 10" x 6' 10" x 1 1/2"	....	3.25
2' 10" x 6' 10" x 1 3/4"	....	4.00

Less a discount of 40%, 5% and 2 1/2% cash.

The sizes most used are 2' 6" and 2' 8" x 1 1/2". An important item in deciding the cost of these doors would be the freight rate. One thing is certain, they could not come by any existing lines. The only chance will be by vessel direct from the St. Lawrence. There is no reason known to me why there should not be such a line of vessels. The other industries of Canada need it, and must have it if they are to succeed here as they ought.

DRESSED TIMBER.

It will be seen that in this class Canada cuts an insignificant figure. The bulk of the trade is from Norway and Sweden or re-exports from the United Kingdom. On my arrival I sought to advance this dressed timber trade. It is certain that it is more advantageous to Canada, whether it always is to the shipper or not, to ship dressed instead of rough timber. The dressed stuff shipped from Norway and Sweden consists of flooring, siding and shelving. It is not clear stuff, but most of it is full of small and tight knots. These knots, of course, wear unevenly in flooring, and do not take paint easily in siding and shelving. There was prejudice against

Douglas fir flooring because its coarse grain splintered. I was told that much of this could be overcome by proper selection and sawing. One British Columbia firm had taken up this trade and its agent here prosecuted the work vigorously and got an entrance into the market for spruce shelving, also for fir flooring, and others were working at it. The Canadian steamers were used to bring the stuff, but just when trade had got on a permanent footing, flour came into demand and the lumber was shut out. Upon seeing steamer after steamer come in without any timber on board, the orders were sent to San Francisco, from where there are frequent sailing vessels. It does now look as if the first results of my efforts in this direction will accrue to the United States. Nevertheless, I think the B. C. millmen will soon find a way to overcome this difficulty. Dressed stuff has already come and more is under way as part cargo of sailing vessels.

There is here a matter on which I should like to get the views of Eastern millmen. They meet the Baltic trade in England, where the freight is against them; could they not dress certain classes of timber and ship to this market, where, if the vessels sailed from the St. Lawrence, they should have equal terms so far as freight is concerned? The Baltic flooring is 6 x 7/8; the British Columbia is dressed out of 6 x 1, and is therefore 1/2 inch narrower than the Baltic. The latter is quoted at 13s. 6d. per one hundred superficial feet, while Oregon, as it is known from B. C., has sold at 11s., but 11s. 6d. would be paid for it if it could be had.

Laths do not call for special reference.

ROUGH MERCHANTABLE TIMBER.

Under the low prices prevailing some of the owners of limits in British Columbia have concluded that their timber will pay better to permit it to remain in the forest than to cut and ship it. A telegram is to hand that the Pacific Coast combine has been reconstructed. It was rotten from the start last year, and it certainly did not greatly help the Canadian mills, which had the reputation of pretty fairly keeping their agreements. Whether the reconstruction will do better is to be seen. The trades done through importers, known as "Indent Merchants." He takes orders from what in Canada would be known as the owner of a lumber yard, to which a planing and re-sawing mill is attached, and then orders from the mill or its broker. Formerly anything shipped as rough merchantable was accepted without demur and the cargoes were paid for in advance or on receipt of the bill here. Three or four years ago a lot of inferior stuff was shipped by a decaying mill, and at once demands were made for a reduction in price for inferior quality. Since then these reductions have been of frequent occurrence, and have been a serious loss to shippers. In some cases the claim was a just one; in others it was made as a matter of course. The buyer had nothing to lose, while the seller had to pay the cost of the survey or arbitration in addition to any reduction that might be found against him. The importer fell back on the mill that shipped the stuff. The result was that the millman, who was not really represented in the arbitration, was the sufferer.

Shortly after my arrival I suggested a temporary plan for meeting this difficulty, and it was tried soon after on a cargo on which there was a dispute. It did not last, for two good reasons. In the first place, there are two very different opinions held on the opposite sides of the Pacific as to what constitutes "rough merchantable timber." The verbal definition was the same on both sides—timber with a certain proportion of sap and tight knots—but when logs were cheap and lumber dear the stuff sent here was really "selected and clear." Now that the conditions of trade are reversed the millman wishes to ship according to the literal definition, while the Sydney man demands that his timber be of the old type. Until there is an understanding upon this point no method of settling a dispute can be satisfactory. The other trouble is worse still. So long as the seller is very much more anxious to sell than the buyer is to buy, so long will the buyer get concessions in his favor in the drawing up of an agreement that practically puts the case in his hands.

No scheme for a general settlement of a dispute is of any value in the face of a special agreement that was designed to override it.

SHOOKS AND STAVES.

Here again Canada is out of it. Some oak staves do come here from Ontario via New York, and are credited in the return to the United States. There is an opening

here for Canadian enterprise. About one hundred thousand tallow casks are required annually in this colony. The material is imported from B. C. as pickets, made into casks in Sydney, mainly by hand, and then taken to pieces and shipped in the knock-down to the interior boiling-down factories. There should be an opening for a barrel factory to do this work in British Columbia.

A promising business was opened up three or four years ago in spruce butter boxes. When I came out it had received a set back. It was said the spruce tainted the butter. A commission man who had written a good deal to Canadian newspapers was urging the Canadians to ship the boxes. He said he could sell any quantity of them. It was true, as he said, that well seasoned spruce did not taint the butter, but there was another obstacle in the way which he could not be brought to see. New Zealand has a white pine that is odorless and well adapted to this purpose. It is perishable and useless for building purposes, and therefore cheap. So long as that New Zealand wood can be landed here at past prices, there is no profitable market for Canadian spruce. When the white pine gets scarcer and dearer, as it must by and by, there will be.

Correspondence has been opened up to see whether a trade cannot be done in soap, candle and other merchandise boxes.

In conclusion, if asked what can be done to improve trade, in addition to what I have said. I should point out this fact: Much of the lumber coming here from British Columbia mills is brought through San Francisco houses. The course of the trade is millman, San Francisco broker, Sydney importer, timber merchant, builder or contractor. The trade passes through five hands, making numerous delays, expenses and misunderstandings. At least two of these middlemen are unnecessary. It is possible that a Canadian mill owner will, not long hence, open a yard and do the trade direct. If placed under proper management it will succeed, but that "if" is an important one.

J. S. LARKE.

Agency Gov't of Canada,
Sydney, N.S.W., Feb'y 20, 1897.

DIFFERENT RESULTS IN SCALING LOGS.

BAY CITY, MICH., April 6th, 1897.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR,—Observing the communication in your last issue under the caption, "Different Results in Scaling Logs," I have prepared the following, which may interest some of your readers.

HAND AND ROTARY LOG SCALE.

An experience of several years tallying lumber cut by different saws mentioned, after it had been through the edger and trimmer, and a comparison of the lumber with the log scale, as shown by the different systems of log scaling, has revealed a difference in favor of the lumber scale of from 20 ft. to over 300 ft., except by the system of hand and rotary log scale. In the first place, logs are not cut to waste as they were a few years ago, nor is there the same desire to saw a large number of logs into lumber and waste without regard to quality and manufacture. Conditions have changed. The object now sought is to saw straight, cut all you can and do it well, slab light, and be conversant with the different grades of lumber, so as to cut the logs to the best advantage. I claim that a 3/4" face on straight logs is all that should be left when slab is taken off. This scale is figured for plump inch, as lumber will surface one side when seasoned 3/8" strong. The hand saw scale is figured on light 1/8" kerf and the rotary scale on light 1/4" kerf.

It will be noticed that the number of feet does not always increase in the same ratio as the diameter of logs increases, viz., a log 12 inches in diameter and 12 feet long, hand saw scale, contains 84 feet, and one of 13 inches in diameter and 12 feet long has 102 feet, a difference of 18 feet; while a log of 14 inches in diameter 12 feet long has 117 ft., a difference of only 15 ft. as between logs 13 and 14 inches diameter, and 3 ft. less than the difference between logs 12 and 13 inches diameter. The reason for this is as follows, as a test will prove: By increasing the diameter of logs in inches only one-half an inch is gained all round for every additional inch to the diameter, and there is not sufficient log left on the outside to make an inch board. The next size being 1/2" inch larger all round, there is an inch board on each side more than on the log one inch smaller, besides the additional width on every board cut, and this makes the seeming inexplicable difference

between logs of different diameters. I claim that logs and standing timber scaled by this scale will cut very close to the actual scale of the lumber. Apply this test and you will be convinced.

HOW LOGS SHOULD BE MEASURED.

All logs, good, bad and indifferent, should be measured for full quantity without any allowance whatever for defects. The variation in quality by this rule would then be offset by variation in price. The theory is that a quantity of fairly good logs might be reduced in quantity to good wood, but a buyer would base his estimate of value from superficial appearances as a whole, and if he secured the logs, would pay for perfect stock at a reduced price. In lumber, culls are measured for full contents and sold at almost one-half price of good stock. Why should not logs be measured the same way?

BAND SAW LOG SCALE.				ROTARY SAW LOG SCALE.			
Diam. in Ins.	12 ft.	14 ft.	16 ft.	Diam. in Ins.	12 ft.	14 ft.	16 ft.
6	15	17	20	6	13	15	17
7	26	30	34	7	24	28	32
8	31	36	41	8	31	36	41
9	46	53	61	9	36	42	48
10	55	64	73	10	53	61	70
11	70	81	93	11	62	72	82
12	84	98	112	12	79	92	105
13	102	119	136	13	90	105	120
14	117	136	156	14	109	127	145
15	136	158	181	15	124	144	165
16	157	183	209	16	145	169	193
17	182	212	242	17	164	191	218
18	203	236	270	18	183	213	244
19	232	270	309	19	210	245	280
20	255	297	340	20	233	271	310
21	276	322	368	21	254	296	338
22	313	365	417	22	287	334	382
23	336	392	448	23	308	359	410
24	375	437	500	24	343	400	457

LOG RULES.	Length	Diam	Feet
Bangor	12	8	33
Oughtred	"	"	28
Scribner	"	"	22
Quebec Government	"	"	24
Doyle's Rule	"	"	16
Bangor	"	12	78
Oughtred	"	"	68
Scribner	"	"	59
Quebec Government	"	"	50
Doyle's Rule	"	"	48
Bangor	"	24	327
Oughtred	"	"	300
Scribner	"	"	303
Quebec Government	"	"	315
Doyle's Rule	"	"	300

Yours truly,

R. A. JOHNSTON.

DUTY ON LUMBER AND SAW-LOGS.

ORILLIA, ONT., March 31st, 1897.

To the Editor of the CANADA LUMBERMAN:

DEAR SIR,—It has been stated that a change is coming over the spirit of a large proportion of the Liberal party in regard to trade relations with the United States. The fact is, Canada has frequently shown her willingness to make any honorable arrangement that would lead to freer trade with the Americans, and all such efforts have been repulsed, more bluntly recently than ever before. The Dingley bill, should it pass, will impose a duty of \$2 per thousand feet board measure on white pine lumber, and twenty-five per cent. ad valorem is to be added on lumber entering the States from any country that places an export duty on saw-logs. It is to be hoped that such an unreasonable bill will never pass the Senate, but if it does become law then the only honorable course for Canada to pursue will be to meet tariff with tariff, regardless of results. The United States cannot expect Canada to submit to the payment of an import duty on lumber entering the States from here, and at the same time permit Americans to buy, cut, and take to their own country, vast quantities of the choicest pine on the continent, from here, without paying an export duty thereon, and this export duty should in no case be less than the import duty charged by themselves. If the Dingley bill had imposed \$10 duty instead of \$2 it would have been no worse, because either is sufficient to prohibit the common grades of lumber from being shipped to the States, therefore if the threatened twenty-five per cent. be added it can do no further harm. There is no question, however, that the

lumber manufacturers of Canada would for a brief time feel keenly the loss of the American market for coarse cheap lumber, but not for the better qualities, for fortunately the time has now come when not only white pine deals but all other thicknesses of the upper grades of lumber can be shipped with profit to the British and other trans-Atlantic markets, at better prices than the Americans can afford to pay; and doubtless when necessity demands manufacturers will find a profitable market in South America and elsewhere for all the rough grades of lumber not required for home consumption in Canada. It is pretty well understood that the Americans can get along for a few years without Canadian lumber, but the time will soon come when they will need it and will not be able to get it, because other more profitable and more reliable markets will have been found for the total output of this country. And even at the present time closing the door of American markets to Canadian lumber will benefit only a few of the Americans, namely, the manufacturers, who will be in a position to charge higher prices, causing a direct loss to the many thousands of American consumers. It is possible, however, that the Dingley bill, now before the House, will be amended as far as the import duty on lumber is concerned. And I hope it will, as we desire neither an export nor import duty to be imposed on logs, lumber or shingles. The freer the trade between ourselves and our neighbors the better, and only in the event of their refusing to deal with us on fair, even terms, and in self-defence, would we desire an export duty to be imposed. With reference to pulp and pulpwood, it seems most unfair to Canadians that hundreds of thousands of cords of spruce should annually be allowed to be taken to the States free from export duty, and at the same time we submit to payment of an import duty on every ton of pulp that is shipped across the line. And the Dingley bill claims to increase this unjust duty. It has been estimated by experts who have explored the spruce localities of the United States that they have only sufficient pulpwood to last their mills about five years, if they import none from other countries, while Canada contains enormous spruce forests, together with numerous immense water-powers, which advantages place her in a position to almost lead the world in the manufacture of pulp.

Yours truly,

A. TAIT.

PERSONAL.

Mr. Levi Crannell, of the Bronsons & Weston Lumber Company, Ottawa, has been elected president of the Reform Association in that city.

Mr. Francis H. Clergue, manager of the Sault Ste. Marie Pulp and Paper Co., Sault Ste. Marie, Ont., gave THE LUMBERMAN a pleasant call early last month.

Mr. Richard Hall, formerly manager of the Ontario and Western Lumber Company at Rat Portage, Ont., has gone into the mining business, and will devote his time to the preparation of plans for stamp mills and mining machinery.

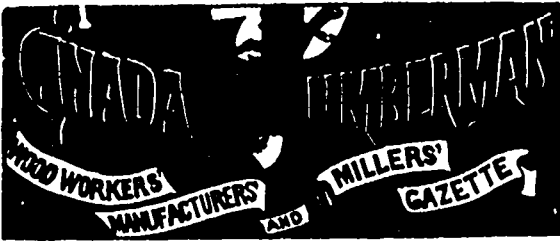
Mr. Jules E. Tache, of the Department of Crown Lands, Quebec, died in the provincial capital on the 19th ultimo. Deceased was a son of the late Col. Sir Etienne Pascal Tache, K. C. M. G., A. D. C. to Her Majesty, and was a descendant of one of the most illustrious families.

Mr. Lewis H. Swan, late manager for J. W. Howry & Sons, of Fenelon Falls, Ont., is said to have decided to remove to Buffalo, where he will conduct a wholesale lumber business. Mr. Swan is an energetic business man, and will no doubt secure a fair share of patronage.

On Sunday, April 4th, Mr. Herbert Burt Rathbun, son of Mr. H. B. Rathbun, of Deseronto, died at Belleville, Ont. Deceased was born in Deseronto and graduated as B. A. in 1883. On his return from college he became connected with the business of the Rathbun Company, supervising the yard department until failing health forced him to relinquish the work. The disease developed into consumption, and although he rallied for a long time, no hopes were held of his recovery. He was a director of the Rathbun Company, Bay of Quinte Railway Company and Deseronto Navigation Company, and was for five years deputy-reeve of Deseronto.

The Jenckes Machine Co., of Sherbrooke, Que., are supplying the machinery for a pulp mill at Chicoutimi.

Barber & Watson, manufacturers of water wheels and mill machinery, Meaford, Ont., have dissolved partnership. Mr. C. Barber continues the business.



MONTHLY AND WEEKLY EDITIONS

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ADVERTISING RATES FURNISHED ON APPLICATION

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

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

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

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN, with its special class of readers, is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements, which will be inserted in a conspicuous position at the uniform price of 15 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

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

TO VISITING LUMBERMEN.

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

THE UNITED STATES TARIFF.

THE Finance Committee of the United States Senate, by whom the Dingley tariff bill has been under consideration for some time, are not to be charged with hasty legislation. It was announced that before this date the bill would be presented to the Senate, that the lumber section would be the first to be considered, and that in case the proposed duty should be sanctioned, it would become operative by the first of June. The probability of this taking place is now out of the question, and no one ventures to predict the exact time when the interesting document will be reported to the House. After this stage is reached probably a month will be spent in discussion before the bill is ready for the president's signature, and it is safe to say that the tariff will not become law until late in the summer.

The announcement was recently made that a retroactive clause had been added to the Dingley bill, providing that, should the bill become law, all imports should be dutiable from the first of April. Later information, however, is to the effect that this provision is not likely to appear in the bill when it reaches the Senate, as the present tariff will not be repealed until the new one goes into effect, and there cannot justly be two con-

licting laws on the same subject at the same time. The main object in inserting the clause was to prevent importers from making large purchases of lumber and other foreign goods, thus weakening the market.

A bitter fight is being made by Michigan lumber manufacturers against the imposition of the duty. In this they have the support of the paper trade, who are interested in obtaining free pulp wood, and of the consuming public, who will not consent to the imposition of a tax which they will be called upon to pay. These combined forces, together with the wholesale dealers interested in Canadian lumber, represent a strong opposition, and already rumors are afloat that the bill has been greatly modified in its protective features by the Senate committee.

A study of the new Canadian tariff furnishes little light as to the probable action of the Dominion government regarding an export duty on saw logs and pulp wood, but without doubt an American import duty of \$2 per thousand feet on lumber will be met by retaliatory measures. It is probable, however, that the final revision of the United States tariff will be such as to render unnecessary any such steps. Should this not prove to be the case, our lumbermen must accept the situation, and at once take steps to devise ways and means to develop our foreign trade. How this can best be accomplished is a question which requires thoughtful consideration, and in any policy which should be decided upon the interests of the small manufacturer should be carefully guarded.

COMMERCIAL AGENTS AND FOREIGN TRADE.

CIRCULARS were sent out some time ago by the Minister of Trade and Commerce to the various boards of trade throughout Canada requesting suggestions as to the best methods to be adopted for the extension of our foreign trade. The replies in nearly every instance recommended the appointment of commercial agents in all countries where there is a fair probability of placing Canadian goods. It is understood that the government has decided to act upon the recommendations, and will shortly appoint suitable persons for the positions. This would appear to be a step in the right direction, and if properly carried out will certainly result in developing our export trade to a much greater extent than has been done in the past. To this method of making its manufactures known the United States owes no small amount of its foreign trade, and to-day it ranks among the largest exporting countries of the world.

That Canadian manufacturers are realizing the importance of foreign markets is shown by the fact that several firms have already sent special agents abroad to report on the possibilities for trade, the success which they have met with only confirming the conviction that Canadian goods are little known in many foreign markets where bright prospects for trade exist. The pioneer work, however, such as the introduction of the goods and the establishing of a connection, has invariably been found expensive—so much so, indeed, that only a very limited number of Canadian manufacturers could thus afford to investigate for themselves the possibility of foreign markets. Considering the wealth of Canadian forests, the number of lumbermen who have visited the markets of Europe and other coun-

tries with the object of learning their requirements is so small as to count for little, and here is where commercial agencies may be of service to the country if judiciously and carefully managed. The Canadian consuls who have been stationed in foreign countries in past years have certainly been of some benefit, and many of these are fully alive to the duties of their positions. That others might have been of much greater service will probably be admitted. The reports sent to the government are frequently so general in character as to be of little value to persons desiring information of any particular class of goods. It should be the duty of our consuls to give as far as possible specific information regarding the classes of goods which are in most demand in the country in which they are located, to furnish suggestions as to best methods of manufacture and shipping, to give approximately the cost of freight, and similar data, thus placing the Canadian manufacturer in a position to estimate his chances for developing a profitable trade.

By the courtesy of Mr. J. S. Larke, commissioner for Australia, we are permitted to publish a communication on another page descriptive of the timber trade of New South Wales, which should be carefully read by lumber manufacturers in this country. Mr. Larke clearly points out that a much larger trade might be done by Canada in dressed timber and doors, but unless our men exercise greater care in the manufacture of stock the advancement in that direction is likely to be slow. In placing goods upon a new market, it is especially necessary that the specifications should be exactly complied with, otherwise opportunities of developing an increased trade may be permanently lost. Mr. Larke is of the opinion that we could compete successfully with the Baltic flooring, and provided that a line of steamships sailed from the St. Lawrence or maritime province ports, there would seem to be no reason why this could not be done. The question of shipping facilities is a very important one, and on which depends to a large extent the future of the Canadian lumber industry. Therefore we express the hope that before many years shall have passed the government of Canada will take such steps as will provide for a regular line of steamers between Canada and her principal importing countries.

In this connection mention might be made of the fact that, acting under instructions from the Minister of Agriculture, Mr. C. C. Eldridge, of Vancouver, is now making a collection of British Columbia products, to be exhibited at the World's Exhibition at Stockholm. Included in the display will be sections of trees, sawn timbers, and other manufactures of the forest.

THE red cedar shingle business of the Pacific coast appears to be taking on new life. For the past year or two the manufacture of shingles on the Pacific coast has been greatly curtailed, owing to the depression in the trade and the low prices ruling. Manufacturers have preferred to allow their mills to remain idle rather than operate them at a loss. The wisdom of this is now proven, as at a recent meeting of twenty of the largest manufacturers it was resolved to advance prices for eastern shipment, owing to the fact that the spring demand had increased beyond the supply.

EDITORIAL NOTES.

THE bill proposed to be submitted to the Ontario legislature at its recent session, providing for the better sanitation and inspection of lumber camps, will not become law for another year at least. For some reason, probably known only to a few friends of the government, the measure was not introduced in the House. It is hinted that this step was the indirect effect of the invalidation of the statute compelling inspection of cattle at the expense of owners, inasmuch as it was intended by the act that lumbermen should bear the cost of inspection of camps and of procuring a physician and nurse in case of infectious diseases.

APROPOS of our remarks in the last issue of THE LUMBERMAN regarding the necessity of uniform inspection rules for the purchase and sale of lumber, the report published in another column of a suit which was recently heard in the County Court at Toronto affords interesting reading. It was shown by the evidence that there was really no general understanding as to what constituted firsts and seconds in birch, and the contentions of the plaintiff and defendant differed widely. The decision declared that sap was not a defect. The learned judge was nonplussed at learning that the lumber business was conducted in such a manner, and suggested that the legislature should sanction some code of inspection rules which would remove the opportunities for law suits such as now exist, and which only serve to divert to the pockets of lawyers the profits which rightly belong to the lumber dealer. This and other similar suits which are fought out from time to time afford a strong argument in favor of some action being taken by lumbermen looking to the adoption of standard rules of inspection.

THE Ontario government is apparently becoming convinced of the expediency of protecting from fire the unlicensed timber limits of the province, as we observe that at the last session of parliament, at the request of the Commissioner of Crown Lands, an appropriation of \$3,000 was made for the employment of fire rangers for this purpose. It is gratifying that a step in this direction has been taken, yet we cannot but express regret that the amount was not larger, thus placing the department in a position to protect more efficiently an asset from which is derived annually a very large revenue. In the case of licensed limits, the expense of fire ranging is borne equally by the licensee and the government, while the latter would, of course, be compelled to bear the total cost of protecting unlicensed territory. The appropriation of \$3,000 would, therefore, only provide protection for a very small section of country, leaving the balance to suffer destruction by fires such as have occurred in past years in many parts of the province, and which should have served as object lessons. Now that the government has shown itself to be in sympathy with the movement, however, we trust we may receive a much larger grant for this object at the next session of the legislature.

Saw mill owners in every part of Canada are asked to assist in making THE LUMBERMAN of greater interest to its readers by furnishing information regarding the condition of the lumber market. Particulars of sales of stock, estimated cut, current prices, etc., are solicited.



ONE of the latest industries to which my attention has been drawn is the collection of white pine seeds for sowing. I recently learned of a gentleman in Ontario who was devoting much of his time to this work, which he described as being very tedious and laborious. His method was to purchase the cones from the lumbermen in his vicinity. These were gathered in the fall of the year, the month of September being the best time, and threshed out by a flail in much the same manner as peas. The seeds were sold at fifty cents per pound, the principal market being in the United States.

MR. E. W. Rathbun, the Deseronto lumber king, upon being interviewed, stated that Canadian lumbermen should not permit the United States to impose a duty on our lumber. "Within seven years," he said, "the American pine forests will be wiped out at the present rate of cutting. Then they will be as dependent on us for pine as they are for pulp wood now. Let the Canadian Government say: If you impose any duty at all upon our lumber, we will impose an export duty upon all logs, pine and pulp wood. When that fact is grasped by the Americans they will change their attitude." "There is another thing that the public have not realized," said Mr. Rathbun. "The timber limits of the country are passing into the hands of Americans who have no interest beyond clearing off the lumber. They bring in supplies free and American labor, and tow away the logs. They are protected against our competition in the lumber market by the duty of \$1 or \$2. That means that when they bid for the timber limits they have an advantage over Canadian bidders equal to the duty. We cannot compete against them, and every year sees fewer Canadian purchasers of timber limits and more Americans." Mr. Rathbun thinks that European capitalists will shortly establish paper mills in America, and under favorable circumstances they would locate in Canada.

A MONTREALER interested in lumber, referring to the system of protection which he considers it preferable for Canada to adopt, recommends a little paternalism. He says: "I would have the government get reports from its Commissioner in England and from British consuls abroad as to lumber markets, and would have instructors travel among our smaller mill men to teach them how to saw for the foreign market. The government should advance to these small manufacturers 75 per cent. of the value of the lumber on board the vessel at the shipping port, after payment of insurance, and I would have the lumber sold for them, just as has been done in the cheese business—done so successfully that young Canada supplies 55 per cent. of the cheese used in Great Britain." The query whether a policy such as this would not meet with strong opposition, was answered thus: "At first, possibly. But when the public become educated to the fact that

no sale for lumber means destruction to millions of dollars of our natural resources—that stagnation in this trade means starvation to tens of thousands of employees from Quebec to Port Arthur—that it means no freights for our railroads—they will favor the policy. Our small lumbermen need help and need it at once; for three years they have been lumbering at a loss. This policy would mean the manufacture of our logs into lumber in Canada. It means its transportation from Sault Ste. Marie and Georgian Bay, Toronto, the Bay of Quinte, Ottawa and all St. Lawrence ports on Canadian railroads or ships to the sea and to Europe. In fact, I think that if the government acts on these lines at this crisis, the McKinley Bill will do as much good as it did before when it was in force."

THE season of rafting timber to Quebec for shipment across the Atlantic has now opened, and passengers enjoying an early summer tour down the St. Lawrence will pass a number of huge rafts, with their jolly crew, quietly floating along. Within the past fortnight a considerable quantity of timber has left Toronto, to which point it was brought by railroad from Ohio and Michigan. In former years all this timber was rafted at Toronto, but the risk of loss by storms on the lake is now avoided by taking the timber to the vicinity of Kingston by vessel, where it is made into rafts for floating to Quebec. This method is now adopted by most of the timber merchants. While the square timber trade is not by any means what it was years ago, when as much as twenty million cubic feet of white pine alone was exported from the St. Lawrence, and twenty firms were engaged therein, it is yet quite an important feature, and one which the average lumberman knows little about. Talking with Mr. Bickell, of McArthur Bros. & Co., the other day, he referred to the great change which had taken place in the timber trade of late years. "Less than twenty years ago," he said, "sailing vessels were employed almost altogether for carrying timber, but now very few of such found their way to Quebec, owing to the difficulty in securing a charter. The steamers were now built in such a manner as to take in a log 75 feet in length. A point in favor of the steamer was that the wood was landed at its destination in much better condition, being free from discoloration such as is likely to occur when shipped by a sailing vessel, which could only make about two trips a season, while a steamer would make half a dozen. The cost of insurance by steamers was also a mere trifle. During the summer months the rate was only one-quarter of one per cent., which was increased in the fall season." Mr. Bickell expressed the opinion that Quebec would continue to hold the timber trade, as Montreal did not afford the necessary cove and other accommodation. He hoped for the early extension of the Ottawa, Arrprior and Parry Sound Railway to the ancient city, which would be the means of restoring some of its old-time activity. He could well remember when as many as fifty vessels were built each year at the port of Quebec, affording employment to thousands of workmen. Now, owing to the general use of iron and steel, this trade had been diverted to the Clyde. Mr. Bickell goes to Quebec early in May, where he takes charge of the shipping of the timber for his company, and will remain there until the close of navigation.

THE RETAILER AND Wood-Worker

THE BUILDING OUTLOOK FOR 1897.

INFLUENCED by the general depression in business, the building trade in Canada has for some years been in a state of inactivity, and much below what might be expected in a young and vigorous country. As each year passed by, it was hoped that the worst had been encountered, yet the season of 1896 proved to be one of the least prosperous. The unsettled condition of the country politically, and the uncertainty with regard to the tariff both in Canada and the United States, had a depressing effect, and many buildings which would otherwise have been erected still remain in a embryo state until the action of the government is made known. The low rentals obtainable in many of the larger cities offered little inducement to speculators, and consequently a few office buildings constituted the major portion of construction. Thus the local demand for lumber has been reduced to a very fine point, and retail dealers have suffered in common with every other line of business in any way dependent upon building operations.

With the object of learning as far as possible the conditions likely to prevail in the building trades during the approaching season, letters were dispatched to architects in the different cities, asking their opinion of the outlook. The replies received, although pointing out that many projected works are yet in an unsettled state, and may or may not be proceeded with, afford some degree of encouragement. It is generally conceded that little change will be made in the tariff by the government, and the official announcement of this fact will be certain to stimulate building operations and restore confidence to business in general.

In Toronto, the new building at the northwest corner of Yonge and King streets is perhaps the largest yet arranged for; the plans are being prepared by Messrs. Darling & Pearson. A large hotel and several other buildings of some prominence are spoken of, but are not yet regarded as certainties. The renovation and remodelling of office buildings is likely to account for a considerable expenditure, as the owners will be compelled to improve their properties in order to retain their tenants. Montreal architects report the season to be opening up somewhat brighter than last year, with several undertakings hanging in the balance. The towns adjacent to Montreal are apparently more prosperous. In the city of Ottawa the prospects for building operations are decidedly encouraging, a number of recent fires having assisted in this direction. The rebuilding of the departmental block and the new building of the C. Ross Company are the most important works now under construction. The addition to the Protestant hospital and a proposed opera house will

reach in value \$100,000, while other buildings equally costly are either under way or contemplated. In western Ontario architects do not take a discouraging view of the future. A \$60,000 hospital is talked of at London, and two buildings of good size will be erected in Hamilton. The bulk of the work in the latter city, however, will consist of residences and alterations to existing buildings. In the vicinity of Stratford a fair amount of building is reported, and at Owen Sound elevator and flour shed extensions comprise the main work. There are a large number of buildings commenced or projected at Rat Portage and other mining towns in northwestern Ontario, and in these will be consumed a large amount of lumber, the structures being mostly of frame.

Very few large buildings are likely to be erected this year in Manitoba and British Columbia. A large university building will probably be built at Winnipeg, at a cost of \$60,000. In the Pacific coast province the cheaper class of buildings promise to predominate, particularly in the vicinity of mining operations. From the maritime provinces favorable reports are received, the work now in sight at St. John being greater in extent than for any season for the past ten years.

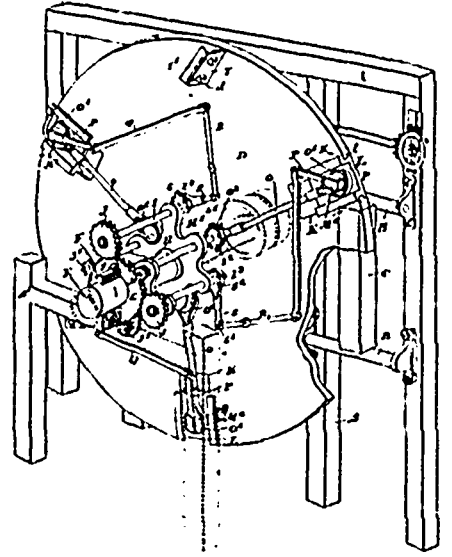
No small amount of material and labor promises to be utilized in 1897 by government work, the appropriation made by the Dominion parliament for canals alone reaching five million dollars. Comparing the situation with past years, we think there is a fair prospect of an improvement in building during the present season. The low price of lumber and other building materials affords a splendid opportunity for speculators to erect good buildings at a very low cost, and it is reasonable to suppose that this fact will be given due consideration by the wise investor, and that projected works will be proceeded with during the present season.

An English exchange states that furniture manufacturers of that country, especially the chair trades, are importing large quantities of American birch timber.

The story is told how a dry kiln failed to give satisfaction. When first built the thermometer showed 200 to 210 degrees of heat in all parts of the kiln, but this temperature ran down gradually until only 140 to 160 degrees could be obtained. Placing a recording thermometer inside the kiln and a recording gauge on the steam supply pipe resulted in the discovery that the fireman was in the habit of closing the steam admission valve in order to favor his boiler. After the fireman was duly warned, and the steam coil, which was badly clogged with grease and dirt, had been cleaned out, the temperature went up to the proper degree again.

RECENT WOOD-WORKING PATENTS.

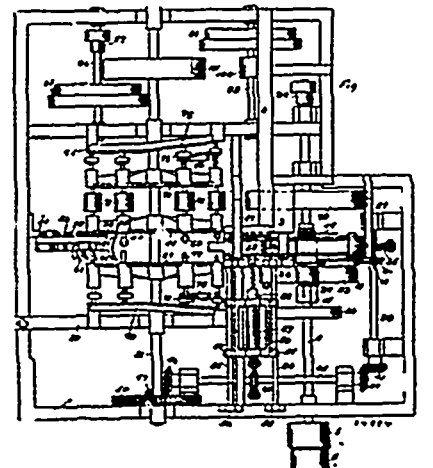
THE following patents for wood-working machines have recently been granted to Canadian inventors:



MACHINE FOR MANUFACTURING EXCELSIOR.

Patentee: H. A. Rider, Toronto, granted 8th February, 1897; 6 years.

Claim. In a machine for making excelsior packing, combination a rotating disc secured on an adjustable shaft, sets of scoring knives equidistant and supported radial guideways, and means for causing reciprocal movement to knives to cause them to travel in a straight line over the chords of the arcs of a concentric circle, and to simultaneously keep them parallel with the chords of each arc from end to end as they rotate. In combination with a rotating disc, supporting blocks peripherally equidistant and provided with side grooves, substantial radial recesses with tongues to fit into the grooves cylindrical discs provided with a plurality of disc-shaped abutting scoring knives, suitably journaled and having cylindrical shanks extending through corresponding holes in supporting blocks, means for reciprocating the blocks supplemental shanks to the disc and arms secured to the supplemental shanks, with connecting rods, eccentric spindles, gear pinions, spur wheel, etc., etc.



WOOD-TURNING MACHINE.

Patentee: Wm. T. Jones, New Westminster, B. C., granted 15th February, 1897; 6 years.

Claim. A wood-turning machine, comprising a series of fixed cutters, a rotary block, means for rotating the blocks relatively to the carrier, saw for severing the block from the strip, and reciprocating frame for holding and operating a boring tool. The combination with a saw, a boring device, and a block carrier, of a block shifter comprising a reciprocating carriage, a fulcrumed lever having a link connection with said carriage, an eccentric shaft, a finger extended radially from said eccentric shaft, and pins arranged at opposite sides of a slot opening in said lever and adapted to be engaged successively by the finger on the eccentric shaft, the pivotal point of said lever being forward of a vertical line through the axis of the eccentric shaft, etc.

H. W. Chamberlain, Ottawa, sash and frame. Wandell P. Jones, Woodstock, N. B., clapboard, having a tongue on one edge and a rabbet on the other edge, and which, when laid on the wall, exactly resembles the clapboard in common use.

D. M. Macpherson, Lancaster, Ont., box, having a detachable cover, with notches formed in its edges and rotatable holdfasts set in the body of the box, projecting from the upper edge thereof through said notches and having their ends offset to engage said cover, etc.

NOTES FROM NOVA SCOTIA MILLS.

(Special Correspondence of the CANADA LUMBERMAN.)

nearly all lines of commercial enterprise there is a period which is termed "between seasons," and the month of April is that period for the maritime province lumbermen, especially those in Nova Scotia and the northern part of New Brunswick, where winter sawing is tried on. The winter mills being mostly portable, the owners plan to finish their cut in the woods and get moved while the roads are passable, and set up in places where logs have been piled for summer sawing. The absence of the shrill shriek of the mill whistle and the "hum" of the rapidly revolving circular saw attests that the "between period" season is here.

The large stationary saw mills are undergoing the usual spring overhauling, so as to be in perfect order when the drives come in. The output of logs generally, owing to the very favorable winter and the stimulus given by an advance in prices in the English markets, has been such that the mills will be fully employed converting the logs into such specifications as the markets call for. This tends to inspire all lines of business into greater activity, as there is no business in the maritime provinces but causes the "circulating medium" to flow so freely and directly among all classes of the people as the lumber business.

The Rhodes, Curry Co., Ltd., Amherst, N. S., have one million feet of logs at their mill at Athol, some of which they saw into deals, but the greater part is for use in their building, house furnishing and car building trade. In their mill they have a circular saw, patent lather, lath and shingle machine and planer. Mr. Clarence McCabe is the superintendent. The company also has a large quantity of sawn lumber outside, which is piled in their large factory at Amherst and shipped to all parts of Nova Scotia and New Brunswick, where they contract to build anything from a modest dwelling to a fully equipped railway station. They also build railway and street cars; a sample of the latter can be seen in Halifax in the new electric railway system. The City Hall, Halifax, Grand Hotel, Yarmouth, and the Intercolonial Railway station, St. John, N. B., besides others too numerous to mention, are monuments of their ability and enterprise as builders.

Curran Bros., Amherst, will saw about one and a half million feet of spruce into deals and building timber.

Kelley Bros., River Hebert, have three million feet of spruce for deals to drive to their steam mill.

Pugsley Bros. & Co. purchased the River Hebert mill and timber property of Young Bros. & Co., Ltd., last year, and are getting out three and a half million feet. Formerly the lumber from Kelley Bros. and Young Bros. mills was loaded into scows and floated about six miles to the vessels side, but Messrs. Pugsley and Kelley have in view the project of building a water sluice and doing away with the scows.

Rufus F. Christie, West River Hebert, has thoroughly overhauled his mill during the past winter, having put in a large engine and new machinery. He will saw about one million feet of deals and boards, as well as some laths and shingles.

E. & R. A. Christie, River Hebert, put a large portable saw mill to work in their timber lands last fall, and have sawn and hauled to shipping point at Two Rivers one million feet of deals.

B. B. Barnhill, Two Rivers, lost his large steam saw mill by fire last fall. He then purchased a new portable mill and sawed through the winter, and about the first of March last had the misfortune to have it burned also. Not to be daunted, however, he began rebuilding at once, and is now sawing again.

Harkness & Sutherland, Maccan, have two portable mills, in which they will saw about two and a half million feet of deals during the winter and spring.

The Londonderry Iron Co., Ltd., Acadia Mines, have a large quantity of spruce on their lands, and have had several mills sawing during the winter. There will be in the vicinity of three million feet of spruce and hardwood deals shipped from their property.

C. B. Lindsay, Belmont, has two mills sawing on a long term contract, and is turning out deals rapidly. T. G. McMullen & Co., Truro, handle the cut.

Henry Hunter, Westchester, will ship one million feet of deals cut in his portable mill on Westchester Mountain.

The Nova Scotia Lumber Co., of Sherbrooke, will cut about eight million feet on the St. Mary river. Their property was formerly owned by James Miller & Co., St.

John. The new company are principally the members of the Shulce Lumber Company. They bought the Economy timber lands from James Miller & Co. as well, but are not lumbering it this year. Messrs. John Seaman and Gideon Prescott, members of the company, are in charge of the operations at Sherbrooke.

NEW BRUNSWICK LETTER.

(Regular Correspondence of the CANADA LUMBERMAN.)

THE St. John saw mills have about all started up, with one or two exceptions, and are just getting the men and machinery warmed up and tested with the logs that laid over winter in the booms, and when the new logs come in they will be ready to slaughter them in good shape. During the past year or two, since the advent of the band saw, the mill owners of St. John have been looking into the new devices for handling logs, and where they have met their views have adopted them, and when repairing and changing have put them in practice, with the result that all the mills now have some of the modern appliances that suit their conditions. Formerly the St. John mills were specially adapted for sawing deals. The price of deals until a few years ago was low, and they turned their attention to the American market, but gang saws were not so well adapted for American specifications as for deals, so some of them put in circular saws, and later the band saw came along, which filled the bill very well, with the result that most of the mills are now fitted up for sawing advantageously for either market.

Hilyard Bros. have put in a continuous log sluice, log kickers, etc., have one gang and shingle saw, with a capacity of 60,000 feet per day, besides laths, pickets and boxes. James Hamilton has one band saw complete, built by the Waterous Company, also lath machine and planer. Their capacity is 45,000 to 50,000 feet per day. J. R. Warner & Co. have one gang and circular, lath and box board machines, capacity 60,000 feet per day. They have also a slab slasher for making short wood. The equipment of Purves & Murchie, Carleton, consists of one gang and circular—the latter put in this winter. This mill was rebuilt last year, having been burned, and started up with gang only. It also has lath machines and planer, present capacity 75,000 feet per day. W. H. Murray has one gang and steam feed circular, lath and stave machinery, the capacity being 90,000 feet daily. A. Cushing & Co. have two band saws and Wilkins gang, with all the latest improvements. The capacity is 125,000 feet per day. Miller & Woodman have two gangs and Mulay saw, lath and shook making machines. They put in a continuous haul-up with modern bed during the winter, with steam jump up cutting-off saw, and now have a capacity of 125,000 feet per day. This firm also have a well equipped shingle mill running thirteen shingle machines. Stetson, Cutler & Co. have two mills, one being at Pleasant Point, of which L. H. Jordan is superintendent, having one band mill and six shingle machines, with lath, box and clapboard machines. Capacity of the band mill, 60,000 feet per day. At Indiantown they have one gang and one band mill, also lath, box and barrel heading machines. Capacity 100,000 feet per day. Charles Miller has one band mill, eight shingle machines and lath machines and planer, daily capacity of band mill 60,000 feet. Mr. Miller also carries on lime burning, utilizing the refuse of the mill for fuel for the lime kilns. The band mill was put in new last year, and a considerable addition was made to the mill. George E. Barnhill has one gang, lath, stave and heading machine. Daily capacity about 60,000 feet. William Rivers, superintendent. S. T. King & Sons have one gang and steam feed circular, with lath and shingle machines, capacity about 90,000 feet per day. Mr. Horace King is superintendent. Randolph & Baker have two gangs, with lath, box, stave and heading machines, capacity about 120,000 feet per day. This firm also have lime kilns. John Galey & Co., Carleton, have one circular, also box board machines. Box making is their principal business, large quantities of onion box slats being manufactured for Bermuda. The working mill hours in St. John are nine hours per day, which lowers the capacity of the mills considerably.

John Dewar & Son, St. George, will get two and a half million feet to their steam mill to be sawn into deals chiefly. They also run a large general store in St. George.

The lumber business at St. Stephen and Calais is very quiet this spring. Compared with other years only a small amount of lumber has been taken out. F. H. Todd & Sons are getting only three to four million feet, where

formerly they have had 30,000,000 feet in one season. H. F. Eaton & Sons have about the same quantity at St. Stephen, but have eight million feet to drive down the St. John river to St. John, taken from their lumber lands in Quebec.

Hale & Murchie, Fredericton, are getting out six million feet on the Tobique river. They are building a furnace to burn the refuse, which will be about 120 feet high and 20" inside diameter. Mr. A. H. Hale is the superintendent and Mr. James Rankin mill foreman. Donald Fraser & Sons are getting eight million feet to be sawn in their mill at Fredericton, and will also saw a considerable quantity at their River DeChute mill. They also saw clapboards and shingles at both mills. They have sold their season's cut to A. Gibson & Sons. Their logs come down the Tobique river. R. A. Estey will saw about three and a half million feet in his steam mill at the same place, which also come from the Tobique. Mr. Estey saws a lot of dimension lumber for local trade, and runs two shingle machines.

A. Gibson & Sons get their supply of logs for their Marysville mills up the Nashwaak river, and will have about forty million feet this year. They also saw about ten million feet at their Blackville mills, situated on the Canada Eastern Railway.

The Morrison mill at Fredericton, owned by James Murchie & Sons, Calais, is operated by John A. Morrison. They saw shingles exclusively. The mill is the largest of its kind, having about twenty shingle machines in operation. The cedar logs come from the head waters of the St. John river in the state of Maine. James Murchie & Sons operate mills at Deer Lake, Benton and Edmondston, in Canada, besides a large mill at Calais, making a total cut of eight to ten million feet, which they ship principally to the American markets. They also saw large quantities of shingles at their Edmondston mills, the logs coming down the Madawaska river, Mr. George A. Murchie having charge of the latter mill, and Mr. Theodore Murchie of the Deer Lake and Benton mills.

Fred Moore & Sons, Woodstock, have purchased the old Sawyer mill and equipped it with a first-class circular, in which they intend cutting about two and a half million feet, mostly for the American market. The logs come down the Meduxnekeag river. They are also putting in three shingle machines to saw the cedar into shingles. James Hayden & Son will saw about two million feet in their mill at Woodstock. They also make doors and sashes and other house materials, shingles and clapboards, and propose also going into the manufacture of pails, tubs, washboards and other lines of like nature. Mr. Albert Hayden is the manager of the business.

Robert McElroy, Grafton, saws about three quarters of a million feet, largely for the local trade. James T. Car has a nice circular mill on the Fredericton branch of the C. P. R., where he saws about one and a half million feet of spruce, birch and hemlock.

A. H. Sawyer, of Calais, Me., has a fine gang mill. Hartland, and has about five million feet ready to stream drive, some of which will be sawn into deals and rafted to Fredericton for the British market, the balance will be sawn into American specifications and shipped by C.P.R. to St. Stephen, thence by schooner to market.

George W. Upham, Perth, has a circular mill with lath mill, and intends sawing about three million feet of spruce, which he is now getting out from the Tobique river.

James McNair, Arthurette, has a saw mill in which he will saw one million feet. The lumber will be shipped on the Tobique Valley railroad, which is about being taken over by the C. P. R. Mr. McNair also logs extensively for some of the large mill owners in St. John, and has the contract for driving the corporation logs on the Tobique river to the St. John river.

James Burgess & Sons have a fine water power saw and shingle mill at Grand Falls, on Little river. The mill is only a few yards from the Grand Fall on the St. John river. They will saw about one million feet of logs and run four shingle machines, sawing cedar shingles besides.

The Stevens Lumber Co., Salmon River, have a finely equipped saw and shingle mill, circular saw, lath machines and ten shingle machines. Their lumber, lath and shingles are taken in scows down to the St. John river, about four miles, then hauled to Ortonville station, on the C. P. R., and shipped to market, nearly all going to the United States.

The prospect for getting the logs out of the brooks in time to reach the main river are good. There is from two to three feet of snow in the woods yet, which, with the rains pretty sure to come, ought to make very favorable river driving.

OTTAWA LETTER.

[Regular Correspondence of the CANADA LUMBERMAN.]

GEORGIAN BAY DEPUTATION.

THE city has of late been besieged with deputations, each seeking some measure of relief from the government. One of the most important came from the Georgian Bay district, and was composed of a number of persons representing the lumber industries of that vicinity, among whom were Messrs. H. L. Lovering, Coldwater; A. L. Vick, Orillia; P. H. Spohn, A. Tessier and T. Payette, Penetang; C. E. Newton, Victoria Harbor, and many others. The deputation was introduced to the Minister of Finance by W. H. Bennett, M. P., and a resolution was presented providing that in the event of a duty of more than \$1 per thousand feet on white pine lumber being imposed by any country, then the export of white pine saw logs from Canada be absolutely prohibited. Mr. Fielding in his reply stated that the government fully appreciated the importance of the question, and their requests would receive careful consideration.

FAVOR RETALIATORY LEGISLATION.

Lumbermen in the Ottawa valley have at last recognized the necessity of taking steps to protect their interests, and have declared themselves in favor of retaliatory legislation. An important meeting of persons engaged in the lumber trade was held at the Russell House last week, when the Dingley bill was thoroughly discussed. Mr. Allan Gilmour presided, and there were present Messrs. Alex. Fraser; J. R. Booth; W. C. Edwards, M. P., representing W. C. Edwards & Co., Rockland, and the Canada Lumber Co., Carleton Place; Thos. Mackie, M. P.; E. C. Whitney, St. Anthony Lumber Co.; J. B. Klock, M. P., of R. H. Klock & Co.; Frank Bronson and Levi Crannell, of the Bronsons & Weston Lumber Co.; Peter Whelan, Sheppard & Morse Lumber Co.; E. W. Rathbun; J. Gillies, of Gillies Bros., Braeside; Chas. Reed, Buell, Hurdman & Co., Hull; William Mason, Mason & Sons; Jackson Booth; H. K. Egan, Hawkesbury Lumber Co.; Ward Hughson, Gilmour & Hughson; and Claude McLachlin, McLachlin Bros., Armprior. Upon motion of J. R. Booth, seconded by Levi Crannell, the following resolution was adopted: "At a meeting of the lumber and timber trade of the Ottawa valley it was unanimously agreed that the government should take power from the House to protect the sawn lumber and pulp interests of Canada against serious discrimination threatening it as contemplated under the Dingley bill."

Mr. Albert E. Reed, a large paper manufacturer of Maidstone, England, arrived in the city recently on a visit to his uncle, Dr. Wm. Saunders, of the Experimental Farm.

Some of the mills have commenced sawing, and others are receiving the finishing touches preparatory to commencing the season's work.

OTTAWA, April 21st, 1897.

BRITISH COLUMBIA LETTER.

[Regular Correspondence of the CANADA LUMBERMAN.]

CROWN TIMBER COMMISSION.

THE chief topic of conversation among lumbermen in this province is the investigation which is now being made by the Dominion government into the working of the crown timber agency. Mr. Archer Martin was appointed commissioner, and the managers of nearly all the mills and a very large number of loggers and farmers have been examined under oath. Pending the result of the investigation, Mr. T. C. Higginson, crown agent, sent in his resignation, in accordance with the departmental rules in such cases. For some time past rumors of dissatisfaction have been current, and the government resolved to make a thorough investigation. From the evidence submitted it would appear that the authorities had not received payment for all the timber cut on government land, and that many inconsistencies had been brought to light, but as the country is of immense area, rendering it necessary to give the agent much latitude to enable him to act in the best interests of the country, it is probable that everything may be satisfactorily explained.

The commission is far reaching, the companies being compelled to submit figures showing the amount of timber cut and the dues paid thereon. Mr. Higginson explained that he sometimes gave verbal permits, as the settlers could not always pay the cash deposits for a regular permit before they commenced cutting, and his object was to

assist the settler. The result of the commission is awaited with interest.

TAKUSH HARBOR TIMBER COMPANY.

According to reports, the manufacture of cypress lumber which was commenced about a year ago at Takush Harbor is to be abandoned. This was a new industry on the Pacific coast, and was somewhat of an experiment. An English syndicate purchased some cypress limits from Vancouver capitalists situated about 300 miles north of Vancouver, and fitted up a mill on an extensive scale. The men were recently paid off, and it is stated that work will not be resumed, as the timber is not there for profitable working, the majority of the trees having turned out to be of inferior quality.

G. O. Buchanan, of the Kootenay Lake saw mill, has acquired 1,000 acres of fir and white pine timber lands on the Moyie river, East Kootenay. A gang of men is taking out 1,000,000 feet of logs.

NEW WESTMINSTER, B. C., April 19, 1897.

THE NEWS.

—Laking, Thompson & Patterson, of Hamilton, have lately put in an improved dry kiln.

—D. & J. Hadden, of Foxmead, Ont., intend putting in a stove mill this spring.

—Sargent's mill at Nelson, N. B., has been fitted with an electric light plant for night sawing.

—J. P. Ryley, of the Victoria planing factory, Lindsay, Ont., has added a new dry kiln to his plant.

—A joint stock company has been organized at Summerside, P. E. I., to erect a woodworking factory.

—Mr. Douglas, of Stanley, N. B., is making improvements to his mill and putting in an electric light plant.

—Alexander McKinnon, of Hillsburg, Ont., has purchased from the Waterous Engine Works Co., Brantford, an improved shingle mill.

—At Coggin's mill, near Sission, Cal., loggers cut a tree which was 494 years of age. It was eight feet in diameter and produced 15,000 feet of lumber.

—Ritchie Bros., of Aylmer, Ont., have purchased the old Cormier saw mill for the sum of \$3,500. The mill and adjoining factory will be thoroughly repaired.

—The Shultz Bros. Co., of Brantford, Ont., are seeking incorporation to acquire the business of Shultz Bros., contractors and lumber dealers. The capital stock is \$90,000.

—W. C. Edwards & Co., of Ottawa, have donated the lumber necessary for finishing a room in the Canadian headquarters at Bisley, Eng. Other materials have also been given by different firms.

—The Wilson Company, of Montreal, is a new company which proposes to manufacture lumber, tan bark, etc. The capital stock is \$100,000. Among the promoters is David Mitchell, lumber merchant, of Forestdale.

—The Dominion government has increased the quantity of green timber which may be cut by a settler from 1,800 to 3,000 lineal feet, and no restriction is placed upon burnt or fallen timber which may be taken for building purposes.

—The Woodstock Woodworking Co., of Woodstock, N. B., have elected the following officers: Wendell P. Jones, president; James W. Astle, manager; Herbert A. Seely, secretary-treasurer. The company have now about fifty men engaged at the factory and in sawing, hauling and piling lumber.

A company is seeking incorporation, to be known as Twidale, Dunn & Company, for the purpose of carrying on business in the city of Montreal as manufacturers and dealers in lumber. The capital stock is \$20,000. Among the promoters are Michael Dunn, of Montreal; Henry Aylen, of Ottawa; and Duncan McPhail, of the township of Wakefield.

—A meeting of lumbermen engaged in operations in the Georgian Bay district was held in Toronto on the 20th ultimo, at which there were present, Ald. Scott, H. H. Cook, John Bertram; Robt. Thompson, Hamilton; W. Thompson, Longford; J. B. Smith, W. H. Pratt, and T. D. Master. Resolutions were passed favoring an export duty on saw logs in case a duty is imposed upon lumber by the United States, and disavowing all reports to the

effect that they were willing to pay an import duty of \$ per thousand feet.

—In a paper read before the Imperial Institute, London, Eng., entitled "The Timber Supply of the British Empire," Dr. Schlich, C. I. E., Professor of Forestry at the Royal Indian Engineering College, stated that Canada was estimated to contain 1,248,798 square miles of wood lands, but enormous tracts of that area did not contain any useful timber, while the remainder was by no means so well taken care of as it ought to be. Fires were frequent and disastrous, and the quantity of timber thus lost to the colony was calculated to be many times more than that cut down and exported. Notwithstanding those drawbacks, however, he believed that with proper management and careful conservation of the forests Canada might, at a moderate relative expenditure, supply the whole world for many years to come. He advocated the creation of a forest department in this country, the careful conservation of existing and the creation of new forests by planting vacant lands, the establishment of schools of forestry, and model plantations for the guidance of private owners, and government grants in aid of those objects.

CASUALTIES.

—Hormidas Tailleux, an employee of the W. C. Edwards Company, Ottawa, died in the bush near the firm's shanty on the Kippewa, having lost his way in the woods.

—Frank Armstrong, of Pennfield, employed in the lumber mill of S. H. White & Co. at Alma, N. B., caught his arm in the belting and was instantly killed.

—A serious accident occurred to Samuel Anderson, of Kazabazue, Que., recently. By the breaking of a pike that was holding a rollway of logs, he was knocked down and thirteen logs rolled over him. It is thought he will recover.

SHAVINGS.

Mr. W. H. Winnett, lumber dealer, London, in receiving his subscription to the LUMBERMAN, reports business very good, and that he finds the LUMBERMAN very interesting.

Patents have recently been granted in Canada as follows: Fred. Cluff, Mar, Ont., saw guide; H. M. Wilcox, Owen Sound, Ont., cutter-head for wood-working machinery; J. A. Ulman and Victor L. Emerson, Baltimore, U. S., lumber truck.

Mr. Campbell, of Barrie, Ont., is making a jubilee case for the Queen. It will contain 1,897 pieces of wood, birch, maple, cedar, ash, oak, walnut, thorn, Russian mulberry, sumach, lilac, cherry and acacia, with pearl and ivory, inlaid with foreign wood. The case is 2 feet 10 inches long.

The McEachren Heating & Ventilating Co., of Galt, Ont., have started in their new premises recently occupied by Messrs. Cant Bros., where they will manufacture a full line of ventilating fans, electric fans, shaving fans, blowers, exhausters, etc., besides their dry kiln machinery and "Little Wonder" boiler. They have received a number of orders recently from Ontario and the lower provinces.

Many persons feel that the loss of one brace or stay is not of very great importance, and go on using a boiler with full knowledge that one or even more braces are broken. The loss of one stay throws double the work upon others adjacent; but, more than this, the plate protected by it, while it may not give way at the moment, is unsustained, and will be depressed to a greater or less extent. Braces and stays should be carefully looked after every time the boiler is opened for inspection, which last duty should be done every month.

Speaking of the reduction of duty on rubber belting made by the new tariff, Mr. J. H. Walker, manager of the western branch of the Canadian Rubber Company, remarked that the present duty would permit of the importation of some inferior grades of belting, and for a time competition would be felt in this connection. The public would soon become convinced, however, of the economy of purchasing a first-class article, and the trade would then resume its normal condition. "We manufacture the best frictional belting in America to-day," said Mr. Walker, "and this fact has been acknowledged even by our competitors. The business of the western branch last year showed a gain over 1894 of \$1,400,000."

WOOD PULP DEPARTMENT

THE PULP INDUSTRY AND ITS POSSIBILITIES.

STRONG pressure has been brought to bear upon the Dominion government within the past month to induce them to impose an export duty upon Canadian pulp wood, but as is the case with every question having different bearings, this proposal has both its advocates and opponents. Canadian pulp manufacturers are, of course, a unit in its favor, and rightly so, inasmuch as the pulp wood is now exported free of duty, while a tax equal to about \$2 per ton is imposed on the manufactured article by the United States government. The opinion is also becoming more general among lumbermen that our pulp wood should be manufactured at home, and many of them have thus declared themselves. The main opposition to the export duty on pulp wood comes from settlers, who have in the past been enabled to earn a livelihood by selling the wood to the American concerns, and who fear they may lose their bread and butter by the change in the tariff.

Foremost among the advocates of the duty has been Mr. P. J. Loughrin, general labor organizer for Canada, who has been lecturing at different points in Ontario. He states that 600,000 cords of pulp wood are exported annually to the United States, for which from \$2 to \$3 per cord is paid. This raw material is then manufactured into pulp and paper, at a cost of from \$7 to \$11 per cord, which amount, he claims, should be expended in Canada. In support of his arguments that the United States must have our spruce, he states that there are 232 pulp mills in that country idle for want of raw material.

Mr. Milton Carr, of Trout Creek, does not agree with Mr. Loughrin, and has endeavored to point out through the Toronto Globe wherein he errs. In his vicinity, he says, the sale of pulp wood is the chief source of revenue, and without it the settlers could scarcely maintain themselves.

Mr. E. B. Eddy, of Hull, believes that an export duty on pulp wood would result in building up an immense industry in Canada, and favors a duty of \$4 per cord. He says: "If an export duty is levied to the extent I have stated it would lead immediately to the investment of some five or six million dollars in the erection of mechanical pulp mills, stretching all the way from St. John, N. B., in the east to the Lake of the Woods in the west, and this would lead to the building up of scores upon scores of villages where waste lands now exist, and give employment to thousands upon thousands of the laboring class, and the demand for labor would be more than we could supply. The labor required to manufacture one million tons of pulp and to freight it to the border would necessitate an outlay of some \$5,000,000 annually."

In view of the many conflicting interests bearing upon this question of an export duty, it may not be amiss to give some figures and review briefly the possibilities of the Canadian pulp industry. First, it must be admitted that Canada

possesses a greater supply of pulp wood than any other country in the world, and that no other suitable raw material has yet been found, or seems likely to be discovered in the near future, for the manufacture of pulp for paper making. The quality of pulp produced in Canada is said to be superior to the Scandinavian article, and has been given a favorable reception by British paper manufacturers. It has recently been pointed out by a Canadian paper manufacturer of wide experience that the climate of Canada is particularly adapted for growing spruce for making pulp, that at the close of a comparatively hot summer the advent of winter puts a sudden stop to vegetation and growth of fibre, which is not the case in other climates where the advent of winter is slower, and which leaves a fibre that is too hard, while the trees grow too knotty for the best quality of pulp.

That British capitalists are already turning their attention to Canada for a supply of pulp is shown by the statement published within the past fortnight that Mr. Reed, a large English paper manufacturer, had purchased the Masterman pulp mill at Chatham, N. B. This is believed to be an indication of the trend of the trade.

Norway and Sweden have in the past furnished the pulp supply of Europe, but the timber in these countries is becoming exhausted. Hence the market for Canadian pulp in Europe is at once opened up, an opportunity which manufacturers should not allow to pass.

Turning now to figures, it is estimated that there are in Canada thirty-four pulp using paper mills, operated in connection with which are nine chemical fibre and eight ground pulp mills. The paper made in Canada amounts to about 64,000 tons a year, the chemical fibre to 27,000 tons, and the ground pulp to 125,000 tons a year. The value of the annual output of the mills is given as \$6,500,000. Canada exported to the United States last year \$557,000 worth of pulp wood. To Great Britain the pulp exported was valued at \$113,000, and pulp wood at \$27,000.

It is estimated that in the United States the annual output of ground wood pulp is 700,000 tons, and of chemical and sulphite pulp 480,000 tons, for the manufacture of which 1,000,000,000 feet of spruce would be required. The increase of the ground wood pulp business in the past fifteen years has been 1058 per cent.

Some statistics of the foreign imports of Great Britain should prove interesting. In 1895, the last year for which we have any returns, that country imported 297,094 tons of wood pulp, valued at \$7,600,000, an increase of over \$900,000 over the previous year. Of this Canada supplied only \$400,000; United States, \$250,000; Sweden, \$1,700,000; Germany, \$380,000; Holland, \$330,000; Russia, \$250,000, and Austria, \$125,000. The British importations of foreign paper in the same year amounted to \$1,442,000.

According to the Statistical Year Book Canadian wood pulp sold in Great Britain in 1893 at \$24.80 a ton, while the Scandinavian product only commanded \$20.77.

PULP NOTES.

A pulp mill will probably be erected this summer at Lake Megantic, Que.

The St. Johns News understands that the Canada Paper Co. will build a large pulp and paper mill at the new dam at Windsor Mills, Que.

The new pulp mill at Sturgeon Falls, Ont., is nearing completion. The contract for four large pulp grinders has been given to the Bagley & Sewall Co., of Watertown, N.Y., the machines to be delivered before the first of June.

The Petewawa Lumber, Pulp & Paper Company has been incorporated by the Ontario government, the promoters being A. Drewson, New York; A. T. Mohr, Niagara Falls; and Geo. Urban, jr., T. C. Becker and Geo. Dakin, of Buffalo.

Mr. Windler, of New York, has purchased lands on the Saguenay River, Que., from the Terres Rompers to Caron's Falls, near the mouth of Rievère aux Sables, and will build a pulp manufactory there employing from three to four hundred men.

The St. Raymond Company, of St. Raymond, Que., is seeking incorporation, to carry on business as pulp manufacturers. The promoters are John Macfarlane, F. W. Everts, W. Drake, G. F. O'Halloran and E. H. Barber, and the capital stock \$50,000.

It is reported that Sir William C. Van Horne, president of the Canadian Pacific Railway Company, and Mr. R. B. Angus, president of the Bank of Montreal, have become associated with General Alger in operating the Laurentide Pulp Company, of Grand Mere, Quebec.

Paper and pulp boards are in demand among apple growers in Canada for use in the barrel heads. It is stated that they preserve the apples better than the wooden barrel heads. Paper pulp is also being used in America as a substitute for wood in the manufacture of black-lead pencils.

We learn that a small lot of about 15 tons of Canadian sulphite has been disposed of in the London market, and that the mills it has gone to have given it a very good report; in fact, in some cases we believe it was reported to be better than the best Scandinavian makes. It is said to be very clean and easily bleached.—Wood Pulp, London.

The largest paper mill is at work in Germany, in the straw pulp manufactory of Tannicht, near Crosswig, Saxony. It is a cylindrical mill of 4,000 kilogrammes capacity, and fourteen metres in length, worked by electricity. It requires forty to forty-five minutes to fill it, and it is emptied in five to ten minutes. The straw pulp is washed, crushed and bleached in the mill.

Chemical pulp will probably be scarce in Great Britain this year. Half the Norwegian mills are reported to be sold out for the whole year, and the others have only unimportant lots left. Buyers show more and more disposition to meet makers' price ideas, and sellers will most likely soon be able to obtain fully those high prices which they are now quoting. Sulphite pulp has been in active demand lately.

Mr. Albert E. Reed, a large paper manufacturer of Maidstone, Kent, England, is at present on a visit to Canada, and is said to have purchased the Masterman sulphite pulp mills located on the Miramichi river, at Chatham, N. B. He proposes to enlarge the capacity of this mill to thirty tons per day. The greater part of the pulp will be required in England to supply the needs of the paper mills operated by Mr. Reed, which has hitherto been obtained mainly from Norway and Sweden.

Do you propose making any changes in the equipment of your mill? If so, drop a card to the CANADA LUMBERMAN giving the particulars. The publisher is always pleased to hear from subscribers.

PULP MACHINERY

We are prepared to supply Pulp Grinders, Wet Machines and Baling Presses.

WRITE FOR ESTIMATES.

Robb Engineering Co., Ltd., Amherst, N.S.

LEGAL DECISIONS.

LINDSAY VS. KLOCK.—This suit was instituted in the Superior Court at Hull, Que., by Archibald Lindsay, to recover \$20,000 damages from R. H. Klock & Co. for the burning of the former's mill at Aylmer. From the judgment delivered by Judge Gill the following is taken:

The Messrs. Klock had leased the mill and had the right to make certain repairs. They started to make the repairs to the mill; and the twenty-ninth day of the month of March the mill was burned during the night-time.

It was shown that the defendants had a night watchman; that they had made new repairs; that they had put in "Dutch ovens," so as to create more steam, and the fire was attributed to this innovation, from the fact that it is said that the Dutch ovens allow sparks to escape more easily than the former apparatus; and plaintiff endeavored in the evidence to prove facts which would place the responsibility on the defendants. On the other side it was proven that these Dutch ovens are adopted in mills, and that the customary manner of adapting them was resorted to in this mill. Moreover, it is alleged that they are no more dangerous than other appliances, and that it is not known how the fire occurred; that it may have taken place and arisen from sparks, but that they don't know. A steam pump was there in case of fire, and all precautions which are usually taken to protect property from fire were used, and consequently defendants were held not liable.

S. C. KANADY LUMBER CO. VS. THE BROADFOOT & BOX FURNITURE CO.—This was an action tried last month at the County Court at Toronto, and will interest lumber dealers in general. The following particulars are obtained from a report furnished by the counsel for defendants: The defendants gave the following order to plaintiff's traveller:

TORONTO, 24th Sept., 1896.

S. C. KANADY.

DEAR SIR: Please ship to Broadfoot & Box Co., of Seaforth:

Quantity.	Description.	Price where, per M.	Terms.
1,000 ft. ½ in.	Birch 1 and 2		
1,000 ft. 2 in.	Birch 1 and 2		
Balance of car 1 in.	Birch 1 and 2	23	Seaforth

Put on 500 ft. of 3 in., if possible 4 in. and up wide, cut two years.

(Sd.) "BROADFOOT & BOX FUR. CO."

Defendants stated in conversation that led up to above order that red dry birch for a particular purpose was wanted. Mr. Broadfoot was not at home when car arrived, and the lumber was unloaded. The inspection made by defendants, however, found the order unsatisfactorily filled, and they refused the car. Plaintiffs sued, and the point fought out in the trial and decided against the defendants was that saps in birch are not a defect, and that if one wants "red," it must be specifically mentioned. The evidence was sadly conflicting, and made

the court and counsel wonder how lumber business could possibly be carried on without law suits, when no two lumbermen agreed on the qualifications of Nos. 1 and 2. Defendants' contention was, Nos. 1 and 2 gave them the best two grades in the log; plaintiffs', that the red could be picked out, and an order for 1 and 2 filled. Defendants contended that firsts and seconds called for standard lengths, which were 12, 14 and 16 ft., admitting ten per cent. of 10 feet. Plaintiffs replied that you could go down to 8 feet, provided board was perfect otherwise. As to other qualifications, defendants set up the qualifications of firsts and seconds as follows:

- Firsts are to be 8 inches and over in width.
 - 8 to 10 inches wide shall be clear.
 - 11 to 14 " " will admit ⅓ bright sap on one side, or one standard knot.
 - 15 to 20 inches wide will admit ⅓ bright sap on one side, or two standard knots.
- Seconds are to be 6 inches and over in width.
 - 6 and 7 inches shall be clear.
 - 8 to 10 " will admit one standard knot.
 - 11 to 14 " " " two " knots.
 - 15 to 20 " " " three " "

In seconds, bright sap shall not be considered a defect. Culls include all lumber not equal to the grade of seconds, one-half of each piece being merchantable. Other than above shall be classed as mill culls.

A scale of the lumber on this basis showed about ninety per cent. seconds and culls, and ten per cent. firsts, with about ten per cent. red in the whole car.

Defendants further contended they were entitled to fifty per cent. of firsts, and that the reds had been picked out. The evidence of the plaintiffs went to show that the minimum width of firsts and seconds is six inches, and that saps are not a defect in either firsts or seconds; further, that there is no settled proportion of firsts and seconds in a combined order of firsts and seconds. The judge smilingly said the Legislature, as they were so anxious to pass new acts, might try their hands at settling the rules of lumber inspection; but he was unable to find that the defendants had not filled substantially the order.

THE following decision in the case of Deslauriers vs. the B. A. Land Company, rendered by Mr. Justice White, will be of interest to proprietors of timber limits: "The plaintiff, one of several laborers employed by his father in the manufacture of logs, ties and pulp wood, sued the company for thirteen days' wages due him by his father. His pretension was that the company was liable, because they had taken from his father a quantity of ties, pulp wood and logs in settlement of their claims for trespass, and had disposed of them. The court held that any rights of accession in value by the added labor belonged to the employer of the labor, who could validly transfer

such rights to the owner of the material, and that the several laborers had no privilege upon the wood manufactured in trespass upon the lands upon which the manufacturer had no rights whatever. Action dismissed with costs."

PUBLICATIONS.

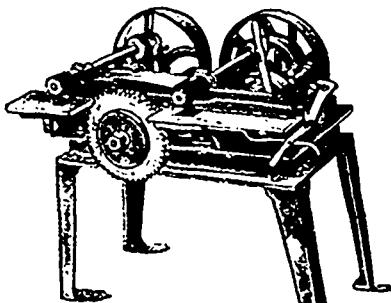
The New Brunswick Tourist Association, of St. John, in publishing "The Gripsack," is performing a desirable work. Its main object is to make known the many seaside attractions possessed by the maritime provinces, and the illustrations in the last number convey a clear idea of their beauty.

The April number of the Ladies Home Journal is an Easter issue, and is brimful of entertaining reading. Clifford Howard tells the story of the most beautiful Easter service in America, and ex-president Harrison has timely articles describing "The Social Life of the President." Other equally popular articles go to make up a complete number.

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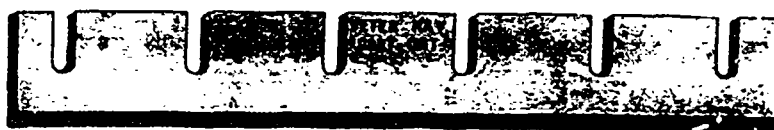
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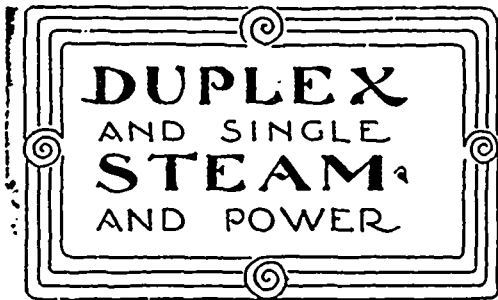
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AN ELECTRIC SAW MILL.

At Folsom, Cal., the American River Land and Lumber Co. recently started its new saw mill. This mill in most respects is like other modern band mills of 75,000 feet daily capacity, or about 120,000 feet when running double time.

The interesting feature about this mill is that all its machinery is driven by electric motors. The motor that runs the band is of 75 horse power and has a speed of 600 revolutions per minute. The edger has a 50 horse power motor that runs 700 revolutions per minute. Then there are three motors of 30 horse power each, one of which runs the log roller and refuse conveyor, another runs the carriage and friction

reverse, while the third runs the trimmer and live rolls. A 5 horse power motor runs the filing room machinery.

When the mill was started on the morning of the first day of December, it worked successfully from the start. In the words of a spectator: "At the hour appointed two of the men, with pike in hand, picked out logs that were suitable for the initial sawing and they were drawn up the chute from the pond below and rolled on the table. The switch was touched and the big saw began its work, smoothly and evenly. The machinery began to turn as easily and quietly as if, instead of being new and untried, it had become used to its business, and everything went on without a hitch."

The waterfall which furnishes the power for the motors is 600 feet distant from the mill. The company estimates that there will be considerable saving in wear and tear over the ordinary steam-driven machinery. The comparative cost of equipment and operation are not given in the article in a Sacramento paper, from which these statements are taken. It is the intention of the company to build a planing mill and box factory in connection with the saw mill, using electrical transmitted power.

Readers of THE LUMBERMAN are reminded that correspondence is invited upon all subjects of interest to the lumber trade. A free discussion of current topics will always be given.

Mr. Gregory proposes erecting a saw mill at Midland

W. H. Kelly is erecting a saw mill at Buckingham, Que.

W. W. Carter is erecting a shingle and planing mill at Fesserton, Ont.

A new saw mill has been erected at Bake Lake, Ont., by Frank Buchanan.

A number of Pembroke citizens, including Hon. Peter White and Francis Inglee, lumber merchants, are seeking incorporation as the Pembroke Navigation Company, for the purpose of towing rafts of timber and saw logs, etc.

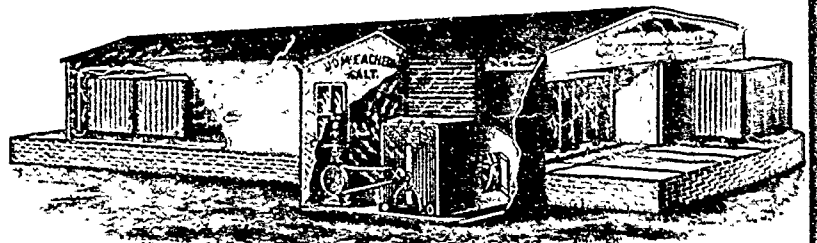


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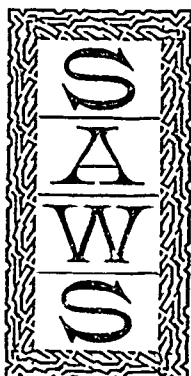
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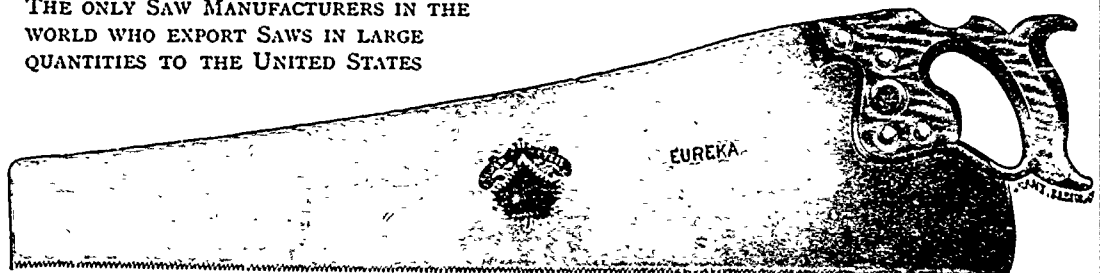
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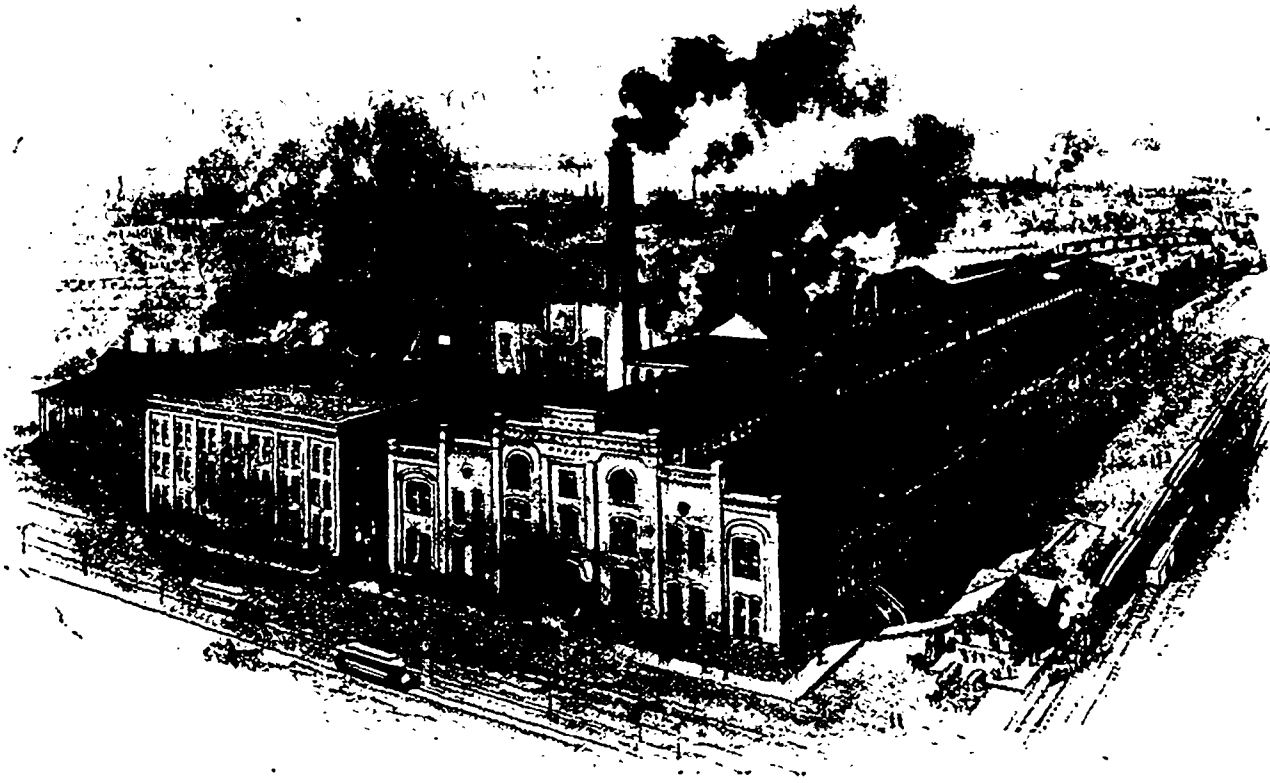


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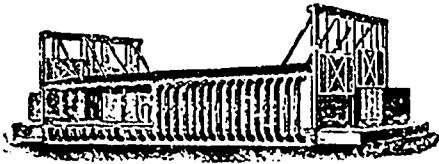
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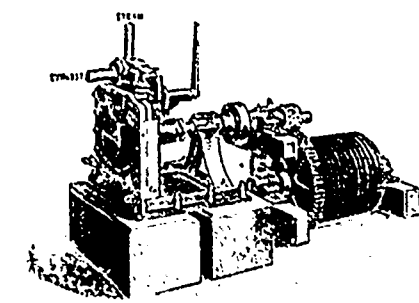
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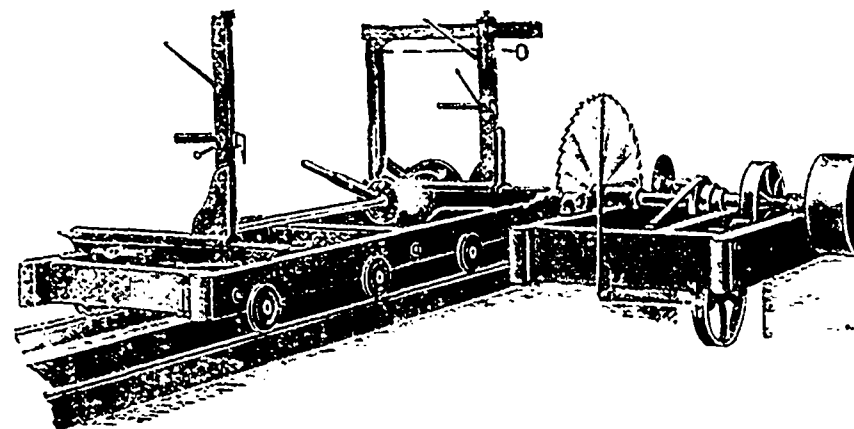
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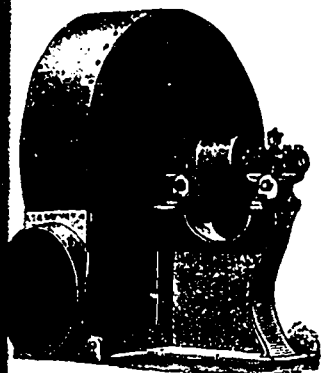
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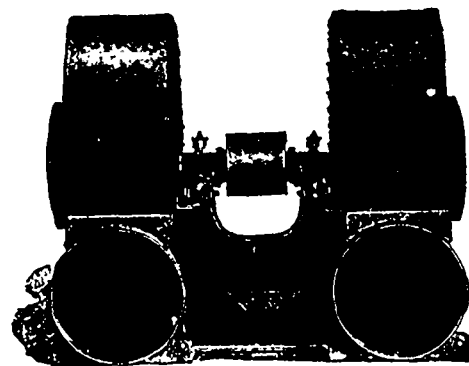
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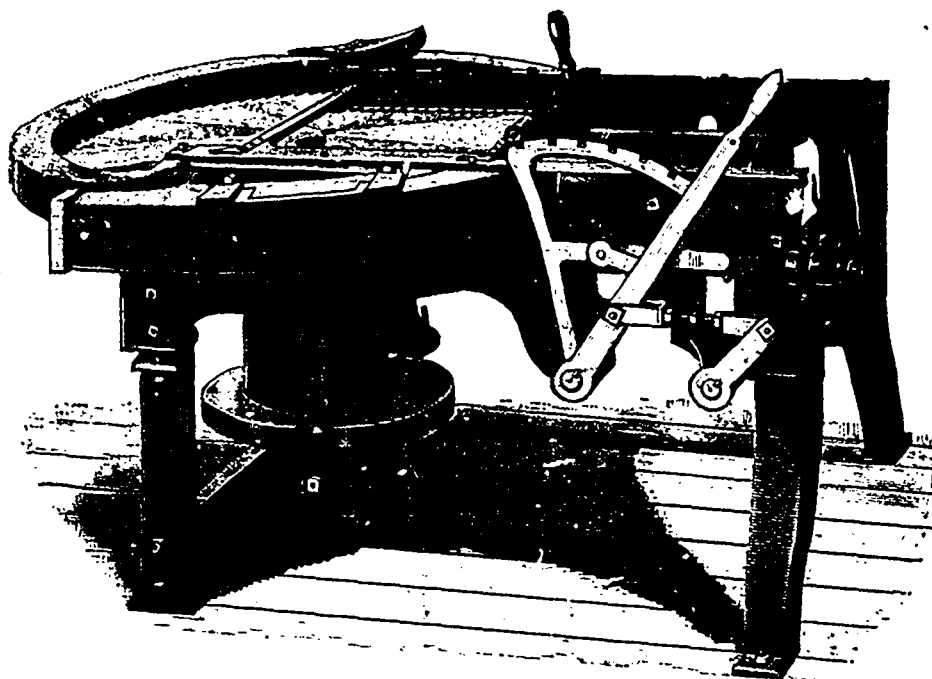
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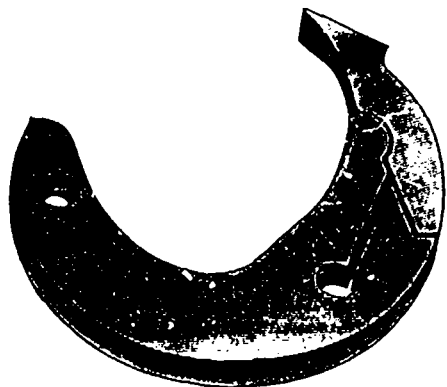
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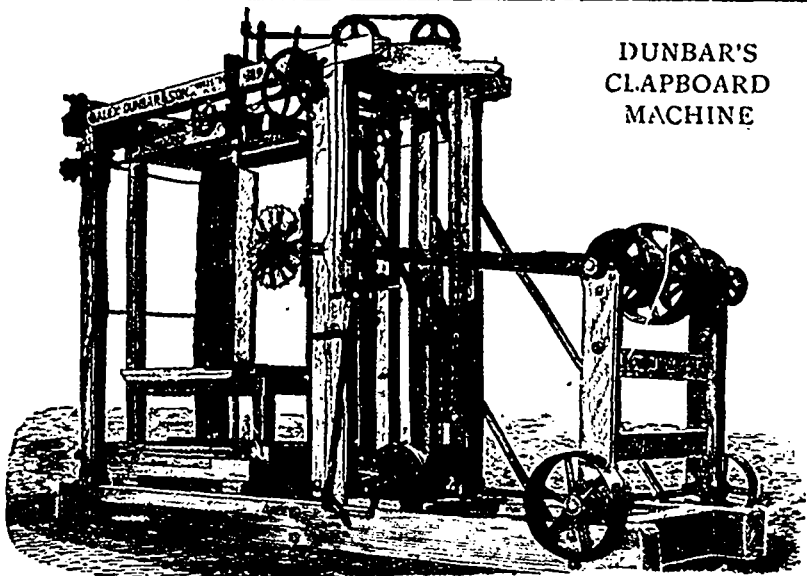
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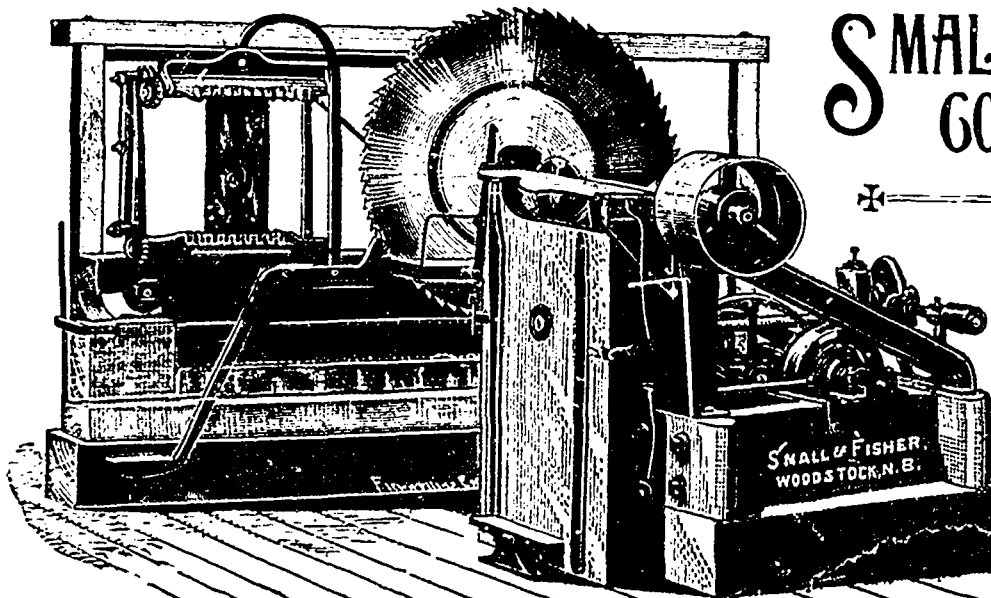
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