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VOL. 4.

PETERBOROUGH, ONT., SEPTEMBER 15, 1884.

NO. 18.

#### ARBORICULTURE IN CANADA.

At the meeting of the British Association in Montreal Professor Brown, of Ontario, read a paper on "The application of scientific and practical arboriculture to Canada." Agricultural countries all complain of want of trees. There is now no question of the value of trees in rural economy; how best to secure full advantage in all their bearings is the question with advanced nations. All nations should have clear ideas of the work to be done before attempting anything. What can Canada do? Two things are necessary to a scientific and practical work in Canada, namely the conviction of the farmers of the necessity of conserving and replanting, and empowering of the Government to reserve tracts for these purposes. The first would, through self-interest, be the most thorough; second, most immediate. Government as a company will have to become foresters. The slowness of the return is the great barrier to replanting. In Europe large tracts are in the hands of one man, whose interest enables him to take wide measures; here, land is so subdivided as to preclude all idea of profitable work. It is harder to re-clothe than to plant for the first time, the chief cause of which is the fact of successive cropping. Trees are not only necessary for shade and shelter, but the climate, temperature, rainfall, moisture and evaporation are influenced by trees. The third great reason for tree cultivation is that the culture is more profitable than agriculture year by year. Fifty per cent. of the cultivated portion of Canada is wooded, as against twenty-five per cent. in the United States. In Canada our need is not for more trees, but for better distribution. Outside of lumbering—a taking without system—there is no preserving, controlling or conserving in any but in an individual ownership here in Canada. The amount of smothering and robbery which goes on in a Canadian forest is great. Our forest should be dealt with in different ways, but on some principles as in Europe, as only 25,000,000 of acres had been cleared for agricultural purposes it may be said that the whole country is still under trees with these exceptions. There are four fields for Canadian forestry. 1st. The untimbered land, such as prairie. 2nd. The older cleared portions. 3rd. The recent forest settlement. 4th. The untouched forest. The proportion of forest to farm land necessarily varies in countries, climate, altitude, latitude, aspect, soil, etc., and can only be settled by practice. The need of shelter should be supplied first, and may be taken as the first measure. That of climate is an unknown one. Everything considered, one-fourth of the surface of Canada should be covered by trees. As this is just one-half of what is at present covered, it is apparent that what we need is regular distribution. Tree planting should not be confined to poor lands, and not merely to

high lands. We have soils and climate suitable for all kinds of tree life—from the pine of the north to the walnut of the South. What is advanced in this paper is founded upon an experience of sixteen years' control of the formation, the planting and subsequent management of something like twenty million of trees on the Seafield estates in Bauff and Inverness shire. With regard to prairies of the Northwest, men need never hope to gather wealth by agriculture without the help of trees. There is no such example in the world. There is no great future for Manitoba and the North-West unless preceded by an extensive system of forestry. Trees are needed for roadside shade, shelter for dwellings, crops, for open grangings and enclosed grangings, wind-breaks and climatic ameliorations. A prairie farm of 160 acres should have 30 acres of timber, 125 acres under cultivation and five acres of orchard, garden, buildings and roads. The roadways of farms should be lined with shade trees, while dwelling-house and orchards should for climatic purposes. Head water plantations must surround or be in the immediate neighborhood of sources of streams. Great wind breaks being needed to fend the smaller plantations as well as districts, have to be carefully outlined, of considerable extent, and must command an exact position. Lesser wind-breaks are planted where larger are difficult to establish. In climatic plantations area is of more consequence than form, as it requires a great field of leaves to effect a climatic amelioration. This address was illustrated by a large map showing exact position form and extent of increasing plantations.

#### FOREST PRESERVATION AND THE TARIFF.

We repeat the following article from the N. Y. Sun because much of it will be interesting to our readers, though of course we do not endorse all the opinions expressed:—

"Serious fires, set for the most part by sparks from locomotive engines, have recently devastated considerable areas of forest in the upper and lower peninsula of Michigan and in Pennsylvania. In commenting upon this fact some of the special organs of the lumber manufacturing industry have made the assertion that such fires are, and always must be, inevitable, and that therefore the collection of the duty by the Government of the United States upon lumber entering this country—inasmuch as it hastens, as they acknowledge, the destruction of our pine and spruce forests, by stimulating the manufacture of lumber of these kinds—is a wise and economical measure. A correspondent of the Tribune of this city, in an argument against the removal of the lumber duty, states some pertinent and important facts. "I believe," he says, "It is generally conceded by those who are familiar with the subject, that the lower grades of pine lumber are now pro-

duced in most cases without profit. As lumbering in Michigan is now conducted, the forests are practically cut clean of every tree that will produce marketable lumber. A further reduction in the price of lumber consequent upon the removal of the tariff would make the cutting of coarse grades of trees impracticable, except at a loss."

The real reason why the duty upon lumber should be removed, and why Congress has thus far utterly and shamefully failed in its duty to the country in failing to consider this great public question upon its merits, is that free lumber will prevent the needless destruction of young and growing trees in accessible forests like those of Michigan or Wisconsin, or of remote mountain forests like those which cover the slopes of the Adirondack Mountains, the chief value of which is found not in the logs which they can furnish to the mills, but in their protective influence upon important water sheds.

The danger of destructive fires in forests in which lumbering operations have been commenced is very great, especially in regions penetrated by railroads; but this danger is not so great as many persons suppose, and it is certainly possible through legislation to greatly reduce it. The lumberman's theory that no forest is really safe from fire until it is piled in a lumber yard is as absurd as it is short-sighted. Forests are successfully protected from fire in other countries, like the foot hill region of India, where the danger and the opportunity for forest fires are infinitely greater than they are in many of our States; and the popular belief, fostered by interested persons who make use of this argument to induce Congress to retain the duty upon lumber, that all our forests must sooner or later fall a prey to devouring flames, will work incalculable injury upon the country. Our forests, unless they are to cease producing valuable timbers, must be worked upon some principle which will tend to continue the growth of the most valuable trees, and so perpetuate their productive capacity. The pine forests of the North are valuable to the country for the pine which they produce, and which the soil and climate of that part of the country are admirably adapted to develop. The other trees which are associated with the pines in these forests are of much less general value. In other regions of the country they attain greater growth and excellence. It is the preservation and perpetuation of the pine, therefore, which offers the principal forest problem to the people of the pine States, like Michigan and Minnesota. In Maine and in the Adirondack regions of this State it is the preservation of the spruce which should receive peculiar attention.

The first steps towards forest protection in this country are only difficult in the careless disregard of the American people upon all questions relating to their forests—a disregard

born of the very immensity and wealth of the forests which once covered the whole of eastern America. What is necessary to be done if our forests are to continue indefinitely producing timber as the forests of Europe produce their annual crop with as great regularity as other crops are produced, is to stop the spread of forest fires, to limit the annual cutting to certain fixed regions and the care of such trees as it is desirable to perpetuate to individuals only of a certain size. In northern pine forests the whole stand of pine, big and little, should not be cut off at once, as is now the universal custom. The young half grown trees and tough old ones, to restock the cleared land with seed, should be left to develop. If such a policy of cutting can be inaugurated, and then if the young seedlings and the half grown trees can be protected from fire, which not only destroys the trees, but the best quality of the soil, our pine forests can be made to yield a regular crop every year for all time. The first thing necessary in order to make such a general system of forest management possible, is to remove the false and dangerous stimulant to improper lumbering afforded by the import duty, and so take away what little profit, if any, exists in cutting down half-grown trees and saplings, which would be immensely more valuable could they be allowed to grow to maturity. If there is no longer a profit to be made, however small, in cutting half grown trees, owners will allow them to stand; and that point being gained, it will be less difficult to induce them to wisely guard and develop the growth of such young trees. The first step is to remove the duty upon lumber. No system of forest management, however general in its provisions or crude in its application, can be successfully inaugurated in this country as long as the Government pays a premium to the owners of timber land to so manage their property as to insure sooner or later its total ruin.

When it is remembered that the saw logs alone produced annually by the forests of the United States are worth fully two hundred millions of dollars, and that wise and sensible measures have nowhere yet been adopted to maintain this great crop, it is not unreasonable to expect that Congress should take up and consider this whole subject broadly and comprehensively, or, at least, clear the way for the inauguration by individuals or by States of systems of forest management by the removal of the pernicious duty now collected upon imported lumber.

The Rainy Lake saw mill has resumed operations. The mill is now in first-class working order, and will cut about 30,000 feet of lumber daily. The owners intend to put on a night gang of hands, when the output will be nearly doubled. —Winnipeg Commercial.

**A SHORT LOOK AHEAD.**

The *Northwestern Lumberman* has the following article on the prospects of the lumber trade:—

"The money obtained for farm products is what every retail lumber dealer bases the success of his business upon. In the absence of good crops and fair prices comparatively little lumber is used. The prosperity of a village is gauged by the prosperity of the farmers in the county surrounding the village, and, this being the case, the success of the lumber trade outside of the largest cities hinges largely on crops and the prices obtained for them.

The yield of small grain this year has been bountiful. From some sections there have come complaints, but investigation has proved that such complaints were due in part to poor, grumbling human nature. Not a small percentage of the people never make note of any days except the cloudy ones. The sun shines for others, they think, and not for them. These people, no matter how prosperous, are never contented. If their wheat fields produced 30 bushels to the acre they would call themselves poorly off because it was not 50 bushels, and if it grew in flour in their pantry bins they would think that nature was doing them a wrong because it was not in baked loaves.

In some districts corn is out of the way of frost, while in others a hard freeze would damage it. The season has been so cool that an early frost has been expected, but in the great corn belt it has not yet come, and in a very few days from now it can come with impunity. There is every indication that the corn crop will be immense. The West next year ought to be a country well stocked with well-fed hogs and cattle. Last season a large number of cattle were sold in certain sections because their owners could not feed them properly, and, of course, on the heels of such a condition, the number of hogs in the yards this season is comparatively small.

Still, with good crops of small grain secured, and an immense corn crop nearly assured, the lumber dealers are seriously asking themselves what the outcome will be. Will the farmers sell their grain and corn, or will they hold them? And, if they do sell them, will the prices warrant improvements to an extent to consume a large quantity of lumber? It is no wonder that these questions are asked by the lumber dealers. They come very properly into the consideration of their business plans, and it would be a poor business man who would not give them thought.

That the farmers will sell the bulk of their farm produce cannot be questioned. They raised it for the purpose of turning it into money as quickly as possible, and they will do it for the simple reason that they want the money. Debts are due and must be paid. Improvements in various directions must be made on the farms, and it will take money to make them. It is not the disposition of but a small class to make every thing count for the best. Sacrifices are made every day in the business world in order to get ready money. So many farmers will sell their crops that we expect for the next few months the railways will have about all they can do. In times of a bountiful harvest, no matter whether prices were high or low, such has always been the case, and this year will not be an exception. There are some men who will hold their wheat and corn, but they will be few when compared to the great number of producers. And what object have they in cribbing their products? Crops generally in Europe are good. There is a probability that the European powers will become engaged in war, but the probability is rather remote. All the people of the old world are not so hot-headed as the French, for which let us be thankful, no matter if our wheat and corn sell for a few cents a bushel less than we would be glad to get for them. This not an era of high prices for any line of goods. It is an era of overproduction, and nature seems desirous this season of pointing out to man that she, as well as he, can take a hand at it. The most sanguine do not even predict that any boom in prices is likely to occur in the immediate future. Plenty to eat, and plenty of houses to live in, at moderate prices and rents, is the outlook. The iron, cotton and coal men are

reducing their output; the lumber manufacturers are taking steps to bring about the same result—all acknowledging that in order to go faster they must first prepare by going slow. Such conditions do not point to high prices this year for wheat and corn.

The second question that the lumber dealers are asking themselves ought to be readily settled. Good crops are always productive of increased activity—an activity that is graded by the prices obtained for the crops. If high prices were realized this season, business so brisk that it could be denominated a boom would be the result. There are no such indications, however. The realization of such an event can be expected to be but partial. There will be a quickening of trade, but not in a degree as to show that the flour is wholly prepared for the leaven yet. This, however, must be borne in mind—we are all hopeful. A partial success leads us to believe that the next step may take us to a success that is unqualified, and we discount the future. Such crops as we have are inspiring, and men on the strength of the inspiration will buy as many of the necessities and luxuries of life as they ought to. Their credit will be extended. Neglected improvements will be made. More money will be in circulation. More men will be employed, and a better feeling will prevail. Another fact that we should not lose sight of is that the people of our great country keep marching right on. They are all the time reaching out, and every step necessitates commercial transactions.

Under such conditions there can be no such thing as halt in the lumber trade, this year or any other year as for that matter. Lumber in the very nature of things must go forward steadily. The amount of lumber that is used, and has been used during the past year, we believe has been underestimated because so much has been said and written about overproduction. Because lumber has piled up on the mill yards and docks many are of the opinion that business has been dull at the consuming end of the line. That does not necessarily follow. The facilities for producing lumber have been largely increased year after year. There really seems to be no limit to them, and with the present mill capacity the demand that would call for all that is turned out would be such as no man has ever seen.

Judging from the evidence with which we come in contact constantly, we see no reason to think that the retail trade for the next twelve months will assume smaller proportions than that for the twelve months past, but rather that it will be larger. It is safe to assert that in the next year 6,000,000,000 feet of white pine lumber will be put into buildings and improvements, and if the dealers distribute that amount from their yards, the year will certainly not be one long play day."

**CONCERNING CHEESE AND CHEESE BOXES.**

We clip the following from the *Glengarry* correspondence of the *Montreal Witness*:

One of the principal features of note which seemed to interest our visitors on that day, and we are not surprised to hear it, is the cheese box manufactory of Messrs. McPherson, Merrill & Schell, directly under the personal superintendence of Mr. J. T. Schell, one of our latest and most enterprising citizens. The factory was built about eighteen months ago in connection with their saw and shingle mill, for the purpose of manufacturing cheese boxes to meet the demand of the factories under the direct control of Mr. D. M. McPherson, our "cheese king." The enormous quantity of one thousand boxes a day are made and despatched to all parts of the country and across the river St. Lawrence, and a large quantity of material ready prepared is shipped daily to all points. Last week over seven thousand boxes of cheese were shipped to England from the different factories, and Mr. McPherson has received further orders from the Old Country for ten large cheeses, each to weigh from seven hundred to one thousand pounds. The average yield of cheeses of the different factories, so far this summer, is seven hundred per day, a decidedly encouraging outlook. A factory run with such activity and push must naturally produce a

good effect in a small place like Alexandria, both to the working classes and the stores. To such of our readers who may chance to visit Alexandria, we feel sure a visit to this factory, to witness the manufacturing of those cheese boxes, will prove interesting. With that indomitable push and enterprise which have characterized Mr. C. T. Schell since his arrival in Alexandria, he has planted in our midst a most flourishing concern. We now learn that this gentleman is about to erect a new saw mill at or near the "Dingwall Farm," in the fourth concession of Kenyon, adjacent to the track of the Canada Pacific Railway, which will give him splendid facilities for transporting lumber and cord wood, etc., to Montreal and the American markets. Such business speculations are all worthy of success, bringing with them as they do a home market for the deserving farmers.

**CONSERVATION OF FORESTS.**

Mr. R. W. Phipps, whose activity in the political campaign of 1878, will be remembered by most people, is now visiting the capital for the first time and in an official capacity. A few years ago he was appointed forest conservator by the Ontario Government. In that position he has shown himself to be surprisingly efficient, and collected a mass of information respecting the forests of our province, and the best means for their reproduction, which is invaluable. He intends to go along the Canadian Pacific as far as Lake Nipissing for the purpose of personally inspecting the forests of the Ottawa Valley and intermediate district, and determining what suggestions are necessary for their preservation and reproduction. In his next report the result of his visit will be published, and we anticipate it will contain some fine specimens of word painting descriptive of the Ottawa Valley's forest wealth and economy. While in this city Mr. Phipps has been interviewing individually the prominent lumbermen and soliciting their co-operation in proposed measures for forest preservation and reproduction. They have invariably approved warmly of his aims, and promised every co-operation in their power. It is probable a general meeting of lumbermen will be called, for the purpose of conference with Mr. Phipps and an exchange of views.—*Ottawa Free Press*.

**A DULL WINTER.**

The coming winter is likely to be the dull-est in the lumber trade which this district has yet seen. There have been very few sales of lumber this summer and all the mills are overstocked in consequence. The Parry Sound Lumber Company's mill here has been closed down, possibly for the season, and, unless shipments are made immediately, the Conger Lumber Company's mill will have to shut down for want of piling ground. The mills at Byng Inlet belonging to the Georgian Bay Consolidated Lumber Co., are also to be closed down for the season shortly. The upper mill is expected to run about three or four weeks and the lower mill is to run only about two weeks and, it is said, will be closed down the whole of next summer. All the different lumber companies are going to largely reduce their winter operations in the woods and the cut of logs this winter will not be one-half as large as that of former seasons. Altogether the outlook in the lumber trade in these districts is anything but promising.—*Parry Sound Star*.

**SPONTANEOUS EXPLOSIONS.**

Herr Baehr, of Dresden, has been conducting a series of experiments in the Royal Theatre in that city, whose results are of the highest importance in elucidating the causes of the spontaneous explosions that sometimes occur in flouring mills. He has found that the leather belts employed for the transmission of energy in manufactories are such rapid generators of electricity that flour malt and other finely divided forms of dust may be spontaneously fired and exploded thereby. Accidents of this kind, due no doubt to the cause exposed by Professor Baehr, have frequently taken place in large mills in this country; and, as any finely divided form of dry combustible material is liable to be thus exploded, the contingency is one against which proper provision should be made.—*Ex*.

**THE PALMETTO.**

Another use has been discovered for the once universally despised palmetto. The fine fibre obtained from the inner lining of the bud is now manufactured into a substance so closely resembling human hair that it is employed as a substitute for the genuine article, and now ornaments the graceful head of beauty. It can be had of any length, and being capable of taking any color, the ladies can now indulge in brown, flaxen and auburn tresses. Thus, not only the hat, but the glossy locks upon which it rests, are now furnished by the palmetto, from which source also come the fan to cool the brows and the material to stuff mattresses whereupon to repose the wearied body. Paper, fiber, hats, frons, hair, etc., are now furnished from palmetto, and it will yet provide material for cordage and clothing.—*Ex*.

**NEWLY-DESIGNED MACHINES.**

The Egan Company, of Cincinnati, Ohio, have just completed several newly-designed machines of special interest to large number of wood-workers on account of the many fine points embodied in their construction. Among the number we may mention their fast-feeding special flooring machine, which will turn out a first-class quality of flooring, in either hard or soft wood, at the rate of 100 lineal feet per minute. This machine is provided with three pair of large feeding rolls, and it will work stuff nine inches or 14 inches wide, by three inches thick, finished sizes. Their new self-feeding rip-saw is well adapted for use in any factory where a large amount of ripping was to be done, as the work performed by it is much more rapid, as well as more smooth and even than can be done by hand. The company have already placed several of each of these machines with parties who had thoroughly canvassed the market and finally decided on the Egan Company's make.—*Lumber Trade Journal*.

**A BRIGHTER OUTLOOK.**

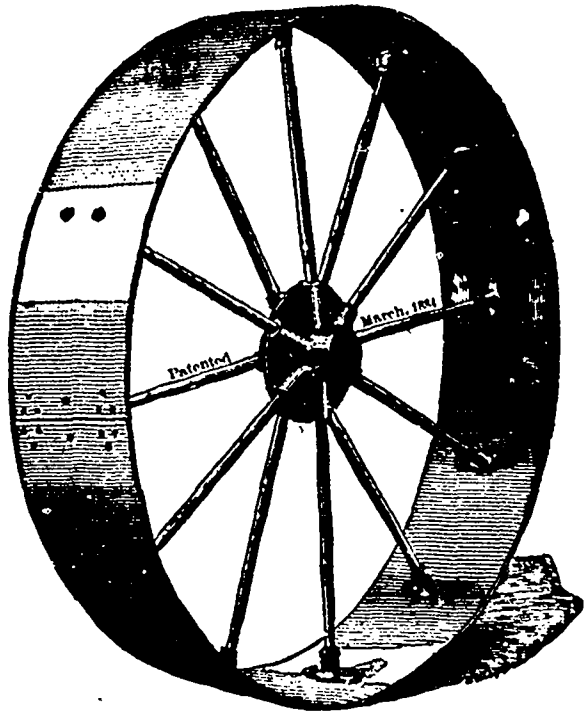
The import list this week is a somewhat formidable one, and includes 25 vessels from Sweden; 13 from Russia, and eight from Canada. There are 25 steamers and 35 sailing ships, making a total of 60 against 74 the corresponding week last year. At that time there was a marked preponderance of steamers, 46 being of this class; so that though the present week's import is undoubtedly a heavy one, it is not so large, fortunately, as twelve months ago. Trade is now duller than it was then, though the prospect of improvement is somewhat brighter than it appeared the autumn of 1883. Then there was nothing to ground any hopes upon of a change for the better. Now the outlook is much brighter, and in the present unsettled state of the foreign markets, and the disturbance between France and the Chinese empire, the chances of the shipping trade improving are every hour becoming greater. The blockade of the Chinese harbors would throw tonnage on the market; but to carry on such a distant war the French will be compelled to utilize all their vessels for transports, and in this way the Mediterranean trade will be almost entirely in our hands.—*Timber Trades Journal*.

**Tree Planting in the Northwest.**

One of the measures before the Northwest Council, now in session, is the introduction of an ordinance providing for the encouragement of those who will undertake the work of planting out trees on the prairies, both for the purpose of raising timber belts on such portions as are of little value for cultivation, and to create wind-breaks around homesteads and along the roadsides for shelter and shade. In either case it is most desirable that the encouragement to be given should be of a liberal nature. There is nothing, we believe, in either the climate or the soil to militate against success, except that the varieties of trees to be tried should be those best adapted to exposure. The experiment need not be a costly one, and a beginning might be made by planting out those sorts that are indigenous to the country or to localities with a winter climate equally as cold.—*Calgary Herald*.

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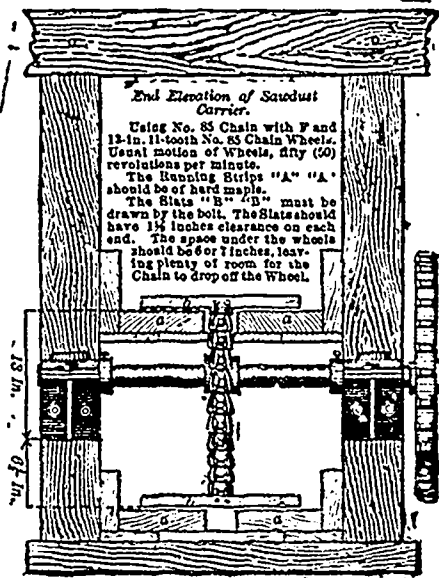
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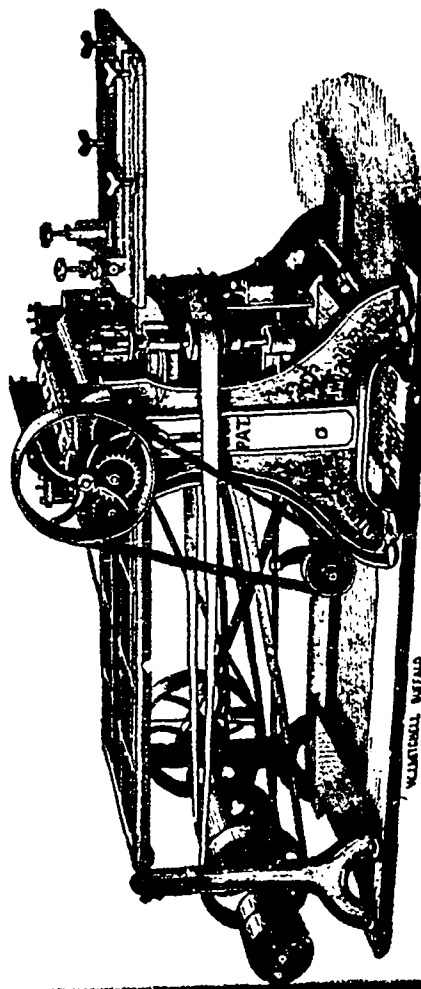
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BRANTFORD CANADA.



COVERING PULLEYS.

A correspondent of Cotton, Wool and Iron tells how he covers a pulley with leather:—"First drill holes in the rim of the pulley of the size of copper rivet—that will be the right length to go through leather and pulley rim; drill the holes so that rivets will go in free, or you will have trouble in their upsetting before you are ready for that. For that size pulley we should drill holes three-eighths of an inch from edge of pulley and about six inches apart; and across the face of the pulley, where the butt comes, we should put four holes in each row and have the rows one inch apart, and in both cases we should put the holes opposite of each other—that is, on each edge of the pulley and across the face. But should he prefer to make a nice joint that would not show where it was made, he will, of course, have to make a long lap joint, and in that case the cross row of holes would need to be much further apart; however, we prefer the "butt" joint. The next thing we take the leather to be used, and if there are no joints in it, soak it thoroughly in water. If there are lap joints in it, wet all it will bear without breaking them; next rivet one end of the leather across the face; the leather being wet the rivet heads will sink below the surface. Now rig up some kind of a purchase to stretch the leather, and only do it as you go from hole, that is, stretch to one hole and rivet both sides at the same time; and when you get at the last row stretch same as before and cut a little short, one-sixteenth of an inch, and punch holes back the same and draw up with a pointed pin inserted in the holes of pulley. Now if the leather should "hump" a little between the rivets don't be alarmed; run your belt on before the cover is quite dry and they will soon be out."

READY MADE HOUSES.

Besides the general demand for all sorts of machinery in Buenos Ayres, there is a new branch of business opened in the demand for ready-made houses ready for erection. Concerning this branch, Consul Baker says, in his report to the State Department at Washington: "Several shipments on a large scale have already been received, and are now in course of erection in the embryo city of La Plata, the new capital of the Province of Buenos Ayres. The demand for habitations at that place was so great that the provincial government could not wait the slow processes of brick and mortar. I understand that upwards of 1,500 are now being put together at that place, and the price is so reasonable that a number of estancieros, who are improving remote cattle farms, have also determined to try the virtue of these houses. Should they meet the expectations of the Argentine people a large trade in them is likely to result. The only fear is that, owing to the heavy southwest winds which prevail here, they may be found to be too light." Furnishing houses ready to put together is a business which Canada ought to be as able to do as the United States. The lumbermen of Ottawa and St. John rivers could surely fill this kind of a bill in first-class style were they to try it in earnest.—Canadian Manufacturer.

Canadian Raftmen in War.

A new work has been found for Canadian raftmen. Lord Wolseley, who conducted the Red River campaign in 1870, and has a knowledge of Canadian raftmen, will take 600 with him on the expedition to rescue General Gordon in Africa. The raftmen are required for services on the Nile. This will be a novel sphere for the men, but doubtless they can "run" the Nile, or force their way up that stream, with as much success as they can carry on the lumbering business on the Ottawa and the tributaries of that river and the St. Lawrence.

The lumbermen's agents have no more difficulty this year in hiring men than heretofore, but the question is where the men want to go. Is it up the Ottawa or up the Nile. An experienced lumberman says that rafting alligators is a better occupation than rafting logs, at least he is reported to have said so.—Ottawa Citizen.

WOODEN PAVEMENT.

In Paris a wooden pavement is made that promises for durability to far ahead of anything in the shape of a pavement that has yet been invented. The blocks are compressed with powerful machinery, which closes the pores of the wood, and then laid upon a foundation that holds them securely in place. The Nicholson pavement has proved a failure, because so short lived, but much as has been said against it, it has saved millions of dollars worth of horse flesh. Continual travelling on stone uses up horses exceedingly fast, notwithstanding which it has looked for some time as though stone must stay and the horses go. But now we notice that in London, as well as in Paris, there is a wooden pavement laid that is lasting and satisfactory in every respect, and we believe the system is about to be, or has been, introduced into New York to some extent. Earth is easiest for a horse to travel on; next in point of ease is wood, and now that a wooden pavement has been invented answers the demands, its use will add to the comfort of the horses, and benefit the pockets of their owners.—Northwestern Lumberman.

A HISTORIC TREE.

A correspondent of the Williamsport Gazette writing from Pueblo on the Arkansas river, gives the following interesting facts regarding a famous tree, a portion of which is lying at that place:

Age 380 years. Circumference 28 feet. Height 78 feet. Was cut down in South Pueblo, June 25, 1883, at the cost of \$250. It was known throughout Colorado as the oldest landmark in the state during the Pike's Peak excitement. The tree sheltered many a weary traveller. In 1850 there was 36 persons massacred by the Indians while encamping near this tree. Kit Carson, Wild Bill, Buffalo Bill and other noted Indian scouts, have built their camp fires under this tree. It is claimed that 14 men were hung on one of its limbs at different times. The first woman that died in Colorado was buried under its branches. The above facts are from good authority.

"The old monarch" was finally felled because it occupied too much room in one of the streets of the new town.

PAINTING SHINGLED ROOFS.

More shingle roofs are painted now than ever before in the history of building in this country. It is mostly seen in cities and suburban towns, although in the country it is by no means rare. Considerable inquiry has led to the conclusion that many have their roofs painted to add to their appearance, which in many cases it certainly does, while others labor under the impression that the paint acts as a preservative to the shingles. The latter are probably right, provided the paint is renewed as often as it needs to be. If the roof is allowed to remain with the paint partly worn off the shingles it will retain more moisture, and consequently decay sooner than they would were they not painted at all. On the score of durability, however, little can be gained in cost by painting. A good shingle roof unpainted will last a great many years, and the expense of painting it a few times would replace it. One painter who had painted the roof of his own house, when questioned by a representative of the Lumberman, used good logic from his standpoint. He thought that painting a roof would add somewhat to its length of life. "You see," he said, "that I have painted mine. I do for myself what I desire to do for others. If I did not, the influence would be bad."—Exchange.

American Forestry Congress.

A circular has been issued by Mr. B. E. Fernow, corresponding secretary, calling attention to the annual meeting of the American Forestry Congress, which will be held this year at Saratoga, N. Y., on 16th Sept. The denudation of the forests of the Adirondack region concerning which there was so much discussion in the New York newspapers last summer, will form the subject of several debates. Among the subjects of special interest to Canadians will be "Canada's Method of Lumbering."

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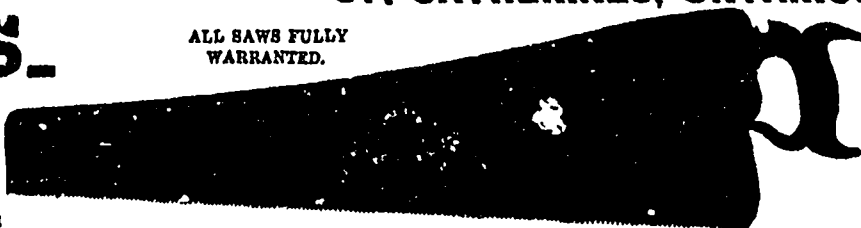
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#### APPLE TREE BORER.

In answer to a correspondent respecting tree borers, the Albany *Cultivator* states as follows: The apple tree borer, known as the round headed borer, in its perfect state is a beetle three-fourths of an inch long, with two broad whitish stripes running the whole length of its back, with rather long and curved horn-like antennae. This beetle lays its eggs in the bark of the tree near the ground early in summer and on till midsummer. These soon hatch, and the young larvae begin to gnaw their way inward, cutting gradually into the solid wood. They are about three years in reaching maturity, when they come out in the form of the beetle already described. Their presence in the tree may be readily detected by the fine sawdust-like castings from the holes. They are easily killed by clearing away the openings of the holes with the point of a knife, and then punching them with a flexible wire or small twig. We have never found anything better than a small flexible twig from which the bark has been stripped to make it small enough to enter the holes. The operator knows when he reaches them by the peculiar touch. It is better to examine the trees often enough to find the larvae when they are young, and before they have penetrated far into the solid wood. A partial remedy for preventing the laying of the eggs, is coating the bark from the ground well up with soft soap, or soap made as soft as thick paint, with washing soda and water. If applied in fair weather, it becomes dry and will not soon wash off. It may be applied two or three times from the first to the end of June. This insect attacks the pear, quince, mountain ash, and thorn. The flat headed borer is half an inch long, more or less, of a shining greenish-black color. It is very common in the Western and South-western States, and is also found far north. It attacks the trunk of the tree from the ground up to the limbs, and lays its eggs at the south side in May, and in Canada in June and July. The eggs soon hatch, and the worms bore through the bark into the sapwood. It is much shorter lived than the round headed borer. Sickly trees are more liable to its attacks than strong healthy ones. The larvae are easily found by using the knife, and are destroyed; and the eggs may be mostly excluded with the soap and soda already mentioned. This insect attacks the oak, soft maple, and several other trees.

#### GREAT FIRE AT CLEVELAND.

CLEVELAND, Ohio, Sept. 8.—A fire that occurred on the flats last night was brought under control early this morning. Sixty-five acres are in ashes. Every vestige of property between Cuyahoga River, the railroad tracks, and Scranton avenue has been destroyed. Travel over the New York, Pennsylvania and Ohio, Cleveland, Columbus, Cincinnati and Indianapolis, and Lake Shore and Michigan Southern roads has been delayed. Large sections of track has been destroyed. The origin of the fire is still a mystery. The chief of the fire department being engaged on the south side of the fire, in which direction the flames were spreading rapidly, did not realize the extent of the danger, and there was not a single engine on the north side to check the possible course of the flames.

When the fire jumped the river it was an extremely critical point. If a strong breeze from the south had been blowing the bolt of flames, a quarter of a mile long, must have inevitably been swept into a thickly built portion of the city along Michigan and Champlain streets. Then it would have been impossible to check the conflagration. Cleveland has never had such a narrow escape from general destruction. A large number of firemen were severely, though not dangerously, burned. An unknown man was carried down with a falling roof and perished. Some of the losses are estimated as follows:—Woods, Perry & Co., \$700,000; Variety Iron Works, \$50,000; Eynon & Son, \$10,000; House & Davidson, \$60,000; G. O. Stanley, \$1,000; Sherwin, William & Co., \$2,000; A. Teabolt, \$20,005; Hubbell & Westover, \$25,000; railroad companies, \$5,000; Potter, Birdsell & Co., \$150,000; King & Co., \$100,000; other small losses, \$20,000. The insurance authorities say that the loss will not exceed one and a half millions; insurance, \$400,000.

#### UNDERLINING ROOFS.

The new method of underlining the roofs of houses with flooring, says the *Timber Trades Journal*, is a first-class idea, whoever originated it, and the boards laid diagonally, when covered with slates, form a roof compact and weathertight that surpasses the ordinary open way of fixing the slates to the laths.

There seems no earthly reason why the walls of houses should not be lined, in a similar manner, especially partition walls, with matchboards, and then covered with non-combustible paper, etc., in lieu of the still usual style of lath and plaster, which we look upon as by no means the best method of making interior walls. Of course there is the difficulty surrounding the employment of wood, especially thin stuff like flooring boards, of getting a perfectly flat hard surface, impervious to atmospheric influences. Plaster, though a very clumsy contrivance, yet, when finished, certainly meets the objection that applies for the use of wood for walls. With the latter so unusually cheap there is no fear but that it will be turned to account somehow, and when once the fashion leads the demand will soon spring up for suitable stuff to meet the new employment found for it.

#### AMERICAN WOODS.

There are said to be thirty-six varieties of oak in the United States, thirty-four of pine, nine of fir, five of spruce, four of hemlock, twelve of ash, three of hickory, eighteen of willow, three of cherry, nine of poplar, four of maple, two of persimmon and three of cedar. The New York Museum of Natural History is to have a complete collection of the native woods of the entire country. The logs are being prepared for that purpose. They will be for the most part five feet long, a section of half the thickness of the log at one end being removed. In this way both the longitudinal and transverse grainings are shown. There is also a diagonal cut on the section, which displays the graining also. The remainder of the log remains in its natural condition with the bark attached.

#### HORRIBLE MURDER.

The *Globe* of Sept. 11 says:—News has reached this city of a horrible murder which occurred on the 26th of July last at Jackfish Bay, on the north shore of Lake Superior. The victim was a navy working on Mr. Reid's contract of the Canadian Pacific Railway, and the murderer is believed to be another navy, who only worked a day or two a week to pay for his board. John Collings, the victim, an Englishman, was a good, steady labourer who saved his money. It appears that on the 26th of July last, Collings was last seen at the camp in company with a young man named John Ryan. The men were missed and a short time afterwards Ryan returned. He was asked where his companion had gone, when Ryan replied that he had quit the job and taken the steamer for Toronto. Of course this story was believed, and a short time afterwards Ryan left the camp and took the steamer Spartan down the lake. Collings' companions did not suspect that anything was wrong till about six weeks afterward, when some men belonging to the camp who went out huckleberrying, discovered a body in the bush in such an advanced state of decomposition that it was almost beyond recognition. The clothing which the man wore, however, was the chief means of identification. The remains were then found to be that of Collings, who had gone away from the camp with Ryan on the 26th of July. His skull was smashed in a most horrible manner, the pockets were rifled, and the waistband of the trousers worn by the deceased in which he had sewn his money, had been cut open and everything taken. Beside the body lay a shoemaker's hammer, with the awful deed had been accomplished. Ryan was at once suspected of being the murderer, and the people remembered that he was generally without money and that the next day after he had been seen with the murdered man he purchased a suit of clothes and appeared to be possessor of plenty of cash. The hammer was also identified as belonging to Ryan, who had been in the habit of putting heavy nails in the soles of the boots for the men to make them wear longer while working: the rock cutting. Ryan came to Toronto after leaving Jackfish Bay and cashed a check, forging the dead man's name, for \$42. This was another link in the evidence. The murdered man was known to have had in his possession when last seen with John Ryan some \$480, which had been taken from his clothing after he had been so brutally murdered. The whereabouts of the man suspected of the murder are unknown, but it is believed that he has respectable relatives living in Montreal.

#### Schooner Sunk.

BUFFALO, Sept. 8.—Cosby & Gunning, of this city, have received the following message from Peninsula Harbour:—"Schr. W.R. Taylor sunk in fourteen feet water. Loaded with steel rails for the Canadian Pacific Railway at Heron Bay, Lake Superior. Please take notice, I abandon her to underwriters. Want tug and two good steam pumps. Will meet tug at the Sault or Detroit, etc., etc. Signed, H. Buckley." The Taylor had evidently reached her destination, as other vessels from this port have unloaded at Heron Bay. She is 322 tons burden, was built in 1877, and registered in Picton.

#### WISE WORDS.

The following rules might be adopted by every saw mill in the land, and if rigidly enforced would save to each mill owners hundreds of dollars annually:

The Sawyer can waste a good deal of lumber by slabbing too heavy. After being at the expense of getting the logs in the mill all the lumber should be made that can be got out of them.

The edger's is a very important place. He should know the different grades of lumber, and be quick to determine when he picks up a board just how to edge it to get the most out of it.

The trimmer should use judgment in trimming. A 12-foot board, well-butted, is of more value than 14-foot board with bad ends.

The yard boss should be careful in grading his lumber, stacking each grade separate. Lumber should be handled so as not to split or injure it. *Exchange.*

#### A Strange Story.

DETROIT, Sept. 8.—Three outrageous Americans went hunting yesterday in the marsh, at the mouth of the little Bassett channel Detroit river, Canadian Customs revenue officer, on the look out, rowed along side their boat and grabbed one of the guns belonging to the party, on the ground that it was unlawful for Americans to bring guns into Canada. One of the men hit the official over the head with an oar, which made him drop the gun and get out of reach, when another of the party deliberately aimed at him with his gun and gave him a charge of small shot to remember them by. Then they concluded the place would soon become to sultry to hold them, and so they made a bee line for Detroit.

#### Prompt Payment is Practical Praise?

An exchange tells its readers how "to mind your P's" in the following paragraph: Persons who patronize papers should pay promptly, for the pecuniary prospects of the press have a peculiar power in pushing forward public prosperity. If the printer is paid promptly, and his pocket book kept plentious by prompt paying patrons, he puts his pen to paper in peace, his paragraphs of passing events have more pleasing colors, and the perusal of his paper is a pleasure to the people. Paste this piece of proverbial philosophy in some place where all parties can perceive.

The Hon. Alex. Mackenzie, after returning to Winnipeg from a trip over the C. P. railway was interviewed by a *Times* reporter, and the following extract is from the interview:—"He was surprised to find in this country such crops he had seen to-day, after all the tales of excessive drought and summer frosts and snows in the Territory which had been told in Ontario. He could not conscientiously declare that he had not seen so good a field of wheat in Ontario this year as the one he seen on Mr. Robitaille's farm, and the oats he had never seen excelled in his life. Everything he saw betokened greatness."

The largest wooden vessel ever built says the *Lumberman's Gazette* was launched at Capt. Davidson's shipyard, West Bay City, last week. She is a steam barge named *Australasia*, 305 feet long. Capt. Davidson will at once build another barge as consort to the one just launched.







Market Reports.

TORONTO.

From Our Own Correspondent.

SEPT. 9.—Since my last letter there has been a slight improvement as to the quantity of lumber shipped over our docks, during the last two weeks about 2,500,000 feet have passed from the cars over the rail of vessels, nearly all consigned to Oswego. A portion of said shipments going forward on joint account and a risk of a firm in Oswego and shipper, and most of the balance to fill direct purchases, or in other words to be sold on commission. This of itself is sufficient to show an unhealthy state of trade. In times not long past dealers from the American market came here hungry for lumber, it was then the rule for wholesale dealers to hunt up the mill men, many of whom treated the middlemen with a stand off kind of air, and often in curt tones said they had sold all they had to dispose of. The tables are now turned. The manufacturer comes here to look up purchasers taking in all the retail dealers in his route, which, by the way, is not exactly on the square, inasmuch as the middlemen are certainly the main stay of the millmen, and the latter are better acquainted with the standing and wants of the retailers, and the trade would be better and safer left entirely in their hands. Still, after all that may be said in this connection, it serves the wholesale dealers perfectly right, they will persist in dabbling in trade that legitimately belongs to the retail men, so that they are paid back in their own coin. This much, however, is certain, if each of the classes named would confine themselves strictly to their legitimate trade they would all come out at the end of the season with quite as many dollars in hand.

The exhibition which opens here this week will have the effect of making trade at the yards quiet for the next two weeks, which will, however, likely be followed by increased activity for the remainder of the season. Large sums of money will doubtless be left in our city and the result will be a free expenditure in various ways, in which the retail lumber trade will share in common with others. Prices remain much the same, and lath, the price of which ruled lower, shows signs of advancing, and will doubtless reach the old figure before the fall closes.

Table listing lumber prices for various grades and types, including Mill cull boards, Shipping cull boards, Scantling and joist, and Cutting up planks to dry boards.

Table listing prices for 1 1/2-inch flooring, dressed, and other lumber products.

WINNIPEG.

The Commercial of Sept. 2nd, says:—Trade in this line still continues fairly satisfactory to dealers. The demand from the city and country is much better than dealers had anticipated at this season of the year. The mills are running full time, and in some cases they have put on a night gang to enable owners to fill their orders promptly.

MONTREAL.

From Our Own Correspondent.

SEPT. 9.—Our exhibition is at present in full swing and lumber dealers are sanguine that after its close there will be a better demand for their goods, which since the date of our last has been very dull and present prices are with difficulty maintained, although holders are not

very willing to yield in their demands. Stocks are still well assorted. We continue to quote as follows:—

Table listing prices for various types of lumber such as Pine, Spruce, Hemlock, and others.

SHIPPING.

Has been fairly active during the past two weeks, and is likely to continue so during the rest of the season of open navigation. Freight, however, shows a slight decline being now \$12.50 to \$13.50, and rates to the United Kingdom are unchanged.

BOSTON.

The Journal of Commerce says:—General business is moving along quietly and moderately, with very little change to chronicle. White pine seems to hold its own in price. Spruce is rather slow and easy. Southern pine is dull and without improvement. Walnut and white-wood of the best quality find an improving market, and oak sell slowly. Cherry has a moderate demand in choice grades.

CANADA PINE.

Table listing prices for Canada Pine products like select, dressed, shelving, and dressed shippers.

CHICAGO.

AT THE DOCKS.

The Northwestern Lumberman of Sept. 6th says:—The fleet on the market from Thursday to Monday was fairly large, the wind having been favorable to bring the vessels in. The port list showed 178 arrivals during the seven days included by our record, a large proportion going on the market.

The prices of timbers and long and heavy joists range upward from \$10 a thousand, quotations on this class of stock being more difficult than any other.

Within two or three weeks a number of cargoes of good lumber have been sold on the market, including a large proportion of thick selects and uppers. It is declared that this kind of lumber has sold considerably off from last year's prices. Such lumber is selling out of the yards \$3 to \$4 below last spring's price in some grades, and it is not surprising that the market shares in the general decline.

Shingles are a trifle more active, while there is some strength to prices. Generally stated there is a better feeling as regards shingles.

During the season there has been a decrease of shingle receipts at this point, according to the report of the secretary of the Exchange, to the amount of 189,172,000.

Quotations are as follows:—

Table listing prices for various types of lumber and shingles.

LAKE FREIGHTS.

Table listing lake freight rates for various destinations like Grand Haven, Muskegon, Whitehall, etc.

AT THE YARDS.

While the volume of shipment is holding the gain that was made about the middle of Aug., trade is not manifesting that life and vigor that was hoped for. Instead of continuing to increase, it is keeping an even, moderate tenor

that does not indicate an extraordinary demand in the country. Judging from appearances in the district it is not certain that business is quite as good as it was a week or ten days ago. Inquiries are numerous, and there are signs of future trade. But those who have calculated on a rushing demand throughout the fall, because of the good crops, are likely to not fully realize on their calculation. There will be a demand for lumber, of course, and it will be large in the aggregate; but it will not be of that extraordinary character that piles up orders, renders cars scarce and stiffens prices. Dealers must make up their minds to be contented with a fairly good demand. If they have counted on a veritable uplifting wave of requirement as a means of buoying them over any sandbars, they must make other arrangements. It is a bad year in which to depend on booms. The only safe way is to figure on the minimum of things. Then if more favorable conditions arise, the yard man will be so much ahead.

One favorable feature can now be scored down as a fact. The crop is nearly assured. The late warm weather and the prospect of continuance almost absolutely settles the corn question.

Receiving lumber is not as active as it was earlier. Though all that is offered at the market docks is taken care of, receipts by lake have latterly fallen off somewhat, and the absorbing process is not as laborious as it was. Piece stuff is still bought with some avidity, the mill men having held back this kind of lumber to some extent, while prices are steady at the docks. The fact that dimension lumber at the market docks is held with so much firmness, is taken with so much readiness by the yard dealers, and at the same time is slaughtered so unmercifully in competition with western trade, is one of the curiosities of the season.

An advance estimate from the reports of stock on hand, places the increase on September 1, over the amount on hand at the same date last year, at 90,000,000 feet.

Receipts of lumber, shingles, etc., for the week ending, Sept. 4, as reported by the Lumberman's Exchange:—

Table showing receipts for Lumber and Shingles for 1884 and 1883.

Table showing receipts for Lumber and Shingles for 1884 and 1883, including a decrease.

Table showing Lake Receipts from Jan. 1 to Sept. 3 for various lumber products.

Table showing Stock on Hand Aug. 1 for 1884, 1883, and 1882.

OSWEGO, N.Y.

Table listing prices for various types of lumber and shingles in Oswego, N.Y.

TONAWANDA.

Table listing prices for various types of lumber and shingles in Tonawanda.

ALBANY.

Quotations at the yards are as follows:—

Table listing prices for various types of lumber and shingles in Albany.

BUFFALO.

We quote cargo lots:—

Table listing prices for cargo lots in Buffalo.

GLASGOW.

The Timber Trades Journal of Aug. 30, says: The list of arrivals is a pretty large one for the past week amounting altogether to about 8,000 loads at Greenock and Glasgow. It comprises four cargoes of Quebec timber and deals, and a large steamer cargo of Miramichi deals and boards. of lower port spruce deals there is a good supply in this market for the present.

At Grangemouth the arrivals of wood goods amount to about 5,900 loads for the past week, principally Baltic deals and battens.

Transactions at the auction sales held here in the course of the week, particulars of which are appended, have been to a fair extent, although of the various goods offered a large proportion was withdrawn, offers not meeting the views of expositors. The mahogany remaining unsold of the cargo offer 1 on 26th inst. consists mostly of small sized wood, which is all that is now in this market in first hands. Fresh wood of good manufacture is in demand, large logs especially commanding good prices.

The sale of deals on 27th inst. was well attended, but comparatively few of the lots catalogued found purchasers, the offers for the goods withdrawn not being considered satisfactory by the brokers.

LONDON.

The Timber Trades Journal of Aug. 30th, says:—Messrs. Churchill & Sim's sale was not, as the catalogue showed, a very extensive one; but on Wednesday there was a very good number of buyers, if not anxious to acquire stock, yet loth to let any opportunity slip of securing goods a very little over cost, and in many cases absolutely below the import price. The mobile pitch pine planks went, we consider, remarkably cheap, from £8 15s. 3 in. to £9 6s. for thicknesses above.

By comparison with the better class of pine and Baltic wood pitch pine has undergone an undue depreciation in value. Either the demand for the wood has slackened to a greater extent than for others, or private stocks are greatly in excess of the consumption, otherwise it is not easy to account for the low prices, comparatively speaking, which good sound wood now fetches.

The Swartvik flooring sold on Wednesday, went comparatively well, 3rd yellow 1x7 at 9s. 3d., being what the best Fredrikstad brands

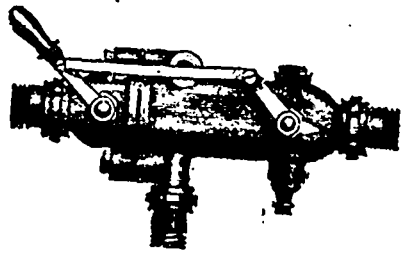


# ROBERT MITCHELL & CO.

Montreal Brass Works,  
St. Peter and Craig Streets, Montreal.

## THE KORTING INJECTOR

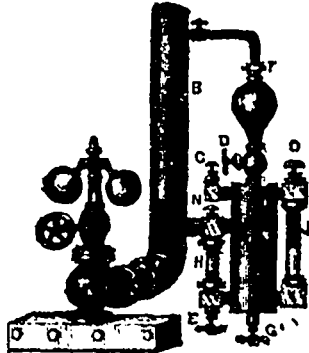
Acknowledged to be the Best Boiler Feeder in the World.



Will lift 20 feet, and take water at 150 degrees. Only one handle to start and stop. No valve to regulate. CHEAPER than any other Injector in the market. Also, PATENT EJECTORS for conveying Water or Liquids. CIRCULARS ON APPLICATION

## The Continuous Feed Lubricator

Saves 50 per Cent in Oil.



# MACHINERY.

STEAM ENGINES, STEAM PUMPS, STEAM BOILERS, SAW MILL MACHINERY, Of Every Description.

RUBBER BELTING,  
LEATHER BELTING,  
MILL SUPPLIES.

SHAFTING, HANGERS, PULLEYS, &c.

## Machinery Supply Association

Corner Bleury & Craig Streets, MONTREAL.

## HUGH GIBSON,

MANUFACTURER OF

KNIGHT'S PATENT "EXCELSIOR"

# SAW MILL DOGS

The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

MISSISSAUGA, June 7th, 1882.  
HUGH GIBSON, ESQ.,—Your Patent Excelsior Mill Dogs give entire satisfaction, and is certainly up to your recommendation. They are the best Mill Dog in the market. I am very much pleased with them.  
Yours Respectfully,  
PETER McLAREN.

BRANTFORD, April 20th, 1882.  
HUGH GIBSON,—Sir,—The Dogs I bought of you give satisfaction. They beat any Dog that I ever saw for ripping or edging lumber on carriages. They are just the thing for scantling. I would not take \$50 for them to-day and have to wait for another pair to come from you, because I believe they make two dollars a day for me.  
Yours truly,  
GEO. S. BROWN, JR.

Manufactured by HUGH GIBSON, CHATHAM.



EXCELSIOR DOG.

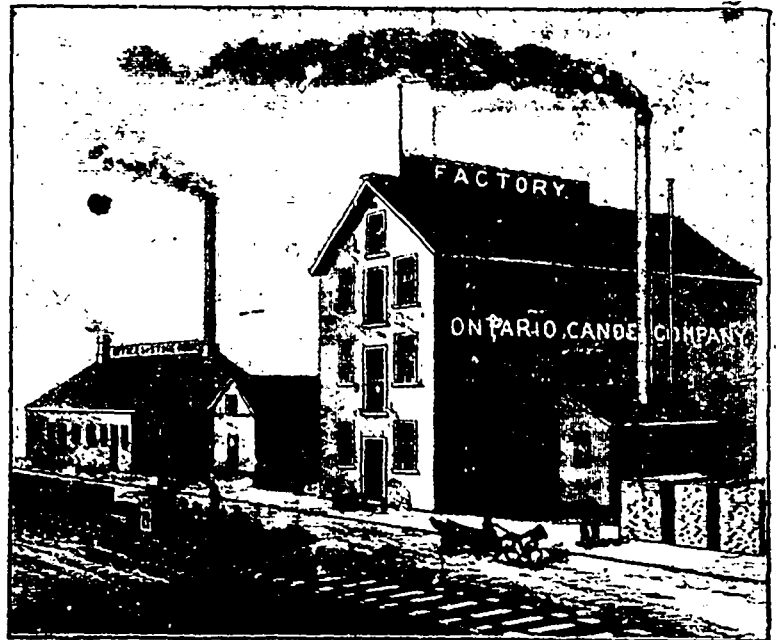
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PETERBOROUGH, ONTARIO,

Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

# CANOEES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Basswood Canoes, Folding Canoes, Paddles, Oars, Tents, and all Canoe Fittings.



Gold Medal, London Fisheries Exhibition, 1883.

J. Z. ROGERS,

Send 3 cent Stamp for Illustrated Catalogue. President and Managing Director  
Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

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Have been awarded Three Years in succession at the Provincial and Dominion Exhibitions in Montreal, First Prizes for

LEATHER BELTING

Fire-Engine Hose, &c.

Send for Price Lists and Discounts to the Factory

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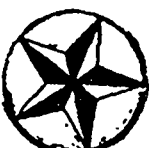
Something New in Leather Belting

To Mill Owners, Lumbermen, Manufacturers

USE ONLY

# Dixon's Patent Lap Joint Star Rivet Leather Belting

To be had only from F. E. DIXON & Co., 70 King Street East, Toronto  
Send for Circulars and Price Lists.

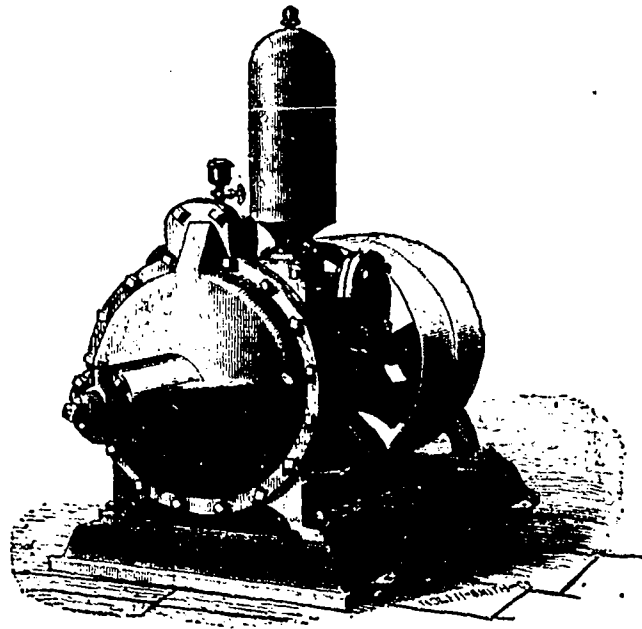


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SIMCOE STREET,

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WM. H. LAW, PROP'R.



## PROTECTION FROM FIRE

An Improved Rotary Piston Force Pump.

No.	Diameter of Pipes.		No. of Revolutions.	Capacity per minute at table speed.	Price.
	Suction.	Discharge.			
2	2½ in.	2 inch.	250	125	\$100
3	4 "	3 "	250	250	150
4	5 "	4 "	250	400	225

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Engines, Boilers, Pumps, Saw Mill Machinery

STEAMBOAT PROPELLERS AND ENGINES.

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For Architectural Works. &c.

IRON ROOFING AND BRIDGES,

AND ENGINEERING WORK IN GENERAL.

## EAGLE FOUNDRY!

GEORGE BRUSH

14 to 34 King and Queen Sts, MONTREAL,

MAKER OF

Steam Engines, Steam Boilers, Hoisting Engines, Steam Pumps,

CIRCULAR SAW MILLS, BARK MILLS, SHINGLE MILLS,

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Hand and Power Hoists for Warehouses &c., &c.

Also, Sole Manufacturer of BLAKE'S CHALLENGE STONE BREAKER.

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Postmaster General.

Post Office Department,  
Ottawa, 31st July, 1884.

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Tarred Felt, Roofing Pitch, Sheathing and Building Papers, Carpet and Rosined Waterproof Paper, Ready Roofing, &c. All orders promptly attended to at LOW PRICES.

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THE

## Hancock Inspirator

The Best Feeder known for Stationary, Marine or Locomotive Boilers.

## THE INJECTOR PERFECTED!

All Sizes lift water 25 feet. No adjustment required for varying Steam Pressures.

Over 50,000 Now in Use.

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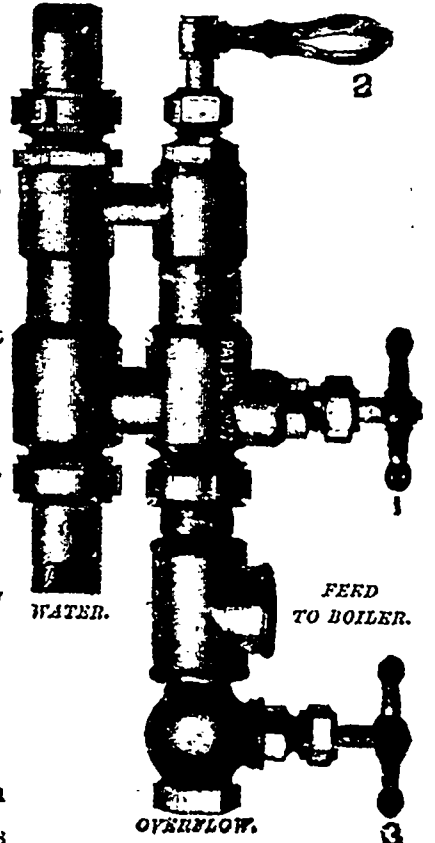
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5 CUSTOM HOUSE SQUARE,  
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Manufacturers of Inspirators, Ejectors, and General Jet Apparatus.

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STEAM.



WATER.

FEED TO BOILER.

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# NORTHEY & CO'S STEAM PUMPS, TORONTO, ONT.

*Pumps for Fire Protection a Specialty.*

## SAVE INSURANCE.

*Our Combined Boiler Feed and Fire Pumps are a NECESSITY IN EVERY WELL ORDERED STEAM MILL or FACTORY.*

### Cheap.

*Cheaper than any Pump built.*

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**IF YOU WANT**

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FOR ANY PURPOSE

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### Compact. Durable.

*Having the well known compactness of direct acting Pumps.*

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*Our PUMPS for general water supply give the greatest satisfaction.*

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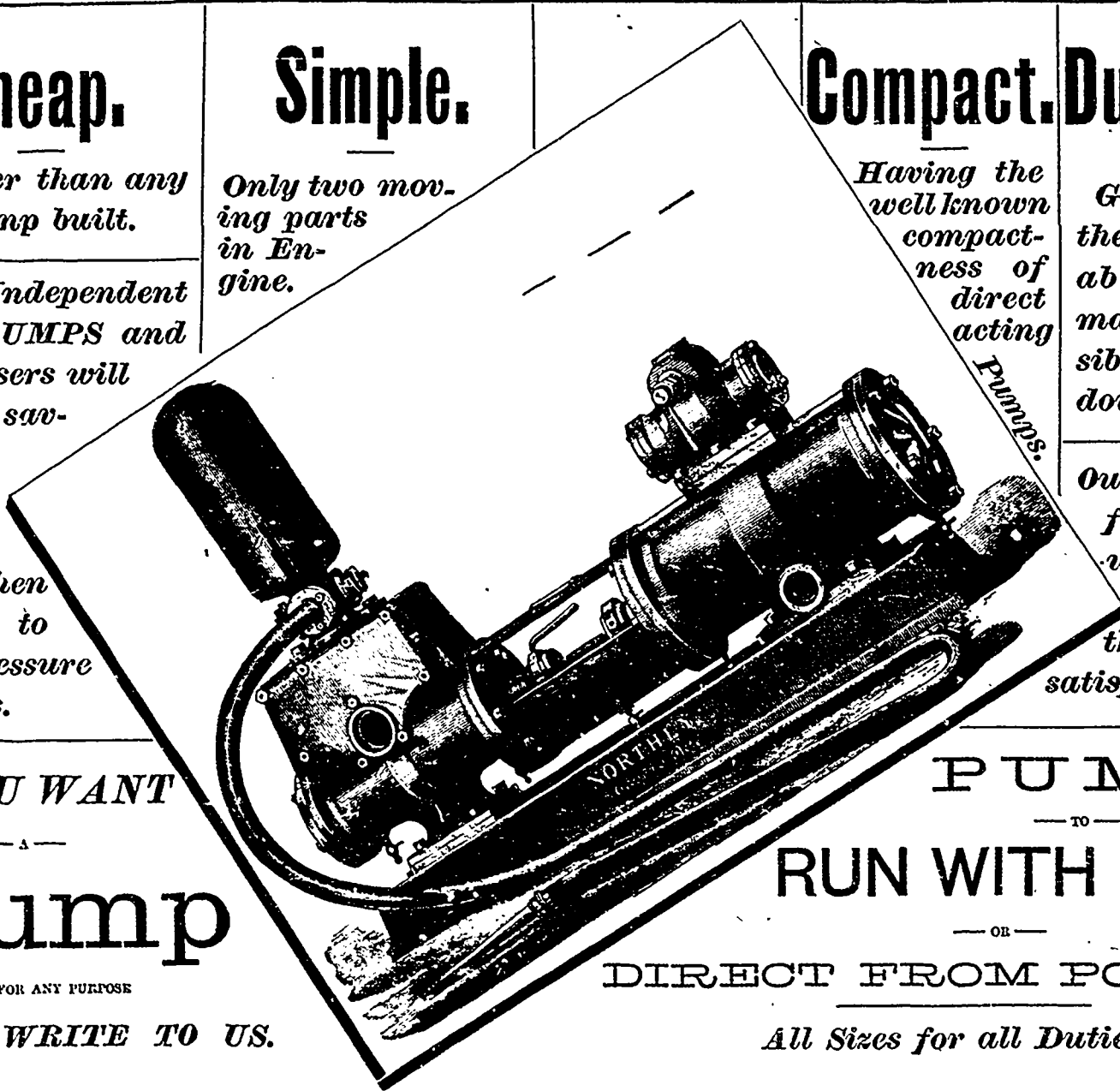
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**SEND FOR CIRCULAR AND STATE YOUR REQUIREMENTS.**

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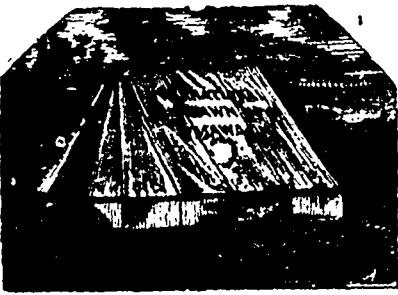
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AND  
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Tents, Flags, Tarpaulins, Waterproof Goods,  
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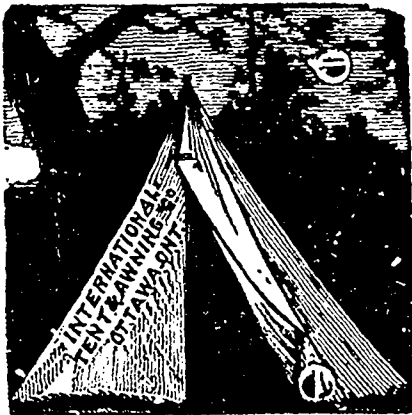
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We have secured the services of the best practical sail-maker in  
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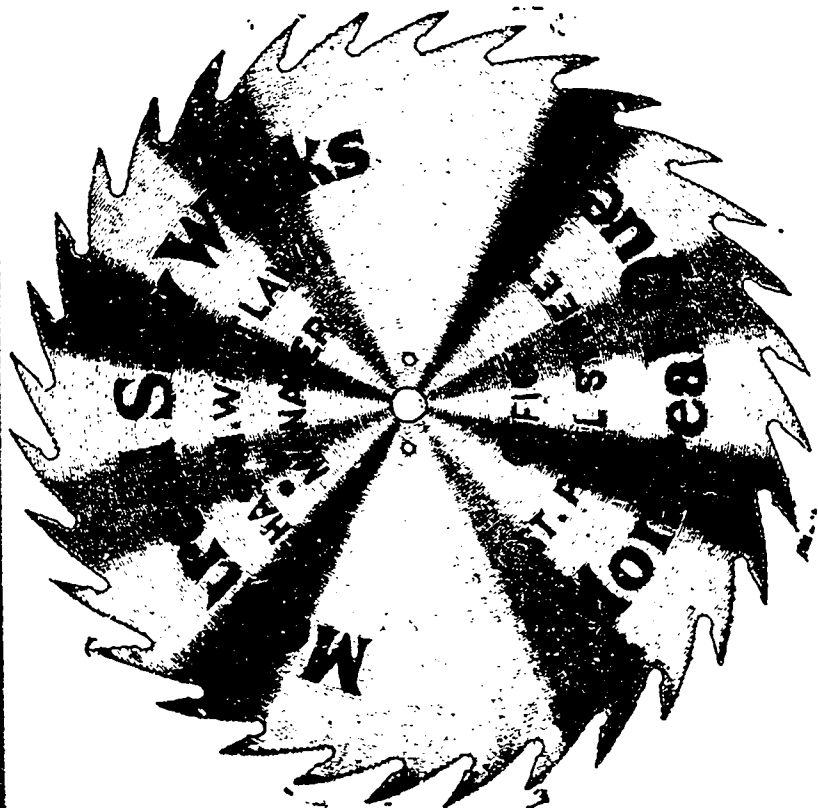
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# The William Hamilton Manufacturing Company, Limited

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## SAW MILL & GENERAL MACHINERY

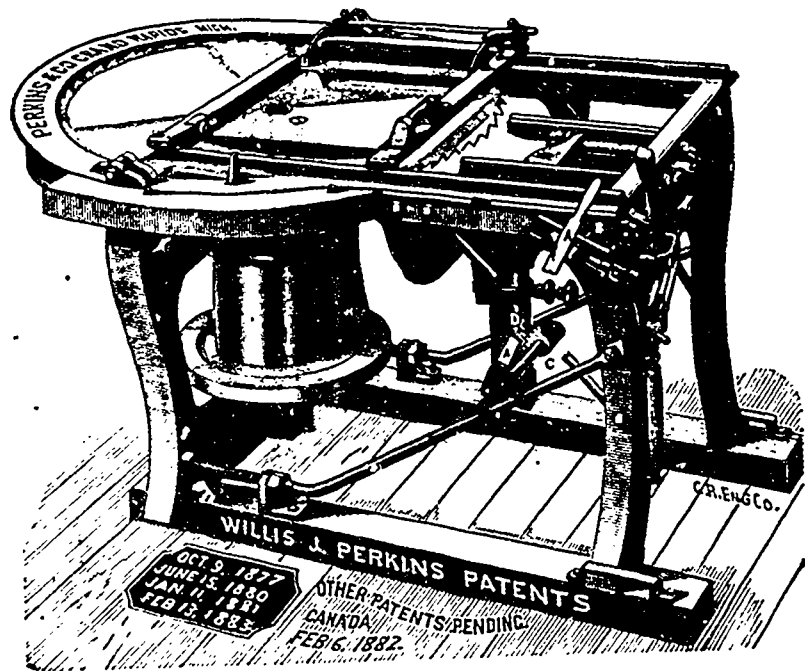
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We wish to call the attention of our Canadian Lumbermen to our First Class HEAVY SAW MILL MACHINERY for Circular Mills and Circular and Gang Mills of the most improved designs. We are prepared to submit Plans and Specifications, together with any information that our many years of close application to the Saw Mill Business may have suggested to us, also when required to enter into contract for building and supplying the machinery complete, superintending the starting of the same, and handing over the mill to its owner in first-class running order.

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### Willis J. Perkins' Drop Tilt!

The only Horizontal Saw Machine on which a thick slab can be cut from the bolt.

**SECOND CUT ALWAYS A SHINGLE.**

Knots, rots, hearts, bolt squared rift ways, and all irregularities cut off at one clip. This improvement will pay the price of the whole machine every season by increase of quality and quantity cut.

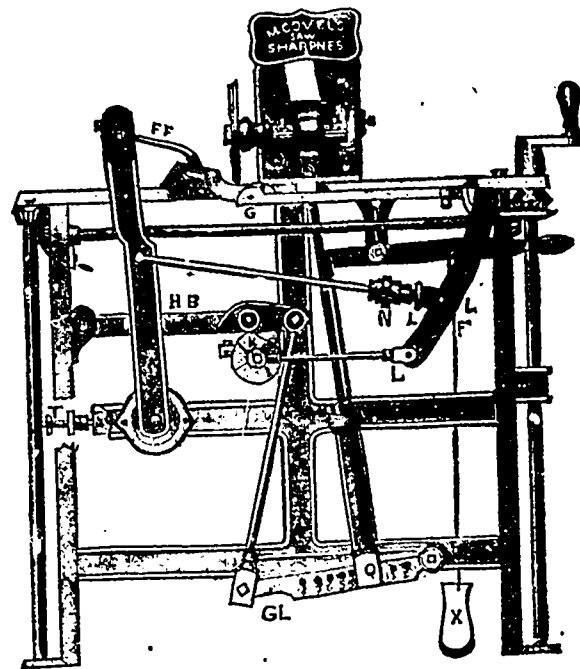
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