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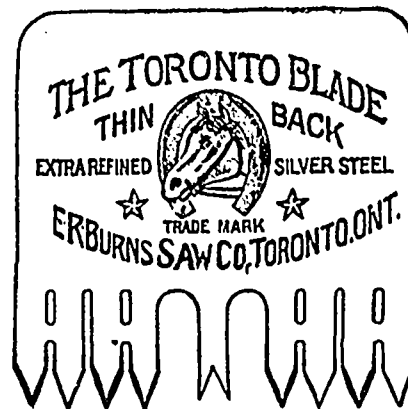
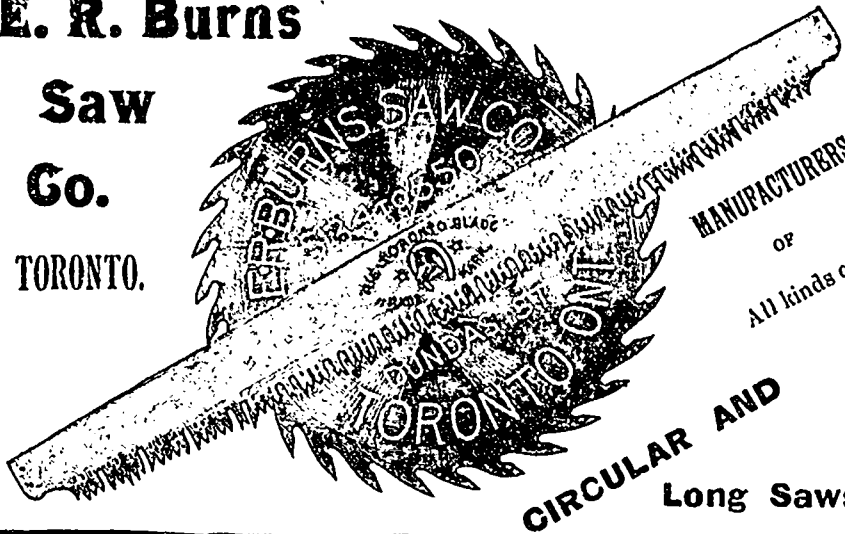
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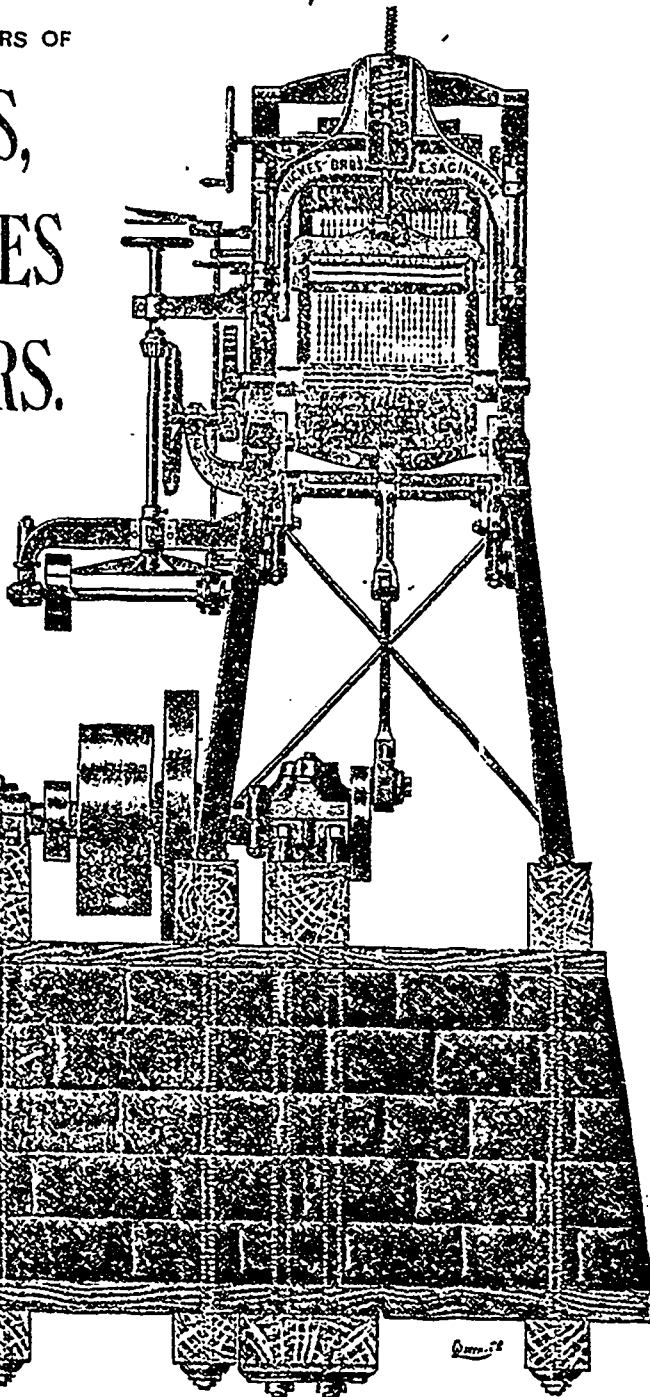
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## LARGE TIMBER DESTRUCTION.

A MELANCHOLY sight in British Columbia and Washington is the enormous areas of forests through which fires have swept, leaving only blackened trunks. The forests of the Pacific slope are going a good deal like the bison of the plains. The people of this continent do not realize how many hundreds of thousands of dollars' worth of fine timber in that region is being annually destroyed. Through the Rocky Mountains along the Canadian Pacific Railroad one may travel for many miles and see hardly a bit of live timber, though the blackened trunks standing quite thickly together show that a few years ago the mountain sides were covered with spruces and hemlocks. A good deal of this devastation is wrought by hunters and locomotives, and the fires are accidental. In some parts of British Columbia, however, and in Washington the farmers are destroying a great deal of timber to clear land for agricultural purposes.

In the last days of July the atmosphere was beautifully clear, and for many miles the grand pyramids of Mount Baker and Mount Ranier could be seen, rearing their splendid cones high above all their surroundings, and showing their great sides covered with the snow that never seems to melt. Three days later a gentleman was within ten miles of Mount Baker, and he could not distinguish the grand mountain for the air was oppressively heavy with smoke. It did not take long to find out who started these fires. Here and there in the timber through which the train sped across Washington were little clearings, and farmers and their men could be seen felling trees and setting fire to the branches. It is the only way they have of removing timber, so that they may plough the land. They have no means of getting the wood to market, and the only thing they can do is to reduce the enormous growth to ashes and then pull out the stump, and thus add a little to their tillable area. They are fortunate men if they are able to clear more than an acre or two a year, for the work is enormous; but when an acre is finally freed of its heavy burden of timber it is found to be magnificent farming land.

But it seems a terrible waste to see these mighty forests reduced to nothing but smoke and ashes. Now and then one sees a more cheerful picture in these woods. At a side-track he will find a large number of flat cars, loaded with big logs all ready to be taken to a sawmill. This is a lumber camp, and through the timber may be seen the little pine or canvas huts of the lumbermen, who are felling the trees and trimming the logs ready for shipment. Then again the traveller sees a sawmill, where lumber is being turned out in great quantities; but probably fifteen times as much timber is destroyed without profit to a living soul as is now being utilized in the forests of British Columbia and Washington. It is a terrible waste, but there is no present prospect that it will be stopped.

## SPONTANEOUS FIRES.

THE number of fires due to what is commonly called spontaneous combustion is probably much greater than is generally supposed. An innumerable number of substances are liable to undergo the process, and as a good deal of ignorance appears to exist in regard to the connections which are necessary for its development, it seems worth while to offer a few hints on the subject. Many organic, and some inorganic, substances, when exposed to the air in a moist state, absorb oxygen and so develop heat. The rusting of iron, the decay of leaves, and the putrefaction of nitrogenous matters are examples of this kind of action. In ordinary cases the mass of oxidizing matter is small, and the heat conse-

quently, being speedily dissipated, has but little intensity, or is even quite insensible to ordinary tests.

Heat is, however, always produced, and when, as in a hot bed the mass is considerable, the tendency becomes notable. When large masses are concerned with sufficient supply of air, but without the possibility of free ventilation, the heat sometimes becomes so intense as to produce actual combustion. In a few well known cases this takes place in contact with water. Thus; cotton closely packed in a moist place, on board ship or in warehouses, has been known to become ignited, and serious fires have arisen from this cause. Hay stacked when moist always becomes greatly heated, and not unfrequently gets thoroughly charred, or even bursts into flames, and the same phenomenon has been observed in barns and granaries. Many fires in country places are, no doubt, due to this cause, and probably some that are ascribed to arson.

Coal, which contains much pyrites, absorbs oxygen and becomes heated rapidly when moist, and although proof is commonly impossible, it is generally believed that fires, particularly at sea, have often originated in this way. But the greatest danger arises when cotton, hemp, jute, flax, or even saw-dust or charcoal, saturated with oil or turpentine, is stored in masses. Under such conditions, the supply of air being limited, spontaneous combustion is sometimes matters of certainty. We do not wish to exaggerate the danger of spontaneous combustion. Most fires are, probably, due to gross carelessness, particularly in the matter of lucifer matches, which are often used with amazing recklessness, or to the too close proximity of wood-work to stoves and open fires. But it seems certain that risk of the kind we have indicated is constantly incurred in ignorance, and we hold it to be a public duty to point out to all, but particularly to warehousemen and ship-owners, the character and causes of the danger which besets them.

## ORDER AND SYSTEM.

THE common theory is that if one man who has a mill of a certain capacity and furnished with a set of the latest and most improved machinery, and is able to run it successfully and profitably, there is no good reason why another having equally as good a plant and possessing the same advantages for business, should not be equally successful. Now, theoretically, this may be the case; but practically it is not always so. That there is a cause for this no one will deny, but to arrive at just that cause is not always so easy a matter, as there are so many small matters to be taken into consideration that combine to bring about this effect, but all may be summed up under the head of order and system.

In the successful mill there will always be found a certain system which is strictly carried out in every department from the time the lumber is received in the rough state until the finished product is ready to be delivered. Everything is so arranged that there is no unnecessary handling, each man has a certain part of the work to perform and he is expected to perform that work in a proper and judicious manner. Every part of the outfit is kept in the best working order so that each machine is capable at all times of turning out the greatest possible amount of good work in a given time.

In such mills breakdowns and expensive repairs are seldom met with and the saving in repairs by close attention at the proper time is one important item that goes far to help increase the profits at the end of the year. It is not so much in the actual cost of the repairs as it is in the loss of the work that the machine would perform while those repairs are being made. Cutting up the lumber preparatory to being worked

is another important item in the management. The careful and experienced man at the saw will scan every board and cut it up in such a manner as to get the greatest amount of clear stuff, worth from two to three dollars per thousand more than it would be were it cut up haphazard, as is the case in many mills. A wide board, for instance, may be knotty on one side while the other may be clear and there is no economy in cutting up such stuff into second class flooring when by a little management a strip six inches wide that is perfectly clear may be had and go into a lot of first class stuff. Again, the careful sawyer will so adjust his machine that each strip for matching will be just the proper width and no more. It is no uncommon thing in measuring such strips as they come from the edging saw to find them anywhere from one-eighth to one-fourth of an inch wider than necessary in order to match full, and while one-eighth or even one-quarter of an inch may seem to be a small matter to talk about, yet if only one-eighth is wasted on a strip six inches wide it means one hundred eighths in a hundred strips which amounts to little more than two whole strips six inches wide and when the number of such strips that go to make up a day's matching with a modern fast feed planer is taken into consideration, the loss is no small item. While it may not be practical to rip up stuff so close that there will be no waste, yet much of the waste in cutting up such strips for matching might be avoided by having one experienced and careful man at the saw for this purpose.

The same rule that applies to the saw is equally applicable to every other machine in the mill. It is true that in some of the smaller mills it may not be possible to give each man a machine and keep him constantly employed upon it, but in mills of larger capacity where all the machinery is kept constantly in motion, it is not only practical, but necessary, in order to obtain the best results. The fact is, that when a man is kept constantly upon one machine and doing a certain class of work day after day he soon becomes familiar, not only with that class of work, but also becomes acquainted with all the peculiarities of the machine, and the necessary changes and adjustments will be made in less time than by one who is not, and the result is that he will get more and better work out of it in a given time.

It is a fact that almost every kind of mechanical work is fast running to specialties, and there is no reason why planing mills should not adopt the same system as far as possible. Experience among the different manufacturers has demonstrated the fact that there is less profit in working men upon the all around principle than there is in giving each man a particular machine and a certain part of the work and keeping him constantly employed on the specialty. Planing mills and other wood-working establishments which have adopted this plan and work upon a correct system with each man to his particular machine and class of work, are more successful than those who have no regular system but work their men upon the all around principle, one day upon the saw the next upon the planer, and so on. Order and system is one of the laws of God and without it no business can be successfully conducted.

## A POPULAR ROUTE.

The Manitoba Pacific route of the Great Northern has opened up a new and picturesque route to Spokane, Washington. The route from St. Paul and Minneapolis runs via Neche, N.D., Winnipeg, Man., to Revelstoke, B.C., thence by steamer on the Columbia River to Little Dalles and then rail to Spokane.

## AUTOMATON MEN.

WHAT manager, superintendent or proprietor of a wood-working establishment who has not had in his employ, for a time at least, men who were mere automatons—men who appeared to have no more intelligence so far as to discern the difference between doing a certain kind of work the right way, or the wrong way, or if they knew did not care, than the machine which they attended? They performed their work in a mechanical manner. They would handle a board or plank and feed it through the planer or matcher, because they were told to do so by the "boss." They would hold such board or plank up to the guide of the rip saw, or shove it up to the cut-off saw, with about as much interest in their work, or evidence of a true purpose to secure the best results from their work, as the machines which worked up the lumber. A new idea or suggestion from anyone as to how a piece should be examined, studied and manipulated so that it might otherwise yield a larger profit to the proprietor would stagger such a man like a stroke of paralysis. His only ideas of the duties of his daily life were that they were of a mechanical nature. He worked, ate and slept as if he were a human machine. Originality, study, thought were entirely foreign to his nature.

If in a planing-mill where he attended a planer, the lumber to be surfaced only on one side, he never turned over the piece of lumber to examine it and to ascertain the best side to surface. Instead, he would pick it up and allow it to go through the machine, the same side up as that which he found it. It would be the same if a piece was to be surfaced and matched, or made into flooring or coiling. He could not comprehend that there was a difference in the quality of the two sides of the piece of lumber, and quite as likely as not surfaced the poorest side. His dominant idea was that he was there in the same capacity as if he were feeding a sausage machine or emptying the grist into the hopper of a corn mill.

Every day that he worked he damaged lumber to the extent of more than two weeks of his wages. In a lot of lumber which you had bought as culls, some of it so graded on account of bad sawing, and being thick or thin in the middle or ends of the boards, what had been intended by the sawyer to be an inch board, by the saw "snaking" had become as one and a-half or two inches thick piece of lumber in places. While it was thus not an attractive looking piece, the quality, had it been saved properly, would have placed it in one of the higher grades. The automaton has the planer set to surface seven-eighth inch thick, regardless of the thickness of the lumber. He places this thick and thin piece of lumber on the bed plate of the planer, gawks around the mill, or outside, or watches a railway train pass by the mill, or gives more attention to somebody else's business than to his own. Meanwhile the planer draws in the piece of lumber until it gets to the thick part where the knives have to cut way an inch of solid wood without slacking the feed. The planer, which is not a heavy one, struggles and groans under the imposition of the task. Something must give way. Snap goes a belt, or it flies off the pulley, if nothing more serious occurs. Then follows delay in fixing or repairing and valuable time is lost, all through the stupidity of the automaton booby, who made pretense of attending the machine. In this instance the machine seems to have shown more intelligence than the man, for it would not submit to unfair treatment beyond a certain limit.

How much better for the interests of the proprietor of an establishment for the work required, is such a man than an ingeniously-contrived machine which would answer the same purpose? Some may say that this is overdrawn, but there are hundreds of just such men to-day who are at work in planing mills all over the country.

It is pleasing to know that we have another type of men entirely opposite to that of the automaton. It is the inquiring, investigating, studious, watchful man, who is always trying to do his work well, but better from time to time. He is always alert, vigilant. Nothing in his line of business escapes his notice. He is said to possess knowledge of an intuitive nature. We shall not discuss the metaphysical view of that question, more than to say that we have good grounds for believ-

ing that much of his discernment and clearness in his judgment resulted from his study in his special line of work.

## THE DISADVANTAGES OF INSUFFICIENT BELT SURFACE.

A FRIEND of the writer was talking with a belt manufacturer the other day, and in the course of conversation the belt man said, "I wish you would try some of this new belting of mine in some of your hard places where the belts must stand the hardest kind of strain and wear." "Well, I would if I had any such places; but I don't, and what is more I won't have, as long as I am a sane man."

On being asked to explain he spoke as follows: "I run belts wide enough so that there need be no undue strain on any of them, and I haven't got a double belt in my place." There was only one thing for the belt manufacturer to say, and he said it. "If everyone would plan shafting and machinery in the same manner, there would be no trouble from belting," and he struck the key-note of successful belt running. What my friend meant by saying he had no hard places in his establishment, was that he always used belts wide enough to do the work without straining them like fiddle-strings, as we often see.

To a certain extent this is impossible, as the makers of machinery have not yet reached that point in their education which teaches them to give the proper amount of belt surface, for the work in hand, without straining the belt until it is ashamed of itself. Lathes and other machinery as well will be found with a three-inch belt where a four-inch is required to do the work nicely without undue strain. When full capacity is expected of any machine the belt suffers, as it must be laced up another notch or two, without improving the belt in the least.

The harm does not stop here, but it continues until the machinery suffers as well, and many cut boxes and bearings worn out of true, can testify. This strain is not evenly distributed, and the lathes have got out of line as a result of this barbarous treatment.

We see belts listed as having such a carrying capacity, and invariably we find that the double belt is rated as having double the carrying capacity, yet it is to be doubted when we think of it thoroughly. What increases the power of the double belt over the single? There is no increase of surface, and is not surface the main factor in the question of the power of a belt?

The only increase of power due to the double belt is in the ability to stand a greater strain on the bearings, shafting and all other interested parts. It is an undoubted fact that a double belt will stand a much greater strain than a single, but it is hardly good practice to strain bearings in order to save the room occupied by the additional width, that a single belt would necessitate, and the cost of the wider pulleys.

It is just as cheap to buy a 10-inch single belt as a five-inch double, and the machinery fares a great deal better; the cost of the wider pulley is hardly to be considered at all, as the saving in cost of maintenance of shafting and the attendant parts. The rating of double belts as twice the carrying or transmitting capacity of single belts seems absurd when it is considered in detail. With nothing to increase the capacity except the ability to stand greater tension, this claim should be dropped as soon as possible as a relic of the past. Whether the theory of air pressure on the outside of the belt be abandoned or not (and in the face of the success of the wire link belt it looks a little doubtful if it can be maintained) the question of slack belts is the same. For if the frictional theory be the accepted one, the increase of surface on the pulley will certainly add to the driving power.

The advent of the perforated belt was by many deemed as proof conclusive, that the "air" theory was doomed to retirement, but to the writer it has appeared as an additional argument in its favor. For assuming the theory just mentioned the presence of air under the belt would prevent the atmospheric pressure from acting to its full extent, the imprisoned air being a sort of back pressure which lessens the efficiency of any means of transmission or power.

There are few appliances that are so abused as the

one under consideration, namely, the old and tried friend of all shops, the belt. We find it stretched out of all resemblance to its former self, laced in a slipshod manner and half the lace holes torn out, making a fine place for the belt to catch against the fingers of the shifter and finally tear out and come down on somebody's head. When we go into a shop of this kind and see the belts as just described, we are pretty sure to find a shop where the time of attending to the shafting, hot bearings and the attendant ills, would make a big item in the shop accounts, if it was counted in the list of running expenses. But this kind of a shop never keeps much account anyhow, and guesses at the charges to be made for work, with the result of either losing money or driving custom elsewhere.

It is not idle capital to have belts running slack and doing less work than they possibly might be made to do, for it is much better to have the capital invested in this way than to have delays, cut boxes and the annoyance that follows in the wake of all unsatisfactory machinery and parts, in the whole establishment. It is a pleasure to see a nicely running belt, to go in a nice engine room and see the great driving belt that is running the whole of a great plant and doing it without apparent effort, the belt being so loose as to almost touch the lower part where the sag of the upper half comes. This is a sure sign that the journals are running cool and everything is going along as nicely as possible. That is perhaps a rash statement, for there are exceptions and a cool journal may not follow, as there may be some cause that is foreign to the belt question; the bearings may not be large enough for the work and heat from that reason even without any belt on the engine.

In one case to the writer's knowledge a new engine was installed, and run hot from the first; all kinds of lubricants were tried without making any improvement in the bearings being cool, and finally the makers had to increase the size of the journals to secure the desired end. This is a case where the belt has no bearing on the subject whatever and is an exception to the above statement.

Designers of machinery are too apt to slight the bearings, or else are not versed in the practical side of the question, for we often find machinery with bearings so small that it is impossible to keep them from heating and cutting. These cases must not be attributed to the belting, though the practice of tight belts, strained to their utmost, is responsible for additional trouble.

In this as in nearly all other branches of the shop or factory management, it is well to beware of the "tinker," for he is on hand here as elsewhere and is just as destructive. The care of the belting should be in responsible hands, and the increased efficiency and lack of trouble will more than repay the expense.

## SENSIBLE TALK.

LUMBERMEN, read your lumber trade newspaper very closely. In the hurry and midst of business do not throw it aside, to be forgotten and perhaps finally used for waste paper. After the day's work, when the evening lamp is lighted in the study and the good wife supervising the clearing away of the supper table, draw your easy chair near the lamp—light the evening pipe—put on your spectacles and go through your lumber trade paper from the title page to the last column of the advertising pages. You may, if you choose, give but a cursory glance to the editorials, but subject the correspondence and price-lists to your closet scrutiny. The notes of new enterprises, and new incorporations may offer many timely and valuable suggestions, and the review of the market is always worthy of consideration and reflection. Above all don't slight the column of advertised "wants." These are always newsy, and indicate the drift of current trade. Advertisements of labor-saving machines generally suggest ideas of practical economy. In the resting intervals, between suns, is the time to con the columns of the trade paper—digest the information it contains, and then to sleep on it.

Pay a reasonable price for an economical boiler, and you have made a first-rate business investment.

### THE DANGER OF CIRCULAR SAWS.

A DELIVERANCE BY THE INSPECTOR OF FACTORIES

THE Inspector of factories for Ontario in his report recently published deals at some length with the danger attending the use of circular saws. One-sixth of the accidents which occur are due, he says, to these dangerous tools. The subject is necessarily one of practical importance to lumbermen and saw mill men. The report says:—

"Saws in general are known as upright, band and circular. To these latter I more particularly refer. They have various names according to the work they are required to perform, or on the manner they are set up and operating in their frames, such as shingle, veneer or section, butting, edging, resaw, stave, equalizing, swing, railroad, angle, concave, cylindrical, grooming and others. These saws are supposed to be made of the best crucible or finest silver steel, and to be carefully and uniformly tempered throughout, requiring great skill and watchfulness on the part of the temperer. Great care is also required in hammering out these saws, as often the process forces the strain to one part, causing a slight bulge which may crack when some unusual strain is put upon the saw. The crack relieves the strain caused by the bulge, and on boring a small hole at the terminus of the fracture it will go no farther, and the saw, I have been informed by the maker of them, is safer than before the fracture.

"Shingle saws vary in diameter from 30 to 36 inches; are rather thin for their work, one would judge from their appearance, being about one-eighth of an inch in thickness, supported at the back by an iron flange to which the saw is made fast by proper screws. This flange will extend to within six or eight inches of the saw's circumference. These saws occasionally break as one did in Ottawa in October, the flying piece striking the workman near by in the side, causing his death 90 minutes later. Veneer saws are necessarily thin in order not to waste the valuable wood being cut into veneer. They are made in sections, fastened as a circumference to a steel blade or disc. Butting saws are in use in various works to square off the ends of lumber in saw mills and for cutting off butts of smaller sticks in other industries. Most of these saws I look upon as being very dangerous, as the saw overhangs the frame so that persons may accidentally walk or stumble against it.

"Edging saws are chiefly used in mills for cutting off the bark edge from the boards. I do not know that there is any special danger from these, except it be that in many saw mills the saw for cutting the logs and the butting and edging saws with their tables or frames are rather crowded together, so that the workers are sometimes jostled by the lumber being handled, and thereby thrown against the saw. In a resaw machine I do not consider there is any special danger. They are common in planing mills and in other wood-working industries, and no accidents have yet been reported to me from this machine. The stave or cylindrical saw is a tube of steel about two feet in diameter, about 36 inches in length, with the teeth on the outer end, and is used for cutting heavy staves such as are used for oil or liquor barrels. The cylinder is set up in a frame and is used horizontally, near the floor. The special danger of this saw is the liability of a person to run against it. It would be difficult to prevent this by a guard, as the wood can only be fed in from the end exposed. Equalizing saws are two cross-cut saws on the same mandril, at the extreme ends; each saw overhangs the frame in which it is set and projects a few inches in front of it. They are used for cutting off the staves or stave bolts to an equal length. In stave works they are set the length of the stave—32 inches apart; they are also used in factories making wagon or carriage wheels for equalizing the spokes. In some of these equalizing saw machines the wood to be cut is fed into the saws by being placed on a table swinging from above, and in others the feed tables rest on pivots below. I consider these saws to be very dangerous, and not easily guarded, but those with the table resting on pivots may be guarded with respect to the top and front of the saws by putting a suitable box across the table, covering the saws, allowing room at the end for the clearance

of pieces of wood cut off. But this does not prevent risk of injury from the lower part of the saws, which in this arrangement of feed table, it seems hard to guard against. On the other hand those equalizing saw machines, so arranged so to feed from the table swinging from above, cannot be guarded in the same way as the other, as the box covering the saws would be in the way of the feed table swinging through between the saws. So while the front and lower part of the saws in this arrangement can be guarded, I do not feel satisfied that the top of the saws can be. At best those saws are dangerous—more than ordinarily so.

"Swing saws are those attached to the frame, which is usually swung from the above floor. There is more than ordinary danger from these. The operator has to pull the saw up to its work, overcoming the resistance of a counterbalance weight, which is attached to the swing frame, generally by a rope, but occasionally by a chain. Sometimes the chain gives way and allows the revolving saw to come forward with sufficient force to reach the operator, often causing serious injury. As a check to this there ought to be a frame built down from the floor above in such a position that its cross-piece will arrest the forward motion of the swinging frame at a point which would prevent the operator from being touched with the saw. There is difficulty in putting a guard over the saw itself of this machine, and many have them. As to rip saws, several practical men have informed me that all of this kind could have a wedge set on the table behind the saw to keep open the cut, so as not to bind the saw, which causes the saw to be thrown forward and frequently injuring the sawyer. This year in Ottawa one young man was reported to me as meeting his death from this cause; also other injuries more or less serious were reported. The railroad saw is for a similar purpose to the swing saw, but usually for lighter work. It is of quite different construction, the saw being set in a sliding frame within the table, and by pressure of the foot on a lever is moved up to its work. I can see no special danger in this machine more than appertains to all saws; in fact I think that there is less than any other I have noticed without guards. The angle saw I consider very dangerous to the attendant, nor do I know of any way by which it can be made less so. The device consists of two saws set at right angles to each other, with their teeth just escaping contact. The saws operate on the top of the log to be cut, one cutting down and one cutting in, sawing out a square stick. They are used chiefly in chair, and handle work. Here about as many of the uses to which the saws are put all depends on the watchfulness of the attendant. Concave saws are used for various purposes, but there is no special danger from them, more than from a flat saw rigged up in the same way.

"Another dangerous use of the saw is the machine for making axe handles. In this machine the saw, a thick one about 12 inches in diameter, projects in front of the frame, about one half its diameter, and there is nothing to prevent the attendant or other person from coming in contact with it and receiving most serious injuries. This can be guarded, and I have asked to have it done wherever I have seen this machine in use.

The recommendation is made that wood-working fences be kept free from bits of stick and other refuse that may trip or cause a person to fall towards the saw. This in some instances is done; one case is cited where the Inspector had to walk altogether on sticks and refuse from the saw, and where the floor, it is behind, was two feet below the rubbish.

### TREES THAT STING.

THOUGH the tropical shrubs of Queensland are very luxuriant and beautiful, they are not without their dangerous drawbacks, for there is one plant growing among them that is really deadly in its effects—that is to say, deadly in the same way that one would apply that term to fire, for if a certain proportion of one's body be burned by the stinging tree death will be the result.

They are found of all sizes, from three inches up to fifteen and twenty feet. In the old ones the stem is whitish, and the red berries usually grow in a cluster at

the top. It emits a peculiar and disagreeable smell, but it is best known by the leaf, which is nearly round, with a point at the top, and jagged all around the edges like a nettle. All the leaves are large, even on small plants—sometimes larger than a saucer.

The effects of the sting are curious, it leaves no mark, but the pain is said to be maddening, and for months after a jab from one of its numerous "stingers" the part stung remains very tender; especially is this true in rainy weather, and when the parts stung have been accidentally dampened, even if very slightly.

Hunters who have found themselves surrounded by small forests of "stinging trees" in the dusk of evening have been known to lie down and pass the night as comfortably as possible, fearing to make an effort to extricate themselves in the dim, uncertain light, lest they might get deeper into the besetting trouble.

"I have seen," said Shuman, "a man who would treat ordinary pain lightly roll on the ground in agony for hours after being stung. I had known a horse so completely mad, after getting into the thicket of these trees, that he rushed open-mouthed at everyone that approached him, and had to be shot to relieve his agony."

Dogs, when stung, will rush about, whining piteously, biting pieces of flesh from the affected parts.

The small "stinging trees," only a few inches high are even more dangerous than the large ones, being so small they are likely to brush one's ankles before they are seen.

One safeguard for the experienced hunter is the fact that they always grow in palm thickets, and no place else. The presence of palm trees is, therefore, sufficient to put the old settler on his guard.

### SOME STATISTICS OF STEAM.

ACCORDING to a recent estimate, four-fifths of the engines now working in the world have been constructed during the last twenty five years. France owns 47,500 stationary engines, 7,000 locomotives and 1,850 steamboat engines. Germany has 10,000 locomotives of all kinds, 59,000 stationary engines and boilers and 1,700 ship and steamboat engines. Austria has 12,000 stationary engines and 2,800 locomotives. The force equivalent to the working power steam engines represent is in the United States 7,500,000 horse-power; in England, 7,000,000 horse-power, in France 3,000,000 horse power, in Austria 1,500,000 horse-power, and in Germany 4,500,000 horse-power. In these figures the motive power of locomotive engines is not included. Their number in all the world at the beginning of 1890 was 150,000, representing a total of between 5,000,000 and 7,000,000 horse-power, about 6,000,000 horse power, which, added to the other powers enumerated above, gives a total of 49,000,000 horse-power for the world. A steam "horse-power" is equal to three actual horse-power, and a living horse's strength is equal to that of seven men. Therefore, the steam engines of the world represent, approximately, the working-power of 1,000,000,000 men, or more than double the working population of the world, the total population of which is usually estimated at 1,455,923,000 inhabitants. Steam has accordingly enabled men to treble his working power, making it possible for him to economize his physical strength while attending to his intellectual development.

### WHAT CUTTING A MAHOGANY TREE MEANS.

It is a full day's task for two men to fell a mahogany tree. On account of the spurs which project from the base of the trunk a scaffold has to be erected and the tree cut off above the spurs, leaving thus a stump of the very best wood from ten to fifteen feet high.

### THE TREE THAT FURNISHES REAL LACE.

A remarkable tree is found in Jamaica, the inner bark of which is composed of many layers of fibers that interlace it in all directions. Caps, ruffles, and even complete suits of lace are made from it. It bears washing from common soap, and when bleached in the sun acquires a degree of whiteness equal to the best artificial lace, with which this surprising natural product compares quite favorably as to beauty.



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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 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 upon 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 effecting 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 three 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.

### "STRIKE BUT HEAR."

PROBABLY twelve years ago, we quote from memory, an important editorial from the pen of Dr. J. G. Holland, then editor, entitled "Strike but Hear," appeared in the pages of the *Century* magazine. It was written at the time of a great strike among the employees of a leading American railroad, and was characterized by that remarkable common sense that made the "Topics of the Time" of this journal so famous with all English reading people.

It was strike, but hear with the strike of that particular time. It has been strike, but hear with every strike before and since then, and it will be strike but hear with every strike until strikes shall be no more.

We remarked in these columns when commenting on the strike of the millmen of New Brunswick a few months ago, that strikes were seemingly the one barbarism of the nineteenth century. We were able to settle almost every other difficulty, national, international or individual by means of reasonable common sense, but a difference between capitalists and labor, two interests that above all others should be mutual, can only be settled apparently at the end of drawn swords.

Does a strike settle a strike? No; again quoting Dr. Holland's words it is strike—if one will—but hear. For months the carpenters of London, Eng. have been out on strike; what the issue will be is yet unsettled; but whatever the end; will the trouble be over? Even if the men obtained every inch asked, what will they have obtained? The primary object of this strike as every other is to secure certain supposed benefits usually in the direction of shorter hours for the same pay, or more pay for the hours established as the working

day. Both men an increase in pay—a greater disbursement on the part of employer. What will have been the cost of securing this pay? We are not going into figures here; but will workingmen out of their own individual experience tell us how many months they must needs work at the increased rate to recoup themselves for the loss of the months' wages while the strike was on? The matter has been figured out more than once, and the record is a terrible one.

But the disaster that follows a strike is not confined to the loss made during the days of idleness, which the workingman hopes somehow to recover. With many it means putting the man and his family in a hole out of which they can neither pull themselves by the proverbial boot straps nor any other way. The store debts that have been incurred, the house rent accumulated, not to say anything of the poverty that has been endured by wife and children to keep the necessities down as close as possible, prove veritable millstones around the neck for all time to come. Let working men tell us if there is anything more difficult than to keep the house running along out of the week's wages, even though there be a dollar or two more than formerly, and at the same time pay off some old score that has been allowed to accumulate with grocer, with the doctor or elsewhere? Those who may have had the misfortune to have gotten behind at some period in their life know what this means.

But a strike extends far beyond the workingman in its injurious influence. Take the case of the railroad strike referred to by Dr. Holland. The loss to the public, who were not parties to, nor responsible for that strike in any way, has been carefully computed at tens of thousands of dollars, a loss which was an absolute loss, not possible in any way to retrieve. We have already referred to the strike of the carpenters of London, Eng. Its effect has been to stay building operations, curtail the sale of lumber, stop the buzz of the planing mill, cancel the contracts of plasterers, painters, and other trades dependent on the completion of the carpenters' work, reduce the sales of storekeeper, in short to paralyze the wheels of commerce in almost every direction. Let the strike be declared off to-day; would it be possible from the future to recover these losses of the past? Verily no: the old saw is emphatically true in this case, one cannot grind with the water that is past. What is lost, is lost. The wage bill per week of the millmen of Ottawa is \$25,000. Is it a trifling matter to the merchants of Ottawa, and in turn to the wholesalers who supply them, and to the bookkeepers, clerks and porters who are in the employ of the merchants, and dependent upon the success of the business for the permanency of their positions, that there should be a shrinkage in the trade of that one community to the extent of \$100,000 a month?

Dr. Holland was right; strike but hear—capitalist and laborer, both.

### SOME ASPECTS OF THE OTTAWA STRIKE.

THE wages are not extravagant; the hours are long. The statement of the men is that the average wage is only \$1.08 per day. This is not however in keeping with the exact facts. The pay roll of Perly & Pattee shows 288 hands employed, at \$2,222 per week or an average of \$7.72 for each man. The wages range from \$6.91 per week for teamsters to \$15 and \$18 per week for millwrights. The average wage paid by Bronson & Weston is \$1.22 per day or \$7.33 per week. This it will be seen is a larger average than that claimed by the men. Then it is to be remembered that it is the inferior workman, who gets the small wage; the capable man is paid a more liberal figure. This is the case in every calling.

Eleven and three quarter hours is a long day; but the lumber trade differs from many other trades. The season is short, the mills only running on an average about five and a half months in the year. To cover the work required within this time, the day must necessarily be longer than the average working day. But, as a matter of fact, whilst a day from the time the men start to work until they close is eleven and three quarter hours, yet owing to the peculiar nature of the work,

causing a good deal of lost time each day from actual steady work, the working day does not count for more than ten hours.

In the case of one firm alone to meet the demands of the men would be equivalent to an increase of \$20,000 per year in wages. What would be the increase with one mill would apply proportionately to all others. Is the lumber trade in Canada in that shape that it will admit of any such an addition to the cost of cutting lumber? The history of the trade for a few years past gives a clear negative to the question. In any proposition for higher wages this matter must necessarily be considered.

The walking boss and the professional labor agitator, as our Ottawa correspondent points out, have been a factor in the strike. We are firmly convinced that their influence is never in the direction of mending matters.

In the interests of commerce generally, and the lumber trade in particular, it is unfortunate that this strike should have taken place on the eve of the fall and winter trade. At this writing there does not seem to be much disposition on the part of either side to give way; yet we are hoping from correspondence in our possession, that if the men are left to themselves, and their passions and interests not excited by the professional agitator, that an amicable basis of settlement can be reached in time to prevent a loss of the remainder of the season's work.

### GETTING NEARER THE SAW.

IN THE ELI page of this month's LUMBERMAN an extract is made from an article in a recent issue of the *Monetary Times* touching a statement made in an American lumber exchange that 100,000,000 feet of Canadian lumber have gone over the G.T.R. to the United States during the past few months. Rebutting this absurd statement still further, our city contemporary of later date adds: "Since our paragraph of last week on the lumber trade was written, there has come to our knowledge a specimen transaction which confirms the truth of what we then alleged. A builder on a large scale in Philadelphia, who has been in the habit of buying largely of lumber in American cities, visited Western Ontario a few days ago desiring to make purchases. His aim was, as he expressed it, "to get nearer the saw," this is, nearer the original source of supply, and that is the desire, we understand, of other builders in eastern American cities. The competition in various branches of the United States lumber trade has become so keen that the builder is anxious to do away as far as he can with intermediate profits, and so tries to avoid the middlemen. The result of this builder's visit is a purchase of sawn lumber at a Georgian Bay port for shipment eastward. It may be judged that trade direct from these mills is increasing and has as much to do with affecting American distributing points such as Tonawanda, Buffalo and Albany, as freight rates on the tariff, and probably more."

NOVA SCOTIA has taken a new departure in the construction of lumber carrying ships, by which a high rate of speed and sailing qualities and great carrying capacity are to be combined. The barquentine *Argentina*, built for the South American lumber trade, is the pioneer vessel in this recent addition to Canada's merchant marine. The *Argentina*, with a registered capacity of 583 tons, will carry 600,000 feet of lumber, while she can easily sail 12 knots an hour. She carries an immense deck load of lumber without any ballast whatever. She is expected to leave Montreal about 1st inst., for the River Platte, with a cargo of lumber, the first of the season from that port to that part of South America. Allowing 10 days to clear the river and gulf, she expects to make the balance of the run to Monte Video in 40 days, making the time for the whole run 50 days or thereabouts. The average time for an ordinary sailing vessel from Montreal to the River Platte, is about 70 days.

Wooden columns are far better than those made of iron. In case of fire the wood will require some time before it will be burned sufficiently to weaken it, but iron is easily heated, and in that condition will collapse immediately as soon as it comes in contact with water.

## EDITORIAL NOTES

THE monthly returns of the Board of Trade, of Toronto show exports in lumber for month of Aug. 1891 to be \$83,038 as against \$62,822 for the same month last year; an increase of \$20,216. The exports in the products of the forest in 1878 were \$19,511,575, and these had increased in 1890 to \$26,179,136 showing a growth in the lumber trade in Canada that is far from discouraging.

LEARY, the log rafter has made a reputation for himself in the success that attended his work in rafting large quantities of logs from New Brunswick to New York. But behold a greater than Leary has made himself known, and we are now told that Lock, Moore & Co., of Westlake, La., will try the experiment next season of rafting logs to England from Galveston. "The attempt" says a lumber contemporary "may seem too much of a risk for the amount of the prospective return. It has been demonstrated, however, that large rafts can be successfully towed on the ocean, but whether they can be made strong enough to withstand the hardships of such a long voyage, remains to be discovered. The greater the risk, the larger the profit, if the plunge is made on the right side."

THE collector of customs at New York recently wrote to the Treasury Department at Washington, in regard to the cancellation of export bonds under the departmental instructions, where the duty does not exceed \$100, upon presentation of a bill of lading without requiring the production of a foreign bill of lading. He pointed out the provisions of the recent reciprocity treaty with Spain, and the possibility that Canadian lumber exported from the United States may be entered in ports of the Spanish West India Islands as lumber of the United States. He enquired if, in the opinion of the department, the waiver of the requirement to procure foreign landing certificates would tend to a breach of comity towards a friendly power. Acting Secretary Spalding has replied that the department does not apprehend that the Government of Spain will construe as unfriendly the regulations referred to, as it applies equally to all exports made by the drawback of duties.

WORK on the Manchester ship canal in England is being pushed ahead with all energy. Its completion, which is expected next year, may have an important influence on the lumber trade of this continent. The calculation is, when the canal is opened, that by bringing timber ships straight to Manchester, instead of unloading them at Liverpool as much as seven shillings per ton will be saved in the carriage. The eastern portion of England forms the market for the Baltic white woods, and that of the west is supplied with American woods. Manchester being some thirty miles inland will most probably produce a redistribution of area and will send the American woods further east than they have hitherto gone, and this, if carried to the extent anticipated by the supporters of the canal, will effect in no slight degree the timber trade in America, Norway, and Sweden. The demand for the Baltic woods will decrease and that for American woods will increase to a corresponding extent simply because it will be possible at a cheaper rate to place the latter in the markets hitherto supplied with the former.

THE statement is made that cedar railway ties are being imported at Cleveland from Canada at a considerable undervaluation and an investigation has been ordered by the custom's authorities. In all lines of business conscience seems to come to a dead stop when the government of a country can be defrauded. Reference need not be made to instances as glaring in both kind and extent as the Tammany frauds of some years

since across the border, or our own revelations at Ottawa and Quebec just now. Perhaps to these, however, we must attribute the lesser peccadillos like cedar post undervaluations or the case of a woman from Windsor of a week ago, who was discovered in the act of bringing over from Detroit, carefully concealed beneath her petticoats, a bag containing a few brace of chickens and several dozen eggs, and who coolly admitted she had been doing this kind of thing for years and selling the stock to a local grocer. These are poor arguments for the removal of a custom's line between the two countries; the morals of both Yank and Canuck would at the same time be improved by the removal; and would not trade and commerce experience a relief by virtue of the freer breathing?

THE first fruits of Adam Brown's visit to the West Indies, so far as the lumber trade is concerned, are shown in a shipment of lumber a fortnight ago from Montreal to Kingston, Jamaica by E. H. Lemay of Montreal. Mr. Lemay says plainly that this shipment is the direct outcome of the Jamaica exhibition. It consists of 750,000 feet of lumber, and he was placed in direct communication with the firm to whom he made the sale through writing to Mr. Brown. If the first experiment is successful Mr. Lemay will continue to export to Jamaica. Other lumbermen will watch with interest the result of the Montreal experiment. Mr. Brown in his official report of his trip to Jamaica says, "a large and profitable trade can, if properly attended to, be done in lumber. Most of the supplies have hitherto been obtained from the United States, the large proportion of which is supplied to that country by Canada and culled there and sent to different tropical countries, Jamaica and other British West India Islands among the rest." White pine Mr. Brown says is in good demand. Likely difficulties in regard to freight rates were anticipated by Mr. Brown, but his efforts to have this question satisfactorily settled are hardly likely to prove futile. The experiment of Mr. Lemay will furnish practical information on the question.

MR. PHIPPS, forest commissioner for the Province, is untiring in his study and investigations on the subject of forestry. In his last report he refers to the indifference to the question in America in contrast with Europe. Here, on condition of the lumberman, paying the authorities a certain amount, he is allowed to cut the timber of the forest at his pleasure. In Europe, on the other hand, the wood buyer is carefully instructed as to what portion he may clear or thin, while, as soon as the ground is ready, it is again planted or the gaps filled. Two reasons for the American practice exist: (1) Farm land was needed. This reason is not now valid, as the pine land now left is very largely too poor for agriculture. (2) Chiefly the timber could be sold. "Matters have now come to pretty much the following condition: This generation, say after 30 years, will have timber enough, though it will have to use much wood hitherto thought unfit. After that there will be little good pine and not much good hardwood in our present forests. What is obtained will be brought from British Columbia and the forests of the southern states, while the generation following will exhaust these. Considering the well known benefit of keeping a large section of the country in forest—benefits which it is not the province of this paper to state—I would earnestly urge the people of America to consider how much more advantageous it would be at once and decidedly to say of certain large portions now in forest, "These shall not be cleared for settlement; "These shall be sacred to the tree." Once this determination is arrived at, the rest is easy. Nothing is more simple than to introduce and maintain a method of preservation, if populations demand it, and government fulfils its desires. It is often said, "We have a large proportion of forest land." But most of this is not good forests. Much has been run over by fire, much culled of every good stick by the lumbermen. But nearly all this might be renewed and made good, permanent forest, if the means were used."

OUR Ottawa correspondent reports a brief, but important interview with Mr. J. W. Todd, of Liverpool,

Eng., an extensive operator in Canadian lumber, who spent some time during the past month in the Ottawa district. Mr. Todd's talk has an amusing side, albeit in the interests of Canadian lumbermen it is not desirable that the funny vogue should be continued. In all seriousness the CANADA LUMBERMAN and the newspaper press in general have been telling of the fast depleting stocks of dry lumber on the piling grounds of Ottawa and other lumber sections. Everybody in this country, who knows anything of lumber movements, was aware of this fact. These conditions have been growing worse each month until within the past few weeks it has not been possible in some cases to fill the orders that have come to hand. The members of the trade across the sea have read these statements, but have thought that Canadian lumbermen were playing at bulls and bears; at least to use Mr. Todd's words, "that the statements made respecting the shortness of lumber were greatly exaggerated." Our conservative and long headed Englishmen were not going to be caught by a caper of this kind, and consequently orders from England have been circumscribed. "Seeing is believing." Mr. Todd has been able to learn for himself the true condition of affairs. He now knows that the statements made on this side of the Atlantic have been moderate in tone and in no measure have they partaken of an exaggerated character. Stocks in the old country, Mr. Todd tells us, are low and getting lower, and putting these two conditions together, Canada has reason to expect a prosperous trade with England, after another season's cutting is put in our mills.

It reads like a joke to say that bread can be produced from sawdust, but propositions seemingly as absurd have before to-day turned out to be stern realities. The question is one in which lumbermen are interested, for they have the sawdust to sell and will hardly object to so large a market as one comprised of the bread-eaters of the whole civilized world. The problem is at present under investigation by the United States Department of Agriculture. This is the account given by a Washington correspondent: Scientists are of the opinion that no good reason exists why this thing should not be entirely practicable. It is a well known fact familiar to all that starch is a substance extremely nutritious; in fact, it is nearly all nutriment. Well, starch and sawdust are the same thing. Sawdust, which is "cellulose," is of precisely the same chemical composition as starch. The two are expressed by the same chemical formula  $C_6H_{10}O_5$ —that is, six parts of carbon, 10 of hydrogen and five parts of oxygen. These are the simple ingredients of either starch or sawdust. Scientific experimenters have been trying for a long time to find out a way to transform the one into the other. If they should succeed the discovery would be away ahead of the philosopher's stone in point of value. An inexhaustible source of food supply would at once be rendered available in the forests, in grass and even in straw and chaff. Hitherto chemistry has occupied itself almost wholly with taking things apart, in order to find out what they are made of; but now the science is directing its attention to putting elements together for the production of useful substances. Already it has succeeded in the artificial preparation of indigo, alizarin, and many other compounds. The aniline colors, obtained from coal tar and yet rivaling the most brilliant tints of the rainbow, are similarly produced. From coal tar in like manner are derived many valuable anti-fever medicines and soporifics. The prospects of this new science of putting elements together seem infinite, and the era of bliss may yet dawn which has been prophesied by the illustrious naturalist, Frederick Cohn, who says that all struggles for existence among men arising from want of food will be done away with when chemistry shall have learned to make starch from carbonic acid and water. Plants grow by doing just that, and it may, therefore, be said that farmers have been engaged since time immemorial in this very chemical industry. It would scarcely be surprising, then, if the farms of the country should be replaced at some time in the future by chemical laboratories.





IN THE MARCH LUMBERMAN a Montreal correspondent asked for information concerning mahogany, chestnut and veneers. As a result of enquiries made at the time we replied that these woods were nearly all imported. I was glad to learn from Mr. H. S. Lusty, lumberman, of Rodney, Ont., with whom I had a conversation a few days ago, that in Elgin Co., in which Rodney is located, that they have there an abundance of chestnut, and that Mr. Lusty handles it in large quantities.

James McBain Reid, Sec'y and manager of the Bradley, Morris & Reid company of Hamilton, has been two years in Canada, and obtained his lumber experience across the border. He does not think Canadians are quite as slow as they are charged with being but thinks they follow beaten paths too much, and are too well satisfied with what was good enough for their fathers, or what seems good enough for their neighbors. He would like to see better rates secured over American roads to Canadian centres, as a means of enlarging trade between the two countries.

"Less lumber is to be found on the piling grounds in the vicinity of Gravenhurst this year," said Mr. Jas. Tennant of this city, who had just returned from a trip in that section of country, "than for ten years back. Only two mills are running, and with these the cut is light. Reason of this? you ask. For one thing timber in that immediate neighborhood is becoming pretty well thinned out. The G.T.R. have had a share in shaping matters thus. For two or three years shippers in the north could not get cars from the railway to move their stocks. Stocks began to accumulate eating up interest until manufacturers became wearied cutting up only to store in their yards. Consequence was, they stopped. To-day we can get all the cars we want. I saw twenty or thirty cars on a siding when I was north a week ago waiting to be used, but no use for them. It is a case of chickens coming home to roost and the Grand Trunk knows it. My impression is that the principal mills in the Georgian Bay district will close down early this season. If so, this fact, along with the Ottawa strike, should stiffen prices.

At not unfrequent intervals I have given in this page the opinions of Canadian lumbermen on the duty question. One important purpose of the page is to cultivate a free expression of opinion on trade matters. We will get nearer the truth on any question by gathering all the information we can touching it; when the proper time comes we can do the sifting. We are going to hear this time from an American lumberman, Henry Moiles, Jr. of the firm of Laing & Moiles, of Saginaw, Mich. In a chat with a reporter of the Saginaw Globe he said. Previous to the enactment of the McKinley law there was an export duty of \$3 placed on logs by the Canadian government, and a United States import duty of \$2 on lumber. The provisions of the McKinley bill took \$1 off the duty from the American tax providing the Canadian government took off the entire export duty, and of course the dollar remaining is ample to pay the tow bills on the logs coming here. The result has been that the Canadian government has taken their duty off of logs, and they are being sent over to this country where the manufacture of salt and the sale of slabs, etc., makes it possible to compete with the Canadian mills in a way most disastrous to them, the towing being only 90 cents or \$1 per thousand. The consequence has been that these Canadian mills have lost the manufacture of an immense quantity of lumber in the Georgian Bay country and all along that district, and men are working for very small wages. In many cases for their board. There are laborers engaged in shoveling coal from the holds of vessels at Algoma Mills for 75 cents per day, where

last year they received \$3 per day. This state of affairs is, of course, due to the McKinley bill and logs coming here from Canada free. The fact that Americans can go from here over there and buy logs in such immense numbers and ship them in here has raised a howl on that side that is bound to have its effect. The Canadians have already made an appeal to their premier in regard to the matter, and he has told them that there will soon be a meeting of American and Canadian commissioners at Washington, and if the duty is not then taken off the lumber they would be obliged to take some action to protect themselves, and would surely do so. It looks as if the result will be that the entire import duty will be taken off by the American government as that is what the Canadian people demand. This will leave both logs and lumber on the same footing, and entirely free. If the duty is not removed the chances are that it will go back to \$3 per thousand where it was before.

One of the events of the month in lumber circles is the unfortunate strike among the millmen of the Ottawa district. I say unfortunate, for there never was a strike, be it big or little, of short duration, or long continued, that did not bring hurt upon all concerned, and on many others not concerned, nor in any way responsible for the act. But I am not going to enter into a discussion of the question of strikes right here. My anxiety has been to lay hold of some one from Ottawa, who could speak from personal knowledge and observation of the strike. I questioned one gentleman, who is a resident of the capital, and well posted on lumber questions in regard to a despatch that appeared in the Toronto dailies, saying that the mill owners had decided to close down for the season and that the strikers were leaving in large numbers for the States where work was being offered them. He said: "This report" very probably originated in the fact that the mill owners had remarked that they might have to resort to closing down for the season and some two or three men, who have shantied in the American forests, for the last three or four years, had gone over to occupy the same positions again this season." What will be the effect of the strike on the lumber trade, assuming the dead-lock to continue? "As nearly all of last season's lumber has been shipped," was the reply, "and the cut at Ottawa has been very much smaller this year, than other years, Pierce & Co.'s mill being shut down, the E. B. Eddy Co. having gone out of the lumber business, Jas. McLaren & Co. and Cassler Lumber Co.'s mills being destroyed by fire, the latter reconstructed, only having commenced sawing again about six weeks ago, Buel, Orr & Hurdman's sawing delayed for want of logs, so that now should all have to close down it will make lumber very scarce, which means an advance in prices all round."

Regarding the merits or demerits of the strike, whichever way you like, I have the views of an Ottawa gentleman with which every one may not agree. But as LUMBERMAN readers know this kind of thing is rather enjoyed in this particular page. The E.L.I. page is free parliament where any one and every one may express their opinions on any question of interest to lumbermen. Sometimes I have to get after correspondents myself and give them a piece of my mind; and to any reader who feels like doing the same thing, we say come right on friend; you'll have every show in this page. The correspondent writes: "My impression is that the mill owners will give in to the demands of the men, perhaps not all they ask but they will make concessions. The men are not making any unjust demands, the most of the lumbermen would be willing to give them what they ask only they don't like the means adopted to get it. Perhaps those most directly affected by the strike are the exporters who have vessels waiting at Montreal or Quebec for loads; and of course it means probably a loss in circulation in this city of three or four thousand dollars daily. The effect on the lumber trade itself may not amount to much, although it means just that much lumber less to ship this fall, which along with the shortage in the season's cut may have the effect of increasing the price of lumber. I don't think the mill owners have any intention of closing their mills as they are anxious to cut for the balance of the season. As to men leaving for the States; I don't think very many

have left as yet although quite a number go over there for the winter and return in the spring. This occurs every year."

Somebody has been "stuffing" the *Northwestern Lumberman*, of Chicago, regarding Canadian lumber. I give the paragraph: "A dealer in this city who is conversant with the eastern trade estimates that the Canadians this year have captured the sale of 100,000,000 feet of the American trade through the operation of the new tariff and the favor that has been shown Canadian shippers by reduced rates on the Grand Trunk and its York state connections. The loss has been especially felt at Tonawanda and Buffalo, and by the hemlock operators in Pennsylvania. The Canadian mills had accumulated a great surplus of coarse stock that could not successfully compete with lumber on this side under the old tariff. Since the reduction of \$1 a thousand in the duty, lumber from the other side has flowed in freely, the Grand Trunk through rate regulation greatly helping in the process. The Canadians have thus been able to work off their accumulation doubtless to great satisfaction to themselves, but to the disgust of dealers and manufacturers at the east end of Lake Erie. In gathering stocks there they necessarily accumulate a large per centage of low grade common lumber, and depend on the eastern state trade as a means of getting rid of it. It was consequently a serious matter for Canadians to come in with their 100,000,000 feet as a competition. The hemlock interest of Pennsylvania has suffered in proportion to the territory affected. In this instance the American operators know that the reduced tariff has cost them money. One concern estimates that its direct loss this year from the cause indicated is \$15,000. The only way to even up the difference is to go to Canada for logs and lumber, and that is being done to an increasing extent." The *Montreal Trade Review* and the *Monetary Times*, Toronto have both copied the item; the latter however, with the comment, "that the estimate by the Chicago dealer is, without doubt, a gross exaggeration," adding enquiries made in this city show "that no more than 10,000,000 feet additional lumber has been moved over the Grand Trunk Railway into the United States this season as compared with former years." I took occasion in my intercourse with leading lumbermen in the city to show them the paragraph. "A hundred million is a big figure," said Mr. John Donogh. "It means a season's output of at least eight of our large mills. No such quantity was shipped from Canada. It is to be remembered that the drop in the G.T.R. rates was only temporary and made for the purpose of moving off the quantities of lumber that had been allowed to accumulate for want of sufficient cars previously. In the spring of the year, just as soon as navigation opened, the rates went up again. A maximum figure would be 10,000,000 or 12,000,000 feet." "With my knowledge of the shipments to the States" said Mr. Jas. Tennant, "I would say 10,000,000 feet would be outside figures. The Chicago journal was well filled up when 100,000,000 feet was talked to them." Our contemporary the *Monetary Times*, winds up its reference to the question in these words: "The dullness of trade frequently leads to magnified statements of this kind. The quantity of both 1889 and 1890 sawn lumber in the mill yards is proof, the inaccuracy of the statement. The coarser grades of lumber which found market in the States did not go over the Grand Trunk, but over the Canada Atlantic Railway, and by water. The lower rates on these routes may have moved a larger quantity from that district; but from the west shipments have not been much in excess of former years. The increased distributing trade direct from the mills both in Michigan and Canada, and which continued throughout the whole year, is affecting central distributing points such as Buffalo, Tonawanda, Albany and Troy, more than any change in the tariff, or reduction in rate of freights."

Give fools their gold and knaves their power;  
Let fortunes bubbles rise and fall;  
Who sows a field or trains a flower,  
Or plants a tree, is more than all.

## OTTAWA LETTER.

THE MILLMEN'S STRIKE—3000 WORKINGMEN IDLE VISIT OF A PROMINENT ENGLISH LUMBERMAN—BRITISH COLUMBIA LUMBER IN OTTAWA—NOTES OF THE TRADE.

[Regular Correspondence CANADA LUMBERMAN.]

PARLIAMENT will have prorogued by the time this letter is in print, but the millmen's strike is still with us. On the morning of the 14th, inst., 1,500 men employed in the lumber mills of the Chaudiere went on strike, and this number has grown by accessions of men from other mills, forced into line since then, until to-day probably 3,000 men are walking our streets idle. The demand of the men is for shorter hours and increased pay. It is interesting to observe how working men in their demands seldom go it moderately. They would have every concession granted to them at the one time.

The hours of the men now are eleven and three-quarters; the request is for a ten hour day; and that wages be increased 50 cents per week. This does not at first thought appear an extortionate demand, but there are other factors to be taken into account, which no doubt will receive attention from THE LUMBERMAN.

The excitement for the first few days was intense. It is to be regretted that the mill-men resorted to violence and coercion to such an extent that the military had to be called out. I am not going to say how far circumstances, in this case or any other, justify a strike as a means of solving the troubles between employer and employed. Only decency and common fairness suggests that when a strike is proposed that the working men themselves shall say whether or not they shall be participants in it. In this case, and it is not the only case on record, the men who went out the first morning marched in hundreds first from one mill and then to another and by absolute force compelled the men who were diligently earning their daily bread to at once drop their work and come out. This occurred first at Booth's new mill where everything was in full swing and four hundred men were at work. From Booth's the strikers went to Mason's and did the same thing. Later Eddy's mill was attacked with the same result, but not until plucky resistance had been made by Mr. Eddy and his manager.

The usual program of all strikes has been followed out in the case of the millmen. Though not as thoroughly organized as some trades still much active organization has been perfected among the men within the past week. The "walking boss" and the professional labor agitator have been here—even your own Dan O'Donohue, Ottawa's whilom citizen. I can never see that these men do else than fan the flame of discontent in troubles like the present. What is wanted is calm council, a little common sense, and a measure of consideration, and that old staple medicine, "give and take," and by these means such troubles as are now worrying our people are more likely to be settled.

At this writing no settlement has been reached. The Shepherd & Morse company have resumed work. In this case it is claimed a mistake was made in calling out the men as they had only been working ten hours a day whilst their lowest rates of wages was \$7.50 and the highest \$10.50. The general situation, however, remains unchanged, and whilst the hope is entertained that a speedy settlement will be reached it does not look over probable. Be it not and a bleak Christmas is in store for a host of men, women and children in this section of the Dominion.

## OTHER LUMBER MATTERS.

Mr. J. W. Todd, lumber merchant, of Liverpool, Eng. was in the city during the month. This gentleman is an extensive purchaser of Canadian lumber and his visit was purely of a business character. Speaking on the lumber business in general Mr. Todd made a rather significant statement to an interviewer. He said that in England lumber dealers consider the statements made on this side respecting the shortness of lumber here to be greatly exaggerated. Many of them he said would continue to be credulous till they realize the truth by actual experience. Quite recently, however, a few of the buyers who are better informed on the condition of the markets here, have wakened up and have commenced purchasing. The stocks in the old country

which have been low for the past year still remain low, but the prospects are that they will take a jump in the near future. The market now is hardening for pine lumber and timber. In view of the real conditions of the market which have been understated rather than exaggerated by the press on this side of the Atlantic it is fortunate that Mr. Todd has been with us to learn for himself that it is a fact that not for years has the piling grounds of every leading centre in the province been so bare of saleable lumber. Speaking of Mr. Todd's transactions in Canada it is opportune to note that Watson & Todd of which firm he is a member have purchased the entire cut of deals of Messrs. Buell, Orr, Hurdman & Co., of this city.

On the 9th of the month a car load of lumber unloaded at the C.P.R. from the mills at New Westminster in which Mr. J. W. McRae has a large interest, the material being intended for use in the new stables in course of completion on that gentleman's property on Elgin and Lisgar streets. The shipment comprises a quantity of red cedar shingles of excellent width and cut from timber that is perfect in construction, the great beauty being that this wood will not warp. Besides this there is a lot of spruce sheeting, for flooring and the ordinary millrun of red cedar ranging from two to five inches in thickness and some of it thirty inches wide. This lumber when oiled and varnished will present a beautiful finish as the grain is remarkably clear and well sustained throughout. Mr. McRae states that despite the high rate of freightage this lumber can be laid down in Ottawa at a good profit. It is as fine a car load of mill produce as can be found on this continent.

A feature of work in the woods this season will be the number of broad-axe men who will be employed, owing to the increased quantity of square timber that will be taken out in the bush.

Messrs. Bronson & Weston now have most of their men in the bush. The firm have two shanties on the Dumoine river, and two at Rockcliffe, and four on the Quinze. They will likely put in several on the York branch, bringing the number up to twelve or thirteen as against eight or nine last year.

The full capacity of the machinery in the new Eddy paper mill is equal to 180 to 200 feet by 72 inches in width per minute. This company are also making their new matches out of cardboard, manufactured in the same mill as that in which the paper is made.

J. R. Booth has made some extensive repairs recently by fixing up the docks and blasting away rock to make more room for piling.

Bidou Renand, the well known lumberman's agent of Murray St. has sent as many as two hundred men to the shanties in one week. He is signing wood choppers as rapidly as he can secure them. Most of the men are from the Province of Quebec.

Ottawa, Sept. 28, 1891.

## TRADE NOTES.

The Wm Hamilton Manufacturing Co., of Peterborough have established an agency at Vancouver, B. C. Robert Hamilton remains in charge. A British Columbia exchange says that when business increases the company proposes to erect a foundry and machine shop in the province.

The Magnolia Anti-Friction Metal Company has a very pleasant habit of now and then remembering their friends with something useful or ornamental, or more often a combination of both. Their latest souvenir is a sixteen inch rule for desk use, of the best pattern and make, the receipt of which THE LUMBERMAN gratefully acknowledges.

John Pell Northey, manufacturer, John Leys, merchant, Arthur Brindley Ley, merchant, Arthur Burdett Lee, accountant, and Harry Sutton Pell, insurance inspector, all of the City of Toronto, have made application for letters patent incorporating the Northey Manufacturing Company (Ltd.) incorporation being sought to manufacture and deal in pumps, engines, boilers, machinery and all other articles made wholly or in part of iron or other metals and to deal in iron and other metals.

## BRITISH COLUMBIA LETTER.

STATE OF TRADE—EXPORT SHIPMENTS—A LARGE CARGO—TIMBER PRODUCTS OF THE PROVINCE.

[Regular Correspondence CANADA LUMBERMAN.]

EVERYTHING in lumber circles continues very quiet. The Vancouver mills are still loading ships for export, in spite of the dull times. The *Neus-boy* chartered by the MacLaren & Ross Lumber Co., to load for Australia is being loaded at the Brunette saw mills on MacLaren-Ross account. This is deemed wiser than to put the big mill into motion to cut seven hundred million. Local trade continues good as is the N.W.T. and Manitoba business.

A local company has been formed to erect a paper mill on Barkley Sound, Vancouver Island, with a capital of \$500,000. In addition to all kinds and grades of paper, pulp will also be manufactured.

A Norwegian steamship is loading lumber at Moodyville for Port Pirie, Australia, and will carry 2,000,000 feet. We cannot recall a larger cargo. Do you know of one? It is supposed she will make the trip in 37 days.

The agitation begun by the New Westminster Board of Trade to have B C lumber sold and quoted as "Douglas Fir" instead of "Oregon Pine" has received the full approval of the Vancouver and Victoria Boards of Trade as well as several large shippers. Several Australian ports have replied endorsing the movement and admitting that "Douglas Fir" is superior to "Oregon Pine" in every way.

We have strong hope that the export trade in general will revive this fall. Fine crops in the east, together with the cessation of the Chilean troubles should lead to a large number of orders before many months; and we hope an advance in prices.

## OUR LUMBER WEALTH.

I sometimes think that those who do not know British Columbia experimentally hardly realize the wondrous timber wealth that is born of this province. In this respect the language is moderate when I say that no other province in Canada, no country in Europe and no state in North America can compare with it. The finest growth is on the coast and in the Gold and Selkirk ranges. The Canadian Pacific Railway passes through a part of this and crosses streams that will bring untold quantities to the mills and railway stations. The species of trees found in British Columbia are as follows: Douglas fir, western hemlock, Engleman's spruce, Menzie's spruce, great silver fir, balsam spruce, white pine, giant cedar, yellow cypress, western larch, maple, aspen poplar, mountain ash and others. Of these probably the best and most in demand is Douglas fir. It is straight though coarse grain, exceedingly tough, rigid and bears great transverse strain. For lumber of all sizes and planks it is in great demand. Few woods equal it for frames, bridges, ties and strong work generally, and for shipbuilding. Its length, straightness and strength specially fit it for masts and spars. Masts specially ordered have been shipped 130 feet long and 42 inches in diameter octagonally hewn. It grows to an enormous height, frequently from 250 to 300 feet, and often exceeds 8 feet in diameter. It is only a matter of some 30 odd years since the first saw-mill was put up at Burrard Inlet and now there are mills scattered all the way from Willsofts, near Port Simpson, down to Martins of Clover Valley, and many of which are shipping their products to Australia, South America and to ports even on the Atlantic seaboard. Our three large towns Vancouver, Victoria and New Westminster have each grown rapidly within a few years, and this growth is due in a great measure to the development of the lumber industry. In New Westminster we have five mills established, employing altogether about 600 men, a third of whom are married and have families, thus making the probable population supported by this industry in town about 1,500. Besides lumber you are aware that the wealth of the mine and the richness of our streams are likewise valuable factors in the progress of this province, but I have briefly sketched the lumber industry as that in which your readers are more particularly interested.

H. G. R.

New Westminster, B.C., Sept. 23, 1891.

## THE NEWS.

## ONTARIO.

—All four mills at Staples are very busy.

—C. H. Staintor, builder, city, has assigned.

—Jayue's shingle mill at Sturgeon Bay is closed down.

—F. W. Schwendiman, planing mill, Dayton, burned out.

—Operations at Cook's mills, Thessalon, are expected to be brisk this year.

—Buel, Orr, Hurdman & Co. have two shanties under way at Deux Rivieres.

—W. J. Church, a builder in a small way at Ottawa, is reported insolvent.

—The Waubashene mill at Waubashene, will run until the end of October.

—Benson & Grinnell, of Penetanguishene are shipping hardwood lumber to Germany.

—The Rainy River Boom Company has handled 35,000,000 feet of logs since May.

—T. B. Tait, of Burk's Falls, is doing a good trade in shingles for the American market.

—C. Young, of Young's Point, is shipping basswood in considerable quantities to the States.

—Warren has had an increase of 300 in population—men employed by the Imperial Lumber Co.

—Lumbering operations in the Parry Sound district are expected to be brisk the coming winter.

—At Penetanguishene, the C. Beck Manufacturing Company have stopped sawing for the season.

—Brennen's mill, Huntsville, which has been idle all summer is being fitted up by George Marskell.

—W. Perdue, of Goderich, has purchased the portable saw mill formerly owned by Perdue & Donaldson.

—W. O. Emory and Thos. Pickard, of Wahnapiatae are conducting large operations in the Sudbury district.

—The mills generally, at Huntsville, will shortly close down, the supply of logs being pretty well exhausted.

—The new shingle mill at Sturgeon Bay, on the site of the old mill which was burned down is doing good work.

—Menzie's millmen at Berriedale are busy completing a contract of 130,000 feet of lumber for sidewalk purposes.

—The local paper at Bracebridge writes rather discouragingly of the prospects for lumbering this fall and winter.

—M. Boyd & Co., of Bobcaygeon ship annually about 10,000,000 feet of white lumber to their yard in Albany, N. Y.

—Mailloux & Co., of Stoney Point, saw mill men, have dissolved partnership. Clement Mailloux will carry on the mill.

—Richard Olmstead's mill at Walter Falls, which is undergoing important improvements, will be in running shape about Nov. 1.

—The Keewatin Milling Co. are about to erect a stove factory on the Rainy river, where there is excellent timber for staves.

—Charles Logue, Maniwaki, has commenced operations for the season on his limits on the Gatineau river, ten miles from Maniwaki.

—The Red Mill at Manitoulin has contracted for the logs which will be cut this winter on the Indian reserve at Wekeomikony.

—J. Milne, of Essex Centre, is negotiating with Michigan men for the formation of a company to manufacture hollow blast grates for saw mills.

—Rechester Bros., of Ottawa, are operating on Horse Island, Manitowaning. An exchange says their clearings will include rattlesnakes as well as timber.

—The Rathbun Co., of Deseronto, have purchased the old McDonnell mill at Harwood and are removing the machinery and building material to Deseronto.

—The capacity of the Lindsay shingle mill of A. W. Parkin & Sons, is 60,000,000 a day, and the firm controls the cut of five other mills adjacent to the town.

—W. A. Frazer, of Suspension bridge, has leased yard room at Tonawanda, N. Y., and will open a yard there. He has a saw mill in Canada and Michigan.

—The Ontario government offer for sale a large quantity of standing pine timber west of Sudbury. The official advertisement appears in our advertising pages.

—Sage & Emory, of Bay City, Mich., have the contract for cutting the lumber on McArthur Bros' limits, twelve miles back of Thessalon, and will run four large camps

—McLaughlin Bros., of Arnprior, have given a large order for harness to the local harness maker to be used by the heavy teams employed by this firm in logging operations.

—Stocks at the mills at Severn Bridge will be well reduced by the time the weather makes it desirable to close down. A good average trade is reported for the season.

—M. V. Ranger, of Ottawa, has sent a gang of men to the limits of the Georgian Bay Lumber Company on the French River. The wages paid vary from \$16 to \$23 a month.

—The mill at Thessalon has again commenced cutting, sufficient logs having been obtained to keep it running until the logs which have been "tied up" in the creeks are brought down.

—Bobcaygeon has supplied a fair quota of the men for the lumber camps on the north shore of Lake Huron. Wages are a trifle higher than last year, running from \$20 to \$24 a month.

—The steamer *Empire* made a trip to the Rainy River boom and returned with a tow of logs of 1,200,000 feet in four days and twenty-two hours. This beats any previous record.

—J. Beck, Sec.-Treas. of the Beck Lumber Company has taken to the woods with a gang of twenty-six men and teams. Their winter's work will be in the vicinity of Webbwood on the French River.

—The estate of J. P. Snook, builder, of this city, who has been compelled to consult his creditors, is likely to pay 100 cents on the dollar. The trustees' statement shows a surplus of \$3,806.

—An assignment has been made to Campbell & May by McGeary & Co., planing mill men, of this city. The liabilities are placed at \$8,000. M. Dymond, of Barris, figures as the principal creditor.

—It is expected that a larger quantity of paper wood than usual will be taken out this winter in the vicinity of Thessalon. White & Myers, local dealers, and G. A. Burton, of Appleton, Wis., are the principal operators.

—The Parry Sound Lumber Company at Parry Sound, are building a new dam to replace the old one at their water mill. Part of the old dam which they are now tearing away was built thirty-five years ago, when lumbering was first commenced in that vicinity.

—At Osgoode Hall, on 15th ult., Alphonso Charlebois obtained a continuation of the injunction against the Great North-western Central, preventing the railway company from selling their 300,000 acres of Crown Lands, or disposing of their bonds. Charlebois intends to press his action for \$75,000 against the railway company. On 29th ult., an agreement was arrived at by both parties, and all suits dropped. The agreement was ratified by Mr. Justice Ferguson.

—R. S. Donally, bush and fire ranger for the Emery Lumber Co., reports that he saw several wild animals in the woods near Sudbury. The first was a young lynx. Two hours later he came across a moose deer. He had a more exciting venture afterwards when he came upon a bear. It looked like fight at one time and Donally was in a tight corner. But Bruin decided to move on, followed by a couple of shots from a 32-calibre revolver. Mr. Donally says there is no water to be found in the small creeks and he travelled from ten o'clock until five in the evening before he could get water to drink.

—Recent storms have caused serious loss to some lumber concerns. The *Mocking Bird* lost a tow of the Emery Lumber Company off French River, but got it all together again and made a safe trip to Michigan. A small tug belonging to the Beck Manufacturing Co., of Penetanguishene, was less fortunate and lost considerable of her stock. The barge, *Louis Hotchkiss* was lost in Lake Huron with a full cargo of lumber. She was the property of the Muskoka Mill and Lumber Co., and was valued at \$50,000.00. The cargo, valued at \$10,000, was fully covered by insurance, but there was no insurance on the hull, which is a total loss to the owners. This boat has been running since 1871, and this is her first and last loss. The cargo consisted of lath and lumber amounting to 1,196,000 feet. The steam barge *Lethair*, loaded with lumber from French River foundered a few miles out of Tobermory harbour. The vessel is water-logged, and bet for the lumber she carried would have sunk. Tugs *Clucas* and *Sragull*, towed her into the harbor where she will be unloaded and pumped out. At the time she foundered the weather was favorable and the cause of the disaster is unknown. The *Resolute* which got a bad shaking up at the time of the *Mocking Bird* disaster is in such a condition that her crew have refused to take her out again and she will have to be rebuilt.

## QUEBEC.

—Preparations for the winter's lumbering are active.

—Butte & Brodeur, saw mill, etc., Waterloo, have dissolved.

—J. B. Hervert of Fulford, has disposed of his saw mill to a friend.

—The Bonnallie saw mill in the township of Oxford has been sold to E. Marshall & Co., of Sherbrooke.

—A rumor has it that an American firm is negotiating with the two leading lumber firms of Buckingham with a view to purchase.

—Richard Ready, lumber merchant, Montreal, Que., has assigned with liabilities of about \$16,000. The Rathbun Co. of Deseronto are among the creditors.

—The Buckingham Manufacturing Company (limited), with a capital of \$80,000 has been incorporated, a number of Montrealers being the promoters. Their objects are to deal in wood pulp paper.

—According to figures published by the Quebec government it is estimated that there have been produced in the province during the twenty-three years from 1867 to 1890 inclusive, 11,173,516,549 feet of lumber, and 70,272,572 cubic feet of timber, while \$10,764,368 have been paid over to the government as timber dues.

—Elie Lachance was at one time in the dry goods business at Levis. In this he proved unsuccessful, and in 1889 he moved to St. Praxede where he started a saw mill and general store. His capital was very limited, and as things seem to have run the wrong way for him during the past year, he has been obliged to take refuge in an assignment.

—In addition to the big saw mill which the Eddy Company has converted into a paper mill, the construction of a stone store house 10x75 feet long has been commenced. It will front the present mill at Hull and be three stories high, and will be used to store paper and the company's other wares. A substantial boiler house with a monster smoke stack 130 feet high is also under way, at the Devil's Hole.

—There is a most marked decline in the export of the square timber from the port of Quebec this year as compared with 1889 and 1890. The falling off has not been restricted to white pine, as in oak, elm, ash and birch and maple there has been a corresponding shrinkage. The following statement in cubic feet, of timber measured and culled up to the first of September at the port of Quebec this year, as compared with the two preceding years, shows at a glance how this once profitable branch of the lumbering industry has declined:

	1889.	1890.	1891.
Waney white pine..	2,811,842	2,868,730	1,339,358
Red pine.....	612,175	97,808	34,269
White pine.....	3,477,910	2,127,792	842,149
Oak.....	960,188	843,036	653,258
Elm.....	705,430	486,055	471,349
Ash.....	229,540	92,787	76,240
Birch and maple..	365,980	163,377	126,666

## NEW BRUNSWICK AND NOVA SCOTIA.

—Meteghan River Lumber Co., Meteghan River, N. S., is in liquidation.

—An extensive shingle business has been done this season at Morrison's mills, Frederickton, N. B.

—Kelly Bros., of River Herberth, N. S. out-put this season has been 2,700,000 feet of lumber and 2,300,000 lath.

—Messrs. Rees & Lozar of Colchester South, N. S. have succeeded in getting water to their mill from the M. C. R. R. reservoir and have resumed business. They have a good stock of logs in their yard, and there is every probability of the mill running steadily until the end of the year.

—Hundreds of citizens of St. John, N. B., were attracted to the corporation pier of that city a few days since to see the big ship *Canada* take her departure for Liverpool. She takes 1,580,500 feet of deals and battens 31,154 feet of scantling, 104,155 feet of ends and 165,701 feet of boards. The value of her cargo is in the vicinity of \$144,109. The tug *Storm King* towed the ship down as far as Musquash.

—A statement published in the *Moncton Times*, N. B., shows that the wooden ship-building industry in Nova Scotia is not dead. Says that journal: In 1887 Nova Scotia built 37 vessels, of 12,300 tons. In 1888 that province built 116 vessels, 12,900 tons. In 1889 she built 106 vessels, 16,645 tons. In 1890 no less than 148 vessels, 33,749 tons. Some of the vessels lately turned out of Nova Scotia yards are among the finest wooden ships afloat.

## MANITOBA AND THE NORTHWEST.

—The Minnesota & Ontario lumber mill at Norman, has closed down. The planing mill is still running, and the yard and office men are busy shipping. The season's cut has been a large one.

—Rafuse Bros. are running a successful saw mill at Riversdale, Assa.

—Fraser & Co., Edmonton, Alberta, are sawing in the neighborhood of 1,000,000 feet of lumber this season.

Activity prevails at Christie's mills, Brandon. Seventy five men are constantly employed, and the turn out is 60,000 feet of dressed lumber every twenty-four hours. 42,000 logs are on hand and 2,100,000 feet of lumber. 40,060 feet of lumber leaves the yard daily for different parts of the province.

—The Western Retail Lumberman's Association has been organized embracing all the retail lumber merchants of the province. The following are the officers: President, A. Black, Winnipeg; vice-president, Mr. Barclay, Brandon; secretary-treasurer, Mr. Housser, Portage la-Prairie. Five directors were also appointed, who, with the president and secretary-treasurer, form the executive committee.

BRITISH COLUMBIA.

—James Tretheway will erect a saw mill at Chilliwack.

—Five logging camps north of Victoria have shut down and the men have been paid off on account of dullness in the lumber trade.

—Capt. Armstrong's lumber mill near Golden, has received a large new planer.

—Purdy & Dixon will shortly begin operations at their new saw mill at Mission City.

—The Cornwall mill, at Whatcom, is now cutting 100,000 feet per day and has over 2,000,000 on hand ready to load in anticipation of the arrival of two vessels from Chile.

—J. A. Carthew contemplates the establishment of another first-class saw mill on the Skeena river, and a few days ago placed a contract for the necessary engines and plant with the Hamilton Manufacturing Company, of Peterboro. The new mill is to have a daily capacity of 50,000 feet.

—Col. J. Y. Scott of Port Moody, who owns a large ranch near Westminster Junction, made an interesting discovery a few days ago. Trees in the woods were found full of honey, each containing an enormous quantity of wild honey. One taken down one night held 400 pounds deposited in the cavity of the cedar, 10 feet long and 18 inches in diameter. The Colonel expects to get a ton of honey this Fall. It has a better flavor than hive honey.

—The shipping intelligence of the month tells of the Chilean ship Atacana, 1,235 tons on the way from Valparaiso to Moodyville to load return cargo of lumber on owners account. The Chilean ship Emma Louise, 1,480 tons has been chartered to load a cargo of lumber at Moodyville for Valparaiso. The Norwegian steamship Herman Wedal Jarlsberg, 1,958 tons, arrived at Moodyville Sept. 4 from San Francisco to load a cargo of lumber for Port Pirie. The Norwegian ship Saga, 1,413 tons, Capt. Ofiedahl, cleared from Vancouver Sept. 3rd, with a cargo of lumber from the Moodyville saw mill for Sydney, N.S.W., consisting of 960,254 feet rough lumber, 22,461 feet l & g flooring, 2,277 bundles of staves and 1,414 bundles of laths.

MEASURING TIMBER.

THE usual rule for calculating timber, is to measure the trunk round the middle take one-fourth part of the girth and square it, and then multiply such square by the height of the tree. In calculating a standing tree, it is usual to measure the height of the tree to the first fork, and if there is still a good portion of trunk above that, it is measured separately and added to the previous calculation. If a tree is very irregular, divide it into several lengths and find the contents of each part separately; or add all the girths together and divide the result by the number of them to find the mean. When the square of the quarter-girth is multiplied by the length, the product gives a result nearly one-fourth less than the true quantity in the tree. Some allowance ought to be made to the purchaser on account of the waste in drying the wood, so as to be fit for use. Dr. Hutton recommended the following rule, which will give the contents extremely near the truth: "Multiply the square of one-fifth of the girth by twice the length, and the product will be the contents." It has been estimated that forty years growth is required to produce one load of timber.

—The large sale of yellow pine made by Messrs Lacey and Wellman to the German government will probably be a big factor in strengthening the yellow pine market, more especially if arrangements now pending, looking toward a sale of 150,000,000 feet more, are successfully completed.



—Michigan lumbermen are embarking to no small extent in Southern timber limits.

—Over 100,000 trees in forest reserves in South Australia have been lately destroyed by grasshoppers.

—Cleveland's trees are being killed by soot, and it is feared that she will soon lose her title of Forest City.

—Terrible forest fires broke out in Northwestern Minnesota on the 23rd, ult., destroying immense quantities of timber land.

—The Michigan Hoop Company expects to handle 10,000,000 hoops at Clare the coming year, and contemplates erecting a mill at that point.

—At Saron, Texas, a plant is being erected that will manufacture from sawdust and pine slabs, alcohol, creosote, tar, pitch, turpentine, and charcoal.

—The early closing down of all lumber mills at the head of Lake Superior is probable. The cause is lack of logs in the Amnicon and Middle rivers.

—The three tallest trees in the world are believed to be a sequoia near Stockton, California, which is 325 feet high, and two eucalypti in Victoria, Australia, estimated to be 435 and 450 respectively.

—With millions of logs hung up in the Wisconsin and Minneapolis streams logging operations should not be very brisk next winter. But it is a difficult matter to curb the ambition of the average logger.

—The Morton & Backus Lumber Company, of Detroit, Mich., one of the largest institutions of the kind in the city, is temporarily embarrassed. Chattel mortgages aggregating \$81,040.17 have been filed in the office of the city clerk. Nearly all of the mortgages have been given to secure the payment of promissory notes given at three months.

—The Upper Congo abounds in forests, and many of the woods would prove of value in Europe. Mahogany and ebony, camwood, and a timber almost as strong as teak, known locally as ironwood, are found in the interior, but the question of transport stands in the way of their being utilized by commerce.

—Choice logs are said to be scarce along Puget Sound this season, owing to a short cut brought about by a poor demand. It is estimated that there are less than 30,000,000 feet of marketable logs in rivers tributary to the Sound. As a consequence, prices are stiffening, and choice logs bring from \$7.50 to \$9.50, a rise from \$6 to \$8 at which prices they were quoted a short time ago.

—There are 413 species of trees found within the limits of the United States and territories, sixteen of which, when perfectly seasoned, will sink in water. The heaviest of these is the black iron wood, found only in southern Florida, which is more than 30 per cent. heavier than water. Of the other fifteen, the best known are the lignum vitae and the mangrove. Texas and New Mexico lands, full of queer, creeping, crawling, walking, and inanimate things, are the homes of a species of oak which is about one and one-fourth times heavier than water, and which, when green, will sink almost as quickly as a bar of iron. It grows only in mountain regions, and has been found westward as far as the Colorado desert, where it grows at an elevation of 10,000 feet.

—With the close of the present season, the H. W. Sage & Co. mill at West Bay City, Mich will have finished cutting all the stock of timber at present owned by the firm. This mill was erected in 1865, and will have the best record of any mill on the river when it closes the season, a cut of 700,000,000 feet of lumber, valued at nearly \$11,000,000. In the decade ending with 1890, the mill manufactured 416,445,251 feet of lumber, as follows:

1880	25,048,987
1881	20,121,264
1882	31,500,000
1883	30,000,000
1884	28,000,000
1885	20,000,000
1886	30,000,000
1887	30,000,000
1888	33,000,000
1889	30,000,000
1890	28,275,000
Total	416,445,251



FIRES.

James Dollar's storehouse and stables in Bracebridge have been burned. Loss \$1,000.

Mackay & Co's saw mill, one mile west of Griffin Lake, was burned to the ground on the 14th, ult.

Large mountain fires lately destroyed millions of feet of good timber in the Kootenay Valley, B. C.

A fire on the 14th ult., destroyed Robertson's lumber shed at Metcalfe, Ont. Loss \$700; no insurance.

The shingle mill on Muskoka Bay owned by A. L. King was burned to the ground a week ago. Insured for \$2,000.

Hilliard's shingle mill, Peterboro, Ont., was burned to the ground on the 21st, ult. Loss \$2,500. No insurance.

The planing mill of F. W. Schwendrinan, Drayton, Ont., together with 10,000 feet of lumber have been destroyed by fire. Loss \$5,000.

Rollister & Jewitt's saw mill and a large quantity of lumber at Garden River, Ont., was destroyed by fire a fortnight ago. Loss \$200,000; insurance light.

The mills of the St. Lawrence Lumber Co. (Ltd.) of Bathurst, N. B. were totally destroyed by fire on the night of the 23rd, ult., together with a large quantity of lumber. Mr. K. F. Burns, M. P. for Gloucester, N. B., is the general manager of the company, and was in Ottawa attending his parliamentary duties when the fire broke out. Our readers will remember that we printed a cut and sketch of Mr. Burns in the June LUMBERMAN.

CASUALTIES.

John Holbert of Burk's Falls, Ont., while at work in his saw mill, had one of his thumbs cut.

A boy named Henry Brodhayen, had his arm broken in Bettcher's planing mill Palmerston, Ont., a week ago.

Robert Rusk, of the cedar mill, Deseronto, Ont., is suffering from a disabled arm through being struck by the shaft of a saw.

A native of Switzerland, named Emiel Hackstrosser died a week ago from the results of an accident in Buste's saw mill, Vancouver, B. C.

A logger named Charles Lerva employed in Mackies camp on Vaidy Island, B. C. died suddenly on 23rd, ult. He had recently come from Marysville, Cal.

A man named Brown in the employ of the Royal City planing mills, New Westminster, B. C., had his left hand badly cut and torn by a circular saw a few days since.

A young man named Arnett who was working at Thompson & Baker's mill, Oakley, Ont., had one of his arms nearly cut off a few days ago by the saw of a shingle machine.

Felix Logon, an employee in Cameron & Kennedy's mill, Rat Portage, Ont., was struck by a shingle bolt in the abdomen, and died the following day from his injuries.

A son of John McConachie, owner of a saw mill at Huntsville, Ont., received an ugly wound in the knee on the 5th, ult., by coming in too close contact with a shingle saw.

Thos. Callaghan, superintendent of the Rathbun company's operations on the Trent river had his leg broken while driving from his office to the railway station at Campbellford, Ont.

Thos. Sheridan, assistant in the Rathbun agency in Brockville, Ont., died of lockjaw on the 13th, ult. Deceased was unmarried, 35 years of age, and a very competent man in the lumber business.

A broken leg has come to Andre Toussaint, a young man employed in J. R. Booth's mills, Ottawa, Ont. He was at work on the mill platform and his leg was caught between a stock of lumber and the rollers.

George Peterson, a logger, working for David Conklyn, Gosfield, Ont., was nearly killed a few weeks ago. The logs of a truck with which he was working became loosened, striking him with terrible force on the face. He will be figured for life.

Some operators make endless leather belts by using common glue to make the joint. One of the advocates of this method says: "Bevel the ends nicely and smoothly. Put the glue on and place the splice in a vise for some time. I have had such splices on the heaviest kind of work, but it has never yet failed to hold."

TRADE REVIEW.

Office of CANADA LUMBERMAN, Sept. 30, 1891.

THE GENERAL SURVEY.

BARRING the Ottawa strike no disturbing elements mark the lumber trade of the month. A somewhat improved business is shown, and the trade has reason to expect at least a fair business this fall.

Not much, if any, increase in business may be expected from Toronto this side of next spring at any rate. Building operations that will benefit the lumber trade may show a revival then, though we have houses enough and to spare for some time to come.

Business in the country is quite healthy. Jobbers say that an encouraging movement is shown around out-town yards, and buying will be free for some months.

Canadian lumber is being shipped in good quantities to the States with the outlook for continued and stronger shipments in October. Prices remain firm.

What will be the result of the Ottawa strike on prices? This will depend on the outcome. At this writing it looks as if the dead lock would continue, and if so, it is not improbable that the mills will at once close down for the season.

Of Canadian trade as a whole, taking a diagnosis of the conditions at all the various controlling centres, it can be said that the patient is in a fairly healthy state, with the probabilities pointing to continued and increasing strength.

NEW BRUNSWICK.

Business in New Brunswick is recovering from the effects of the strike a few months since. The mills are all running and shipments to the United States and Europe are fairly brisk.

MANITOBA.

Mills in Manitoba and vicinity are commencing to close down for the season, though a good trade is anticipated as soon as the pressure of harvesting and contingent work is completed.

\$14, dressed, \$15; 3rd do. rough, \$12; dressed, \$13; culls, rough, \$10, dressed, \$11; 1st common stock, 12 in., rough, \$19; dressed, \$20; do., 8 and 10 in., rough \$18; dressed, \$19; 2nd do., 12 in., rough, \$16; dressed, \$17; do., 8 and 10 in., rough, \$15; dressed, \$16; wide box boards, No. 1, rough, \$19; dressed, \$20; do., No. 2, rough, \$16; dressed, \$17.

BRITISH COLUMBIA.

Whilst British Columbia continues to feel the shrinkage in export trade to South America, yet the past month has shown signs of improvement in this direction. There is a strong feeling that matters are coming round again in this market.

UNITED STATES.

Briefly summarized reports from the more important lumber centres tell of increased activity in trade over the preceding month, and a hopeful outlook for the fall. One can hardly say more than this. The good things that we have all been expecting have yet to come.

FOREIGN.

Activity has not been a characteristic of the British market of late. Various causes have led to this dullness, not the least of which, so far as the big city of London is concerned, has been the carpenters' strike, which has proven a long drawn out affair, and still continues with prospects of settlement far off.

inclined to forecast a brisk condition of business in general during the closing months of the year. Whitewood logs are a drug in Liverpool, the market being swamped according to the London Timber Trade's Journal with large arrivals from America.

Toronto, Ont.

Toronto, Sept. 30, 1891.

CAR OR CARGO LOTS.

Table with 2 columns: Description of lumber types and prices. Includes items like 1 & 1/2 in. Cut up and better, 1x10 & 12 dressing and better, etc.

YARD QUOTATIONS.

Table with 2 columns: Description of yard items and prices. Includes Mill cull boards & scantlings, Shipping cull boards, Scantling & joist, etc.

Ottawa, Ont.

Ottawa, Sept. 30, 1891.

Table with 2 columns: Description of Ottawa lumber prices. Includes Pine, 1st qual., 2nd, shipping culls, etc.

Montreal, Que.

Montreal, Sept. 30, 1891.

Table with 2 columns: Description of Montreal lumber prices. Includes Pine, 1st quality, 2nd, shipping culls, etc.

St. John, N. B.

St. John, N. B., Sept. 30, 1891.

Table with 2 columns: Description of St. John lumber prices. Includes Spruce deals, Pine, Deal ends, Scantling, etc.

New York City

NEW YORK, Sept. 30.—Perhaps the best that can be said of the lumber market here is that it shows some improvement; not much to brag about, but a start. This is also to be noted that whatever increased demand exists is in anticipation of colder weather—stocking up to some extent for the winter.

call is chiefly for better grades. Instrumental in helping the demand has been the prospective increase of freight charges, indications that Canadian supplies on contract are nearly all forward and the material reduction of the supply of dry lumber in the Ottawa district. Demand for yellow pine is light. Spruce is arriving with greater freedom. There are no new features in the hardwood market—it would stand more activity. Export trade has brightened materially. The West Indies, Brazil, and some other South American ports, are beginning to show a demand again. To that port last month, not including hardwoods, there was shipped 7,653,000 feet.

**White Pine—Western Grades.**

Upper 1 in.....	\$4 00	Box, in.....	\$13 00
1 1/2, 1 3/4 & 2 in.....	40 00	Thicker.....	14 50
3 & 4 in.....	55 00	Ceiling, base, fig No. 1.....	40 00
Selects, 1 in.....	40 00	No. 2.....	35 00
1 in. all wide.....	41 00	No. 3.....	24 00
1 1/2, 1 3/4 & 2 in.....	43 00	Shelving, No. 1.....	30 00
3 & 4 in.....	50 00	No. 2.....	25 00
Fine common, 1 in.....	36 00	Molding, No. 1.....	30 00
1 1/2, 1 3/4 & 2 in.....	38 00	No. 2.....	24 00
3 & 4 in.....	45 00	Bevel sld'g, clear.....	32 50
Cutting up, in, No. 1.....	25 00	No. 1.....	22 50
No. 2.....	21 00	No. 2.....	20 50
Thick No. 1.....	29 00	No. 3.....	16 00
No. 2.....	24 00	Norway, c'l, & No. 1.....	23 00
Common, No. 1, 10 & 12 in.....	22 00	No. 2.....	20 00
No. 2.....	20 00	Common.....	18 00
No. 3.....	17 00		
Coffin boards.....	20 00		

**Albany, N. Y.**

ALBANY, N. Y., Sept. 30.—Lumbermen are feeling in good feather. The month opened with a nice trade and it has kept improving the month through, with promising omens of a satisfactory fall trade. Grain shipments have almost monopolized shipping interests, so large is the crop to be moved, and lake freight rates have advanced accordingly. Dealers here talk a good deal about a rise in values this winter and predict that lumber will be considerably higher in the spring. To some this may appear mere talk, but the men who are doing the talking usually know what they are talking about. The trade are hopeful of an improvement in export trade in the near future. The inquiry for shipper has improved and considerable twelve inch has changed hands of late. This feeling is based on what is believed to be an improved condition of the money market in South America—at least in the near future. Canada stock continues in good demand. The supply of logs on the Upper Hudson are exhausted, and where better can we look for supplies than across the border?

**White Pine.**

1 to 2 in. good.....	\$4 90	to 2 in. box.....	\$13 00
1 1/2 " 4ths.....	44 00	1 1/2 to 2 in.....	13 17
1 1/2 " select.....	39 00	1 1/2 in. and up shelving.....	26 32
1 1/2 " pickings.....	34 00	1 1/2 in. coffin boards.....	19 23
2 1/2 in. and up, good.....	55 00	1 1/2 in. shippers.....	16 00
2 1/2 " 4ths.....	50 00	5 1/2 x 10 in. and 12 in. com.....	16 00
2 1/2 " select.....	45 00	5 1/2 x 10 in. and 12 in. sound.....	18 21
2 1/2 " pickings.....	40 00	5 1/2 x 10 in. common.....	18 21
1 to 2 in. yard picks.....	32 00	1 1/2 x 12 in. dressing.....	25 23
1 1/2 " No. 1 cuts.....	25 00	1 1/2 " dressing and better.....	32 33
1 1/2 " No. 2 cuts.....	18 00		

**Thirteen Foot Stock Boards and Plank.**

1x10 in., up dressing.....	\$2 50	1 in. siding, selected.....	\$3 50
1x10 " common.....	25 00	common.....	13 18
1x12 " dressing.....	29 00	selected.....	40 45
1x12 " common.....	25 00	common.....	15 20
1x10 " up dressing.....	25 00	1x10 in., up dressing.....	42 50
1x10 " culls.....	17 00	1x10 " culls.....	22 25

**Shingles and Lath.**

Shingles, shaved pine.....	6 50	Shingles, cedar mixed.....	2 75
2d quality.....	5 00	Lath, pine.....	7 00
Sawed, extra.....	4 50	Spruce.....	2 15
Sawed, clear butts.....	3 00	Hemlock.....	1 50
Cedar, XXX.....	4 00		

**Oswego, N. Y.**

OSWEGO, N. Y., Sept. 30.—Greater activity exists in lumber circles to-day than was the case a month ago. Prices are firm.

**White Pine.**

Three uppers, 1 1/2, 1 3/4 & 2 inch.....	\$4 00
Pickings, 1 1/2, 1 3/4 & 2 in.....	30 00
No. 1 cutting up, 1 1/2, 1 3/4 & 2 in.....	31 00
No. 2 cutting up, 1 1/2, 1 3/4 & 2 in.....	20 00
In strips, 4 to 8 wide, selected for moulding strips, 14 to 16 ft.....	31 00
2 in siding, cutting up.....	35 00
picks & uppers.....	30 00
1 in dressing.....	19 00
1 in No. 1 culls.....	14 00
1 in No. 2 culls.....	13 00
12 & 16 ft. mill run.....	20 00
10 & 16 ft. No. 1 & 2, barn boards.....	17 00
12 & 16 ft. dressing and better.....	20 00
12 & 16 ft. No 2 culls.....	13 00

**12 to 16 ft.**

12 & 13 ft. mill run, mill culls out.....	19 00
12 & 13 ft. dressing and better.....	25 00
12 & 13 ft. to 16 barn boards.....	16 00
12 & 13 ft. No. 1 culls.....	15 00
14 to 16 ft. No. 2 culls.....	13 00
14 to 16 ft. mill run mill culls out.....	20 00
14 to 16 ft. dressing and better.....	25 00
14 to 16 ft. No. 1 culls.....	16 00
14 to 16 ft. No. 2 culls.....	13 00
10 to 13 ft. No. 3 culls.....	9 50

**17 to 20 inches.**

Mill run, mill culls out.....	20 00
Dressing and better.....	25 00

**17 1/2 inches.**

Mill run, mill culls out.....	17 00
Dressing and better.....	23 00

**17 1/2 inches.**

6 7 or 8, mill run, mill culls out.....	19 00
6 7 or 8, dressing and better.....	24 00

XXX, 18 in pine.....	3 75	Shingles, XXX, 18 in cedar.....	3 50
Clear butts, pine, 18 in.....	2 75	Clear butt, 18 in cedar.....	2 50
XXX, 16 in pine.....	3 00	XXX, 15 in cedar.....	2 10
Stocks cedars, 5 or 6 in.....	4 50		5 00

No. 1, 1 1/2.....	2 20	No. 2, 1 1/4.....	1 80
No. 1, X.....	1 00		

**Buffalo and Tonawanda, N. Y.**

TONAWANDA, N. Y., Sept. 30.—It cannot be said that fall trade has yet opened out at this point. We had expected it, but it has not showed up. Receipts at the several docks have not been as large as usual for September. Buffalo trade has been disturbed some by what we are inclined to believe are unneeded suspicions of shakiness in certain circles of trade. At the first meeting for the season of the lumber exchange here, the subject of inter-state commerce will be discussed. Rail freight rates are far from satisfactory. The need of higher grades of pine is felt in this market. The large supplies of Canadian logs that have come across the border lately have furnished us with abundance of coarser grades. Hardwoods are becoming increasingly popular and we are constantly in receipt of quantities from Saginaw, Toledo, and points in Canada.

**White Pine.**

Up'rs, 1 1/2, 1 3/4 & 2 in.....	\$45 00	shelving, No. 1 13 in.....	\$32 00
2 1/2 and 3 in.....	55 00	and up, 1 in.....	26 00
Selects, 1 in.....	39 00	Dressing, 1 1/2 in.....	27 00
1 1/2 to 2 in.....	40 00	1 1/2 x 10 & 12.....	25 00
2 1/2 and 3 in.....	46 00	2 1/2 in.....	27 50
3 in.....	50 00	Mold st'ps 1 to 2 in.....	32 00
Fine common, 1 in.....	33 00	Barn, No. 1, 10 & 12 in.....	21 00
1 1/2 and 1 3/4 in.....	34 00	6 & 8 in.....	20 00
2 in.....	34 00	No. 2, 10 & 12 in.....	17 00
2 1/2 and 3 in.....	45 00	6 & 8 in.....	16 10
3 in.....	45 00	No. 3, 10 & 12 in.....	14 00
Cut'g up, No. 1, 1 in.....	25 00	6 & 8 in.....	14 00
1 1/2 to 2 in.....	33 00	Common.....	16 00
No. 2, 1 in.....	18 00	1 1/2 & 1 3/4 in.....	17 00
No. 2, 1 1/2 to 2 in.....	24 00	2 in.....	19 00
No. 3, 1 1/2 to 2 in.....	17 00		

**Box.**

1x10 & 12 in (No. 3 out).....	15 00
1x6 & 8 in (No. 3 out).....	12 50
1x3 & wider.....	14 50
Narrow.....	12 00

**Shingles.**

1 1/2 in XXX, clear.....	4 00
1 1/2 in, XX, 6 in clear.....	2 75

**Lath.**

No. 1.....	2 25
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**Boston, Mass.**

BOSTON, MASS., Sept. 30.—Trade here is still quiet, yet not as entirely devoid of life as a month since. Wholesalers feel a little more cheery, and are impressed with the idea that a fair trade will be done this fall. There continues a steady call for spruce boards, with a lack of stock to meet the fall demand. Business in western pine is slow, with dealers buying only for immediate requirements.

**Western Pine—by car load.**

Uppers, 1 in.....	\$45 00	Fine com., 3 & 4 in.....	42 00
1 1/2, 1 3/4 & 2 in.....	50 00	No. 2, 1 in. Fine com.....	30 00
3 & 4 in.....	55 00	1 1/2, 1 3/4 & 2 in.....	29 00
Selects, 1 in.....	42 00	No. 1 strips, 4 to 6 in.....	40 00
1 1/2, 1 3/4 & 2 in.....	43 00	No. 2.....	35 00
3 & 4 in.....	45 00	No. 3.....	24 00
Moulding boards, 7 to 11 inch clear.....	36 00	Cut ups, 1 to 2 in.....	24 00
6 to per cent clear.....	34 00	Coffin boards.....	15 00
Fine common 1 inch.....	30 00	Common all widths.....	22 00
1 1/2, 1 3/4 & 2 inch.....	35 00	Shipping culls 1 in.....	15 00
		do 1 1/2 in.....	15 50

**Eastern Pine—Cargo or Car Load.**

Nos. 1, 2 & 3.....	40 00	Clapboards, 4 ft., sap.....	45 00
4.....	25 00	clear.....	40 00
5.....	23 00	Sap, 2nd clear.....	35 00
Ship'g bds & coarse.....	16 00	Heart extra.....	50 00
Refuse.....	12 00	Heart clear.....	45 00
West'n pine clapbds.....	45 00	Bevel siding 6 in, clear.....	23 00
4 ft. sap extra.....	45 00		

**Spruce—by Cargo.**

Scantling and plank.....	14 00	Coarse, rough.....	12 00
random cargoes.....	14 00	Hemlock bds., rough.....	12 00
Yard orders, ordinary sizes.....	15 00	dressed.....	14 00
Yard orders, extra sizes.....	16 00	Clapbds., extra, 4 ft.....	30 00
Clear floor boards.....	16 00	Clear, 4 ft.....	30 00
No. 2.....	16 00	Second clear.....	25 00
		No. 1.....	10 00

**Lath.**

Spruce by cargo.....	2 10
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**Shingles.**

Spruce.....	1 35	Cedar, sawed, extra.....	3 35
Pine, 1 1/2 in, extra.....	4 00	Clear.....	3 00
Pine, No. 1.....	3 00	Extra, No. 1.....	3 50
		Cypress, No. 1, 1 1/2 in.....	5 00

**Saginaw, Mich.**

SAGINAW, MICH., Sept. 30.—The lumber market has taken a good spurt during the month and it begins to look as if the long looked for revival had at last struck this point. Besides many minor sales, several large sales are reported during the month. One commission dealer here sold over 3,000,000 feet within a few days, near the middle of the month, all to go east. Another sold over 3,000,000 to eastern and Ohio parties. Two hundred car loads have been sold by one firm to go to Chicago for the world's fair building, and is negotiating trades for enough more of this class of stock both Norway and white pine, to aggregate 5,000,000 feet. The shortage of the log crop at many other points

added to the generally reviving volume of business throughout the country, is regarded as the cause for the increasing activity here. The mills are doing a fair trade, not more than one or two being idle. If trade continues, when the season closes there will be less unsold lumber on hand, in proportion to the output of the mills than last year. Several lots of Canadian cut lumber have sold at \$13.75 to \$14. A good trade is being done in hardwoods.

**Finishing Lumber—Rough.**

Uppers, 1, 1 1/2 and 1 3/4 in.....	\$45 00	Fine common, 1 in.....	\$31 00
2 in.....	46 00	1 1/2 & 1 3/4 in.....	26 00
Selects, 1 in.....	36 00	2 in.....	33 00
1 1/2 & 1 3/4.....	37 00	C. 7, 8 & 9 in.....	34 00
2 in.....	39 00		

**Siding.**

Clear, 1/2 in.....	22 00	1/2 in.....	17 00
3/4 in.....	16 00	3/4 in.....	30 00
Select, 1/2 in.....	20 00	No. 1, 1/2 in.....	12 00
3/4 in.....	39 00	3/4 in.....	20 00

**Timber, Joint and Scantling.**

2x4 to 10x10, 12, 14 and 16 ft.....	\$10 00	20 ft.....	12 00
15 ft.....	11 00	22 & 24 ft.....	13 00

For each additional 2 ft. add 1, 12 in. plank and timber \$1 extra; extra for sizes above 12 in.

**Shingles.**

XXX 18 in. Climax.....	50	18 in. X (cull).....	50
XXX Saginaw.....	3 50	18 in. X shorts.....	2 00
XX Climax.....	2 00	XX.....	1 25
18 in 4 in c. b.....	50		

**Lath.**

Lath, No. 1 white pine.....	2 00	Lath, No. 2 W. pine Norway.....	1 50
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Mr. and Mrs. Geo. Hurdman of Ottawa, Ont., are home from a holiday trip to Old Orchard.

THE LUMBERMAN had the pleasure of a call a few days ago from Mr. Palmetre of Palmetre, Impey & Co., manufacturers, Galt, Ont.

J. H. Greer, of West Lorne, has left for Arkansas where he has large interests in timber lands. The Conservatives of West Elgin lose by his departure a staunch supporter.

Peter Callahan is one of the veteran riveemen of Ottawa, Ont. He has plied on the Upper Ottawa since 1849, and is recognized as one of the most active lumberers on the stream. His age is 68.

Christopher Johnson, lumberman, Whitby, Ont., died on the 2nd, ult., aged 47 years. Deceased was for many years with M. Boyd & Co., of Bobcaygeon. He had been in business on his own account for about 15 years.

Blundell Maple, is an English lumberman with a big pile of money and a strong liking for the turf. This attachment is shown in the amount of money he is always ready to put into horse flesh. Recently he bought the celebrated race horse, Common, paying therefor \$75,000. Since that Mr. Maple has paid the highest price ever given for a yearling in England, he having secured a colt by St. Simon for \$32,000.

The death is announced of Samuel Code of Trowbridge, Ont., an Ontario pioneer, and one of the early lumbermen of the Province. Deceased was born in the county of Lanark in 1824. In 1848 he entered the bush prospecting for a home. For two years with a younger brother he roughed it in the woods. The two then located on what is now the site of Trowbridge. For a number of years the nearest town was Stratford, and the journey for the mail used to be about once a month. The Codes erected the first saw mill in the district and had lumber for sale almost before there were customers to buy. He was a prominent member of the Methodist church.

Ino. I. Pierce of the Chaudiere lumber firm of Pierce & Co., Ottawa, Ont., died suddenly on the 5th, ult. Mr. Pierce had only arrived home a few days from England, whither he had gone on a visit about six weeks previously and was then apparently in the best of health. Shortly after his arrival he complained of a neuralgia pain in his head, which continued to grow worse until the hour of his death. The doctors attribute his death to blood effusion or apoplexy. Mr. Pierce was born in Liverpool, England, and was a son of Mr. Hugh Pierce, of the lumber firm of James Bland & Co., England. Mr. Pierce was 45 years of age. He leaves a wife and daughter to mourn his loss. Mrs. Pierce was present in his last hours. Miss Pierce is at school in England. Mr. Pierce was also a member of the lumber firm of Pierce & Pierce, London, Eng. He came to Canada about four years ago, when he purchased the Old Levi Young saw mill from James Greer of Montreal. Mr. Pierce was an ardent cricketer, and was president of the Ottawa Cricket club. He was also a member of the Rideau club. Deceased was popular with all who knew him, and his death will be generally regretted.

## SAW MILL BUILDING.

BY J. H. MINER.

**A**N ITEM to be closely considered in erecting any mill, is the timber supply. Few men can look over a tract of timber and not overestimate it. It is bad policy to erect a mill on a small lot of timber, calculating to buy the adjoining timber later. It will in many cases cost two or three times the amount that you could have got an option on it at. Better keep quiet and secure plenty of timber if any money is to be made.

Erecting a mill on a stream or water course, is a different thing. Here the location of the mill and opportunities of holding logs in swift water must be closely looked at.

The amount of waste around a saw mill can in many cases be worked up very economically, in a way not known to all. Where lath are not in sufficient demand, all slabs should be worked into box boards or heading, which will command a nice profit at your nearest city. An ordinary shingle machine can be used for this purpose and all trimmings can be utilized. A boy at a small cost will work up the refuse from a mill of 15,000 feet capacity.

The care and assorting of timber should be done but once. Many large mills spend more money to take care of their product than to make it. A good edgerman and assorter are necessary. The latter in ordinary mills may be one of the hands at a salary above the rest. Bad work starts back from the sawyer; where he uses bad judgment in setting and sawing, the edgerman is compelled to spoil more to rectify the carelessness.

Lumber should be well trimmed. Defects never grow smaller. Where judgment is not used, a board may be reduced from clear to a cull for the want of one foot more in trimming, or one inch in edging. When the lumber leaves a mill it should be so graded that there are no rejected pieces and no tearing down a stack to "pick." The policy of putting in a few better boards to compensate for some worse ones, will never work with customers. The natural tendency is toward accuracy. A man wants it as near alike as possible.

By close grading is where many yard dealers make the profit which the mill man should make. The shipments are made without much attention to rigid inspection. The buyer never gives any credit for what is above the inspection, but lays aside the lower grade and culls, that the mill man may come over and see for himself. Green lumber presents a deceiving appearance, and the mill man is surprised at shakes, loose knots, stained sap and the appearance of rot. The considerate, successful merchant classifies his goods. How many customers would be had and what would he make lumping certain articles together? Nothing; yet we see mill men with competition just as sharp working on this plan.

It is safe to count a ten per cent. loss by the time lumber leaves the mill until the money is received in the office, and many mills lose much more than this—not only from rejection because of bad assorting, but from the care and abuse lumber is subjected to in many yards.

## HOW TO BE A SUCCESSFUL SAWYER.

1. Acquire a sufficient knowledge of machinery to keep a mill in good repair.
2. See that both the machinery and saws are in good order.
3. It does not follow because one saw will work well that another will do the same on the same mandrel, or that even two saws will hang alike on the same mandrel. On the principle that no two clocks can be made that tick alike, no two saws can be made to run alike.
4. It is not well to file all the teeth of circular saws from the same side of the saw, especially if each alternate tooth is bent for the set, but file one-half of the teeth from each side of the saw, and of the teeth that are bent from you, so as to leave them on a slight bevel, and the outer corners a little the longest.
5. Never file any saw to too sharp or acute angles under the teeth, but on circular lines, as all saws are liable to crack from sharp corners.
6. Keep your saw round, so that each tooth will do

its proportional part of the work; if a reciprocating saw, keep the cutting points jointed on a straight line.

7. The teeth of all saws wear narrowest at the extreme point; consequently they must be kept spread so that they will be widest at the very points of the teeth; otherwise saws will not work successfully.

8. Teeth of all saws should be kept as near a uniform shape as possible, in order to keep a circular saw in balance and condition for business.

9. Frosted steel is always brittle. No intelligent woodsman will use a good chopping ax on hard frozen timber until he has taken the frost out of it, and no intelligent sawyer ought to attempt to set the teeth of any saw without taking out the frost, if there is frost in it.

## AMERICAN LUMBERMEN IN CANADA.

A RECORD OF SOME RECENT OPERATIONS.

**G.**A. BURTON, representing the Pulp Wood Supply Company, of Appleton, Wis., spent some time during September in the Algoma district with a view to making an arrangement with a responsible party for the taking out of some twenty thousands cords of paper wood.

H. M. Sage and Hiram Emery of Bay City, Mich., have purchased a timber limit on the Serpent river, and Mr. Emery has started camp with the intention of putting in 20,000,000 feet of logs, which will be towed to the Sage mill in Michigan. Without this supply the Sage mill was likely to have been closed down.

A. J. Scott and Eli McLaughlin, of Michigan are in the Georgian Bay section looking up timber limits for William Peter to stock his mill at Bay City, Mich.

An American lumber exchange gives currency to the rumor that Merrill & Ring, of Saginaw, Mich., are talking of turning over their mills at Parry Sound, Ont., to some other operators.

Edmund Hall, of Michigan has parties prospecting for timber berths, in the Georgian Bay territories.

A consignment of 306,685 feet of pine lumber from Byng Inlet, Ont., reached Bay City, Mich., per barge *Hercules* on 8th ult. There is said to be no previous record of the arrival at this port of a direct consignment of lumber from Canada.

Howry Bros., of Saginaw, Mich., shipped on 7th ult., from White Fish river, a raft of 3,500,000 feet of logs, and will take another over immediately on her return.

Nelson Holland of Michigan is a large buyer of Canadian logs.

The Saginaw Lumber and Salt Company depends almost wholly upon Canada for its supply of logs. The company owning a large body of timber on the Vermillion and Wahnapiet rivers, and also on Fitzwilliam island.

## A BOOK FOR LUMBERMEN.

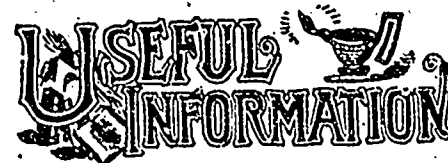
**A** VERY complete directory of lumbermen in Canada and the United States has just been issued by Rand, McNally & Co., of Chicago. The work contains the names of lumbermen, loggers, sash and door men—in truth of every one identified with the lumber trade. The financial rating of each firm, so far as it has been possible to cover the ground, is also given. The work besides contains much valuable information concerning the grading and inspection of lumber, legal pointers for lumbermen, and the power, style and daily capacity of the different mills in these territories. The work makes one large volume of nearly 700 pages, and the name of the veteran publishers is a guarantee of the excellent mechanical make-up of the book.

## BITS OF LUMBER.

Shipments of lumber from San Francisco to South America for the first six months of 1891 fell short of those of the first six months of 1890 by over 5,000,000 feet.

More than 300,000 persons are occupied to-day in the United States in the direct manufacture of forest and saw mill products alone.

Rosewood takes its name not so much from its color as its fragrance when first cut. It still remains prince among the finer woods, being worth \$750 per 1,000 feet board measure.



When a belt breaks from a fair strain, it bursts nearly straight across at the weakest part. When a belt is broken diagonally across the solid leather, then be sure it is torn by something else than fair strain.

An expert in such matters says he has found the following the best thing he has tried for making joints against fluid pressure: Five pounds of paris white, five pounds of red lead, four pounds black oxide manganese. The whole is to be well mixed, and a little asbestos and boiled oil added. This, he says, soon becomes nearly as hard as the iron itself.

It is considered a good load for a belt to be able to manage fifty pounds for every inch in width; in fact this is considered about as much as a belt is able to stand, for seventy-five pounds for every inch in width to let the slack side run with only one third this strain, for it is the difference in tension that does the business in belt driving.

If you wish to prevent the slipping of pulleys, throw out your iron pulleys and put in wooden ones, or else cover the iron ones with leather or wood. High speed light belts should be fastened together with the strongest quality of bed ticking, torn into strips one inch wide and double lace into the belt. It will last longer than the best rawhide lacing, and when it breaks will give away all along and not tear out the holes in the belt. Those who do not believe this, just try it for any belt under eight inches in width.

A traveller has recently returned from Mexico with an idea which he hopes to utilize in the manufacture of flour. He notes that for centuries the Mexicans have been accustomed to parch their grain before grinding it, and claims to have discovered that the heat gives the flour a sweetness and fragrance unknown in the flour of ordinary brands, and at the same time adds much to its power of nutrition. Mills are to be equipped with apparatus for parching the wheat before putting it in the hopper.

One of the latest applications of electricity is to lumbering and a company has been formed for the purpose of exploiting a lumber carrier to be electrically worked. The apparatus consists simply of a clamp to be swung from trees or other supports on which hangs a cable; the cable is drawn taut, and on it run pulleys from which hangs the chains which carry the logs about three feet from the ground.

One very important cause of deterioration in boilers is due to the fact of their becoming too small to do the work without forcing, so that the pulsations of the engine cause a well marked succession of shocks on the boiler, which result in the weakening of the material. By placing one's hand on the head or shell of the boiler, the vibrations of the metal can be felt similar to the rising and falling of a man's chest while breathing.

To make elevator-cups discharge perfectly the speed of belt and size of pulley should be as follows: Of belt speed 200 to 250 feet per minute, size of pulley 24 inches; speed 300 to 350 feet, pulley 36 inches; speed 400 to 450 feet, pulley 48 inches; speed 500 to 550 feet, pulley 60 inches, and speed 600 to 650 feet, pulley 72 inches; or 35 to 40 revolutions per minute of any size pulley.

An excellent way to discover the whereabouts of a pound about an engine is to place the end of a piece of rubber hose to one ear and the other at different parts of the engine. Sometimes it may be necessary to stop up the other ear, as sound travels in a very deceptive way. Some engineers put the end of a thin pine stick between the teeth, and let the other end touch the suspected part of the engine. We have always found the hose quicker and more reliable.

A shaft that is crooked, and is run in bearings that are in line, consumes power equal to the amount of strain it requires to spring it into line, and this strain is constant in any position that the shaft may be in, but as it revolves it shifts the strain to the bearings, and has a tendency to wear and loosen it. If the shaft is straight, and the bearings are out of line or level, the result is similar as to the constant strain of bending the shaft as it revolves, but the strain on the bearing will be one way all the time, and the tendency will be to wear the bearing in a direction that will allow the shaft to straighten itself. If the shaft is crooked and the bearings are out of line to the same amount, there will be one point in each revolution where there will be no strain, but opposite to that will be a point where it will be double, and the result will be a jerky motion, worse than if one or the other was right.

THE CROWN LANDS OF NEW BRUNSWICK.

By EDWARD JACK, C. E.

THE position of the crown timber lands of this Province is none too encouraging to the lumbermen. Years ago the lumbermen were given leases for a period of ten years; the stumpage payable under such leases was \$1.25 a thousand. Many of them had been purchased at large sums over and above the upset price of \$8 a mile, very conclusive evidence that the rate of stumpage, \$1.25 a thousand, was not too high. Owing to some trouble with the representatives of the city and county of St. John, the local government finding that they could not stand without the aid of money, resorted to the unheard-of and extraordinary measure of rebating to those who had contracted to pay this sum of \$1.25 a thousand, a fifth part thereof, or in other words the sum of 25 cents a thousand, thus virtually canceling the solemn agreements which the lumbermen had made to pay a certain and specific sum of money. They did not cancel the whole agreement and offer the lands at sale again by public auction subject to this lower rate of stumpage, for the simple reason that it did not suit these lumbermen whose representatives desired to make the corrupt bargain above referred to, because there were outsiders who stood ready to buy these leases and to pay large bonus for them. This bonus had been lost, thus entailing a double loss on the unfortunate country, first, that of the 25 cents a thousand, and second, that of the bonus for the unexpired term of ten years. This bonus might have been safely estimated at \$50,000. This statement will explain fully enough the inwardness of the famous or rather the infamous Northumberland deal. Now what is the present state of matters? The ten years lease will expire in a year or two; they will be renewed to the present lease holders, or will they be offered again for sale by public auction? What is the government policy? since, until this is known, capital from the United States cannot be introduced into New Brunswick to forward any extensive wood manufacturing enterprises which will have to depend for their source of supply upon timber lands which are not the property of the crown. The writer has always looked unfavorably on the annual or even decennial sale of

timber berths at Fredericton, and believes that the parties who have bought their timber leases at public auction should be allowed to hold them so long as they comply with the conditions therein contained, since it is no difference to the country who holds these leases so long as the stumpage is paid and conditions performed; in fact if one would be willing to pay the mileage on the land and not cut the lumber, but hold the same until there should be a greater demand, he would be doing the country a great service for holding and caring for the timber, and would also be aiding to curtail the cut of lumber for spruce in this province, which is not excessive. There is a large amount of capital in the United States which can be introduced into New Brunswick, to be used in the manufacture of woods in various shapes, so soon as the government will adopt such a policy as will give some security that the leases of crown land which may have been purchased shall not be subject to be taken away at the expiration of a short period and again offered for sale. There is in New Brunswick a vast area of crown land not now under lease; much of this would rapidly be taken up did the government give leases renewable yearly, so long as the conditions contained in them are being complied with, and the revenue from the crown timber lands would thus be greatly increased.

FREDRICKTON, N.B.

A USEFUL CATALOGUE.

We are in receipt of a 66 page catalogue of new and second-hand machinery from H. W. Petrie the well-known dealer, whose large ware-rooms are located on Front street. There is hardly anything in the way of machinery that Mr. Petrie has not for sale. The list includes machine tools, chucks, boring machines, drill presses, drills, milling machines, power hammers, punch and shearing machines, bending rolls, tops and dies, screw plates, bolt cutters, jack screws, machinists' stocks and dies, forges, anvils, vises, saw gummers, engines and boilers, feed pumps, injectors, tube brushes, governors, pressure gauges, steam pumps, steam fire engines, wood-working machinery, sand papering machinery, circular saws, belting, hose, lace leather, belt

fasteners, water and steam gristmill machinery, brick-making machinery, cotton and woolen machinery, agricultural machinery, etc. To all interested Mr. Petrie's depot is well worth a visit.

TO THE WEST! TO THE WEST!

TO THE West! to the West! to the land of the free. Where mighty St. Lawrence rolls down to the sea, Where a man is a man, if he's willing to toil, And the humblest may gather the fruits of the soil, Where children are blessings, and he who hath most, Hath aid for his fortune and riches to boast; Where the young may exult, and the aged may rest, Away, far away, to the Land of the West! To the West! to the West! where the rivers that flow. Run thousands of miles, spreading out as they go; Where the green waving forests, that echo our call, Are wide as old England, and free to us all; Where the prairies, like seas, where the billows have rolled. Are broad as the kingdoms and empires of old; And the lakes are like oceans in storm or in rest, Away, far away, to the Land of the West. To the West! to the West! there is wealth to be won, The forest to clear is the work to be done, We'll try it, we'll do it, and never despair, While there's light in the sunshine and breath in the air. The bold Independence that labor will buy, Shall strengthen our hands and forbid us to sigh. Away! far away! let us hope for the best, And build up a new home in the land of the West!

FOR SALE—A RARE CHANCE.

A VERY desirable mill property in the town of Essex, Ont., known as the Hanlan Mills, for the manufacture of staves and lumber. The daily capacity of 20,000 feet of lumber and 34,000 staves. Twelve acres of land for mill yard, on which is located 4 charcoal kilns, boarding house, two tenant houses, barns, sheds and other outbuildings, with an unlimited supply of pure well water; with or without horses, trucks, wagons, etc. Also six million feet of standing timber, one-half elm, balance oak, cottonwood, ash, maple and sycamore; from one to three miles from the mill; and other timber in easy reach can be bought. The mills are on the line of Michigan Central Railway, with two spurs running into the mill yard, and within fifteen miles from Detroit. Terms liberal. Good reasons given for selling. Write or call on the proprietor, T. H. DREW, Essex, Ont.

WANTED AND FOR SALE.

Advertisements will be inserted in this department at the rate of 15 cents per line each insertion. When four or more consecutive insertions are ordered a discount of 25 per cent will be allowed. This notice shows the width of the line, and is set in Nonpareil type. Advertisements must be received not later than the 7th of each month to insure insertion in the following issue.

WANTED AT ONCE—delivered at Toronto Junction, from \$1,000 to \$10,000 worth of lumber for building and manufacturing purposes for fully paid up stock in a flourishing manufacturing business, well established, a continuous supply of over 2,000,000 feet required annually. The Gurd Brandon Woodenware Co., Limited, Toronto Junction, Ont.

PARTNERSHIP WANTED in Sawmill, Sash and Door or Furniture Factory, or any other class of good wood-working establishment. Advertiser will invest \$5,000 cash. Address: "PARTNER" care of CANADA LUMBERMAN.

HARDWOOD lumber, bought, sold or received on consignment; TUCKER DAVID, lumber commission merchant, 202 Eleventh Ave., N.Y.

SAW AND SHINGLE MILL

FOR SALE—on the Manitoulin, near Little Current. A bargain. Address: W. L. H. CANADA LUMBERMAN.

SHINGLE LIMIT WANTED.

WANTED—Good shingle timber limit. Address: P. J. D., care CANADA LUMBERMAN.

PARTNER WANTED.

WANTED—Partner—Silent or active, with \$10,000 to \$15,000, to handle lumber 1892. Address: T. C. F., care CANADA LUMBERMAN.

STEEL RAILS, ETC.

SEVERAL thousand feet T rails 12 and 20 lbs. to the yard. A large quantity of flat strap rail for tramways, 20 pair wheels and axles, all in good second hand condition, very cheap. JOHN J. GARTSHORE, 49 Front Street, West, Toronto.

FOR SALE, RENT OR PARTNERSHIP

FIRST CLASS saw mill, planing mill, sash and door factory and dry kiln, 35 pieces of machinery in complete running order, situated just outside of limits of city of Kingston. Premises suitable for a ship yard, or will sell machinery, dry kiln or building for removal. For particulars and catalogue of machinery address M. STRACHAN & SON, Kingston, Ont.

WANTED—TO BUY.

GOOD Canadian Timber Limits and Georgian Bay saw logs. Address: BEN BIRDSALL, Whitney Building, Detroit, Mich.

SALE OF TIMBER LIMITS.

For sale by Public Auction, at the Russel House, Ottawa, at three o'clock in the afternoon of TUESDAY 26th October, 1891, the following Timber Limits.

Parcel No. 1—Kippewa Birch No. 21, on White Pine River, area 22 square miles, being one of the few Virgin Forests and contains a considerable quantity of superior Pine with very short haul.

Parcel No. 2—Bertha A & B River Coulongo, area 100 square miles. This country is very neatly all green and contains a large quantity of good Pine, short haul, the drive from which reaches the Ottawa early in June.

With Parcel No. 2, there are supplies and plant for one chantier, to be taken at a valuation as per inventory.

The terms and conditions made known on day of sale.

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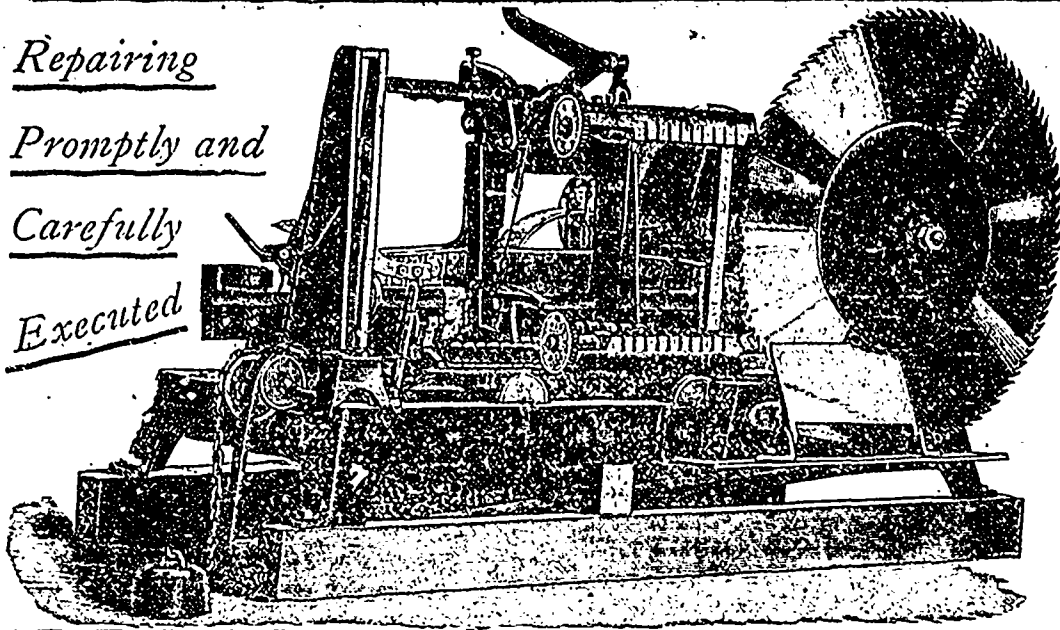
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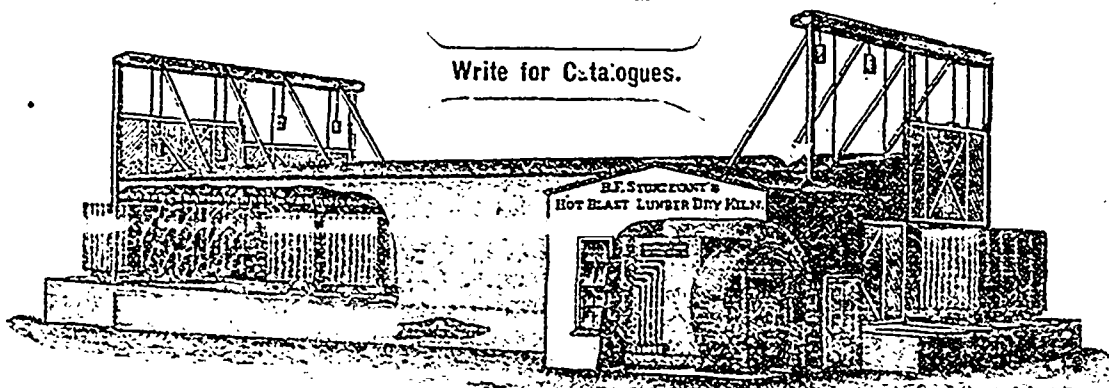
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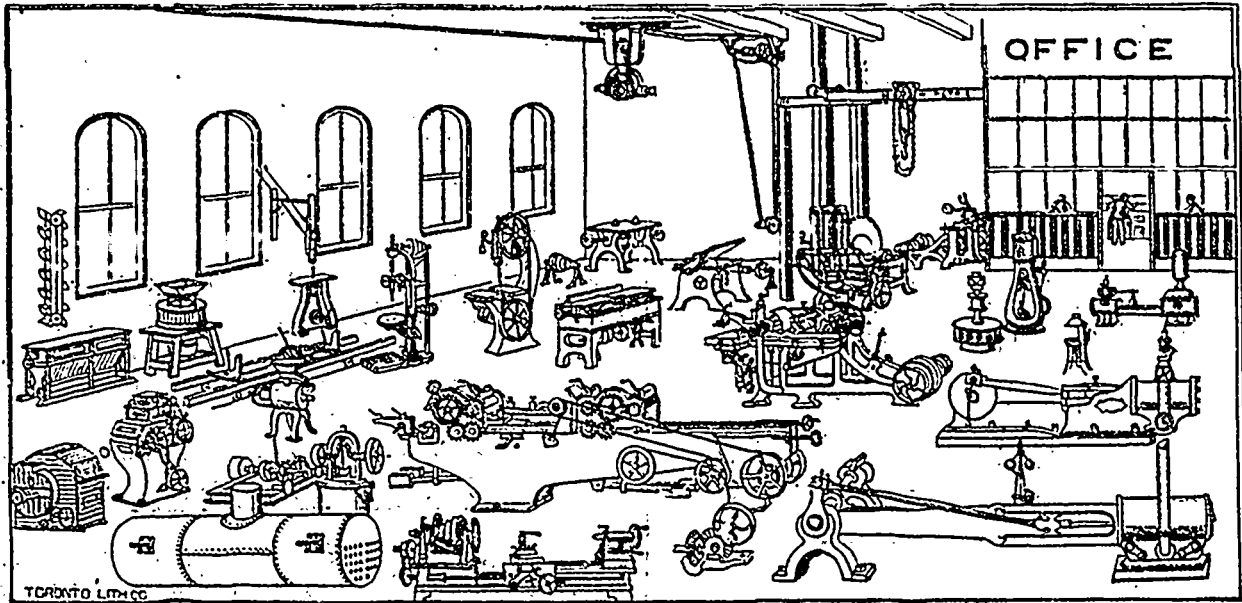
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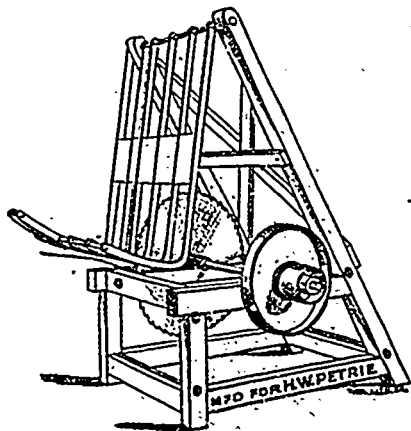
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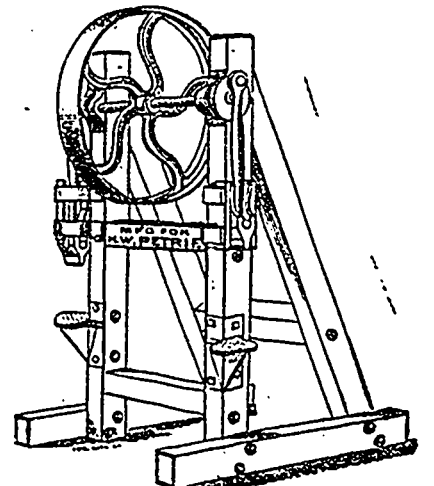
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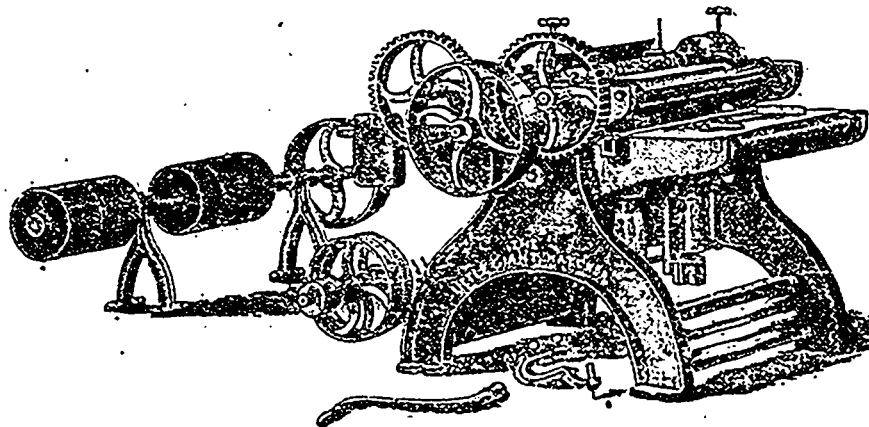
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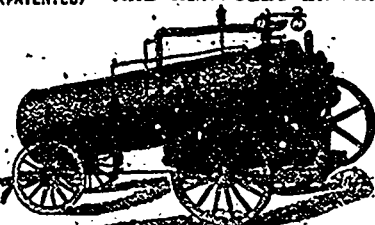
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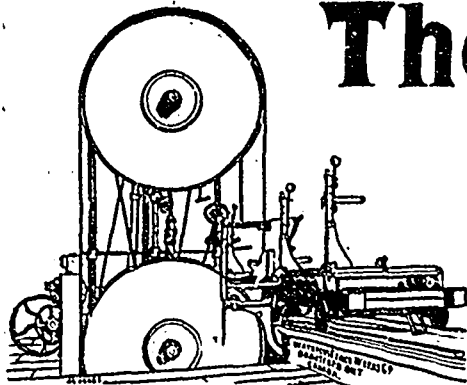
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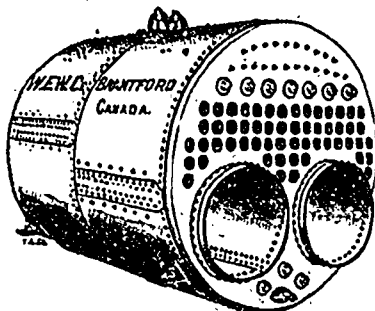


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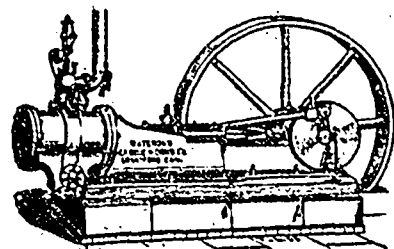
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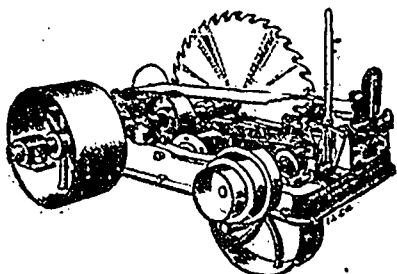


1890

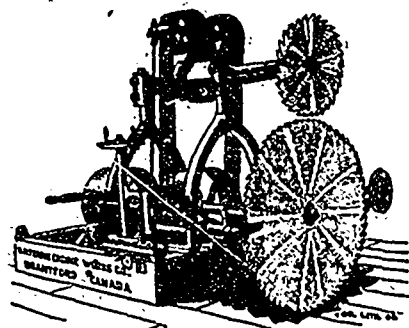
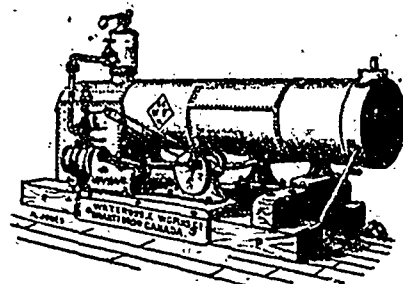
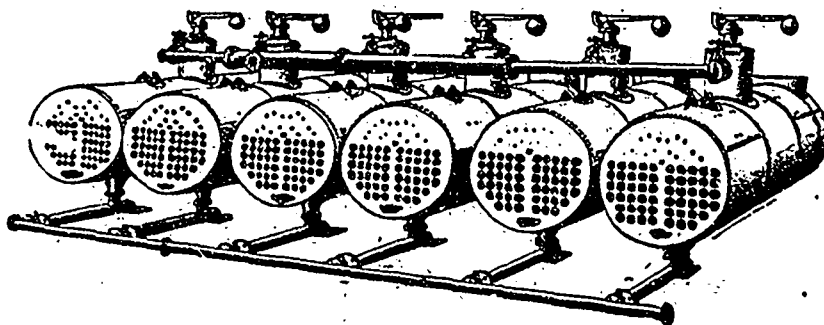


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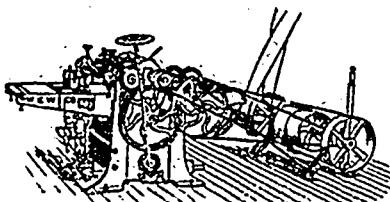
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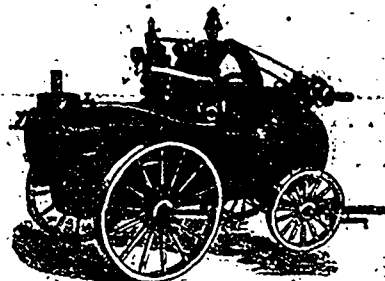
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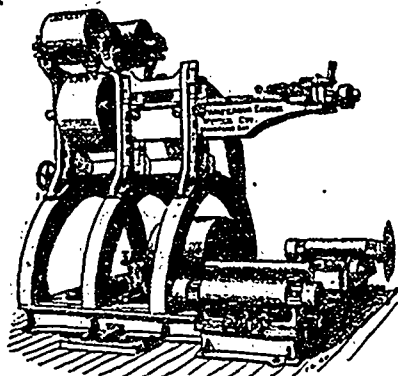
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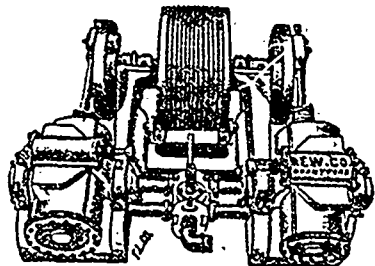
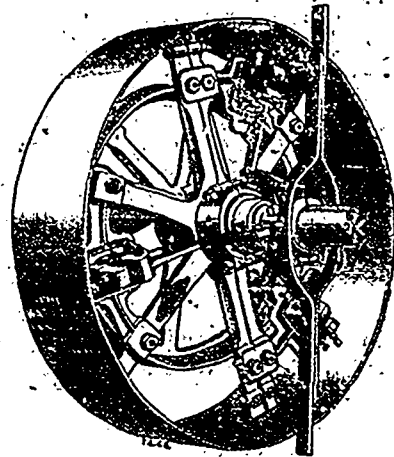
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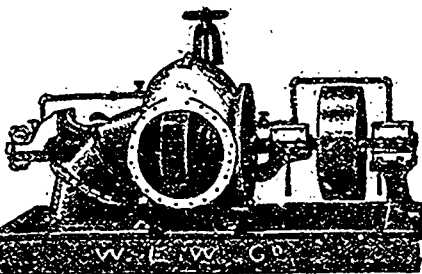
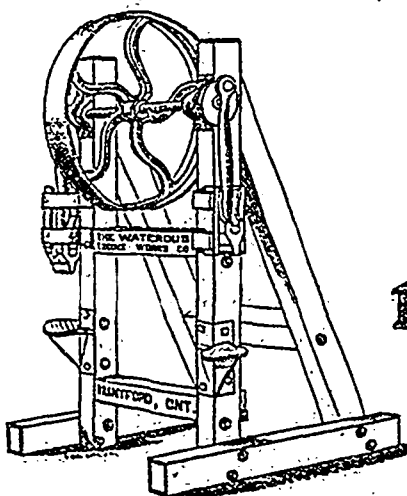
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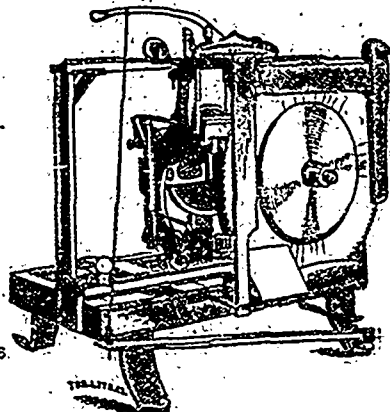


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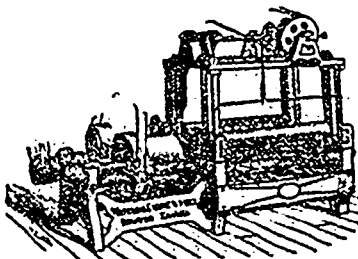


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