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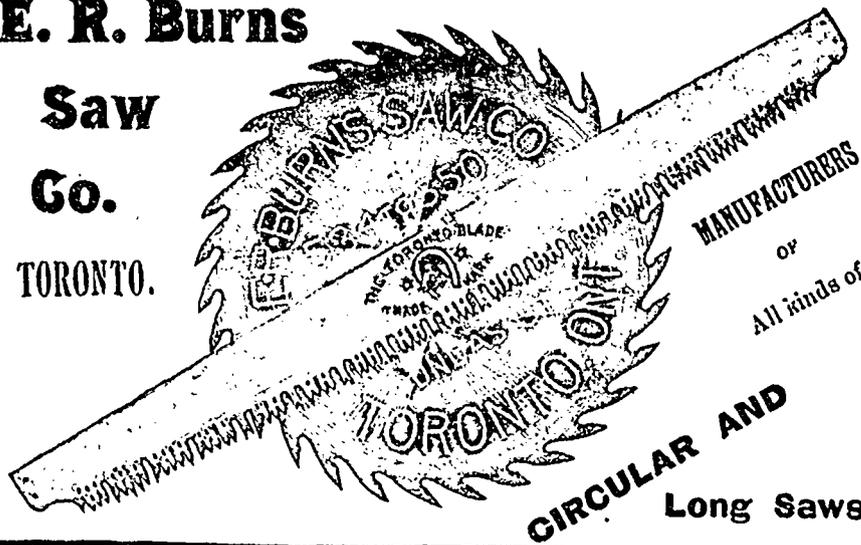
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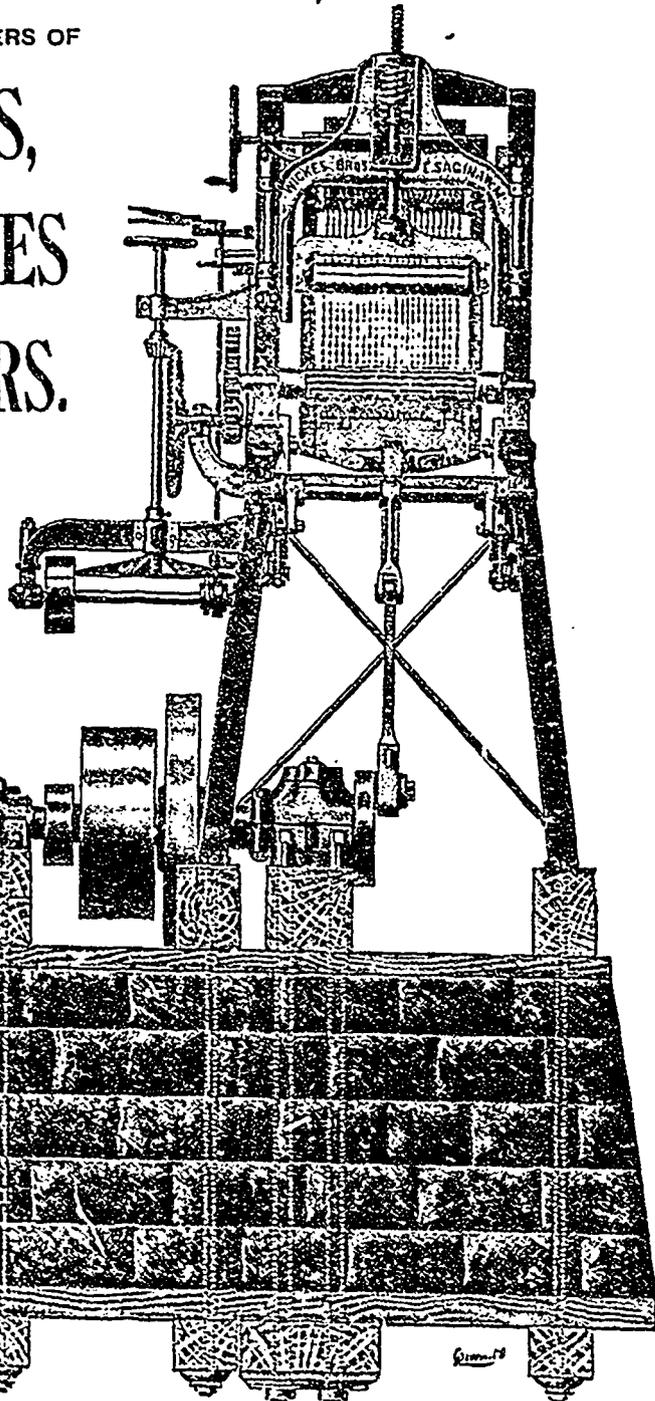
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MILL SURGERY.

BY JONATHAN TORREY.

SOME things have been said about surgery, or more properly dressing wounds in the mills. I had hoped to see some plan developed by which men getting hurt might receive immediate attention, and not as is often the case, be obliged to wait and suffer a long time before medical aid comes. Very many, if not the majority of cases, are wounds which common sense and good judgment will care for without the aid of a physician.

A few things should be kept in common by the men, and each one should contribute from time to time a few cents to keep a little treasury, and a little medicine chest amply supplied even for the most complicated wounds. Very often where it is necessary to call a skilled physician he often fails to bring the most needed things with him, such as lint, bandages and surgeon's plaster, and much delay is caused by hunting them up. The medicine chest should contain a pair of scissors, two or three knives, a knife made especially for spreading a plaster, needles, a good supply of bandages, alcohol, five per cent. solution of carbolic acid, arnica, and with the rest a flask of whiskey, and a roll of good surgeon's plaster. A cut, even quite a saw cut, can be drawn together with strips of surgeon's plaster, sticking it fast on one side and drawing the parts gently together until they are nicely in place, and then fasten the other side. These strips should be about three-sixteenths-inch wide, and long enough to reach over the wound and stick firmly on the skin each side of the wound. After covering the wound properly in one direction, cross them in the other, and you will find with a little care that the cut will be nicely done up. Don't be particular and cover it over tight, for it will do as well in that way. This does very well for small cuts, but for large, clean cuts made with some knife, I advise sewing up with white silk.

A bruise must be treated differently. If the skin is not broken, and no bones broken, a pail of hot water is the very best application in the world. Strip the parts immediately, and with a towel bathe the bruised parts with water as hot as it can be borne, till the intensity of the pain is gone, and often a continued bathing will free the person from all pain, and the bathing continued frequently, will be all that is needed to make a permanent cure.

For a common cut, which needs only a little immediate attention, a roll of Griswold's salve, or any good sticking plaster will be all that is necessary; and the part properly done up with this treatment will get along well enough without further trouble.

For complicated cases, however, the first thing to be done is to call the best surgical aid known. In the meantime keep the injured person as comfortable as possible. The whiskey will often be found a good assistant, for often the nervous system needs sustaining by some stimulant, and this is as good as anything for the purpose, and it is so hard to get a pure brandy of any kind, whiskey is usually the best thing to depend on.

One thing should be always borne in mind, and that is, if the person is so badly injured that he must be taken to his home, it is better to take him there before any operation is performed; not taking him to the surgeon's and then home. Ordinarily, however, it is quite as well to have the surgeon come to the mill, for here any convenience can be improvised for the operation, which can not be provided at home. It is always best to give the injured person the benefit of a doubt, and have the surgeon at hand, rather than let the wound go uncared for. Often a person is made a permanent cripple by not attending to the injured part at once.

SOUTH AFRICAN TREES.

IN the Spring, in the year when rain has fallen for two months, the Karoo is a flower garden. As far as the eye can reach stretch blotches of white and yellow and purple fig flowers. Every foot of Karoo sand is broken up by small flowering lilies and wax flowers; in a space of a few square feet you may sometimes gather fifty kinds. In the crevices of the rocks little, hard leaved, flowering air-plants are growing. At the end of two months the bloom is over, the bulbs have died back into the ground by millions, the fig blossoms are withered, the Karoo assumes the red and brown tints which it wears all the rest of the year. Sometimes there is no Spring. At intervals of a few years great droughts occur when no rain falls.

For ten or thirteen months the sky is cloudless. The Karoo bushes drop their leaves and are dry, withered stalks: the fountains fail, and the dams are floored with dry-baked mud, which splits up into little squares: the sheep and goats die by the thousands, and the Karoo is a desert. It is to provide for these long rainless periods that all the plant life in the Karoo is modified. The Karoo bush itself provides against drought by roots of enormous length, stretching under ground to a depth of many feet. At the end of a ten months' drought, when the earth is baked brickdust for two feet from the surface, if you break the dry stalk of the Karoo bush three inches high, you will find running down the centre a tiny thread of pale green-tinted tissue, still alive with sap.

The air plants, which are fastened by the slenderest roots to the ground or rocks, live entirely upon any moisture they may draw from the air, and will grow and bloom for months in a house without any water. In other ways the intense dryness modifies vegetation.

SAWING AND PILING.

ALMOST as much depends on the after care and handling as upon the quality of timber and manufacture. If not very carefully piled it will warp or buckle, especially thin wide stuff. The writer recently visited a band saw mill that makes a specialty of quartered oak, and saw some thin stuff—three-eighths inch panels—piled in a manner new to him. Instead of being piled on sticks out of doors, the sticks were nailed to strips at the ends and middle, forming a sort of frame, and the boards were set up endwise as nearly perpendicular as possible to prevent them falling, and under a shed were latticed sides and ends boarded up. It looked like a good deal of trouble for very little, but the millman said it paid him well for all the additional trouble and expense. He was twelve miles from a railroad, in a very rough country, but had evidently made money. He declined to state for publication the price he asked for three-eighths inch panels—only made prices to those who wished to purchase. "But," he added with it, "I sock it to him on prices, you bet." The fact that he had a well equipped band saw mill of twenty-five thousand feet capacity, plenty of fine white oak timber in sight of it, and less than three carloads of that sort of lumber on hand, was an indication that he did not lack for customers. Another idea of this man's is worth mentioning. He trimmed his lumber as it came from the saw, but did not edge it until ready to ship. This incident is given to show the care necessary in the proper manufacture of quartered oak. When so prepared and handled there is no quoted market price set on it, but it is like thoroughbred Jersey cows or imported Spanish jacks the price depends on how bad the buyer wants it. There is a good demand for it at prices that allow a profit satisfactory to any reasonable man.

HE HAS HAD HIS DAY.

The iceman's look becomes austere,
A frown is on his brow;
The summer's gone, the fall is here —
He isn't in it now.

CAMEL'S HAIR BELTING.

ONE of the latest things in the way of a belt in this country, though it is more familiar in England, is belting made of camel's hair. The first thought of the mechanic who has had experience in buying a camels' hair shawl for his wife, and paying five or six hundred dollars for it, is that it is altogether too expensive a material for belts; but we are informed that this depends upon what particular kind of hair is selected, and that some kinds of camel's hair, that is, hair which comes from certain parts of the body, is not so expensive as to prohibit its use for this purpose. Among the advantages claimed for the belts are, they are absolutely uniform in strength and elasticity at either surface or at either edge, so that they run true and smoothly; have only one joint in them, which can be made as good and smooth as any other part of the belt, it is stronger than leather belting, and more durable; its adhesion is better, and it is adapted to use in exposed places where it is liable to become wet.

A TIMBER STORY.

THERE are timber stories as well as fish stories. A quarter section of timber land that will cut from five to ten million feet is considered a good quarter. Fifteen million is rated extraordinary, but even that is a baby estimate when we place it by the side of a particular quarter section on the Satsop, in Mason county, recently cruised by several competent men who will testify shortly in the United States land office to the quantity they found. One of these men will testify that the quarter section will cut 40,000,000 and the whole section at least 100,000,000. It is a solid mass of fir even in the thinnest spots. When a railroad is built to this land, the quarter section alone will be worth forty to sixty thousand dollars.

AN ESSAY ON TREES.

The following essay on trees was written by a scholar in Standard VI, of a Board School in Chelsea: Trees are very useful. There are all sorts of trees the coker-nut trees and orange, apple and plum trees. Coker nuts are very nice people. In the pacific and foreign nations live on cokernut and many other fruits. Apple trees and orange trees are very nice. Their are trees that do not bloom, oak trees and bay and corn trees and pine apple trees never bloom. Some trees are very tall they stand from the height of 10 to 15 yds. high and some are taller than that. Trees are very useful for the wild rabbits and hares and dears. There is no wild beasts in England only in foreign nations.

PERT BUT LUCKY.

A few weeks ago a 11-year-old lad approached Marshall Field, the noted Chicago merchant, and asked him for a raise of salary.

"You'll have to go to your manager," replied Mr. Field; "he attends to the pay."

"I've been to him, and he won't do anything," said the lad.

"How much do you get?"

"Five and a half a week."

"Well, my boy, that's 50 cents more than I got when I was your age," said Mr. Field, assuringly.

"Perhaps you weren't worth any more," the lad retorted.

The youth is getting \$7 now.

RUNNING CIRCULAR SAWS.

I HAVE seen men who, to judge by the intelligence they displayed, had better be running an axe in a wood yard. They would jamb a saw through a board like a man running a beetle and wedge. If the saw choked up and stopped, they pull the board back a foot or two, take a breath themselves, then bring the lumber sinp bang against the saw again, stopping it dead. Something has got to slip; the saw belt is the thing that usually does it. The belt can't run off for it has a cob house of edgings around it. Like a horse in a horse power machine, the poor belt can kick as much as it chooses, but must run as long as it holds together.

Sometimes a well-regulated saw will bind. It will cut into the work and cut a wider strip than can pass between the saw and fence. Now the average man tries to remedy matters by pulling the work back. The back of the saw cuts itself clear, but there is a spot the width of the saw that has not been touched, so the saw runs in there again and is just where it was before. The trouble is caused by the saw getting hot. It expands and dishes over. The saw always dishes towards the coolest side. The cool side is the sharpest or may be has a trifle the most set in it.

When a saw acts as above, lift the board up square off the saw. If you have just started into a long board bear down on your end, and let it swing upon the edge of the table and raise clear of the saw. If nearly through the board, let it swing upon the back of the table, and raise your end of it. Be very careful to keep the board snug against the fence while lowering it back upon the saw. The cool air striking on the saw takes out all the dish, the saw straightens itself up and cuts itself clear as the board is replaced, and will go along all right. There always is one thing to look out for when a saw cuts this caper, and that is to see if the saw does not need setting or filing. Nine times out of ten this is the trouble.

In jointing boards upon a sliding carriage you will sometimes feel the board crawl sidewise as the saw crawls along. When this happens just take the saw off and play dentist for a few minutes. When a saw smokes (and when a man does also) it is time to quit. Saw the timber, don't burn it off. File a saw before it gets dull. Don't follow the rule one old chap had, viz.: "When edgings would slide off the saw without catching, then file the saw." Any saw that can be filed with a three-cornered file, should need but three strokes of the file for each tooth, two for the face and one for the back. It does not take long to go around a saw at this rate, and it can be done every time if the saw is filed before it gets too dull.

Sometimes when taking a saw from the arbor, a blue spot is found upon one or both sides of it. Just look that saw over, and see if there is not a spot of gum or dirt close to the blue spot. Glue is bad to get on a saw. Pitch is worse, and there is something in maple sap wood that is worse than either. A spot of gum upon a saw will cause it to heat, and the blue spots tell the story. Take a piece of sand stone or a soft Scotch "rag," wet the saw and scour off all the dirt or gum. Blue spots do not hurt the temper of the saw, but they are apt to spring the saw, and cause it to take a permanent set; and the only cure is hammering.

Hammering a saw is the sawyer's bugbear. Almost every one of them has tried to take a kink out of a saw by hammering, and many have failed in the attempt. The way they did was to lay the saw on the buzz planer and rounding set up, then take a five-pound hammer and attempt to beat down the bent spot. Just like putting a saucer upside down and trying to hammer it flat. A man might as well attempt to straighten a dent in a tall hat by placing it on the floor and pounding on the top of it with the heel.

Take a steel straight-edge long enough to reach across the saw. Hold the saw nearly plumb upon your finger (if a small saw) and locate the bend. It is generally a little round spot. Lay the saw, rounding place down, upon the anvil. If you can not afford to own an anvil to true your saws upon, you are too poor to own a saw and had better sell out. Have a little hammer not larger than your finger. The face should be round and convex and not over an inch in diameter. The pene of the hammer should never be used, except

in severe cases. Strike one or two blows upon the bent place. Be sure that the saw lays true upon the anvil, or you may hammer until you are tired, for all the good it will do. After striking one or two blows, test the saw again with the straight-edge. If it shows any improvement, strike a few more blows, and test again. If no change is seen, strike a couple of hard blows and make another test.

The principle of the thing is, that the convex side of the saw is larger than the other side, so it puffs out; the hammer blows upon the smaller side, stretch the surface, and have a tendency to correct the error by swelling out this side, and, of course, shrinking the other. Sometimes hammering as above only makes the matter worse. In this case mark the place with chalk or by some other means and strike several blows in a line extending from center to circumference through the bent spot. Strike each side of the spot so as to stretch the whole saw to agree with the full place.

The simplest bend to remove is when an arc of the saw is sprung one side and the line of the bend follows the cord of the arc. All that is needed to cure is a number of light blows all in a row upon the hollow side as above, and right in the hollow or bend. The worst case to deal with is a twist, part of the saw bent one way, part of it another, and the rest of it both ways.

In this case, go for all the low places one side first. Get them all out and the saw will dish. It is very easy to deal with a dishing saw—just hammer the rim. Take the worst saw you ever got hold of, and if you can hammer it so as to be dishing, then the battle is yours. A few good blows at the roots of the teeth, and that saw is good for something.

Once get it through your head where to strike a saw and you can easily true up a bent one. If you have an old saw that you have always kept to look at, try your hand on that. Pick out a true place in it, and strike there with the hammer, and see what the effect will be. Strike four or five blows in a line and measure the bend they cause. Now, try to straighten the saw back again, always bearing in mind that you can not drive down a bulging place. You must coax it down. Do it as Paddy coaxed the pig to go ahead, by hitting him on the nose. "If the mountain won't go to Mahomet, then Mahomet must go to the mountain." If a certain part of the saw is too big, stretch the rest of the saw to correspond. It doesn't take much hammering. Have often seen saws hammered too much. It would spring the saw the other way every time, and it would have to be hammered elsewhere to get it back again.

Hammering wants to be done like filing, "just before it is needed." A small kink needs but three or four taps of the hammer. Let it go and another kink gets in, the saw springs out of shape, or you may have to get an expert to hammer it in shape again. Don't let a saw run a minute after it needs fixing. It is only a waste of time, power and elbow grease. It is ten times as much wear to the machinery, saw and man. If we could only make the men who tolerate dull, untrue saws believe the above, they might get rid of lots of hard work and poorly-cut stock.

One day while passing through a shop, a circular saw was heard making a noise as if it were having an awful hard time. Every time the sawyer forced a board against the saw it would slow down and stop after going eight or ten inches. The countershaft kept right on, and didn't care what the saw was doing. Upon going around the saw table where the belt could be seen, it was found to be sagging badly. It was too loose. The remark was made to the sawyer that "if he took up the saw belt the saw would work better." The sawyer said, "I'll be— if I take up any belts round this mill unless I have an order." That man can not be blamed, either. The foreman would fuss and fret around a man every time he found him doing a little repair work, and it shows the foreman does not know his business. The men get so they hate to mend anything. It is hard, in any shop, to make the men "take a stitch in time," but when the whining boss runs the shop, then every crack goes until it breaks clear off.

Patch up the little breaks as fast as they are found; things will work better. If the corner of a cement joint in a belt starts up, don't let it go until the belt breaks, but warm the belt, work in a little cement (one-third

fish, two-thirds common glue), hammer the parts together and drive in a few pegs. Five minutes will do the job, but it will take half an hour to mend the belt if it runs a week longer without fixing.

Some sawyers raise the table until the saw barely reaches through the work. They claim that the saw cuts better and easier. This is a mistake. It puts double the work on the saw. For example: Take an eight-inch saw and a pine board. When the board runs close to the collars, the saw cuts nearly square across, and the action of the saw is to cut off the grain of the wood and split off the pieces thus cut off. This agrees with the action of cutting tools in general. When the table is raised, the tendency is to split before. This, with the increase of the section upon which the saw acts, which is double, makes it much harder for the saw. The chip is smaller, but does not compensate for the extra section of cut.

Always run the saw as high as possible. If the pulley is small, or the machine is bolted down, raise up the saws until the collars almost project through the table. Keep the saw sharp and true. Use more oil than cuss words. Then your saw will cut a great deal of lumber, and do it easily.

THE FAITH OF INVENTORS.

UNSHAKEN faith in their ideas, and a determined perseverance to overcome obstacles, are gifts with which inventors have been endowed, or, in common parlance, they have their inventions "on the brain"—mount their hobbies and ride them continually. If they were influenced by rewards, or hopes of reward ultimately, it would seem, in the eyes of the world at large, that there was a "method in their madness," and that the tangibility of wealth was the terminus of the "hobby" race. But we find a large proportion of inventors unbiased and uninfluenced by any hope of wealth, money or reward. They labor and experiment as though their life depended upon it; they labor with the hope only of ultimate success in accomplishing what they proposed to perform, and the labor is with them a labor of life and love. This labor is ever constant in their minds, ever uppermost in their thoughts, ever exerting itself in every movement and every action. They are determined to overcome every resistance. It is an example of the power of mind over matter—of intelligence over the forces of nature.

And what does the world not owe to inventors? Civilization, arts, and commerce are the fruits of the inventors' "hobbies," and the greater part of these fruits have been the product of toil, many years of labor, at a cost of life, privation and poverty; yet such was the inventors' faith that all obstacles have been overcome, and often after the results are obtained the fruit is left for others to mature and gather. Galileo declared the world "did move," and a prison was the result. Columbus, on the eve of his discovery, was nearly being thrown overboard by his discontented mariners. Harvey, the discoverer of the circulation of the blood, and Jenner, who first practiced vaccination, may be cited as examples of how great discoverers may be treated by the world before their discoveries are appreciated. Among the mechanics of a later day, Fulton, who was declared crazy; Colt, who had to mortgage his little stock of tools to obtain money to make his pistol; Goodyear, patiently toiling to obtain his results in the manufacture of rubber; Howe, bravely meeting all adversity to finish and introduce the sewing machine, may be cited as a few—very few—examples of struggling but afterwards successful inventors. The list might be extended almost *ad infinitum*. Yet when success is achieved and the true value of the invention appreciated, the tardy meed of praise is tendered to the persistent faith of the inventor who accomplished the results.

A THREE CENT STAMP DOES IT.

On receipt of a three cent stamp we will mail free to any address a copy of our little hand book entitled "Rules and Regulations for the inspection of pine and hardwood lumber," as adopted by the lumber section and sanctioned by the Council of the Board of Trade, of Toronto, June 16, 1890. Address, CANADA LUMBERMAN, Toronto, Ont.

HOW TO REPAIR A SPRUNG OR BLISTERED SAW.

TO MAKE it clear: A blister is a bent spot, or the same condition as a part of the plate forming the tooth bent for set. The plate is bent enough to stay in both cases, only a bent tooth does not change the tension, and a blister does change it; it buckles that part of the plate, and must be bent back again. This restores the tension somewhat, but in doing this that part of the plate becomes stretched, and causes tension in the surrounding plate immediately connected with the blistered spot. It seems that the only practical way to bend this blister back is by the use of a hammer and anvil. It is humped up and must be humped back again. For a saw 12 to 20 inches, 12 to 16-gauge, a two-pound hammer will do. It should have a moderately rounding face, and be very smooth, and the same is true of the anvil.

If you do not care to buy a set of tools for this, then get a two-pound machinist's hammer, pick out the highest and smoothest place on the blacksmith's anvil, and use it while he is gone to dinner. On this put a thin piece of sheet copper, then strike heavy blows directly on the convex side of the blister and force it down using your short straight-edge. When you get it down level, hammer the saw all over both sides alike on the bare anvil, except where the blister is; do not touch this spot only to true it, using copper blanket between the saw and anvil. By hammering lightly all over the plate you have restored the tension. To judge when this is right, your saw if running at a high speed, should have a little drop to it, that is, the most tension on the edge caused by hammering most near the center. To find this drop or sag, lay the saw down flat, and with the straight-edge applied across the saw at right angles with the support raise the edge next you, and the plate should show 1/32-inch drop at and near the center; turn the saw down, and it should drop the same on that side too; this for about 2,000 revolutions per minute.

In truing up the plate, test all over both sides with the short straight-edge. When you find a round hump, use the round face of the hammer, but if the high place extends in ridge-like form, that is longer one way than the other, use the pene end of the hammer parallel with the ridge. A very dry, hard block of wood, oak or maple, or what is best, *lignum vitae*, endwise of the grain, is a pretty good substitute for a flat anvil top; indeed, some sawmakers prefer to use this, but I prefer a large flat-top anvil; this always remains in shape and true.

If your saw happens to be center-bound or rim-slack, "fast" as termed by saw hammerers, it should be hammered at and near the edge; this condition is known by the saw dropping near the center too much when testing flat. The tension may be the reverse of this and drop at the edge; by forcing the straight-edge hard down, holding the saw up a little, one edge resting on a support, the edge will fall away, leaving the center the highest. This is overcome, as before said by hammering the plate about one-third the way off from the center in circles, three or four of them both sides alike, on the smooth, hard-faced anvil, with the round face of the hammer.

These rules hold good on large saws, and as far as goes on all metals.

WHERE TO FIND THE OLD-FASHIONED BUCK-SAW.

THE buck-saw has gradually gone out of use in cities, in consequence of changing methods of life. Twenty-five years ago cords of wood for the winter's use were dumped into the back yards, which were then deemed a necessary adjunct to every house, to be sawed. With the abbreviated space which the crowding of cities has brought about, this routine would not be practicable nowadays, even if it were desirable. The kindling wood factory, cutting up the log into very small pieces and kiln-drying it for convenient use, is the order of the day.

The itinerant wood-sawyer who followed a load of wood from the wagon stand has passed on. Not so, however, in the country. Many a farmer has his buck saw, which he uses on rainy days to keep himself busy,

an economy of time at which the agriculturist, if any one, is an adept.

In sections where this is the rule the demand for the buck-saw is as large as it ever was, and in its perfection the saw has ever kept in line with the step of our day. Better sorts are made of what is called "razor steel," which is more in its name than in its approaching the high order which its appellation would signify.

It is, however, carefully selected from high grades: how carefully, being shown by an extra cost of fifty per cent. over ordinary sorts. The bracing of the saw has also reached a point of high technical skill. The middle brace often represents an elliptic in its center, reaching at both ends a solid piece of wood. What is claimed, however, to be superior has the points separately joined in the frame at the handle end, reaching a point solidly in the further upright. This gives a certain spring and strength to the movement, which is in itself a study. Then the frame itself is light, combining all in strength, utility, graceful lines, workmanship, and ease in movement.

Nothing is more laborious outside of the stoke-hole of an ocean steamer than the sawing of wood and the care and skill with which the saw is made and put together are full of thought to the reflective mind in considering the strides making in this mechanical age

HOW TO DRY OAK.

A CORRESPONDENT of the *Scientific American* asks the following question: "Would you kindly inform a reader how to successfully kiln dry oak lumber and not have it warp? We use twelve feet even length, best quality Wisconsin red oak. In piling we have six sticks even thickness two feet apart, foundation of piles perfectly level but the lumber is not straight. With exhaust in day we have one hundred and thirty degrees, live steam at night one hundred and sixty to one hundred and eighty degrees of heat. Sometimes in the middle of drying we allow the kiln to cool down entirely; for instance, stopping Saturday night and not starting again till Monday morning. Does that affect it? What is the right temperature for drying oak when hot air is not used? How is lumber dried with hot air? What degree of heat and what size of blower? How can I figure the pressure of force of any sized blower?" The answer given is as follows: Try turning steam into the drying room at the same time steam is turned upon the coils. Keep the room moist in this way until the lumber gets heated to one hundred and thirty or one hundred and fifty degrees. Then shut off steam from the room and continue the heat with very little ventilation. This will dry the lumber evenly and make it less liable to warp. It is better to have an even heat, and the drying should be finished in a week. It is better for drying oak to heat to two hundred degrees if possible. This you can do with live steam by closing drying room nearly tight during the last of the process. Ventilating blowers give about two ounces pressure to the per square inch. The pressure depends upon the speed.

A SIMPLE FIRE EXTINGUISHER.

IT IS THE opinion of many that some of the money which is spent by factories, mills, and stores on the introduction of pipes and valves for fire extinction might be saved by the adoption of a much simpler method. Both sulphur and ammonia are well adapted for extinguishing fire. Sulphur absorbs oxygen and forms sulphuric acid, the fumes of which are much heavier than air. The quantity required would be small, since seventy grammes of sulphur can make one hundred cubic metres of air inimical to combustion. An effective sulphur extinguishing apparatus can be made of a large box of moderate depth and open at the top. It should be hinged at one end or one side to a protected ceiling, and kept close thereto by a cord or wire connected with a wire or strap formed chiefly of cadmium fusible at 144° F. Inside the box is placed a considerable quantity of cotton wadding well saturated with powdered sulphurous acid gas is instantly evolved, which extinguishes the fire by rendering the air unfit for combustion.



Keep the lag-bolts and lock-nuts of machines tight. Many machines that have become rickety and shake can be made to work perfectly still by attending to them in this particular.

A Powerful Gas. A German scientist has discovered a curious gaseous compound, made up of oxygen and hydrogen. It dissolves metals, and with silver and mercury it forms powerful explosives.

True Economy - When selecting pulleys or belts don't be afraid of having the face of the pulley or the belt too wide. Economy will be found in the use of wide belts if not carried to extremes.

Some German engineers have invented a new lining for bearings. It consists of a thin layer of compressed vegetable parchment, and may be made to stand a great deal of use by being occasionally impregnated with mineral oil.

Few engineers will assert that either of the three methods in common use from prime movers to the machines is so good that nothing better need be desired. Toothed wheels, flat belts and endless rope have respectively useful qualities peculiar to themselves, rendering each better adapted to given conditions of work than its companions. Nevertheless none of them claim to be quite perfect.

Oxidation is one great source of deterioration in boilers, and is caused by the air held in the water, the process being intensified by the heat and pressure. That the corrosion of boilers is caused by the oxygen liberated from the water is shown by the fact that its specific gravity is greater than steam (nearly double) and therefore it would naturally remain near the water line; and it is found that the corrosion is nearly always at that point.

Mention is made of an ingenious engineer, who desiring better lubrication of indicator pistons, has an internal reservoir formed in the body of the piston, so that the steam pressure acting on the surface of the lubricant, forces it through small outlets into a groove on the other surface of the piston. This piston is thus continuously lubricated, and the oil under pressure in the groove forms a packing, one full of oil lasting, it is asserted, while taking twenty-five diagrams.

The three elements of electrical transmission of power are: (1) The generators, which are placed at the power station, and which are driven by the water wheel or steam engine or other prime mover; (2) the copper conductors, which are placed on poles like telegraph wires, and which conduct the electric current from the generators to (3) the motors, which deliver the electrical energy to all kinds of machinery. The motors are either belted or geared to these machines.

The most effectual remedy for preventing belts from running to one side of the pulley would be to find out first if the face of the pulley is straight; if not to straighten it. In some cases the shafts may not be in line. The remedy in this case would be to slacken up the hanger bolts and drive the hangers out or in, as the case may be, until both ends of the shaft become parallel. This can be determined by getting the centres of the shafts at both ends by means of a long strip of board.

Plumbago has long been regarded with favor by many engineers as a lubricant, and in many places it seems to fit where everything else has failed, noticeably in rough bearings, in which the plumbago can settle and fill up, making a smooth bearing in place of the old one. If this partial use of its lubricating qualities is successful it would seem that a bearing made wholly of this material would be still better, but whether superior to a good bearing lubricated with oil remains to be demonstrated, and considering that self-oiling bearings are now plentiful and efficient, the advantage of no oil disappears.

A correspondent of an engineers' paper suggests that white paint for boiler fronts, smoke stacks and other iron surfaces in the engine room, instead of black, as commonly used is more pleasing and makes a better appearance; besides, it is known that lime is a non-conductor of heat, therefore, whitewash must be considered an excellent material with which to cover the many metal surfaces on which black paint is generally used. He argues that white induces cleanliness, and that there is no argument against its use but laziness.

A considerable saving in repairing saws is attributed to the process of electric welding. It was formerly necessary to cut down to a smaller size any saw from which a tooth had been broken, but it is now only necessary to fit in a new tooth and secure it in place by electric welding. A drop of oil restores the temper. The joint in continuous band saws is also made by this process.



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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 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.

SPECIAL ANNOUNCEMENT.

WITH the first number of the thirteenth volume of the CANADA LUMBERMAN, which will be the number of January coming, this journal will appear in an entirely new dress, printed throughout from new type from the leading type foundries of the United States and Great Britain; and the mechanical preparation of the paper, in every particular, will be executed in the best style of the art preservative. We shall allow the paper, when it appears, to "speak its own praise," but it is hardly anticipating too much to say, that we have determined to "get there" with the handsomest printed trade journal the country can produce. The work will be done in our own office, on the premises, and under careful personal supervision.

Advertisers, who purpose making changes for January, will oblige by sending in their matter as early as possible, as the work of placing the journal in new type from cover to cover calls for considerable time.

The distinctly newspaper and literary features of THE LUMBERMAN will be made to keep pace with the mechanical improvements.

COMMERCIAL INFLATION AND THE BUILDING TRADES.

IT is true that not a few shrewd men have made fortunes during the period of a commercial boom. Where this has been the history of one, scores of others, though they made money at the time, let it slip through their fingers when the boom had ceased, for just as surely as night follows day, so comes a collapse as a

sequence of commercial inflation. Few there be who successfully go through the combined periods of inflation and collapse. We need only refer to the history of Manitoba as an instance not far remote, and one that has a forcible lodgment in the memory of many to this date.

We are not forgetful of the fact that it is during these periods of inflation that the greater enterprise is often shown by individuals and communities; and that prosperous cities and towns have an existence to-day, that would never have reached more than the conditions of a village or hamlet, had they not first gone through the hands of the enterprising boomster. The same thing is observable in commercial undertakings of various kinds. How few railroads of any country, that may be paying properties to the present owners, did better for their promoters than land them in bankruptcy. As the pioneer of the forest endures the severest hardships, not unfrequently breaking down physically under the strain, while future generations reap the rewards of his toil, a kindred law exists in the world of commerce, which builds prosperously on the work of those who went before, and courageously laid the foundations.

It is not the case that the pioneer always builds wisely and well. More frequently the peculiar spirit of daring and impetuosity that makes him a pioneer is combined with it a certain recklessness that leads him to take chances that the more-conservative man would never take. But had there been no Columbus, would there have been a new continent? Where would science be to-day had there not been a Newton to lead the way?

Our own city is not void of some experience, that if not directly, at least indirectly, bears a relation to this line of thought. Last month the news columns of THE LUMBERMAN told the story of a considerable number of local failures in the lumber and building trades. This month adds full as many more to the list, and rumblings are heard of others. These periodic troubles are not uncommon to the building trades, and in no way presage anything alarming to the general lumber trade. But the very fact that from time to time they show themselves the more distinctly is the cause of their existence marked.

A few years ago, real estate operations in Toronto shot ahead with race horse speed. This circumstance gave birth to a volume of speculative building far beyond the requirements of the city. It was undertaken largely by men of no commercial strength, but then the boom was on, and where to-day, loan associations, money lenders and capitalists guard the treasury with the watchfulness of an eagle, then money was plethoric and one did not require a gilt-edge rating to secure either credit or capital. The result: everybody was doing something in real estate and building. The business man, working on a limited capital, managed somehow to extract sufficient money from his business to go into building, confident that he had only to erect his houses and ticket them "for sale," and he would find a customer as readily for them as for the sugar or cotton stored behind his counter, and with a considerably larger profit for his labor. Many did this and did it again, until the time came when it could not be done again. Then followed the pinch that is sure to come when one's capital is locked up in property of the character of houses and lands, that when slow to move are slow indeed. And when the effort to move became desperate, as it would in some cases, then it was found that like the tailor's suitings that had not first been sponged, there was a good deal of shrinkage visible.

What is the explanation? The position is very nicely put by the *Northwestern Lumberman*, discussing the subject not in a local but in a general light.

In periods of dullness, when money is hard to get, and only the very best security will obtain at all, the inclination is to build as little as possible. Even men who desire to make permanent investments of that character will defer them till times are better, as they say. They should rather build when material is cheap, because sales are slow, and dealers are anxious to sell; when labor is plenty and minimum wages prevail. After a lapse of time business recovers from stagnation, enterprise awakens, there is a demand for houses, and the capitalist or speculative builder launches into building with vigor. At the same time prices of building material and

labor advance, and it is nearly impossible to obtain either at the bargains that could have been secured in the previous dull times. The result is that the majority of buildings in all the large cities are erected at a cost that is not justified by the income that can be derived from them during a series of years. In the case of the speculative builder, who starts structures that he expects to sell at a profit before completion, or as soon as finished, he is often caught by the collapse of a boom and his bankruptcy follows, because he has paid too much for material and labor, and probably for the land on which his buildings stand. The cost of the enterprise has been inflated by the boom and when he attempts to secure a loan in dull times, he finds a wide divergence between the expenditure and the security value of his property. In other words he finds he has lost money, and if the loss is equal to the equity he put in at the start, he is a bankrupt at once. Foreclosure of mortgages and forced sales reduce the value of improvements that fall into such ill luck to a level below cost from which they may never recover.

Do these things tell of the decadence of Toronto, as some envious writers proclaim abroad? Not in any sense. They are conditions that have been encountered in the history of the most prosperous cities on the continent. During the period of real estate depression, if we shall put it that way, as noticeable as when the boom was on, Toronto's population increased with marked rapidity, whilst in commercial progress and the construction of public buildings and colossal structures, the property of sound and conservative monetary institutions, never in the history of Toronto has there been like activity.

Present conditions are not without their lessons, and perhaps the lumber trades in some measure can take these lessons home not in any sense do they reflect disparagingly on the possibilities of this great city.

A DUTY PROTEST FROM AMERICAN LUMBERMEN.

ANY fault found with the McKinley bill, in its relations to the lumber interests of Canada and the United States, has so far, come from Canadian lumbermen. It is a new thing to find American lumbermen protesting against the privileges that so many of their own number have been prepared to lay hold of with increasing avidity. But a writer in a United States lumber exchange essays to call upon the "lumber manufacturers and their employees" of this country to "immediately protest to the president and request the re-imposition of the duty removed by the act of 1890, and make such a showing to the next Congress of the United States as will give relief to our manufacturers from a competition that does not benefit consumers of lumber but damages producers."

Canadians, according to this writer, were actually too clever for Uncle Sam and "tricked him into lowering the duty on lumber." The Ohio statesman has usually been credited with being the "smart Aleck" in this deal, but it seems that Miss Canada was really too smart for him.

The increase in the importation of Canadian forest products into the United States within the past year is the circumstance that has set the American writer trembling with fear as to the further outcome. It will be known that it is these same figures that have caused so much concern to Canadian lumbermen. The figures, are these: Importations of Canadian lumber into the United States for the year ending June 30, 1890, \$10,118,198; for the year ending June 30, 1891, \$19,886,358; showing an increase of \$9,768,160.

The argument is that, whilst a few American manufacturers with Canadian interests are benefitted by these conditions, the great body of United States lumbermen are serious losers. The Canadian lumber is brought into competition with the American product, and "the effect of this competition," we are pathetically told "is felt from Maine to Texas and from Washington to Florida."

The writer of the article in question is undoubtedly an ultra-Protectionist, but he may make up his mind that whether the great body of United States lumbermen are protectionists or free traders they are well satisfied with the kind of protection Mr. McKinley has given them in his little bill, as far as Canadian lumber is concerned, and we opine they are ready to go it one better when the opportunity presents itself.

Just before closing our forms we received a well written communication from an esteemed subscriber and well known lumberman, in which the *Northwestern Lumberman's* "bogey" is handled in a vigorous fashion. We publish it in another column.

EDITORIAL NOTES

THE insurance losses on the lakes for September and October are estimated at \$465,000. The two months taken together are without precedent. We have not the figures beside us at this writing, but it may be noticed that the losses from mill fires this year have been of a most exceptional amount.

THE carpenters in the Sheffield district of England, recently obtained a considerable advance in wages. This had the effect of turning the attention of builders to doors and window frames made elsewhere. Recently doors imported ready-made from Canada have been taken into that district at a cheaper rate than they could be made there, and used in houses now in course of erection in the South Yorkshire district.

THE Hemlock lumber producers, of New York and Pennsylvania, say that trade with them is injured in a measure by the influx of cheap pine from Canada, the importation since the change in duty increasing very largely. There is no doubt about the increase; the fact that the increase has taken place, and is likely to further grow, is the best possible evidence that the tariff change has been generally acceptable to the lumber industry across the border. It may hit the hemlock men a little hard, but the lumber trade as a whole are not likely to squeal.

THE Kingston (Jamaica) correspondent of the New York *American Mail and Export Journal* writes. A good trade, and a profitable trade at that, is to be made in lumber of all kinds if properly attended to. There is a growing desire for improved dwellings in the majority of the West Indian islands, and when it is remembered that the erections are to a great extent made entirely of wood, an opinion can be formed as to whether the market with the West Indies for lumber is worth keeping and worth an attempt to extend it. The Canadians are seeking to make a strong point in this, and have taken no little pains to bring the resources of the Dominion before the builders and merchants in the more important centers of the West Indian islands. Pitch pine and white pine are the kinds most in demand. Shooks or staves and headings are also in good demand at all times, and a profitable business can be done in these if care is taken in the selection.

A GOOD work is done during the winter months by the Women's Christian Temperance Union in providing the various lumber camps of the province with magazines, newspapers and other suitable reading matter. To each Union is assigned the care of a certain number of camps. There is no reason, however, why this work should be confined to Ontario alone, and it may be that it is not. In New Brunswick, British Columbia and Quebec thousands of lumbermen are at work in the woods, and whilst, as is somewhat painfully shown in our interview with Mr. J. S. Murphy, of Quebec, in another page, there are thousands of shantymen who are unable to read, at the same time there are others in large numbers who are not so ignorant, and who doubtless appreciate the kindly acts of this philanthropic organization. More than this, the story as told by Mr. Murphy shows how far short, with all the missionary effort of our churches, christianity and philanthropy have come of meeting the mission needs of our own country.

AN experiment is being made in Paris, France, of a new system of wood paving. It consists of pieces of oak about 4 in. long, split up similarly to the ordinary freewood, and laid loosely on end in fine sand on a bed of gravel from 4 in. to 4½ in. in thickness. A layer of fine sand is then spread over them, and they are alternately watered and beaten several times. In about forty-eight hours the humidity has completely penetrated and caused the wood to swell, and it is claimed that the

mass becomes thus absolutely compact and homogeneous, and capable of supporting the heaviest traffic. In London, Bristol and other parts of England contracts have been let during the past month or so for the laying of considerable wood pavement. The contract in one case calls for the laying of yellow deal blocks, 9 in. by 6 in. on a bed of Portland cement concrete. The Puget Sound *Lumberman* alleges that native cedar, if properly laid with fir or hemlock planks underneath, will make the best kind of pavement in the long run. Thus block paving continues to hold its own on both continents.

MUST the saw mill go? A new machine has been invented which it is said will revolutionize the lumber business. This machine cuts lumber without any waste and there is no sawdust whatever. The new invention, which is called the Bradley Draw Cutting machine, is designed to cut thin boards and planks, and will cut in different thicknesses varying from one thirty-second of an inch to an inch. The inventor is Thomas S. Crane, and he and Dr. E. Bradley, who is the principle owner, have been at work on it for five years. The saving in lumber that this machine will effect will be very great. Mr. Lewis said that in small lumber, one-quarter and one-half an inch in thickness, one-quarter of the log is lost in sawdust; then another eighth is lost in planing, and the lumberman in preparing his lumber for use loses three-eighths of the log. This new invention will save all that. The machine cuts cherry, ash, birch and maple, in thicknesses from a sixteenth to a half inch. The machine is intended to be placed in the woods and to cut the trees as soon as they are felled. Green wood is cut more easily than seasoned wood, but logs have been cut with it that had lain in the yard for ten years. The machine weighs forty tons.

LUMBER conditions in the Puget Sound district, Washington, are in a most unsatisfactory shape. Between the lumbermen of Seattle and Tacoma severely strained relations exist, and the result is that these men are, metaphorically speaking, cutting one another's throats by a continued cutting of prices. As is usually the case under like circumstances, at any time, neither party is being benefitted by the cutting. No more trade is being done, and profits are sacrificed to the individual injury of every man in the trade. An attempt will be made to remedy the trouble by the formation of a state organization, when other questions including an adjustment of railway rates, and rules for inspection and grading will be considered. Get together and stick together brethren is the word from your Canadian lumber friends. This doing business on the lines of a Donnybrook fair, each man striving to do the most injury to his neighbor, is silly business. Every man gets hit in the melee. It may be that to realize right profits you may have to wait for a revival of foreign trade, but this will be better than doing business as you are now, just for the fun of the thing. There is money sometimes in what the French term the activity of remaining silent.

CHARLES Stewart Parnell, the Irish statesman whose recent death called renewed attention, was engaged at one time in the saw mill business. This is a fact not generally known on this side of the water. Mr. Parnell began business in the saw mill, timber and stone quarry trade about the year 1873. Two years previously he returned from a tour in America, and determined then to commence in the trades named at the first opportunity. The mills were built on the family estate at Avondale, near Rathdown, county Wicklow, and of course, some stir was made in the neighborhood in consequence, the reasons being that it was somewhat unusual for a landlord to engage in commercial pursuits, and that a new industry was created in the district. But very shortly Mr. Parnell's mind became engrossed in politics, and early in 1874 he took an active part in political affairs, and from then devoted himself chiefly to those concerns. The saw mills, etc., did not stop, however, nor did Mr. Parnell cease to be connected with them. Indeed, up to the time of his death he was connected with the businesses, which are still being carried on. At the works a good deal of native timber is sawn up and manufactured into wheelwrights' goods

and similar articles which are not only sold in Ireland but exported from the country. A brisk trade is also done in general turning, but particularly in the turning of brush heads, handles, etc.

THE great feat accomplished last spring by Leary, the enterprising lumberman, in shipping a raft of logs from St. John, N.B. to New York has already been recorded in these columns. Reference has also been made to the intended effort of Chas. H. Moore, of Lock, Moqr & Co., owners of timber limits and saw mills at West Lake, La., and who resides at Galveston, Texas, to out do the Leary feat. We have now from Mr. Moore himself more perfect particulars of the methods to be employed in the accomplishment of this feat. He said: I have consulted some of the oldest sea captains in America, men who have crossed the ocean and traversed the coast all their lives. They have perfect faith in my theory and believe that the experiment will be a successful one. In the first place a log raft from Galveston to London wouldn't encounter the severe storms and seas that are confined to the coast from the Bay of Fundy to New York Harbor. Of course it might be possible that a journey across the ocean with a raft might encounter weather more severe than that on the coast but it would be an unusual case. I will choose my weather, making a start from Galveston late next July. The shipment will be consigned to our London house. About three months will be employed in making the raft, which will consist of three sections, firmly spiked together after the plan of a primitive catamaran. The logs of each section will be solidly lashed by heavy cross pieces and spikes. This raft will be built in Galveston harbor and propelled across by the steam tug Storm King and a tramp ocean steamer 3,000 tons, owned by Frederick Leyland & Co., proprietors of the Leyland Line, Liverpool, Eng. The raft will be about half the size of the Leary raft. Ponderous wire cable will be used for hawsers. The raft is to consist of Texas yellow pine, and is intended for ship and house-building. The risk, of course, is great, for if the logs are lost I am out about \$20,000. If the experiment should prove a success I will make my shipments by raft every summer, as it is by this means I save freight, while the action of the water on the timber seasons and improves it.

"BE sure your sin will find you out," is an axiom of high authority that excepts not even the dishonest lumberman. An illustration of recent date is found in the case of D. W. Holt, a lumber merchant, of Phillipsburg, Pa. This man has been placed on trial in a suit to recover \$3,500 paid to him by the Peoples' Fire Insurance Company, of Pittsburg, Pa. There are 16 similar cases against Holt, which will probably be decided by this case. The whole involves about \$120,000. Some time ago Holt's lumber yard at Phillipsburg was destroyed by fire, and he succeeded in recovering \$120,000 insurance. The charge now is that the fire was the work of an incendiary, and that Holt himself was the guilty party. He was further guilty of the fraud of causing his books to be so manipulated that they were made to show about twice as much lumber as he had actually on hand. A. B. Carpenter, a former employe of Holt, has given testimony of a highly sensational character. He testified that Holt had instructed him that when he was making his daily returns to the bookkeeper of the number of feet of lumber he was to increase the amounts each day until the entire amount given made the total about twice that on hand. This done, he said that Holt had made a proposition to him that if he would fire the lumber he (Holt) would give him a quarter interest in the business and 10 per cent. of the insurance, which proposition he admitted he agreed to. Witness then explained how he prepared boxes saturated with oil to fire the yard, concluding as follows: "On the night of August 21st 1882, Holt came to me about 7 o'clock and told me it was time to finish the work up. Holt then left," said the witness, "and I fired the boxes." Carpenter then told how the crime had preyed upon his mind and he could get no rest, day or night, from a guilty conscience, how it had transformed him into an old man, his sufferings finally becoming so great that he went to the sheriff and confessed all.



N. C. DYMENT, of Barrie, thinks the outlook for the lumber trade is bright, for the reason that building throughout the country has almost been at a standstill. He approves of the action of the government in removing the export duty on logs because it had the effect of reducing the duty on lumber going into the States.

"Our shipments of oak this year," remarked Mr. Charles McGibbon, the Penetang lumberman, "have been considerable. We are doing a nice foreign trade in hardwoods. But we are taxed \$2 a thousand every time on hardwoods. What was the matter with the government that they did not get down the duty on hardwoods, when they lowered it on pine? What of the log duty, you ask. It is tough on our saw mills in the north. 'Tis too bad that such a quantity of timber should be sent to the other side, that rightly should give employment to labor in our own saw mills. If we had free trade in lumber there is little question but that the Americans would be disposed to plant their mills on our side of the lines, close to their logs."

David Ross, Whitemouth, Man., writes: Being a manufacturer of spruce lumber for the last eleven years, I felt some interest in the action taken by the pine manufacturers of the Lake of the Woods towards the spruce men; and yet I never feared but that the question would right itself very soon. It is well to remember that there are pine men who do not own allegiance to the boycotting process. Such men, I believe, as Dick, Banning & Co. and John Mather do not believe that the process is workable; and although they were willing to accept its blessings, would not shoulder its onus. The trouble with the pine men is that they want the earth, and when they get that they are not satisfied. Your remarks on boycotting are sound and fair to all classes of business, the lumber trade not excepted. The true principles of trade are stronger in their governing influence than the circular issued by the lumbermen of any one section of any one province. This too needs to be remembered in connection with this matter: trade has never been better in Manitoba than this summer, and yet men are found who are not satisfied.

A few days since I had a pleasant chat with Mr. C.A. Larkin, very recently of Brandon, Man. Mr. Larkin conducted a successful lumber business in the Prairie Province for several years, and only disposed of his business there within the past month to become a resident of Toronto. "Business has been splendid in Manitoba all summer," said Mr. Larkin. "We do no export trade, as you know. The business is entirely local, but it is keeping good pace with the growth of the country. I think our methods of doing trade in Manitoba—my reference is solely to lumber trade—is superior to yours in Ontario. We are altogether more exact and careful in the grading and inspection of our lumber. There are about twenty-five distinct grades of lumber in Manitoba. We grade more closely than you do here. For example, in the matter of flooring your people seem to cut all sorts of lengths. We cut to one uniform length, which is more economical to the builder in making up. There is practically no manufacturing of sashes, doors or other house building appurtenances in the province. You may think it strange, but we buy everything required in this way from St. Paul, paying 25% duty and then we do better than in Ontario. What influences us in our trade with the States is the fact that we secure just the class of sash and doors suited for the line of building common to this new province. My purpose in coming to Ontario is to engage in the manufacture of these things particularly for Manitoba trade. Since the falling off in export trade in British Columbia, an effort is being made to cultivate the field in Manitoba, but not with very much success. The woods there are not so well

suited for the trade, as what comes from the Rat Portage district. But I can say that there is nothing in its way to equal British Columbia cedar. The polish that is capable of being put on this wood is something surpassing competition anywhere in the world, as far as I am aware."

"I am one of the old pioneers of Canada," said P. O. Byram, of Victoria, N.B. "For fifty years of my life I have been engaged in milling and the lumber business, more or less, and have taken an interest in opening up our wilderness lands. But I find syndicates locking up our lands, and driving population out of the country despite every effort of the pioneer to open them up. What is worse, our provincial and Dominion legislators encourage this slaughtering of our once magnificent forests now fast becoming extinct. You ask why is this done: simply to encourage lumber rings, and secure for the politicians whatever influence they can exert on their behalf. I give you an example of what I mean, and this is one case among the thousands, that might be cited. About forty years ago, I came to this upper country and concluded to open up a settlement on Grand River, Victoria Co. The late Hon. R. D. Wilmott, our respected Governor was then Surveyor-General, and our present respected Governor, L. L. Tilley was also in the government, and I wrote them my desire. At once they sent Mr. Gordon, C. L. Surveyor to run in the settlement for me when I desired. He staked lots on both sides of Grand River for several miles up. In those days, on all lands laid off for actual settlement, the crown protected the lumber thereon for the benefit of the pioneers. I chose my lots and cut down about fifteen acres and put in a crop. The next year I cleared about five acres more, and did some more planting. In August a frost came and cut the crop down. For two years of hard toil, except about thirty dollars worth of hay, and after having expended four hundred and nineteen dollars, I realized nothing save a small stock of potatoes. I concluded to adhere to the old saying, "where you loose money is the best place to find it." I tried again and met with better success in my farming operations, at same time exerting some influence in having roads opened and settlements started. But the day of the politicians came. Lumber syndicates were formed and lands that were laid out for the settlers fell into their hands. These lands have been operated to a large extent by Americans who stripped the forests of their wealth, removed the logs to their own side of the lines there to be manufactured into lumber in their own mills. The effect has been to dishearten the settlers, and give poor encouragement to the erection and opening of lumber mills of our own. We should exact an export duty equivalent to the American import duty on our manufactured lumber."

Constant experience bears testimony to the accuracy of the saying, that one half the world does not know how the other half lives. We see this exemplified almost daily close to our own doors. I closed an exceedingly interesting interview with Mr. J. S. Murphy, the veteran lumberman of Quebec, a few days since, convinced that there is, as another old saw goes, more truth than poetry in the statement. Mr. Murphy has been a resident of Quebec for 46 years, and has been engaged in lumbering the greater part of his life-time. He has an office in Quebec city and operates a mill and timber limits on the St. John river employing about 300 hands. He knows almost every foot of his native province and relates some interesting history of the conditions of the habitant.

"Do you know," said Mr. Murphy, "that there are thousands of men and women in the Province of Quebec, who have never seen the ancient capital, or put eyes on a railroad. An epoch in the lives of scores of these people, was the occasion a few years ago, when a local railroad extended its ramifications into these backwood's settlements. It was a great day for the small boy, while the older boys, who took advantage of the opportunity to see how the steam horse could pull them along, had a lively time, though they came back to the woods, many of them, with heads increased in size as a result of too close acquaintance with some of the blessings of modern

civilization. These people live in the most primitive fashion. Their domicile is usually a log house, with no lack of occupants to fill every nook and corner. The average family of the French shantyman, consists, I suppose, of fifteen or sixteen junior shantymen. The counsel of Holy writ to be fruitful and multiply and replenish the earth is religiously practiced by these people. You say it must take a good deal to fill the mouths of families of this size. It does, and it is surprising how little it is done on. Each family has a patch of a garden, where, if the season is at all favorable, a crop of potatoes and other vegetables is grown, which goes a good way towards tiding them over the winter. In summer, work is found chiefly in the mills, where fair wages are earned. This lasts about six months of the year. In winter a certain number of men go into the woods, but employment of course is not found for all. From \$10. to \$12. a month is paid the men in winter, and from \$5 to \$7 to boys of sixteen and seventeen years of age. This is exclusive of their board. We feed them well, not with the dainties you are accustomed to get in Toronto, but good, substantial food and abundance of it. It is undoubtedly a monotonous life, yet these people taking them altogether seem happy and contented. Thousands of them can neither read nor write, but I am glad to say that of late years through the efforts of missionaries and various philanthropic organizations a change is being made in these respects; but the field is a wide one to cover.

"The fact that work cannot be found in winter for large numbers of these people has caused the removal of thousands of them to Massachusetts, where not only the men, but also the women and children find work in the cotton factories.

"To leave this phase of lumbering and replying to your enquiry as to the condition of trade in Quebec, I may say," continued Mr. Murphy, "that trade during the season just closed was very dull. One hundred and fifty six cargoes of lumber less than last year left our ports, representing in money about \$3,000,000. This is a considerable reduction in one season's business. The competition of the Baltic has affected our English trade of late years. Cheap as one may think labor in Canada, we cannot commence to compete with foreign labor. On the Baltic, women work in the lumber mills, doing work that we would consider altogether beyond the physical ability of the sex, receiving eight and ten cents a day. It is chiefly a poor grade of lumber that reaches England from these ports, but it is sold at a price so much lower, relatively than ours, that Canadian forest products are at big disadvantage. Where one vessel leaves Canada for England, six leave the Baltic ports and we find this circumstance operates seriously against trade here.

"Yes, I am hopeful that the building of the new Manchester ship canal will help our trade with England. In fact I know where a beneficial effect has already been experienced by Canadian dealers. Lumber for Manchester will now go direct from Canada, and not as hitherto, first to Liverpool and then undergo additional carrying expense before reaching Manchester. We will likely do an increased trade with Manchester. Freights have run high this year and that has had a hurtful influence on trade with England. As many as fifteen or twenty vessels loaded with lumber from Canada have been lost during the year.

"Trade with the United States has been good. I ship all my spruce to Troy, Albany and Burlington. Have done so for years and established a good trade at these points. We ship of course altogether by water, which makes our season short. Towards the close of the season freights to American ports went up from \$2.25 to \$3.50 thousand. This led American lumbermen, who had bought our lumber, to order it to be held here until next spring. We get \$7.00 for coarse and \$12.00 for better grades in Quebec.

"Though the season closed has been dull we anticipate a marked improvement in business in the spring. The lumber trade in England, which has been more than dull for a year past, shows encouraging signs of improvement. Our stocks of lumber are low, there will be a good work done in the woods this winter and all these conditions portend better things. Prices will, I think, hold firm."

[WRITTEN FOR THE CANADA LUMBERMAN.]

GUIDING PRINCIPLES OF LABOR AND CAPITAL.

THE best time, it has been said, to prepare for war, is when a nation is at peace. The time to discuss the relations of labor and capital is not when the mind is inflamed by the passions that seldom fail to be roused during the prevalence of a strike, but when business is going on undisturbed, and the workman in the shop, and the employer in his office are doing with all their heart the work that is nearest to them.

We do not suppose that, on general principles, any reasonable person will dispute the right of either employer or employee to become members of an association organized for the purpose of advancing interests common to those identified with their particular calling. Capitalists and employers of labor, we are led to think, would be serving their own interests better, if they got together more frequently than is the practice with the majority of tradesmen at the present time. In every branch of business questions are constantly arising, that can only be settled right, after careful and united consideration by everyone interested in the particular trade concerned. This getting closer together occasionally would lead to improved methods of doing business, a removal, measurably at least, of some of the results of present day competition, an increase in profits in some cases, where business, is being done almost for nothing, and would be the means of creating a spirit of amity and fraternity, that in this break-neck-age is to be preferred to the diamond cut diamond policy that is too much the vogue. Briefly put the old illustration of the strength to be found in the bundle of sticks has its application to the commercial world.

When purposes of this character bring business men together, whether they be lumbermen, millers, manufacturers, or merchants, good must be the result. If the object is to combine in any manner for the oppression of the employee, to take unfair advantage of certain favorable conditions of trade in existence at the time, and thus bear tyrannically on the people of a community in general, then occasion is given to employ means to subvert these ends.

Workingmen, and we include those of any class, who work with hand or head, and we may use the term in its generic sense, embracing all men and women, who work for a livelihood, have an equal right with the employer to band themselves together into organizations for mutual improvement, mental and social, and that they may be in organized shape to resist attempts that might be made to deprive them of their rights and freedom, providing always, that only manly and honorable means are employed to accomplish the end desired, and that these means, even though approved of by a majority of the assembly or society, by whatever name it be called, do not operate unfairly against any one or more of their own members or workmen engaged in that trade.

When workingmen's societies get away from these leading principles, they resign cause for the sympathy and support of all worthy people just as much as the capitalist does when he uses his position and opportunities for personal aggrandizement, regardless of how others may suffer.

Stating the case in these terms, without pretending to enter into an elaborate discussion of the labor problem, we refer to one question only, but one that probably more than any other is the cause of frequent ferment in labor circles, and which if rightly solved would itself solve others. What is a day's work? Custom has fixed it at various lengths. The government employee has sometimes done his work without doing it. He may even be pursuing another vocation, but manages to draw his day's pay. The bookkeeper in the office, clerk in the store, mechanic at his bench, lumberman in the mill may work six, eight, ten, twelve or even fourteen hours a day. Custom has no absolutely fixed rule, nor can custom correctly make a rule. A day's work is measured by the work a man does within that day, whatever the time-keeper's record may show. Two men may work in the same shop, commence work together and drop their tools at the ringing of the same bell. One may have worked fifty per cent. longer than the other during the same time.

The case has been squarely stated by the head of a

large painter's firm, where the eight hour rule prevails. He said:

When a painter comes to me for a job I ask him if he is a first class workman, and if he belongs to the painter's union, to both of which he invariably replies in the affirmative. Well, then, say I, your union makes two demands of me, and I will only make one of you in return. Your union says that you must be paid \$3.50 a day, and that the day's work must be only eight hours. Now, my one demand of you is this, that you will give me in return for eight hours work at \$3.50 day an able bodied man's work. I have discovered after repeated experiments that a skilled, able-bodied painter can paint eight rooms with one coat of paint in a day, and I demand of you to paint eight rooms a day or else you needn't begin work.

Some of the fellows who want work, when they hear my demand, shrug their shoulders and say, "Well I'm no steam engine," or "I'm no horse," while others who are more good-natured say they are willing to make a trial. I find, however, that a majority are not able to do eight rooms in a day. Some do seven, some seven and a half, and some only six. All men, however, who cannot do eight rooms are paid off, and only those who can put one coat of paint on eight rooms are retained. Work is not impossible to be done. I have one man who can do thirteen rooms in a day if he wants to but I only ask him to do eight. I would rather pay an able-bodied man \$4 a day than \$3.50 if I can get the man I want.

The point where workingmen's unions stumble most seriously is just here. No attempt is made to grade their workmen, and the man whose habits have led him into every excess, rendering him wholly unfit to do "eight rooms a day," adhering to the painter's illustrations, is as good a man in the eyes of the union, as the sober, industrious, studious fellow, who aspires to be a peer in his trade, doing with his whole heart, whatsoever his hands find to do.

No employer of labor will object to pay this man, but there is neither business, or common sense, in the demand of the labor union that insists that good, bad, and indifferent workmen shall be dealt with alike. When a workman goes into a shop to buy goods he does not obtain cottons and silks, tweeds and broadcloths at the same price. He will pay more for one than another because the value is there. Is not the workman who paints eight rooms a day, worth more than the man, who paints only six rooms? The surprise is that the intelligent workmen do not realize the dead weight that is placed on their talents and energies by the existence and practice of this rule, which is general to workingmen's unions of all trades.

Strikes will be fewer when this law is amended.

A BATCH OF FAILURES.

NOVEMBER will be noted in lumber circles in Toronto, as following on the heels of the preceding month, with another batch of failures, chiefly of builders. In our editorial columns we have discussed the question of these periodic troubles at some length and believe that the reasons there assigned for their occurrence are correct.

The case of Bryce Brothers is probably the most important among the builders, though in many circles not unexpected. Three months ago, without giving names, we referred to a large local firm that was in deep water. The reference was to Bryce Bros. They carried on a lumber business, and besides doing a large amount of speculative building a few years ago, also held contracts in building from the Public School Board, and have done considerable paving, both board and asphalt about the city. H. H. Williams has been appointed receiver, and is busily engaged endeavoring to get the estate into better shape.

Charles McClelland, a speculative builder at Parkdale, carrying on business in the name of his wife Mary McClelland has assigned to E. R. C. Clarkson, who has been instructed by the creditors to wind up the estate. Liabilities \$34,600 with nominal assets \$38,000.

C. Spencer & Son, which means Charlotte Spencer and John William Spencer, the former being the wife of A. Spencer, who failed some years ago, have made an assignment to D. D. Christie. Assets \$2,713.10, and Liabilities \$1,400.70. The firm have a number of contracts out and if these and the other assets realize as expected, the estate will probably pay 100 cents on the dollar.

James Leighton, builder, has a lot of property on his hands, which is unsaleable, and he is consulting his creditors. Nominal assets \$18,000, and \$12,000 liabilities. A committee of creditors are investigating his affairs.

T. & R. Robertson and Hannah Mould are the names of two other building concerns, in a small way, that made assignments before the month of November ended.

Samuel Davidson, dealer in small lumber, has assigned to E. R. C. Clarkson. The estate is a small one.

A big failure is reported from Richmond, Quebec. Mr. J. C. Bedard, who for many years has carried on a large lumber business in Richmond, has assigned with liabilities of 50,000. Mr. Bedard is supposed to have lost a lot of money lately in lumber and also in slate quarries. His assets are not yet known.

The most important failure in lumber lines during the month is that of Tennant & Co., of Dock No. 3. The firm is composed of Mrs. J. Tennant and H. & A. Colwell. The direct liabilities amount to \$20,000, and the assets are estimated at \$15,000. The chief creditors are: Beck Manufacturing Co., \$2,200; Conger Lumber Co., \$2,000; Mickle, Dymont & Co., \$2,100; Peter Robertson & Co., \$1,400, and Playfair & Co. \$1,400. The firm have made an offer of 50c. on the dollar which is now being considered by the creditors.

A number of small failures in different parts of the Dominion are recorded in our regular news notes.

NEW MULTIPLE SPINDLE BORER.

THE Cant Bros. Co., of Galt, have just brought out a new Multiple Spindle Boring Machine, which is designed for accurate and rapid boring, being specially suitable for dowelling joints, table leaf work, furniture work, church furniture, school seats, etc. The frame is of iron, well braced and planed perfectly true. The mandrel frames slide on planed ways. Each mandrel frame is independently adjustable to and from the other by means of screws and crank, each mandrel being driven by an independent belt. The table works on planed ways, and is raised and lowered by means of bevel gears and screws operated by a crank and parallel shaft below. The treadle is connected to the table by adjustable rods to regulate the throw of the table, which is moved forward to the boring bits when the treadle is pushed down by the foot, and which returns to its original position when the treadle is released. The clamping device on our machine is entirely new, the work being held down by four eccentrics which are operated by one handle, so that along with the new stop it is impossible to bore the holes out of line. For extension table work our machine surpasses anything yet made. The machine can be made with one, two, three or four spindles, and will bore holes from 4 inch s to 4 feet apart.

PROTECTING THE BELTS.

ABOUT the first thing I did after taking charge of this engine, says a writer in an exchange, was to nail it in and to box in the belt. Any one who has had the misfortune to be present on the occasion of an accident to some poor unfortunate who has slipped and been crushed in the fly-wheel pit, or who has been caught by a belt and had his arm torn out of the socket, will be more than ordinarily anxious not to have such an accident happen to him, or any one in his presence or on his premises. In some countries there is a law about boxing in all wheels, shafts, belts, &c., which by any means may be the cause of death or injury to careful or even to careless people. The careless people have as much right to life as the careful ones have; they are just as much loved and their earnings may be as necessary to some one's support as though they were the most cautious and practical persons on the globe. And after all, it is not necessarily the careless men who get caught. The most careful may slip on a greasy spot, or may be seized with vertigo, or be absent-minded by reason of trouble at home. By boxing in dangerous things, you never have any terrible scenes to haunt you.

J. H. Chaloner, lumber dealer, Lauder, Man., had his stock damaged by fire.

McLellan & Black, lumber, West Brook, N.S., have dissolved.

F. Tremblay's saw mill and sash and door factory, Montreal, Que., was destroyed by fire on 29th ult. Loss, \$32,000.

THE NEWS.

ONTARIO.

—Wm. K. Snider, lumber dealer, Wilkesport, has assigned.

—The mills at Longford Mills have shut down for the season.

—Joy & Son, Napanee, have completed a large addition to their saw mill.

—Barrett Bros. are pushing ahead with their new mill at Maganettawan.

—J. W. Anderson & Co., shingle manufacturers, Lanark, have assigned.

—Dickinson's mill at Staples is closed; Ainslie's stave mill at the same place is busy.

—Omyer Bros., of Holland Centre, have sold their saw mill to Mitchell Bros., of Berkley.

—The rains of November have helped the securing of logs that had moved very slowly before.

—De Blaquiere's shingle mill at Leg Lake, recently destroyed by fire, is in course of re-erection.

—The Longford Mills Lumber Company have four camps this winter and expect to cut 12,000,000 feet.

—Large quantities of shingles are being shipped from South River, for the Shannon Shingle Co., of Toronto.

—Mr. McEachern, of Maganettawan, is at Burks Falls busily engaged shipping his summer's cut of lumber.

—The Rathbun Company, Deseronto, have shipped a car load of doors and sash primed and glazed, to South Africa.

—The remainder of the paper wood which was "hung up" in the Thessalon section is being removed by the steam barge *Lindsay*.

—The Buell, Hurdman Company have purchased a locomotive from the Eddy Company, and have leased one of their lumber yards.

—The cordage factory at Brantford has been purchased by the Consumers Cordage Company, of Montreal, Que. The price paid is understood to be \$150,000.

—John Galbraith's mill, a few miles from Emsdale, cut 67½ thousand shingles in one day, thus beating all other shingle cutting for one saw, by 34 thousand.

—Rumor states that the Georgian Bay Lumber Co. have bought Messrs Burton & Bros.' large mills at Byng Inlet North for, in the neighborhood of, \$110,000 cash.

—Considerable trouble is experienced from low water in the vicinity of Lakesfeld, and mill owners are realizing that prompt measures will have to be taken to remedy the evil.

—Messrs Burton & Bro., of Byng Inlet have shipped nearly 16,000,000 ft. this season, and their mill (one circular and gang), closed down on the 18th of November, having cut over 15,000,000.

—Mr. Gascien's large, lumber-laden, on her way to Oswego via Rideau canal sunk off Kingston. No lives were lost. Mr. Gascien is a resident of Hull. The large is one of D. Murphy's & Co's.

—Valec, an Ottawa shantyman, in a dispute about a woman, bit the whole nose off a half-breed hackman named Soucie. The nose was sewed on, but refused to reunite; inflammation set in and Soucie's death is expected.

—The water in the log pond at the Big Mill, Deseronto, has been so low that logs have had to be drawn over the mud to the slides, a state of things never known before. The mill has had an excellent year's trade.

—The Conroy mills at Alymer, Ont. are still running, nearly two hundred men being employed there. The cold weather will likely put a stop to operations this week, when all the employees will be sent to the shanty by the firm.

—The steam saw mill at Carleton Place, of William Caldwell, of Lanark, was shut down recently, the logs and limits having been exhausted by the 22 years of ceaseless havoc among them. Seven hundred chains were gathered up at the wind up.

—The steamship, *City of Midland*, left Byng Inlet, Nov. 21st for Parry Sound, Midland and Collingwood having a heavy cargo of old iron and about 60 passengers. She makes her last trip for this season next week, which will close a successful season's business.

—Paul Huffman, saw mill owner of Northfield Centre, has assigned, but his creditors have ordered the assignee to carry on the business until the two law suits he now has pending are decided. If he wins, the creditors will be paid in full. If he loses, the estate will barely pay 20 cents on the dollar.

—The following advertisement in a Toronto paper duped several score of workmen: "Wanted—50 men for lumber

woods, wages \$26 to \$35, board and fares paid. Apply 45 Wallace-ave., near Dufferin-st., after 5." The men paid the advertiser a commission of 25 cents, and they were to report at the Union Station for transportation. The men turned up, but no agent.

—The *Thessalon Advocate* says:—Very little lumbering will go on on the Manitoulin this winter, the McKinley tariff having killed the cedar industry. A few logs will be got out at Kagawong. Conlin and Walsh have got the timber on the Indian reserve at Manitowaning, and will operate extensively; this will not help the village much, as the supplies will be got at the Indian stores a Wikemikong. Very extensive operations will be carried on at Webbwood, and that village will boom this winter.

—Tenders were opened on 7th ult. at the Crown Lands Department, pursuant to advertisement, for the purchase of an estimated quantity of 32,500,000 feet of timber damaged by fire during the past summer, viz., projected berth 66 and part of 65 on the Vermillion River. The prices realized were something over \$3 per 1,000 feet, board measure, by way of bonus and in excess of Government dues. Messrs. Booth and Hale of Ottawa were the successful tenderers. The commissioner considers the sale a very good one.

—A Rat Portage correspondent writes: "The sawing season of 1891 has now closed, all the mills in the district having shut down. The planing mills are still going and lumber being shipped, but orders have eased up somewhat lately. Several outfits have been sent out to the bush by the local mills, and this week the *Arenines*, left for Reed river having a barge and outfit for D. E. Sprague, of Winnipeg. Sprague's limits are on the Rosseau river, and the logs are driven down to the Red river, but for his getting in supplies the portage is preferred, as it is between twenty and thirty miles distant, as against about one hundred miles by way of Winnipeg. Dick, Banning & Co. are having repairs and alterations made in the head gates for their water supply. Mr. Dick being here to look after the work."

QUEBEC.

—Leon Ravary, saw mill, St. Clet, has assigned.

—DuGrenier & Gagnon, saw mill, etc., Racine, have assigned.

—Ross Bros. are rebuilding their large timber slide at Buckingham.

—Three car loads of new machinery have arrived for the E. B. Eddy Coy's new paper mill at Hull.

—J. Allaire, lumber and tannery, St. Boniface, has sold out his lumber business to Edward R. Lloyd.

—Extensive alterations are being made in the pulp works of the Buckingham Manufacturing Co., Buckingham.

—Twelve square timber camps are at work in the locality of Portage du Fort which is a half more than last winter.

—Thomas Lyon has contracted with Ross Bros., of Buckingham for the making of about 1,000 pine logs. He will also go heavily into spruce.

—8,000 feet of lumber and 8 kegs of nails were used in the scaffolding required for the building of the big chimney for Mr. Eddy's factory, Hull.

—The employees of the E. B. Eddy sulphide works Hull, wear a neat nickel plate on their hats, bearing the inscription "E. B. Eddy, Sulphide."

—George Smith has shipped since the 1st day of October about 50,000 feet of basswood and ash lumber from Campbell's Bay, Pontiac Co., to the Rathbun Company, Deseronto.

—Roderick C. Carter, dealer in lumber, Montreal, has ceased to do business under the name of the Montreal Lumber Co., and has now registered under the name of the Brosseau Company.

—E. Morency, a lumber dealer in a small way at Quebec, has assigned. He is a steady man who has been in business 10 or 12 years doing a moderate trade and under small expense. And yet he has not been able make both ends meet.

—The members of the firm of J. Gilmour & Co., lumberers of Ironsides, have dissolved partnership, and the business will be carried on in the future under the name of Gilmour & Hughson. The members are John Gilmour and W. C. Hughson, of Albany, N.Y.

—The McLaren Manufacturing Company, limited, Montreal, on the demand of the Lachute Lumber Company, have gone into liquidation. The lumber company, represented by Messrs. Archibald and Foster, presented a petition to Mr. Justice Gill asking for a winding up order and the appointment of a liquidator. The petition was granted. Mr. Alex. Caldwell has been named provisional liquidator.

—Last summer when Ross Bros., of Buckingham lost connection with their Basin piling ground by way of the water

slide, they decided to pile their lumber for the future in the town, expecting that the C.P.R. would offer some inducements in the way of sidings and fair freight. After waiting until now for some sign from the company they have gone back to their first love and are now actively engaged in the work of restoring the connection. The C.P.R. will not only refuse to build the siding but will not even furnish cars to ship what is already ordered out.

—A jobber paid a visit to one of the Quebec lumbering establishments to make the customary arrangements before commencing bush operations, and was greatly surprised to learn that the standard log in vogue this year according to the principle laid down by the Quebec Government must contain 249 feet board measure instead of 200 feet as formerly. "Well, it does beat all," he said, "I have been chucked out of a job at the mines because they say the mining tax compels them to stop working, I thought I would go in for jobbing at logs this winter, but an additional fifty feet on the standard log for the same money as usual settles that spec. I think Mr. Mercier wants to run us out of the country altogether."

—John Hannigan, lumber merchant of Desrivieres, is endeavoring to effect a settlement at 20 cents in the dollar on his personal liabilities of \$45,000. He is a large shipper of hard wood lumber to the United States, and was one of the principle promoters of the Rapid Manufacturing Company, of Bedford, which collapsed ignominiously a year ago. He held 419 shares in the concern and, in addition to this, endorsed heavily for James Crothers, the president, who left with his affairs in bad shape. He owns a good deal of real estate, but his bankers have a lien for \$34,000 on it to cover his endorsements, and it is doubtful whether his estate shows more than the percentage offered.

NEW BRUNSWICK.

—John Kilburn has been in Fredericton securing men for his Quebec camps.

—Two new mills for the manufacture of spools are in course of erection in Northumberland.

—A shingle mill is to be erected just below Campbellton, on the line of the Intercolonial by David Richards, who has been lumbering on the Restigouche for several years.

—Large numbers of men are in the woods, and the prospects are that as large a cut will be made this winter as last, if not larger. Cedar, especially, will be got out in large quantities.

—Between 4,000,000 and 5,000,000 feet of spruce, and 5,000,000 or 6,000,000 feet of cedar will be cut on the Restigouche this year. The manufacturing of shingles has become quite an industry on the north shore.

—The St. Lawrence Lumber Company at Bathurst are pushing ahead the work of rebuilding on the site of the mill recently destroyed by fire. The new mill is to be completed by the opening of navigation next spring.

—A shingle mill is to be built at Marysville, near the Canada Eastern track. The land owned by Mr. Gibson, lying along the track, has an immense amount of cedar of the best quality, and the railroad will be used to bring the lumber to the mill. This will necessitate the building of a number of additional dwelling houses in the town. The building will be 60x100 feet, and the engine 160-horse power. There will be space for 12 shingle machines, but only eight will be put in at present.

MANITOBA AND THE NORTHWEST.

—The mills at Norman, Man., are shipping considerable sawdust for the C.P.R.

—All the saw mills at Norman, Man., are now closed with the exception of Cameron & Kennedy's day shift.

—Ironsides, lumber dealer, Thornhill, Man., has sold out his lumber business. He intends going into the butcher business in Miami.

—Many mill hands in Manitoba, now that the mills have closed down, are engaging in threshing operations in Manitoba and North Dakota.

—It is rumored that a company is about to take over the Ross, Hall & Brown water power at Norman, Man., and erect a mammoth paper mill here, unless Rat Portagers give a \$15,000 bonus to remove it to their town.

—H. Crowe & Co., have sold out their lumber business in Winnipeg, Man., to Jas. M. Hall, of Rat Portage, who was lately connected with the Western Lumber Co., of that place.

—The partnership existing between John E. Campbell and Andrew R. Stevens, as lumber dealers in the villages of Carman and Glenboro, Man., has been dissolved by mutual consent. John E. Campbell takes over and will continue the Carman business. A. R. Stevens will continue the Glenboro business.

BRITISH COLUMBIA.

—E. Dalack, of Haney, is getting out ties and cordwood for the C.P.R.

—The Brunette Saw Mill Company have a logging camp on the Lillooet river, where they own extensive timber limits.

—McLaren's mill at New Edinburgh is closed down for the season. The cut been in the neighborhood of 25,000,000 feet.

—A. C. Fraser, of Cowichan Lake, has a contract from Hewitt & McIntyre to get out 15,000,000 feet of logs for their mill at Cowichan.

—The lease of the premises now occupied by Smith & Clarke's mill, Victoria, having expired, a new mill will be built near Laing's ways, at James Bay.

—The large tree that has given Garry Bush Point its name and which has for years assisted navigation on the Fraser river, is in danger of being washed away.

—Fred. Robinson, who has been manager of the Beaver saw mills, Beaver, for some years, has sold out his interest to the old members of the company and gone east.

—McClymont & Co.'s saw mills in New Edinburgh, now run by Maclaren & Co., will change hands next May, when Mr. David Maclaren, of Wakefield, will take possession. Maclaren & Co. and McClymont & Co. then intend retiring from the mill business permanently.

—The *News-Advertiser*, of Vancouver says: "The saw mills are still kept running steadily, there being now four vessels loading at the Hastings Mill and one at Moodyville. The local trade has, however, slightly fallen off during the last few days as the building season is now about over."

PERSONAL.

J. S. Stain, lumberman, of Quebec, is on a visit to Eng- and on lumber business.

Assistant Government forest ranger George Bick, of Bob- cayeon, died during the month. He had held the position for twenty years.

Wm. Pulling, of the Thompson Lumber Co., Windsor, Ont., was married on 17th ult., to Miss Peacock, of Detroit, in Woodward Avenue Methodist church.

Hon. E. H. Bronson, M. P. P., the lumber King of Otta- wa, Ont., has recently purchased the noted horse Selfax. \$1,500, is said to have been the price paid.

R. K. Dobell, a prominent lumber merchant, of Quebec, has consented to run as Parliamentary candidate for the Com- mons for Quebec west. Mr. Dobell has large interests in Quebec and is known as an enterprising and liberal-minded citizen. Beyond his sympathies with Imperial Federation, it is said that Mr. Dobell has no party attachments.

Twenty-seven years ago J. D. Abbey, of Clayton, Ont., left home and was never heard of until last week, when he reached Almonte, Ont., to inquire for friends. Mr. Abbey first went into the lumber business in Michigan and became rich, when forest fires swept away property valued at \$1,000,000. Although almost ruined by this catastrophe, he was not discouraged and went to work again with renewed energy. Success once more was his lot, when he sold out his timber and went to Minnesota, where he went into farming and ranching and where he now resides.

William Henderson, who died a few weeks since at Mon- treal, Que., was one of the old settlers of that section. He was born at County Farnagh, Ireland, May 1810, and came to Quebec with his father, David Henderson, in the year 1830, where he remained for a number of years engaged in the lumber and timber trade. He came to Montreal in 1842 and here he has resided ever since. He carried on an exten- sive lumber and timber trade, retiring from active busi- ness life some years ago. He was a member of the city council, representing the St. Louis Ward, from 1868 to 1871, being the only old countryman ever elected to represent that ward in the council. He was very popular with the French- Canadian population, and employed a large number of them in his mills and elsewhere. While in the council he was in- strumental in having the by-law passed creating Mountain Park, and worked hard with the late Rev. Father Labelle to have the Northern Colonization Railway built at Jerome. He was life governor of the Protestant House of Refuge and took an active part in the welfare of the Montreal General Hospi- tal, and was also one of the founders of the Irish Protestant Benevolent Society. In the year 1835 he married a daughter of the late Captain John Jameson, of H. M. 4th Royal Bat- talion, and had a family of three girls and four boys—one daughter, Mrs. T. B. Pacy, and two sons, David H. and Nor- man, the well known lumber merchants of Montreal, besides a number of grandchildren survive him.



—Within the last six months 150 young women have taken up timber claims in the State of Washington.

—Several mills in Alabama have been obliged to cease operations because there were no logs. There has been no rain since September.

—The old propeller *Parsait*, owned by Mr. Blodgett, of Detroit, lumber laden, foundered in Lake Erie. The car- go was insured for \$2,700.

—More than 15,000,000 feet of lumber will be used in the construction of the huge building for manufacturers and liberal arts at the World's Fair.

—The statement is made that it will cost each of the makers of saw mill machinery \$8,000 to \$10,000 to make an exhibit at the World's Fair.

—The widest plank on earth is on exhibition at the railroad depot, in Humbolt, Cal. It was cut at the Elk river mill, and is 16 feet in width. It will be among the Humboldt ex- hibits at the World's Fair in Chicago.

—The chute in a logging camp at Clifton, Oregon, is three- quarters of a mile in length, and is one of the longest chutes in the world. The bottom is shod with railroad iron. A log slides the whole length in twenty seconds.

—A tree near Manistee, Mich., thirty-six feet in circumfer- ence, twelve feet in diameter, and one hundred and seventy- five feet high, will be blasted by dynamite, as there is no saw that will cut and no mill that can cut it into boards.

—Wages for woodmen in Minnesota rule somewhat higher this year than last. Some difficulty is experienced in obtain- ing men enough to supply the demand. From \$20 to \$40 a month and free transportation are being paid for help.

—Yellow pine trade conditions present a rather peculiar as- pect. In Texas orders are badly needed, while in Arkansas they are being refused, because cars in which to ship them cannot be secured. It's a pity that conditions cannot be evened up a bit.

—Typhoid fever is reported prevalent in the logging camps of the Menominee region, and in other portions of Michigan and Wisconsin. Out of 25 patents in the Menominee river hospi- tal at Marinette recently, 17 were down with typhoid, all hav- ing come from camps to the north. In a camp near Ontona- gon, Mich., 16 out of 30 men were down with the disease.

—About the most interesting thing in the lumber circle at Chippewa Falls, U.S., is the extreme scarcity of men. Loggers find it difficult to get even half a crew, and good wages. The rea- son of this scarcity of men is said to be due to the fact that but few of the "boys" have returned from Minnesota and the Dakotas where they went threshing.

—A new steam ferry is shortly to be established across the Sound between Helsingborg and Elsinore so as to connect Sweden and Denmark. The ferry will transport Swedish and Norwegian railway carriages from Helsingborg to Denmark, and German and Danish carriages from Elsinore to Sweden. A new harbor and large railway station are to be erected at Elsnore.

—Three thousand large sal trees in the Saranda, Porahat, Kolhan forests of Singbhum, were recently sold by tender. The trees were of large size, girthing from 6 to 10 ft. Ac- cording to the *Indian Forester*, this is the first attempt at a systematic utilization of the fine Singbhum timber lately made easily exportable by the opening of the Bengal Nagpur Railway, which passes through the forest.

—One of the evidences of the beginning of a new era among the Puget Sound lumbermen is the establishment, by several mill men, of yards in the agricultural districts. This is the be- ginning of an extensive yard system, which in future years will see the question of a market for Puget Sound lumber. When the markets are extended into the neighboring states the lumber industry will flourish like a green bay tree.

—M. B. Goble, an extensive dealer in lumber, of Carleets- burg, Ky., has made an assignment. His liabilities will prob- ably reach \$400,000, but the assets will be nearly the same amount. Goble was interested in the Colter Lumber Com- pany of Louisville, which failed recently, and it is said this precipitated his assignment. Claims against the estate are held entirely by Louisville and eastern banks, local institu- tions not holding any of Goble's paper.



FIRES.

Henderson Bros' planing mill, Cobourg, Ont., has been damaged by fire.

The mill and machinery of John Bonnewise, of Brodhagen, Ont., is a complete wreck from fire. Insurance \$1,500.

The saw mill and sash and door factory of I. C. Dicks, Fordwich, Ont., has been entirely destroyed by fire. Loss \$3,500, insurance \$1,500.

During the past five years there has been about twenty fires in Norman, Man., but the means of combatting them have in each been so effectual that the total damage during the whole five years has only been a few hundred dollars. A fire started in Cameron & Kennedy's mill yard a week ago, but it was quickly extinguished.

CASUALTIES.

Joseph Fowler, formerly of Orillia, was killed in a saw mill at Beggsboro, Ont.

F. Joannette, of Hu't, Que. had one hand badly mangled by a circular saw in J. R. Booth's mill.

John Kay, jr. in the employ of Cameron & Kennedy, Nor- man, Man., had his hand badly crushed a week ago.

Andrew Porlier had his leg broken through falling on a slab at Cameron & Kennedy's mill at Norman, Man.

James McGowan, head sawyer for J. Caverly, Gilmour, Ont., had three fingers taken off while sawing shingles.

Foster Hockley, a young lad of 13 years, had his hand ter- ribly mangled at McAdam's saw mill, South River, Ont.

An employee named Gendron in Edward's mills, Rockland, Ont. had three fingers cut off while working at one of the saws.

Charles Nibbs, of Owen Sound, who had been working in a saw mill at Little Current, was drowned by being knocked off a schooner.

Arthur Furber, an employee in the Victoria Harbor Lum- ber Company's mill at Garden Hill, Ont., had his arm taken off with a circular saw.

Octave Charbonneau, a shantyman, of the Madawaska, is at home in Lachute, Que., suffering from a severe wound in the leg, obtained while cutting a tree.

A tree fell on one of the men in Conlon's camp, in the Parry Sound section, breaking his arm and injuring him internally. He was taken to the hospital at Collingwood.

While piling lumber at Buell, Orr & Hurdman's dock, Ottawa, Ont., on the Hull side of the river, a workingman named Xavier Proulx fell to the ground under a heavy deal, dislocating one of his shoulders and being otherwise badly shaken up.

An old beggar inmate of the Old Men's Home for the Aged, Ottawa, Ont., was found drowned at the head of the Claudette lumber slide. The old man stooped down to drink in the river, and remained there, head submerged, in which state he was found dead a short time after.

W. Clevely, the young man in the employ of Mickle & Dy- ment, lumbermen, who was accidentally shot for a deer by some sportsmen in the woods near Huntsville, Ont., has since died. His home was in Orillia, where the remains were taken. A coroner's inquest has found James Manning, who fired the fatal shot, guilty of manslaughter.

On 19th ult., Willie McLean, a 16-year-old son of John McLean, while loading lumber in Col. Hespeler's saw mill yard at Galt, Ont. was killed. The horse, which had not been out of the stable since Saturday previous was a little frisky, and the lumber being slippery, owing to the snow and frost, the lat- fell off and the waggon ran over his head and smashed his brains out. He was picked up by a lady, and uttered:—"Oh, lay me down!" and died.

On 6th ult. the boiler in M. E. Tonkey's planing mill and sash and door factory, Sundridge, Ont., blew up, demolishing the building and machinery and injuring a number of men. The boiler was blown through the building and about 50 feet into the air, landing 175 yards from the factory. James Tern- ball, engineer, was driven through two partitions. Both legs are broken and he is terribly scalded. William Cassidy, car- penter, had a leg and arm broken by falling machinery. Several others were scalded but not seriously.

than 90,000,000 feet, the lowest for years, will be held over in the yards this winter. We have been bothered this year as in the past for want of boats and as a consequence many orders remain unfilled. Trade is taking a shape of late that operates materially against the business of the middleman. Small dealers now, as well as large, go direct to the mills and buy in carloads to suit their own convenience. This is the case in hardwoods, and especially so with pine, dealers now doing business direct with the mills in the west and in Canada. It has been pointed out that whilst there are advantages in this method of doing business, that with small dealers there are dangers, and they may regret some day that they broke away altogether from the middleman, who in this market at least, has always used them well. Good lumber is decidedly scarce, short in truth of requirements. One by ten inch pine boards are very scarce; in fact, they are almost unobtainable, not even, we are told, in your country.

White Pine.

| | | | |
|------------------------|------|---------------------------------|-------|
| 1 to 2 in. good | 2 90 | 2 to 2 in. box | 3 13 |
| 1 2 " selects | 4 45 | 1 2 " 2 in. | 13 17 |
| 1 2 " pickings | 3 34 | 4 1/2 in. and up shelving | 26 32 |
| 2 1/2 in. and up, good | 5 50 | 1 2 " coffin boards | 19 23 |
| 2 1/2 " " " " " | 5 50 | 1 2 " shippers | 16 00 |
| 2 1/2 " " " " " | 5 50 | 1 2 " x 10 in. and 12 in. com. | 16 00 |
| 2 1/2 " " " " " | 5 50 | 4 1/2 x 10 in. and 12 in. sound | 15 21 |
| 2 1/2 " " " " " | 5 50 | 4 1/2 " common | 15 21 |
| 1 to 2 in. yard picks | 3 34 | 1 2 in. dressing | 25 23 |
| 1 2 " No. 1 cuts | 2 50 | " " dressing and better | 32 33 |
| 1 2 " No. 2 cuts | 1 80 | | |

Thirteen Foot Stock Boards and Plank.

| | | | |
|------------------------|------|-----------------------------|-------|
| 1 x 10 in. up dressing | 2 90 | 1 in. siding, selected | 3 30 |
| 1 x 10 " " " " | 2 90 | 1 in. " common | 13 18 |
| 1 x 12 " " " " | 2 90 | 1 in. " " " | 40 45 |
| 1 x 12 " " " " | 2 90 | 1 in. " " " | 15 20 |
| 1 x 10 " up dressing | 2 90 | 1 1/2 x 10 in. up, dressing | 4 20 |
| 1 x 10 " " " " | 2 90 | 1 1/2 x 10 " " " " | 2 25 |

Shingles and Lath.

| | | | |
|-----------------------|------|-----------------------|------|
| Shingles, shaved pine | 6 50 | Shingles, cedar mixed | 2 75 |
| 2d quality | 5 00 | Lath, pine | 2 00 |
| Sawed, extra | 4 40 | Spruce | 2 10 |
| Sawed, clear butts | 3 10 | Hemlock | 1 80 |
| Cedar, XXX | 4 00 | | |

Buffalo and Tonawanda, N. Y.

TONAWANDA, N. Y., Nov. 30.—The weather has been favorable to the lumber trade, and at a time when there is a good deal to do before winter fairly settles down upon us; this is fortunate. Considerable stock has been coming to hand for yard purposes, and of this not a little of the better stock, which has been scarce here for some time. The time of the year is suggestive of a retrospect of the year's trade now fast coming to a close. It cannot be said that the year has been a particularly bright one for the lumber interests. Labor disturbances have caused a loss to the laboring classes, and naturally had a hurtful influence on the lumber business. The volume of trade at these points will not be up to that of last year. We look forward, however, with good reason for the hope that in us, for an increased trade in the spring.

White Pine.

| | | | |
|---------------------------|------|-------------------------|-------|
| Up's, 1 1/2, 1 1/4 & 2 in | 5 50 | Shelving, No. 1 13 in | 3 30 |
| 2 1/2 and 3 in | 5 50 | and up, 1 in | 26 00 |
| 4 in | 5 50 | Dressing, 1 1/2 in | 27 00 |
| Selects, 1 in | 3 90 | 1 1/2 x 10 & 12 | 25 00 |
| 1 1/2 to 2 in | 4 00 | 1 1/2 in | 25 00 |
| 2 1/2 and 3 in | 4 60 | 2 in | 27 50 |
| 4 in | 5 00 | Hold st'ps 1 to 2 in | 32 00 |
| Fine common, 1 in | 3 30 | Harm, No. 1, 10 & 12 in | 21 00 |
| 1 1/2 and 1 1/4 in | 3 40 | 6 & 8 in | 20 00 |
| 2 in | 3 50 | No. 2, 10 & 12 in | 17 00 |
| 2 1/2 and 3 in | 4 20 | 6 & 8 in | 16 10 |
| 4 in | 4 50 | No. 3, 10 & 12 in | 14 00 |
| Cut'g up, No. 1, 1 in | 2 50 | 6 & 8 in | 13 00 |
| 1 1/2 to 2 in | 3 00 | Common | 16 00 |
| No. 2, 1 1/2 to 2 in | 2 80 | 1 1/2 & 1 1/4 in | 17 00 |
| No. 2, 1 1/4 to 2 in | 2 40 | 2 in | 19 00 |
| No. 3, 1 1/4 to 2 in | 1 70 | | |

Box.

| | | | |
|----------------------------|-------|----------|-------|
| 1 x 10 & 12 in (No. 3 out) | 15 00 | 1 1/2 in | 13 00 |
| 1 x 10 & 12 in (No. 3 out) | 12 50 | 1 1/2 in | 13 50 |
| 1 x 13 & wider | 14 50 | 1 1/2 in | 14 00 |
| Narrow | 12 00 | 1 1/2 in | 13 00 |

Shingles

| | | | |
|--------------------------|------|-----------------------|------|
| 1 1/2 in XXX, clear | 4 00 | 1 1/2 in, *A extra | 2 60 |
| 1 1/2 in, XX, 6 in clear | 2 75 | 1 1/2 in, clear butts | 2 10 |

Lath.

| | |
|-------|------|
| No. 1 | 2 25 |
|-------|------|

Oswego, N. Y.

OSWEGO, N. Y., Nov. 30.—Trade has been on the quiet side. Prices are firm. Better grades of white pine continue scarce. Laths have an upward tendency. The work for the season is being rapidly cleaned up.

White Pine.

| | |
|---|-------|
| Three uppers, 1 1/2, 1 1/4 & 2 inch | 8 45 |
| Pickings, 1 1/2, 1 1/4 & 2 in | 3 00 |
| No. 1 cutting up, 1 1/2, 1 1/4 & 2 in | 31 00 |
| No. 2 cutting up, 1 1/2, 1 1/4 & 2 in | 29 00 |
| In strips, 4 to 8 wide, selected for moulding strips, 1 1/2 to 1 1/4 in | 31 00 |

Siding.

| | |
|-------------------------|-------|
| 1 in siding, cutting up | 3 00 |
| 1 1/2 in selected | 3 00 |
| 1 1/2 in dressing | 19 00 |
| 1 in dressing | 19 00 |
| 1 in No. 1 cuts | 14 00 |
| 1 in No. 2 cuts | 13 00 |

1 1/2 in.

| | |
|------------------------------------|-------|
| 12 & 16 ft. mill run | 20 00 |
| 12 & 16 ft. No. 1 & 2, barn boards | 17 00 |
| 12 & 16 ft. dressing and better | 25 00 |
| 12 & 16 ft. No 2 cuts | 13 00 |

1 1/2 in.

| | |
|--------------------------------------|-------|
| 12 & 13 ft. mill run, mill culls out | 19 00 |
| 12 & 13 ft. dressing and better | 25 00 |
| 12 & 13 ft. No 1 culls | 16 00 |
| 12 & 13 ft. No 2 culls | 15 00 |
| 12 & 13 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 |
| 14 to 13 ft. No 1 culls | 9 50 |

1 1/2 to 2 inches.

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

1 1/2 inches.

| | |
|--------------------------|-------|
| Mill run, mill culls out | 13 00 |
| Dressing and better | 11 00 |

6, 7 or 8, mill run, mill

| | |
|--------------------------|-------|
| 6, 7 or 8, No. 1 culls | 15 00 |
| 6, 7 or 8, drsg & better | 19 00 |

Shingles.

| | |
|-----------------------------|------|
| XXX, 1 1/2 in pine | 3 80 |
| Clear butts, pine, 1 1/2 in | 2 80 |
| XXX, 1 1/2 in pine | 3 00 |
| Stocks cedars, 5 or 6 in | 4 50 |

Lath.

| | |
|--------------|------|
| No. 1, 1 1/2 | 2 10 |
| No. 1, 1 1/4 | 1 60 |

Saginaw, Mich.

SAGINAW, MICH., Nov. 30.—Little activity prevails in the cargo market, the business in this direction being ended for the season. No more stock will be bought for lake shipment, and we do not hear of any purchasers yet for spring delivery. Prices are stiff, good lumber being short of the demand. Yard trade is good, and the planing mills are doing a fairly active business. Taking the season throughout, the business will show a nice average. The statement is confidently made that there is less unsold lumber on the mill docks in proportion to the total output than one year ago.

Finishing Lumber—Rough.

| | |
|-------------------------------|------|
| Uppers, 1, 1 1/2 and 1 1/4 in | 4 50 |
| 2 in | 4 00 |
| Selects, 1 in | 3 00 |
| 1 1/2 & 1 1/4 | 3 00 |
| 2 in | 3 00 |

Siding.

| | |
|----------------|------|
| Clear, 1/2 in | 2 00 |
| 1/2 in | 1 50 |
| Select, 1/2 in | 2 00 |
| 1/2 in | 3 00 |

Timber, Joint and Scantling.

| | | | |
|--|-------|------------|-------|
| 2 x 4 to 10 x 10, 12, 14 and 16 ft \$10 co | 20 ft | 12 00 | |
| 18 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 1 1/2 in, Climax | 3 50 |
| XXX Saginaw | 3 40 |
| XX Climax | 2 00 |
| 1 1/2 in 4 in c. b. | 1 25 |

Lath.

| | |
|---------------------------|------|
| Lath, No. 1 white pine | 2 00 |
| Lath No. 2 W. pine Norway | 1 50 |

Boston, Mass.

BOSTON, MASS., Nov. 30.—Quietness in lumber reigns supreme at the Hub. No quiet volume of business has been done during the month, and we are likely to have a quiet winter. Spruce is keeping an emphatic upper lip, seldom, if ever, has the position been more firm. It is only fair to say that the chief reason for this is its scarcity, rather than any particular demand. Prices on hard pine are low and have ruled so all summer.

Western Pine—by car load.

| | |
|-------------------------------------|------|
| Uppers, 1 in | 4 50 |
| 1 1/2 & 2 in | 4 50 |
| Selects, 1 in | 4 00 |
| 1 1/2 & 2 in | 4 00 |
| Moulding boards, 7 to 11 inch clear | 3 00 |
| 60 per cent clear | 3 00 |
| Fine common 1 inch | 3 00 |
| 1 1/2, 1 1/4 & 2 inch | 3 00 |

Eastern Pine—Cargo or Car Load.

| | |
|----------------------|-------|
| Nos. 1, 2 & 3 | 4 00 |
| 4 | 3 00 |
| 5 | 2 00 |
| Ship'g bds & coarse | 1 00 |
| Refuse | 1 00 |
| West'rr pine clapbds | 4 50 |
| 4 ft. sap extra | 50 00 |

Spruce—by Cargo.

| | |
|-------------------------------------|-------|
| Scantling and plank, random cargoes | 14 00 |
| Yard orders, ordinary sizes | 15 00 |
| Yard orders, extra sizes | 16 00 |
| Clear floor boards | 19 00 |
| No. 2 | 18 00 |

Lath.

| | |
|-----------------|------|
| Spruce by cargo | 2 10 |
|-----------------|------|

Shingles.

| | |
|-----------------------|------|
| Spruce | 1 35 |
| Pine, 1 1/2 in. extra | 4 00 |
| Pine, No. 1 | 3 00 |

Coarse rough.

| | |
|------------------------|-------|
| 1 1/2 in | 12 00 |
| 1 1/4 in | 12 00 |
| 1 1/2 in dressed | 12 00 |
| Clapbds., extra, 4 ft. | 34 00 |
| Clear, 4 ft. | 30 00 |
| Second clear | 25 00 |
| No. 1 | 20 00 |

Lath.

| | |
|-------------------------|-------|
| Clapboards, 4 ft., sap | 40 00 |
| clear | 45 00 |
| Sap, and clear | 35 00 |
| Heart extra | 50 00 |
| Heart clear | 45 00 |
| Bevelsiding 6 in, clear | 23 00 |

—J. L. Hughes, of Brandon, Man., is in receipt of two large barges of lumber from his mills on Rainy River. The expectation is that the entire summer's cut will be received before the close of navigation.

SAW LOG SLEIGHS FOR SALE—VERY CHEAP.
 FIFTY sets one team saw log sleighs, new Ottawa pattern (steel shod), made of the best material throughout, good as new. MUSSOM BOYD & CO., Bobcaygeon, Ont.



A REPLY TO AMERICAN NONSENSE ON THE DUTY QUESTION.

Editor Canada Lumberman.—What is the matter with the editor of the *Northwestern Lumberman*, does he sleep o' nights? or is he physically unstrung by insomnia resulting from the "bogy" he has conjured up regarding the disastrous effects on American lumbermen's interests by the admission of Canadian lumber into the United States at the current rate of duty? The frantic inconsistency in some of the pleas put forth both in the opening letter by Mr. Huyett and followed by equally absurd propositions in letters of commendation that appear in the issue of the paper Nov. 28th, are to say the least refreshing. It would seem that we Canadians are terrible people. We actually control the Congress of the United States. We compelled the legislation which resulted in the decrease of the duty from \$2 to \$1. Was ever any statement so absurd? What are the facts? Under the McKinley act it was decreed that the duty on pine lumber should be reduced to \$1, but that from any country imposing an export duty on logs exported into the United States, an import duty should be collected on lumber equal to the export duty so collected. Against what country was that directed? any other than Canada? did that show it was Canadian influence which produced the lowering of the duty or did it clearly show that Canada must be brought to time and be made to abolish the export duty then imposed on logs? The complaint is also made that Canada lumber demoralizes prices on hemlock and coarser grades of pine etc., "and that its admission benefits no one but the Canadian." How does it demoralize the market, by selling at lower prices? If so, does it not benefit some one, does it not benefit the American consumer, and who gets the benefit of the lower duty? An appeal is made to all employees of lumber concerns to unite in recommending some measure that will result in the exclusion of Canadian lumber. Why should they, will they benefit, will their salaries or wages be greater, were they larger when Canadian lumber was subject to a \$2 impost could they be raised if the former duty were restored? I think not. The idea of the greatest protectionist country on earth finding fault with another people because they pursue the same policy is, to say the least, cool. Because Canada wants to have Canadian logs manufactured into lumber in Canadian territory, it is termed a rank injustice to American interests, when the whole spirit of American industrial legislation is that American interests shall be fostered and developed on American soil. Fault is found with Ontario Province because she now will not sell her own private domain unless the product be manufactured within her borders; is there anything unfair in that; is it not publicly made known as one of the conditions of purchase that such shall be done? Where is the trickery? Americans, or for the matter of that, Canadians, who don't wish to purchase under such conditions, are not compelled to.

As an economic question it of course narrows itself down to whether the consumer pays the duty or not, and parties in the United States, judging by the late elections are, to say the least, evenly divided on that matter, but to attribute the lowering of the duty to the sinister influence or even the active work of Canadians is ridiculous to those who daily see the hostility with which anything appertaining to Canadian interests is met in either the Congress of the United States or the local State Legislature.

Let the fault, if any, be laid at the door of American legislators, but don't blame Canadians for what they have not done.

The *Northwestern Lumberman* should be the representative of all the trade, not of a faction. Perhaps at a later date I may return to the subject.

TORONTO, Nov. 30, 1891.

M.

MICHIGAN LETTER.

Decline of Water Shipments—Trade Prospective and Retrospective—Decadence of Michigan Forests. A Dam at Niagara Falls.

[Regular correspondence CANADA LUMBERMAN.]

THE shipments of lumber by water from Saginaw river ports during the season have been the smallest for many years, and are in the line of a gradual decline, which must ultimately have a serious effect on the water-carrying trade of the State. The following figures exhibit the shipments for the season to Nov. 1 from the entire Saginaw river for five years and illustrate the fact just stated.

| | Lumber. | Shingles. | Lath. |
|-----------|-------------|------------|------------|
| 1887..... | 486,081,627 | 74,497,000 | 25,128,000 |
| 1888..... | 436,326,000 | 75,802,000 | 29,474,000 |
| 1889..... | 376,880,000 | 87,705,000 | 18,554,000 |
| 1890..... | 382,162,000 | 70,547,000 | 11,397,000 |
| 1891..... | 365,228,000 | 72,327,000 | 13,099,000 |

It is to be remembered, in this connection, that while the shipments by water are steadily decreasing, the railroads are each year capturing a larger lumber business.

The season's trade is well over. Lumbermen are viewing the work now both retrospectively and prospectively.

Freight rates to Buffalo and Tonawanda have been advanced, and I hear of two firms who have sent instructions to forward no more of their lumber until next spring.

Some failures, as you know, have occurred this year, and Michigan lumbermen have not altogether escaped their effects. The Hagarid failure struck a number of Bay City men, and the P. A. Scribner troubles of the present month have roped in quite a number from Bay City. This firm did business at Tonawanda and the Michigan men, who suffer are: Pitts & Grange, \$17,000; Eddy Bros., \$5,500; Eddy, Avery & Eddy, \$2,800; S. G. M. Gates, \$1,600; Thomas Madden, \$4,500.

LUMBER CONDITIONS.

Dealers generally, express themselves as satisfied with the trade that has been done, despite occasional set-backs, some of which I have hinted at in this and previous letters. A prominent manufacturer here, who has been in the business in Muskegon for twenty-five years is authority for the statement that with the exception of one or two "boom" years the season of 1890-1891, has been the best, all things considered, within his memory. He bases this statement upon the fact that from the very beginning, starting with lumbering operations last winter, every condition has been favorable to the logging, driving and manufacturing of pine with a minimum expense and without losses or casualties worthy of note.

The question of the decadence of the lumber industry in a State possessed of the lumber importance of Michigan is always a leading question and gives rise to much in the way of conjecture and often little that has no other quality to recommend it. In 1867, a writer, who was supposed to have good knowledge of the question discussed, estimated the total standing pine in the Saginaw and Au Sable districts at 5,241,600,000 feet, which, at 300,000,000 feet yearly cut would be exhausted in 17 years. Well, the seventeen years are a good many years over run, and still a rather lively cut goes on. Not in any one year since that date has the production fallen below 451,000,000 in any season. At the same time there are individual parts of the State where the timber is becoming decidedly scarce. A lumberman, who recently returned from a trip to Muskegon River, where he has been looking over the lumbering prospects for the coming season, is reported as saying: "That where once the woods resounded with the crash of the axe there is now a dreary waste of barren plains, swamps and straggling trees. The camps on the Muskegon River to be operated this winter he says can be counted upon the fingers of the two hands. In the Higgins and Houghton Lake district, Matthew Wilson is about the only one who has any standing pine and but a handful, perhaps not to exceed 15,000,000 feet, which he will throw into the lake this winter. The other belts southward, along the stream and its branches, are being operated, the most of them by logging railroads and it is seldom that the primitive

methods of Michigan lumbering are seen. The present will wind up all but about half a dozen lumbering tracts tributary to this city and next season the Booming Company do not anticipate, nor have they counted on receiving more than 250,000,000 feet for the drive, and this, President Hill thinks may possibly be reduced about 50,000,000 feet. A quantity of logs will be brought to the city direct by rail and in some instances rafts will be made on Lake Michigan."

To remedy in part, at least, the trouble caused this season in Saginaw river and lake ports, the suggestion has been made to build a dam at Niagara Falls. Capt. Marshall, the government engineer in Chicago, however, says the only practicable way to get more water in the lake channels is to dig deeper. Should dams be built he says that in two or three years the water in the great lakes will be so high that people will be clamoring against that as they are now against low water.

PICA.

SAGINAW, MICH., Nov. 25, 1891.

OTTAWA LETTER.

Close of the Season—A Short Cut—Large Increase in Bush work—5,000 Men in the Woods—A Lumberman for the Cabinet—Lumbermen in Court—Where the Profits come in—Timber Limit Purchases—Piece Stuff.

[Regular correspondence CANADA LUMBERMAN.]

SO far as mill operations are concerned we have reached the end of the season. If every saw in every mill hereabouts has not stopped buzzing each is near enough the last kick to exhibit little life in the effort. The season in some respects at least has not been over satisfactory. I expect in a future letter to give you figures telling with proper exactness the outcome of the season's trade. I cannot do this to-day, but with what information is in my possession there is no risk in saying that the cut will be much behind last year. J. R. Booth has said this of the cut of his mill, and Pierce & Co. have only cut nine million feet against fifty million last year, their mill at the Chaudiere having been closed down throughout the season.

This short cut, however, is not an unmixed evil. It has left our piling grounds well cleaned out of nearly every kind of lumber. Prices have as a consequence stiffened, and the winter in the woods will be one of the busiest lumbermen have experienced for years.

Five thousand men will spend the winter in the bush this year—I am speaking only of operations of Ottawa lumbermen—as compared with three thousand last year. Road cutters are getting \$12 to \$16 a month (and their keep of course), general hands \$16 to \$20, log cutters \$20 to \$22, scorers \$26, liners \$30, hewers \$35 to \$40, cooks \$30 to 35. There is an increase of about \$4.00 a month all round. The estimates of the men employed in most of the shanties this winter are given as follows:

Bronson's & Westman, 990; Buell, Orr & Hurdman, 600; Hawkesbury Lumber Co., 400; McLaren & Edwards, 300; Ross Bros., 400; Canada Lumber Co., 200 Edward Moore, (square timber) 100; Emery Lumber Co., 300; Rochester Bros., 100; R. H. Klock's, 150; Booth's 200; Perley & Pattee's, 500. Locally this means a good deal for Ottawa and Hull. Taking an estimate of 5,000 men in the woods, with an average of \$20 a month will be an expenditure for wages alone, by the lumbermen of about \$100,000 per month, or \$500,000 for the season. The increase in pay over last year will be between \$80,000 and \$100,000.

HON. PETER WHITE FOR CABINET MINISTER.

The question of lumber representation in the Cabinet is being considered by prominent lumbermen in this section. A few days ago a deputation consisting of J. R. Booth, G. H. Perley, Hiram Robinson and Berkley Powell had an interview with Premier Abbott with this object in view, strongly urging the claims of Hon. Peter White, now Speaker of the House of Commons, to a position in the Cabinet. Mr White was for years engaged in lumbering and as a lumberman likely knows as much of lumber affairs as the next man. He has been a member of Parliament for some years, representing the north riding of the County of Renfrew. Neither friend or foe will dispute his ability to hold a seat in the

Dominion Cabinet, and altogether aside from the present movement his name has frequently been mentioned when the question of Cabinet making has been to the fore, as it has very much been, since the death of Sir John A. Macdonald. Whether he should have a place there as the representative of any particular trade interests is a question on which people will divide opinions. Abundance of precedents exist in Canadian Parliamentary practice to support the custom, for class interests hold powerful sway in our politics. Goldwin Smith tells us that this is the rule of merit in Cabinet making, one man being chosen because he is prominent in Orange circles, another for the reason that he is a good Roman Catholic, and a third to represent the prohibition movement, and so on. Perhaps so, but I shall not tread further on the dangerous field of politics.

TWO IMPORTANT LUMBER SUITS.

The suit in connection with the David Moore estate, to which you made some reference in your news columns last month has since been settled, Edward Moore agreeing to pay each of the other heirs, six in number, \$7,500, which offer was accepted. When David Moore, the father died, he was one of the wealthiest lumbermen in the Ottawa Valley, his estate being valued at \$700,000. His eldest son, Edward Moore, was left in charge of the estate. He managed it with business ability and success, having since paid out \$250,000 to the other heirs. Some complications arising as to the administration of the Quebec portion of the estate as well as a question about a large Ontario limit which had been left separately to Edward Moore by his father, the other heirs began the suit which has just been amicably settled. With regard to the disputed limit, the contention of the other heirs was that, although David Moore gave it to his eldest son, which they admitted, they held that this was under a misapprehension. Edward Moore, while repudiating this, nevertheless was prepared to make some concessions with them in view of the appreciation in value of the limit. The facts show where the profit in lumbering comes in. David Moore bought the limit originally for \$4,000. Edward Moore during his father's lifetime made \$46,000 out of it, and after his father's death \$30,000 more and finally sold it for \$46,000; total, \$126,000.

The action brought by G. B. Pattee, G. H. Perley and C. Berkley Powell, for damages against John McKay for obstructing and shutting off the waters of the Amable du Fond river has been dismissed with costs. The plaintiffs have an extensive timber limit on Long Lake and by means of the Amable du Fond, thence by the Mattawa, thence by the Ottawa, they convey their logs to their mills. They claim that in August last, while they had 25,000 logs in transit, the defendant made a dam on the Amable du Fond, which injured the river as a stream for floating logs by reducing its current. Plaintiffs claim \$4,000 damages, and a declaration that the said river cannot be so injured and that Mr. McKay shall have no right to dam it. The decision rendered, confirms McKay in his right to dam the Eau Claire river, not saying what the consequences may be.

TIMBER LIMIT SALE.

The timber limits of Messrs. Dougherty & Rochester and R. Gorman were sold by public auction during the month, creating considerable activity among lumbermen. Parcel No. 1. - Kippewa Berth, No. 21, on White Pine river was the first offered. Bidding started at \$10,000 and went as high as \$31,400, when it was knocked down to J. C. Edwards, M.P., of Rockland. Parcel No. 2—Berth A and B on river Coulonge, area 100 square miles, was withdrawn as was also the supplies and plant for the shanty, only \$18,000 being offered. The limits of Messrs. Dougherty & Rochester sold en bloc. They comprise licenses 280, 281, 283, and 284 on the Mattawa, with 21 miles frontage. Captain Murphy bidding \$57,000 at which price it was sold, the purchasers being Messrs. Thomas and William Murray, of Pembroke. A few days later these gentlemen sold the limits again to the Rathbun Company of Deseronto, at an advance on the price paid. It is stated that the Rathbuns will erect a mill between Klock's and Mattawa and thoroughly work the limits.

PIECE STUFF.

Napoleon Fateaux, who won for himself the sobriquet of "the Bonaparte of the Chaudiere" during the late strike still continues to inspect the town, as none of the mill owners will hire him. This is rough on Napoleon, but no more than he deserves.

A local paper makes the statement that the mill owners who were responsible for calling out the troops during the recent riots have decided to settle the little bill on their own account.

A report of Chief Young shows that the fire losses in the city since 1881 total up nearly half a million of dollars. Details of the nature of the fires are not given, but, there is no doubt that a considerable percentage of them is represented in the lumber trades.

Forwarders have been experiencing some difficulty in getting American boats to touch at this port, in consequence of the recent strike. Dealers have orders for the States but are troubled because of this want of shipping accommodation.

What is known as the little mill of Messrs. Buell, Orr, & Hurdman, situated close to the falls on the Hull side will be almost entirely rebuilt and made about as large as any mill in the locality. Three new saws and two patent gates are among the new machinery to be placed in it.

An experiment in cutting logs was made at J. R. Booth's mill at the Chaudiere on 7th inst., between the gangs of two patent gates, one of which was purchased by the firm this year. The men worked half a day and cut together 1,800 logs, which surpasses all previous records for that length of time. The men on the new gate cut five more than those on the old one. In addition to the two gates there were nine bandsaws at work the same afternoon, so that the cut all told must have been a very large one.

Mr. Robert Hurdman is on a trip to his lumber shanties.

At a meeting of the Trades and Labor Council held during the month, the following report was presented touching the late strike. It gives the men's view of the case:—

The struggle lasted just four weeks and three days and resulted in very material gain for the men engaged. There were about 2,200 men out and when the strike was declared off on the 16th by the committee the following was shown to be the result:—

| Firm. | Previous hours. | Present hours. | Previous wages. | Present wages. |
|--------------|-----------------|----------------|-----------------|----------------|
| Mason ... | 11 | 10 | 6.50 to 7.00 | 6.50 to 7.50 |
| Bronson ... | 11½ | 11¼ | 6.50 to 7.50 | 7.00 to 8.00 |
| Perley ... | 11½ | 11¼ | 6.50 to 7.50 | 7.00 to 8.00 |
| Booth ... | 11½ | 11¼ | 6.50 to 7.50 | 7.00 to 8.00 |
| Hurdman ... | 11½ | 10 | 6.50 to 7.50 | 6.50 to 7.50 |
| Pierce ... | 11 | 10 | 6.50 to 7.50 | 7.00 to 7.50 |
| Shepherd ... | 11 | 10 | 6.50 to 7.50 | 7.00 to 7.50 |
| Ex. L. Co. | 11 | 10 | 7.00 to 7.50 | 7.00 to 7.50 |

OTTAWA, CAN., Nov. 25th, 1891.

BRITISH COLUMBIA LETTER.

The "Devil Club"—B. C. Fir and Cedar in Toronto—Shingle Cutting all Winter—A New Lumber Company.

[Regular Correspondence—CANADA LUMBERMAN.]

YOUR article in the October LUMBERMAN of "Trees that Sting," reminds any one acquainted with the woods in British Columbia of the "Devil Club." The effects of the two are alike and are both to be avoided, if possible.

I have just learned that quantities of B.C. fir and cedar have been used in the new Confederation Life

building, going up in your city. The opinion of the contractors re these woods would be valuable to a large number of your subscribers.

Mr. MacCaulay, of the Chemainus Lumber Co., has gone to Chili, and Mr. John Wilson, of the Brunette Saw Mill Co., has gone to Australia, both in the interests of their respective firms.

The Revelstoke Lumber Co. will cut shingles all winter and get out six million feet of lumber for 1892 cut. They will soon close down the main mill for the winter.

Elmer Ward's new side-wheel boat has made its trial trip, to the satisfaction of all interested; it will be principally used on the Fraser river.

The new mill at Barnet, Burrard Inlet, will be ready to start sawing early next spring. Nearly all the machinery is in place. It is a very complete mill of 330 ft. x 50 ft., two stories. The iron burner 120 ft. high, is provided with a water jacket extending 30 ft. up its base. A siding is built. The company have very good water works for fire protection.

The Smelter Co. at Pilot Bay, Kootenay, are building a wharf 700 feet long; 500,000 feet of lumber will be used exclusive of covering.

The Pacific Coast Lumber Company of New Westminster is seeking incorporation. The managing directors of the company, Messrs. Scott, McCormick, Allen & Port, have decided to fit up their mill with the newest and most improved machinery for lumbering, and their order, which is a very heavy one, is now being placed on the cars in the east and is expected to arrive here in a week or two. The mill is situated on the end of Lulu Island just west of Messrs. McGillivray & Co.'s shops, and was formerly owned by the North Pacific Lumber Company, now extinct. The plant at present in the mill is sufficient to get out lumber for the more extended premises which the Pacific Coast Company intend to begin the erection of at once. As soon as the new machinery arrives and the necessary powers are obtained the mill will be started and run at full capacity. All the directors are thoroughly practical men with large experience in the lumber business.

H. G. R.
NEW WESTMINSTER, B. C., Nov. 18, 1891.

TRADE NOTES.

To get the best is the policy of a shrewd business man always. It is an especially sensible rule to follow in the purchase of an article connected with machinery. The poor thing is sure to go to pieces at the time one is busiest, and will give trouble when trouble is least wanted. The record of the Friction Grip Pulleys, manufactured by the Waterous Engine Works Co., of Brantford, Ont. appears to be one of unqualified satisfaction in all quarters. Seldom it is that a manufacturer can give to the world such a list of first class references of an article of machinery as is published in the LUMBERMAN for this month, of the Grip Pulley and Couplings of this company. A rather unusual, but very practical test of the strength of the Grip Pulley, was shown in the case of an accident a few days ago on the Sandwich, Amherstburg and Windsor Electric Railway. Something gave way and everything connected with the make-up of the train felt the force of the accident. The dynamo did not even escape, but an examination afterwards showed that the Grip pulley remained undisturbed and its natural strength in no way abated by the strain that had told on all the other parts. The Waterous Co. will be pleased to furnish particulars of these celebrated pulleys.

CHIPS AND BARK.

Makers of certain lines of wood goods complain that sawmill men are not careful enough in their cutting and grading—and which is often too true.

A handsome maple would be considered the last of all trees to need to blush for anything, but it is generally the first to turn red.

There is just as much difference between precept and example as there is between a horn which blows a noise and one which blows a tune.

A "crank" is now defined as a brainy yet unpractical man who has spent his life turning fortune's wheel for other men to draw prices therefrom.

Nothing but a stump now remains of the weeping willow which for so many years marked Napoleon's burial place at St. Helena.

City life is a severe trial. One man is struck with dry rot; another develops season cracks; another shrinks and swells with every circumstance. Few men stand the drying out of the natural sap of their greenness in the artificial heat of city life.

A Georgia editor, who is also a dealer in timber and pastor of the village church, was recently called upon to perform the marriage ceremony. He was in a great hurry—in fact, the couple surprised him in the middle of a heavy editorial on the tariff. "Time is money," said he, without looking up from his work. "Do you want her?" The man said, "Yes." "And do you want him?" The girl stammered an affirmative. "Man and wife!" cried the editor. "One dollar. Brink me a load of wood for it—one-third pine, balance oak."

BITS OF LUMBER.

The woods chiefly used by the Greeks and Romans were the cedar, ash, oak, yew, lotus, citron and ebony.

A Saginaw lumber firm exhibits a white pine board 16 feet long by 4½ inches wide, containing one knot the size of a nickel.

The smallest tree that grows in Great Britain may be seen on the very top of Ben Lomond. It is the dwarf willow, which at maturity, reaches a height of only two inches.

On the farm of Mr. E. Boughner, lot 6, con. 13, Windham, Norfolk Co., there is an apple tree having a girth of 9 ft. 1 in. One of the branches measures, 6 ft. 6 in. in circumference. The tree is 60 years old and is still flourishing.

Examinations of mounds in Jersler parish, in Northern Jutland, by archaeologists, have led to the discovery of oak coffins dating from the Early Bronze Age, about 1,500 B.C. Hitherto such oak coffins have only been found in Southern Jutland.

The systematic replanting of the Malagan forests is urged in a Kew bulletin, or gutta percha will disappear. Fifty years ago gutta percha was unknown in Europe. Now the annual consumption amounts to 4,000,000 pounds, with a constantly increasing demand, and the trees where it is obtained in the East Indies cover a very limited area and are being rapidly used up.

Dwarf trees, only two feet high, exact productions in miniature of sycamore, oak, cedar and apple trees, have for 200 or 300 years been raised by the Japanese. The mode of producing them is a well guarded secret, but some French gardeners have, within the past five years, almost equalled the Japanese in the production of these dwarf trees.

It has been generally asserted by the weather-wise that we are to have a cold winter with plenty of snow, but old Indians, who are accredited with a fair knowledge of weather indications gathered from nature, assert that the cold and snow will come early and go quick, and will be followed by an open and mild winter. Some lumbermen, much as they dislike the prediction, are prepared to gamble on the red man as a weather prognosticator against his white brother.

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MANUFACTURERS of and Wholesale dealers in all kinds of Lumber, Lath and Shingles. Tonawanda, N. Y.

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The Montreal *

*** Car Wheel Co.**

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Offices: New York Life Insurance Building, Montreal.

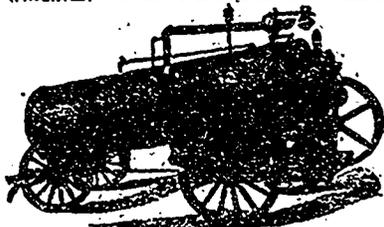
Works: Lachine, Quebec.

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 Canoe, Yacht and Boat Sails made to order. Perfect Fits guaranteed.
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Portable from 6 to 70 horse power. Surpass portable steam power heretofore produced for strength, durability, compactness, and the ease with which they can be moved.
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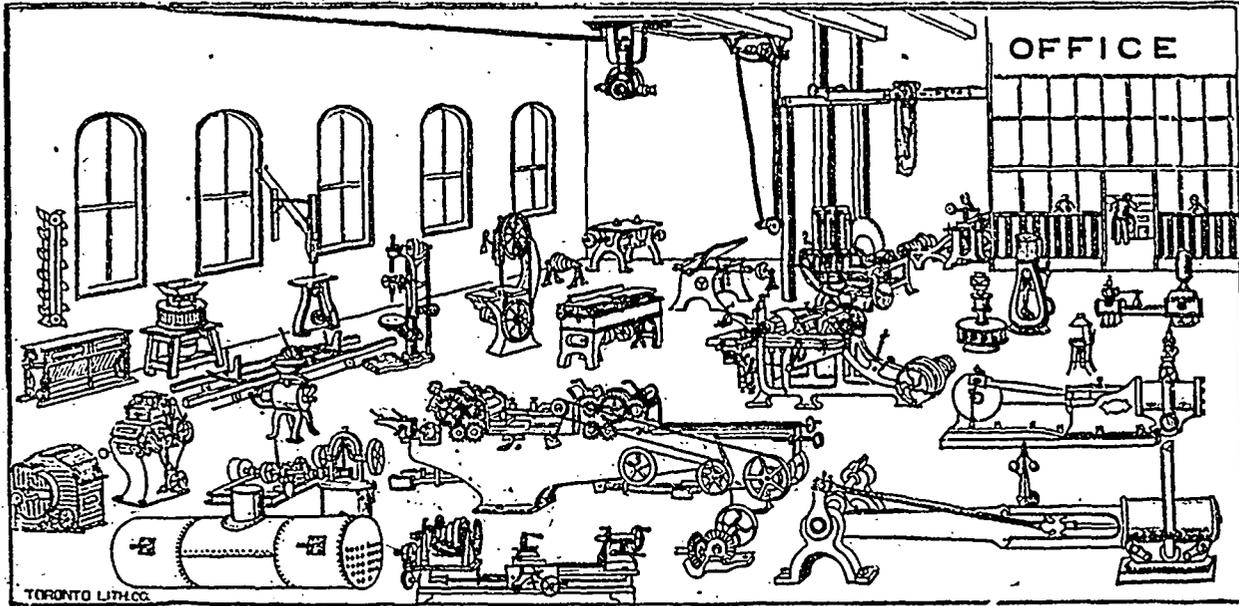
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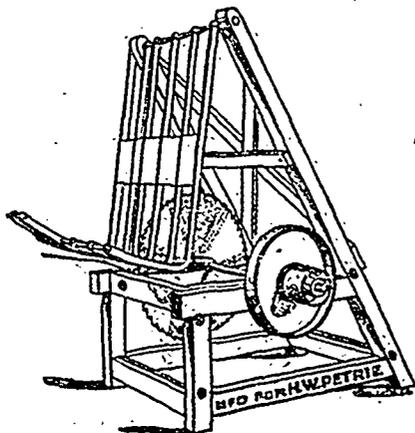
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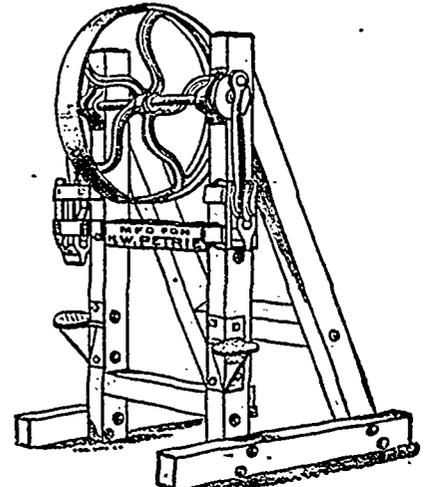
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The Improved Little Giant Planer, Matcher and Moulder.

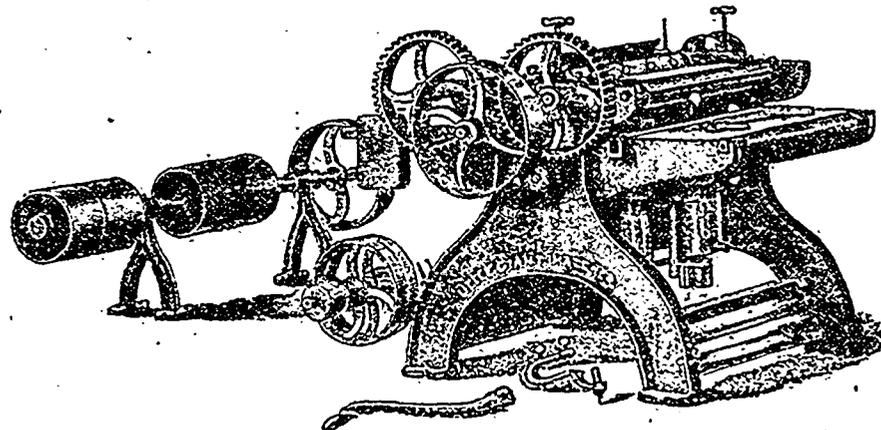


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Advertisements will be inserted in this department at the rate of 15 cents per line each insertion. When four or more consecutive insertions are ordered a discount of 25 per cent. will be allowed. This notice shows the width of the line, and is set in Nonpareil type. Advertisements must be received not later than the 27th of each month to insure insertion in the following issue.

TENDERS WANTED.

OWING to ill health of owner, a new and complete shingle mill, equipped with latest improved machinery, 3 1/2 miles from N & W. R. R. must be sold—built 1891. Room and shafting for second machine, water power sufficient to run several, timber unlimited, and convenient to operate mill winter and summer. With mill site, 5 acres of land, large boarding house, stable, also horses, sleighs, waggon, and plant for efficient equipment of mill and camp. There is big money in business for man with small capital. Must be disposed of at once. Terms liberal. Tenders will be received by the undersigned, from whom all particulars can be learned. Address: R. H. MYERS, Bracebridge, Ont., Vendor's Agent.

WANTED AT ONCE FOR CASH.

ELM dimension stock, cut to exact sizes for furniture manufacture. Give prices and full particulars to P. O. Box 2144, New York.

WANTED FOR CASH.

Half a Million Feet of Ash.

MOSTLY 1 inch, some 1 1/4 and 1 1/2 inch Canada Ash, strictly first and seconds; must be of uniform color, also commons and 1 inch Elm, 1 and 1 1/2 State particulars as to stock on hand dryness and lowest prices F. O. B. Montreal, Que. Address all particulars to

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NEW YORK,
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WANTED—TO BUY.

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

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

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

PARTNER WANTED.

TO join advertiser in manufacturing mill machinery and patented specialties. Must have \$3,000 to \$5,000 cash. Experience not necessary if capable of keeping books and attending to office work. Address: "D" 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 trantways. 20 pair wheels and axles, all in good second hand condition. very cheap.

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**WANTED
SAW MILLS**

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ROCKY MOUNTAINS

ALONG LINE OF

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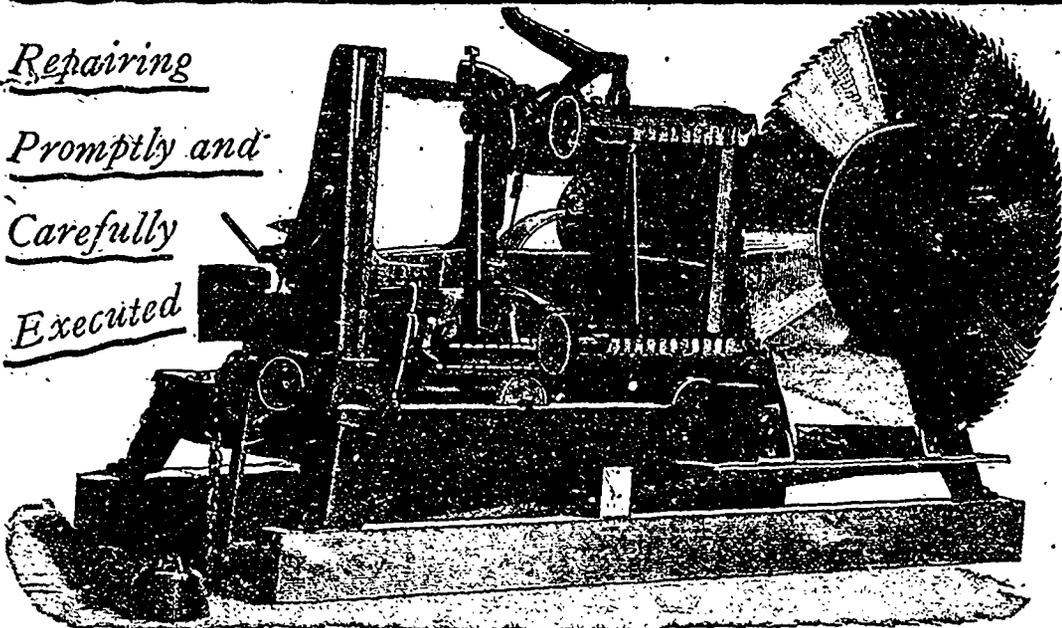
For particulars write
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4 Palmer House Block, Toronto.
Or F. J. WHITNEY, Gen. Pass. Agent,
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Repairing

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**Saw Mill
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Machinery.**

Shingle Machinery a Specialty.

The "BOSS" SHINGLE MACHINE

Manufactured by us is acknowledged by practical men to be the best machine in the market.

GRAVENHURST, ONT.

The *XXX* Saw *Gummer *and *Sharpener

HAS NO RIVAL

For Variety, Capacity or Quality of Work.

OR FOR

Simplicity, Durability, Cheapness.

Will take saws from 6 inches to 6 feet diameter, sets the saw forward one tooth at a time automatically. Sharpens any saw (rip or cross-cut) perfectly. Giving the teeth any desired pitch or bevel, and making all the teeth exactly alike. Will sharpen 20 teeth in ordinary mill saw in One Minute, or 100 teeth in shingle saw in four or five minutes. The cut shows outline of mill saw 54 inch dia. Patent applied for.

Gilmour & Co.
Lumber Manufacturers and Dealers.
F. J. DRAKE Esq, Belleville, Ont.

Trenton, Ont., 26th Aug., 1891.

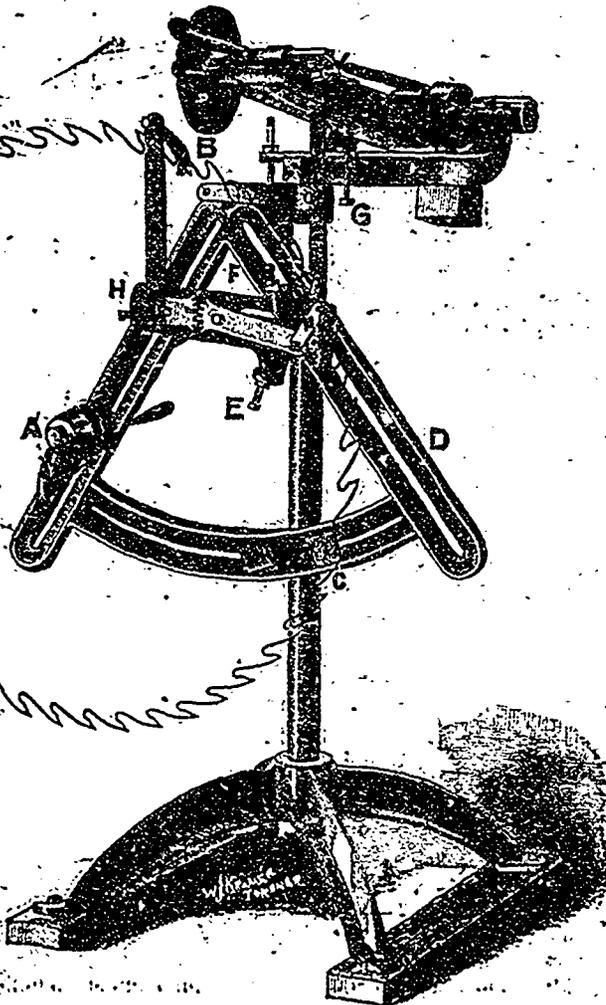
Dear Sir,—Your Patent Saw Sharpener is giving us good satisfaction. We average about one hundred thousand shingles per day, and sharpen the saws for both automatic and hand-fed machines with your Sharpener. As it keeps the teeth all perfectly uniform it must be easier on the machine and sawyer too. It causes also a great saving in files. We now only use about one 10 in. file per week. Before putting in your machine we used about six per week. As regards your Improved "XXX" Shingle-Packer—they work first rate, and are the only machines we could get that would press tight enough. We consider them the best we ever had.

Yours truly,
GILMOUR & CO.

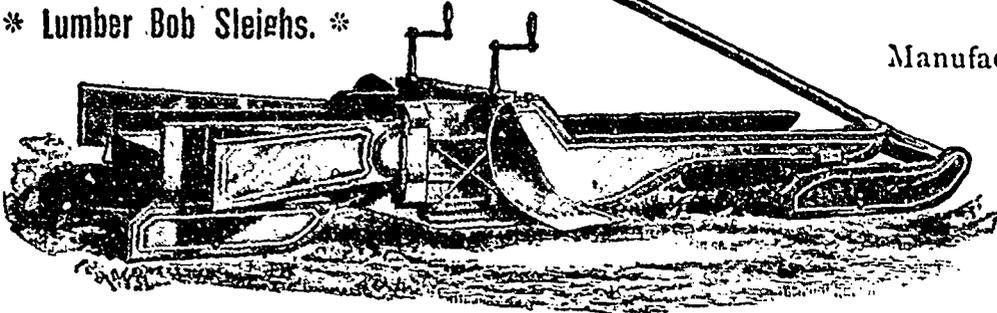
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Cant Dogs, Peavies,
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J. Muckleston & Co.

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Manufacturers of RED TOP LINE

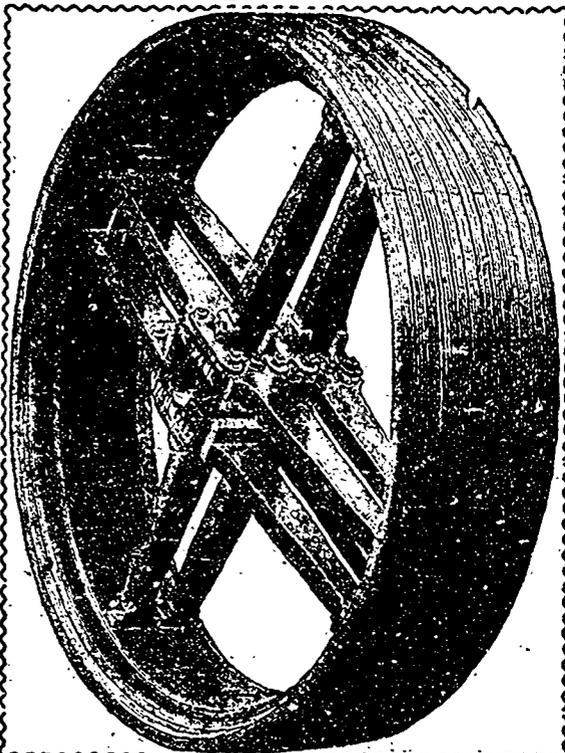
LUMBERMEN'S * TOOLS.

And Sole Licences for the Manufacture in the Dominion of
**BRAZEL'S PAT. SNOW AND SIDEWALK
PLOWS.**

DODGE PATENT

Wood * Split * Pulleys.

*We guarantee 30 to 60 per cent. more
Power with same belt.*



*Every Pulley guaranteed strong enough
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All Sizes in Stock. Send for Catalogue.

DODGE WOOD SPLIT PULLEY CO.
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If you are in need of Stationery for your office, shanties or drives, let us know your wishes and we can guarantee that both our work and prices will please you. Address, The Canada Lumberman Job Dept., Canada Life Building, Toronto, Ont.

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Wholesale Dealers in

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OFFICE:

Nos. 213, 214 and 215, Board of Trade Building,
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ARE THE ONLY SPLIT GRIP PULLEYS & CUT OFF
COUPLINGS MADE. GIVE EVERY SATISFACTION AS
DRIVERS OR DRIVEN PULLEYS. FULLY GUARANTEED.

WATEROUS ENGINE WORKS CO.
BRANTFORD, CANADA

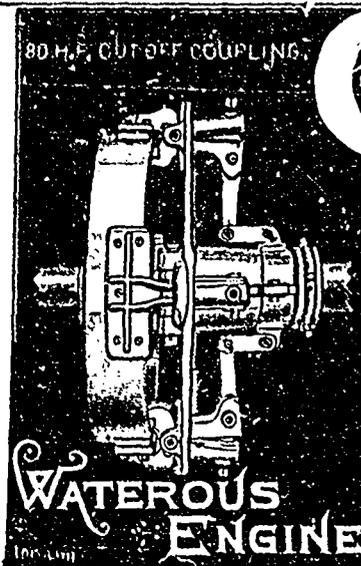
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PLANTS

THE THOMSON-HOUSTON AND THOMSON SYSTEMS.

FOR MILLS AND
FACTORIES.

THE ROYAL ELECTRIC CO. ADDRESS 58 WELLINGTON ST. MONTREAL, QUE.

80 H.P. CUT OFF COUPLING.



GRIP

Pulleys & Cut off Couplings.

INCHES INCHES
10 x 3 TO 10 x 30
FEET INCHES

SPLIT OR SOLID
GUARANTEED.
AFTER USING YOU WONDER HOW YOU MANAGED WITHOUT IT.

WATEROUS ENGINE WORKS CO. Brantford, Can.

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| J. L. Spink, Grist Mill, Toronto.....1-40x 9 " | Waterous Engine Works Co., St. Paul, Minn. 1-30x 9 " |
| I. Nightingale, Brick Works, Toronto.....1-30x14 " | J. A. K. Drummond, (elevator work) Manitoba 2-30x 6 " |
| Dowling & Leighton, Furniture, Harrison, 1-24x 6 " | A. Harris, Son & Co., Brantford.....1-18x 8 " |
| Toronto Radiator Co., Toronto.....1-40x 7 " | Letang & Letang, Montreal.....1-12 in. Sprocket |
| Taylor Bros., Brick Works, Toronto.....1-30x14 " | Pettit Bros., sawmill & stave works, Comber 3-64x17 in. face |
| J. J. Coulter, Toronto.....1-22x 9 " | Adamson & Co., (for elevator work) Manitoba 1-24x 7 in. face |
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| For Elevator Work, Manitoba.....1 Cut-off Coupling | Ogilvie & Co., Grist Mill, Se..... 2-30x10 " |
| W. Milne, Sawmill, drive bull-wheel, Stayner 1-16x10 " | American Mill Building Co., Stratford.....3-40x13 " |
| Windsor, Sandwich & Amherstburg Electric 2-45x16 " | |
| Railway, Windsor.....2-60x12 " | |
| British America Starch Co., Brantford.....1-48x14 " | |

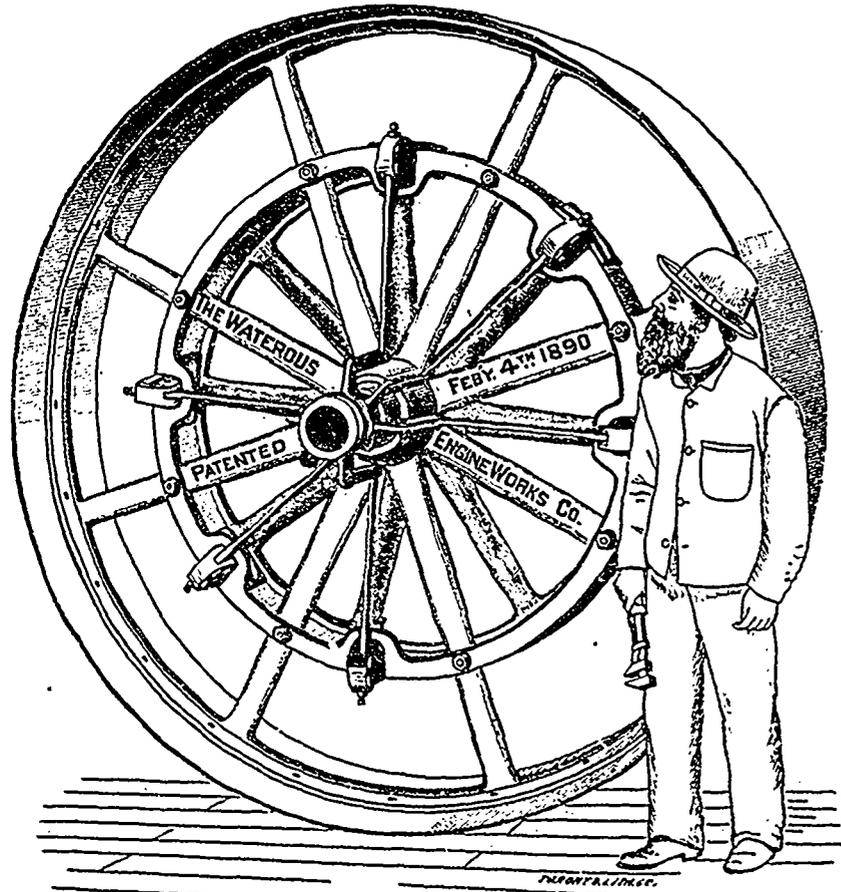
Many, after trial, make further purchases of our Pulley.

Ordered from 7th to 27th October.

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| North American Mill Building Co.....Stratford.....2-25x13 | |
| Practical School of Science.....Toronto.....1-30x13 | |
| Rirdon Paper Co.....Merriton (their 5th order) 1-24x 6 | |
| Walkerville Mal. Iron Co.....Walkerville.....1-40x10 | |
| E. B. Eddy Co.....Hull.....10-44x13 | |
| Barber Bros., Paper Mill.....Georgetown.....1-40x12 | |
| Globe File Works.....Port Hope.....1-16x 7 | |
| Tallman & Son, Brick Works.....Beamsville.....1-24x14 | |
| George Erb, elevator.....Winnipeg.....1-16x14 | |
| George Wright.....Fort Corington, N.Y.....2-24x 8 | |
| E. B. Eddy Co.....Hull.....(2nd order) 1-64x16 | |
| | 2-62x14 |
| | 44x10 |
| Firstbrook.....Toronto...(3rd order) 3-42x 9 | |
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SPECIALY NOTE

Grips always motionless when pulley out of clutch.
Not necessary to stop an important shaft with a dozen pulleys on it to adjust an unimportant pulley.



93 x 22 in. Face Pulley Furnished by Royal Electric Co.

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| Cookshire Mill Co. (Saw Mill).....Cookshire, Que.....1-45x12 | |
| P. & A. McGibbon, Saw Mill.....Lachute, Que.....1-52x14 | |
| J. C. Wilson & Co., Paper Mill.....Lachute, Que.....2-36x12 | coupling |
| E. Buse, Saw Mill.....Vancouver, B. C.....1-48x12 | |
| Waterous E. W. Co.....Brantford.....1-36x 8 | |
| Rirdon Paper Mills.....Merriton, Ont.....1-36x 8 | |
| Globe Printing Co.....Toronto.....2-42x12 | |
| Brooke Woolen Co.....Simcoe.....1 Split-30x 6 | |
| Hall & Price, Saw Mill.....Quebec.....3-60x16 | |
| George Erb.....Winnipeg.....1 Split-30x12 | |
| A. A. Benson.....Montreal.....1 Split-30x12 | |
| W. H. Law.....Peterboro.....1-24x 6 | |
| Northumberland Paper Co.....Campbellford.....1-36x12 | |
| Electric Light Co.....Kat Portage.....1-48x12 | |
| R. Lang & Son, Tanners.....Berlin.....1-30x 8 | |
| Wisner, Son & Co.....Brantford.....1-34x 9 | |
| W. Sutton, Grist Mill.....Simcoe.....1-32x10 | |
| E. Lavendarp.....S. America.....4-90x16, 60x13 | |
| | 81x19, 44x10 |
| Miller & Hunting, Vencer Works.....St. Catharines.....1-33x10 | |
| | 43x 9 |
| Hunt Bros., Electric Light and Mills.....London.....6-50x12 | |
| | 50x16 |
| | 72x16 |
| S. Frank Wilson, Publisher.....Toronto.....1-48x12 | |
| Kuntz Brewing Co., Ice elevator.....Hamilton.....1-30x 8 | |
| W. B. S. Anglin, Saw Mill.....Kingston.....1-36x12 | |
| C. S. Hyman & Co., Tanners.....London.....1-30x 8 | |
| American Watch Case Co.....Toronto.....1-26x 9 | |
| M. C. Keith, Saw Mill.....Central America.....1-22x 8 | |
| Westman & Baker, Machinists.....Toronto.....1-24x 6 | |
| A. Harris, Son & Co.....Brantford.....1 coupling | |
| British American Starch Works.....Brantford.....2 couplings | |
| North Pacific Lumber Co.....Port Moody, B. C.....1-48x12 | |
| Firstbrook Bros., Box Makers.....Toronto.....2-42x 8 | |
| Bertram & Co., tool makers.....Dundas Duplex... 3-12x14 | |
| James Morrison, brass works.....Toronto Pulleys... 1-36x12 | |
| | 2-10x 3 |
| Canadian Copper Co.....Sudbury.....1-48 in. Sprocket | |
| Clough & Co., Elevator.....Lennoxville.....1-18 in. Sprocket | |
| Royal Electric Light Co.....Montreal.....3-92x19&22 | |
| Gurney Scale Co.....Hamilton.....1 Grip Sprocket | |
| Grand Trunk Shops.....Hamilton.....Cut-off coupling | |
| British American Starch Co.....Brantford.....1-30x 8 | |
| W. S. Shaw, tannery.....Bracebridge.....1-18x 8. &c. | |



* NOTE SPECIALLY *
THE
SIMPLICITY OF THIS PULLEY.

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—All messages are received by this Company for transmission, subject to the terms and conditions printed on their Blank Form No. 2, which terms and conditions have been agreed to by the sender of the following message. This is an unrepeatd message, and is delivered by request of the sender, under these conditions.

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CHAS. R. HOSMER, Man. Telegraphs.

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| From Montreal | | 23 | |
| To Waterous Eng. Works Co | | | |

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