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VOL. 6.

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NO. 15

NOTES FROM THE WORLD OF WOOD

A process has been discovered by which wood may be compressed into various designs, having all the appearance of carving, and with a finer finish. The process consists in paring hardwood shavings as thin as wafers, which are then placed in a chemical solution. When in a properly pliable condition, the mass is introduced into molds made from steel plates, and pressure is applied, which forces the wood pulp in every line of the mold. When it becomes dry, it is removed from the mold and has exactly the appearance of a wood carving, with the grain of the wood as perfect as though it had never been reduced to a plant condition. The process is a German invention, and large numbers of different designs are now being manufactured in the city of Berlin.

The tradition is, if the oak gets into leaf before the ash, we may expect a fine and productive year. If the reverse is the case, a cold summer and unproductive autumn are anticipated. Statistics have been collected on this point extending over 30 years. The oak displayed its foliage several months before the ash in 1818 to 1820, 1882, 1821 to 1827, 1833 to 1837, 1842, 1846, 1854, 1868 and 1869, all inclusive, and the summers of those years were dry and warm, and the harvest abundant. The ash displayed its foliage full a month before the oak in 1816, 1817, 1821, 1823, 1828 to 1830, 1838, 1840, 1845, 1850 and 1859, and the autumns were unfavorable.

The forest trees east of the Rocky Mountains have been divided into four groups, as regards their geographical distribution within the Dominion. (1.) A northern group, including the white and black spruce, larch, Banksian pine, balsam fir, aspen, balsam, poplar, canoe birch, willows and alder. (2.) A central group of about forty species, occupying the belt of country from the white pine line to that of the buttonwood. (3.) A southern group embracing the buttonwood, black walnut, the hickories, chestnut tulip tree, prickly ash, sour gum, sassafras and flowering dogwood. (4.) A western group, consisting of the ash-leaved maple, burr-oak, cottonwood and green ash.

Of a monster oak felled in England in 1810 the main trunk, 10 feet long, produced 150 cubic feet; one limb 472 cubic feet, and other limbs respectively 335, 233, 156, 113 and 106 cubic feet; six other limbs of inferior size averaged 93 feet each, making a total of 2,415 cubic feet of sound timber. The bark was estimated at six tons. It took five men twenty days to strip and cut down this tree, and two sawyers were five months without losing a day (Sunday excepted) in converting it into timber. The main trunk of this tree was 9 1/2 feet in diameter. The whole produce of the tree in the market brought about \$3,000.

A distillery has lately been put in operation at Chatham, S. C. manufacturing oil from

pine wood. The material is subjected to intense heat in sealed retorts, and one cord of it is said to yield fifteen gallons of turpentine, eighty gallons of pine-wood oil, fifty bushels of charcoal, 150 gallons of wood vinegar, and a quantity of inflammable gas and vegetable asphaltum. The oil alone is worth about 25 cents a gallon and is used by painters and shipbuilders.

There is a small tree growing in a gulch near Tuscarora, Nevada, the foliage of which at certain seasons is said to be so luminous that it can be distinguished a mile away in darkest night. In its immediate region it emits sufficient light to enable a person to read the finest print. Its luminosity is said to be due to parasites.

It is said that one of the properties specially conducive to durability in timber is odoriferousness. It is also said that the increase in strength due to seasoning in different woods is as follows: Elm, 12.3 per cent.; oak, 26.6 per cent.; ash, 11.7 per cent.; beech, 61.9 per cent. The comparative value of different woods in respect to crushing strength and stiffness is thus shown: Oak 40,741, ash 3,571, elm 3,468, beech 3,079. Regarding relative degree of hardness, shell hickory stands the highest, and, calling that 100 white oak is 84, white ash 77.

Lieutenant Zimmer Gossende, of the German navy and Dr. Kummel have explored North-east Guinea. They report that they reached a spot twelve days' march from the coast and discovered that their compass was useless, owing to the presence of a tree which possesses the properties of a highly charged electrical battery. Dr. Kummel was knocked down when he touched it. Analysis showed it to consist of almost pure amorphous carbon. It has been named *Elhasia electrica*.

The *American Architect* says that the Southern pine seems to be the natural habitation in this country of the cinnellectularius, or bed bug, which is found in immense numbers under the bark of old trees of that species. If the wood contains natural clefts, the insects and their eggs remain in these after sawing and are often carried in that way in the seams of large timber into buildings. It is worth noticing that living trees of yellow pine sometimes keep houses near them infested with the vermin, which stray in all directions from their home.

The inventive genius of the Yankee is constantly widening the use for lumber. Last year a concern in Maine cut up, in the aggregate 1,200 cords of white birch logs into shanks and counters for boots and shoes. Special machinery is used for the purpose, and the white birch is displacing leather board to a considerable extent. The more extended use of the hardwoods in shoe making is among the possibilities of the near future.

Among the latest inventions is that of a match which may be used over again an indefinite number of times. The wood is soaked with a peculiar chemical solution which renders such reusing practicable.

The following trees were in ancient times dedicated to heathen gods. The cornel, cherry, tree and laurel to Apollo, cypress to Pluto, myrtle to Venus, oak to Jupiter, olive to Minerva and Pallas Athene. It is curious to note that the laurel, cypress, myrtle, oak and olive are all funeral plants. The olive with the Greeks was an emblem of chastity. - *Exchange*.

SAW MILL AT OAMBELLFORD.

On Tuesday last we spent a few minutes looking at the operations of Rathbun & Co.'s saw mills in this village, and while there learned from Mr. Joseph Clairmont, the trustworthy manager, that the average daily product of this manufactory is 800 railway ties and between 10,000 and 11,000 lath, besides a quantity of lumber.

There are 25 men now working steadily every minute of the day, as busy as the machinery beside them, handling the logs which come down the river, and cutting them up into ties, lath and lumber.

Ten saws are in constant motion. Two large saws are rapidly revolving on the first floor, at the north end of the building, butting and edging the logs which come up from the water where they are boomed, on what, in the absence of the proper name we will call a carrier. The large logs are handled with ease by the dexterous workmen, who first saw off the ends and then slide them on a truck which moves backwards and forwards on a track to and from the edger. This large saw does rapid execution, and the railway ties are cut as quick as thought and removed by men at the other end of the track, who slide them through an opening in the building and deposit them on waggons which are drawn to the cars. The slabs from the logs are then put through a planing machine and converted into lumber, while the small pieces are placed on a carrier and deposited on the second floor, where men quickly cut them up into lath. They are as busy as bees, too, turning out 10,000 per day.

In front department of the building is a machine for planing and edging lumber, which is fed by Mr. J. D. Arney. Near it is the invention of one of the Rathbun company, a gum-taper, for sharpening saws, which is worked by Mr. Ducheman. By the aid of this machine which carries an emery wheel making 1,600 revolutions per minute, a large saw is sharpened ready for work in twenty minutes.

The shingle machine is not yet in operation but will be shortly. The engine which drives the machinery, with improvement and the care of a tidy engineer, looks like a new one. Near it is a pump and hose ready for use to quench a fire.

The railway track has been laid along Ranney street to the mill, and will be ballasted and completed in about ten days. A switch is to be laid in front of the mill, and another at the

rear, on which cars will be run and loaded as the ties come from the saws. Fifteen car loads of ties were taken away on Monday. - *Herald*.

THE BUSINESS OUTLOOK

The New York *Star* Mill *Gazette* says. The semi-annual report lately issued by the mercantile agency of R. G. Dun & Co., shows a material improvement in the business outlook throughout the United States. Notwithstanding the strain resulting from labor troubles the record of business failures during the first six months of the present year shows a marked decrease as compared with the failures of the same period in the preceding year. The liabilities of insolvents for the period referred to in 1886 were considerably smaller in amount than they were in the corresponding period of 1885.

The report calls attention to other encouraging features of the times among which are the virtual decision of the conflict of labor against capital, and the fact that values of all kinds have apparently reached their lowest point. The power of the labor organizations to resist the ordinary laws of trade is not so seriously estimated as it was a few months ago. Confidence has been restored and there is a manifest disposition to extend business operations and engage in new enterprise. Good crops are now assured, generally speaking, and the fall season is looked forward to as likely to yield satisfactory returns in trade circles. The abundance of money, the result of the growth of the country in wealth, is one of the characteristics features of the times and is also a most influential factor in the business situation. In confirmation of the views expressed in this report Messrs. Dun & Co. present statements by their agents with reference to the condition of trade at all the leading business points in the country.

As regards the lumber trade, the outlook is in most respects encouraging. The temporary check to building operations caused by the labor troubles, has been succeeded by a marked activity in this trade throughout the east and west. The present consumption of lumber in the building trade is almost equal in amount to that called for at the same period last year, and it is possible that the demand for lumber for railway construction will soon exceed the mills. In hardwoods the transactions are moderate but the market is firm. Walnut is in special demand, and holders of good lots are not inclined to make concessions in price. In ash, doors and blinds the business being done is not large, but much activity is not to be expected at this season, and it is evident that prices are being fairly sustained.

REPORTS from Temiscamingue state the timber drives on the Kippawa and Upper Ottawa are successful this season, notwithstanding that fears were entertained at an earlier date concerning the insufficiency of the spring floods.

Chips.

A FIRE in Knapp, Stout & Co. Company's yard, at St. Louis, July 18, consumed about 25,000,000 feet of lumber in pile, involving a loss of 000

LAMOURÉUX BROS., of Edmonton, are preparing a second raft for shipment to Battleford. It will consist of 175,000 feet of lumber, 100,000 lath and 100,000 shingles.

By a new process hats are now made of wood pulp. They are said to be very fine, and more serviceable than anything heretofore on the market. Great is wood pulp.

CAPITAL is said to have been secured for building a railroad from Fargo Dak., northwest by way of Turtle Lake, to the boundary of Manitoba, 600 miles. It is said that a survey will at once be made.

MR. JAMES CROSSER, of the Cobourg Car Works, obtains the contract for rolling stock of the Northern & Pacific Junction Railway. The specifications are said to conform to those of the Canadian Pacific Railway.

THE contract of the locomotives for the Northern & Pacific Junction Railway has been let to the Kingston Locomotive Works. It calls for the delivery of two engines in Sept., three in October, and remainder in November.

A YOUNG man, named Gingras, was struck on the head by a flying splinter of wood at Drum's cabinet factory, Quebec on July 23rd, and will also probably die. A ship laborer, named McCaulay, was dangerously injured by falling into the hold of the bark Kate Maguire.

WM. GOLDBER, a bark peeler, has been found dead in the woods on the Leswick, N. B., his skull fractured and his neck broken. Beside him on the ground lay a tree, the falling of which was the cause of his death. Goldber was a man about forty years of age, and lived in Tripp settlement for a good many years.

MESSEURS. RANKIN, ASHER & HENDERSON, of Dover, Ont., are erecting a saw mill on lot 19, con. 9, Dover, with a capacity of 12,000 daily. Messrs. McKeough and Trotter have the contract for the machinery, and will have it running for the fall work. The erection of the mill promises to prove a great convenience.

THE machinery department at the Colonial Exhibition is under the direction of Mr James Clark, of Cobourg, who has put the hall into shape without a single accident or breakage that I have heard of. The *Canadian Exhibitor*, the journal of the Canadian department well says that no other choice of a mechanical superintendent could have been made by Sir Charles Tupper.

TWO orders in council have been passed one authorizing that a charter be granted the other issuing it, to Archbishop Duhamel, Rev. Father Grendreau, L. A. Oliver, A. Desjardins and E. Tasse, empowering them to construct a line of railway six miles long from the Ottawa river near the Mattawan at the foot of the Long Sault rapids to a point at the foot of lake Temiscamingue, with a capital of \$100,000.

THE correspondent of the *Canadian Manufacturer* at the Colonial Exhibition says that in manufactures of wood of all kinds the Canadian have distinguished themselves. Messrs. Tees & Co., of Montreal, Messrs. Stahlshmidt & Co., of Preston, and the Schlicht & Field Co., Toronto, have done a "roaring trade" in office desks, letter cabinets, etc., which seems to be looked upon as both cheaper and better finished than the English article.

THE *Menominee Herald* estimates that at least 80,000,000 feet of lumber will be sent east from the Green Bay mills the present season, of which nearly 50,000,000 feet have already been heard from. The H. Witbeck company have

sold 12,000,000; the Bay Shore Company, 12,000,000; Dunham & Avery, 10,000,000, and A. Spies 400,000 feet, all of which will be shipped to the eastern market—mostly to Buffalo, during the season of navigation. Besides the above amounts, the Oconto Lumber Company has sold 25,000,000 feet of its cut to Buffalo parties.

MESSEURS MASON & Co., says the *Ottawa Journal* have received an order from Messrs Hutchison & Wood to supply 1,000,000 ft. of lumber for the construction of the bridges on the new Short Line Railroad between Merrickville and Kemptonville which is the extent of their contract. Messrs McKee & Co., of Ottawa, have also received an order from the same firm for a large quantity of Portland cement for the stonework in connection with the bridges.

THE *Chicago Northwestern Lumberman* says:—"There are two new lumber papers in New York engaged in the amusing business of trying to scratch each other's eyes out. They remind one of two cats with their tails tied together and hung across a clothes line." We had often heard that western editors were remarkably hard hearted (as well as hard headed), but did not believe that even a western editor would watch two cats fighting, in the manner described until the *Lumberman* made this confession.

JOHN E. STEWART, one of the corporators of the Tobique Valley railway company, has been negotiating with capitalists in Boston with a view of the immediate construction of the line from Perth on the N. B. railway up to the Tobique river past Plaster Rock. This road was subsidized by the Dominion parliament last session, and an attempt will, it is said, be made to secure a local subsidy. The Tobique Valley railway runs for about forty miles through a rich agricultural region, passing through heavy timbered land.

THE *Monetary Times* says:—"The effect of the export duty, placed by the Dominion Government on pine logs exported from this country has already been that of increasing the manufacture of sawn lumber on this side of the border. We are told that more than one firm in the Georgian Bay district whose pine was expected to go to the American side to be manufactured, will be converted into lumber in Canada. Evidently these firms regard it cheaper to pay \$2 duty on lumber than to pay the same duty on the logs aside from the additional cost of manufacture, arising from the higher price of labor paid on that side. It is tolerably clear that the doubling of the duty will materially check the exportation of logs.

LAST year the extensive mills and woodware factory of Messrs. Wm. Cane & Sons, Newmarket Ont. was burnt down and as soon as the firm decided to rebuild all the old employees, voluntarily offered to donate a week's work each, as an evidence of their goodwill and regret for the firm's heavy loss. Another pleasing instance of co operation, in a like manner is now recorded, as we learn that: "Each one of Mr. Tilson's employees, of Tilsonburg has subscribed a week's wages to assist him to build his oatmeal mill. The amount thus donated will be between \$700 and \$800. This is something new, and speaks volumes for the harmonious relations existing between the employer and employees."

Lumber by Railway.

THE *Montreal Star* of July 20th says:—"A new departure has taken place in the shipment of lumber from the western districts. Previous to the opening of the C. P. R. the whole of the lumber and square timber was forwarded by water to the loading port. Mr. G. M. Bosworth, the freight agent of the C. P. R., stated to a *Star* reporter this morning that the great lumber merchants in the districts round Georgian Bay and Lake Nipissing had forwarded no less than 3,500 car loads of square timber, representing 2,000,000 square feet, to Montreal within the last two months. The timber consists almost entirely of pine, and is sent on to Quebec for shipment to various ports.

LUMBER FOR CANADA.

DETROIT, July 27.—The departure of the great log boat Michigan, which left Alpena in tow of a powerful tug bound for French River, Georgian Bay, for a load of logs for Tawas parties, yesterday, was witnessed by a large crowd. Notwithstanding the gradual decrease of the timber in Michigan, remains the fact of millions of dollars invested in costly mills and railways.

Within the past two years Michigan lumbermen have turned their attention to Canada, and extensive purchases of pine lands have been made near the shores of Lake Huron and along the large streams emptying into that inland sea. To move their mills to that side of the lake for the purpose of cutting up the pine involves great expense. Then, too, they must encounter the tariff on imported lumber on seeking an American market. To somehow get the logs to this side would solve the difficulty, as there is but a small tariff on these. Transportation by rafts has been attempted in a few instances, but the risks are very great, as Lake Huron is a decidedly stormy body of water, and the breaking up and scattering of a single raft would sadly trench upon the profits of a season's business. Hence the experiment of the log boat, which is intended to bear the same relation to water transportation that the log train does to the railroad. If it can be managed successfully and not too expensively it promises to solve a very important problem in connection with the lumber business of Michigan for the next 20 years.

The pioneer boat, named after the state, is 294 feet over all, 42 feet beam, with 16 feet depth of hold, and has a tonnage of 1,227. She has one boiler 15 feet long, 7½ feet in diameter, and two engines. One engine has a 16 by 12 inch cylinder. The other engine has two cylinders, 14 by 12 inches each and is connected with two 10 inch pumps and also with an apparatus for hoisting anchors of which she carries two, one weighing 1,600 and the other 8,000 pounds. The chain of the large anchor weighs 20 pounds to the link and is made of 1½ inch wire. The apparatus for hoisting logs on board is a slip that extends on an incline to the water, in which an endless chain runs and on which are hooks which carry the logs up the slip, which is jointed at the rail and extends across the deck. Here men with cast hooks will receive and roll the logs off on to the skids, where they are held until wanted in the hold, they being there dropped into five feet of water. The water comes into the hold through a ten inch aperture in three hours, and the two eight inch pumps empty the hold again in four hours. There are two of the slips. The logs are hoisted out of the hold at the after hatches (of which there are seven) by two upright slides with arms upon which the log rests. When the log gets on deck it rolls on to a set of rollers that carry it overboard. It is claimed that the craft can be loaded in less than 20 hours. She has a full set of canvas on four spars, 10 men for a crew, and will carry about 700,000 feet of logs. The question of expense would seem to be the only one to be settled by experiment. It is probable that no special interference would be encountered from boisterous weather, and there seems no reason to doubt that as in the ore and grain carrying trade from three to six of these immense barges could be loaded and towed across Lake Huron by a single powerful tug.

IN NEW QUARTERS.

Messrs. Lord & Thomas, of Chicago, the well-known and popular Advertising Agents, have removed to new quarters which are so spacious, so elegant, and so original and novel in their appointments, that they deserve more than a passing notice. The building Nos 45, 47 and 49 Randolph St., between State and Wabash Ave., is at once the most striking in appearance and the most elegant in Chicago, built of sandstone. It is 70 by 174 feet practically fire proof and and lighted on four sides. Three large elevators and two spacious stairways, give abundant facilities for passengers and freight. Messrs. Lord & Thomas occupy the entire third floor, giving them a superficial area of nearly 12,000 square feet. This beautiful lighted room is unbroken by partitions save a private office in one

corner and work passes with great regularity. While the entire appointments are elegant, the filing department is arranged on an entirely new principle, which amounts to an important invention. Heretofore Advertising Agents have filed their Newspapers in wooden pigeon holes, which not only excluded the light, but caught and retained the dust, and thus proved a nuisance. The new filing department of Messrs. Lord & Thomas is made entirely of wire work; a separate compartment is made for each Newspaper, Magazine and Periodical in the U. S. and Canada, about 14,000 in all. The various sections are suspended from the ceiling, and hang clear of the floor, leaving a space under each one so that the entire floor can be swept. Space will not permit us to describe this important improvement in detail. The principals upon which it is constructed will be covered by letters patent. The Chicago Safe and Lock Co. have done for the firm one of the largest safes ever built in Chicago. Our friends who wish to see a copy of our paper when in Chicago, can always find it on file at the Agency of Messrs. Lord & Thomas.

JOTTINGS AT WAHNAPIITAE.

A correspondent writes from Wahnapiitae to the *Toronto Globe* as follows:—"Last September the Einery Lumber Company commenced operations on their limits, five miles north of the C. P. Railway crossing at this place, with about 150 men. During the winter they took over 52,000 choice saw logs, driving them in May to the mouth of the Wahnapiitae, at French river, close to the Georgian Bay, in four weeks, where they load them on their barge Wahnapiitae which is estimated to carry two and a half million feet of lumber, and has this week sailed with a load of three thousand logs for Tawas, Michigan, where their mills are. It is said that they intend taking out double the quantity this season, commencing next month. Jinnings & Gorham have taken out this season over 3,000 pieces of board and square timber from their limits, north of here, which they shipped per C. P. R. to Papineauville, on the Ottawa.

McArthur and Brothers this season got out between three and four thousand pieces off their limits south of here, mostly board timber, which they run down the river to the Georgian Bay, from thence to the Midland railway; and are going to put in more camps this season. There are men for several firms in the States looking for limits on this river; the last one, from a firm near Chicago, is exploring here, and he says the lumbering capacity of this river, so far as he has seen it is at least 100,000,000 feet per year.

I am creditably informed that this river gives access to a very large extent of excellent pine land to the north of this, which is all green woods—all of which is not yet surveyed, or sold by the Crown Land Department. As soon as it is opened for sale the Americans say they will be on hand to purchase.

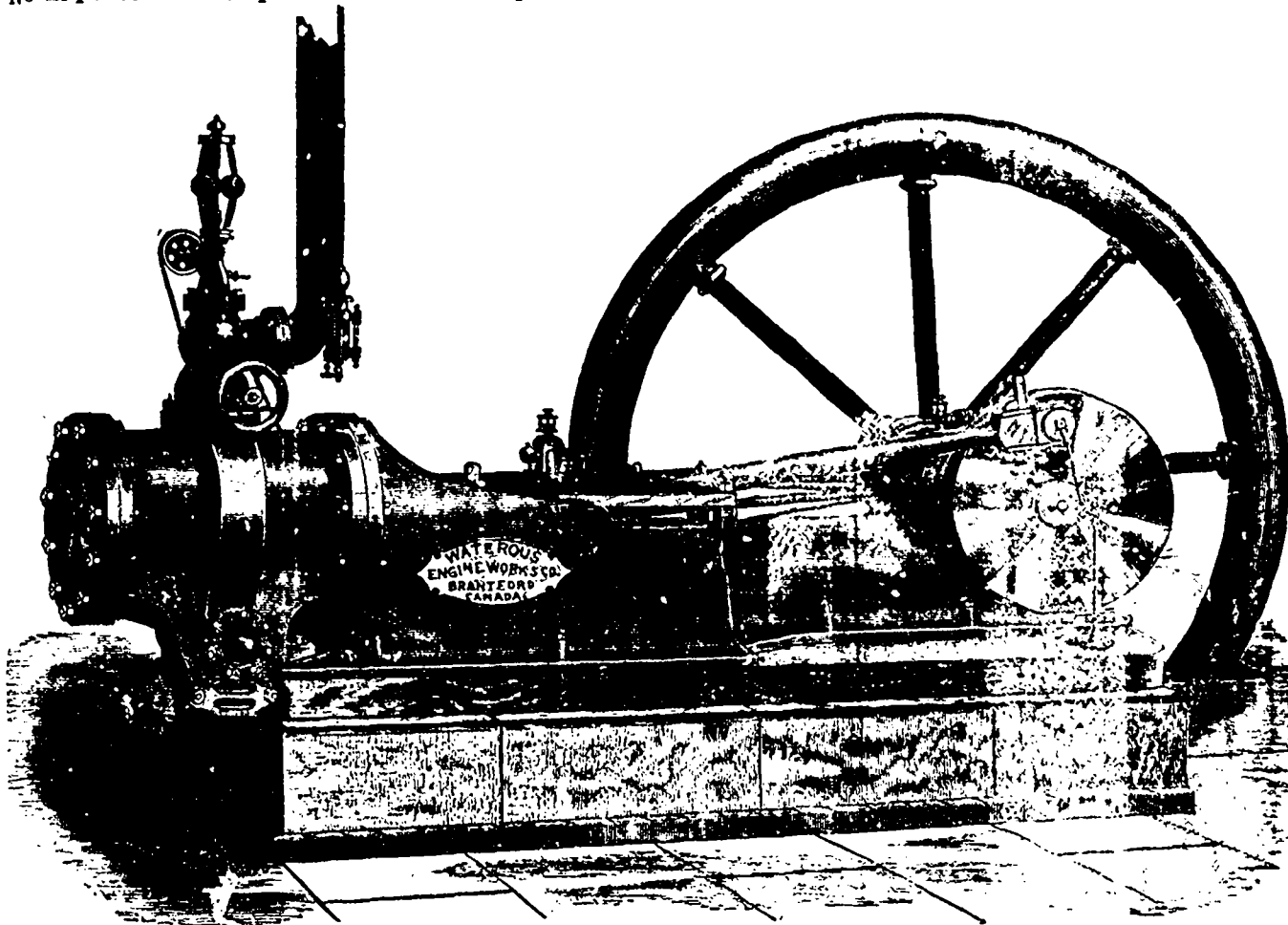
I see the Government has put an export duty on saw logs, I suppose to prevent them being taken to the States to be manufactured in place of Canada. This seems nothing more than just for Canada, as the manufacturing of the logs into lumber on this side will cause much improvement, and villages to grow at places where there is nothing else comparatively to induce such improvements. The Americans have two objections to manufacturing lumber here:—First, by shipping by the C. P. R. they will have to transship in order to get their lumber to the States; secondly, they want a certain rate for a term, say ten years, to secure them against the rate on lumber being raised after they have their mills erected.

I think the C. P. R. would be consulting their interest as well as the country their line passes through, between South Bay and Lake Superior, by giving lumbermen a reduction equal to cost of transshipment, and for the term of years, as the chances are that in not getting this they will build their mills at the mouth of the rivers at the Georgian Bay, and drive the logs down where they can load on vessels from the mill yard, and so the railway lose the traffic on the only product there is to give them local freight.

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THE COOK'S BEST FRIEND

PERSONAL.

MARY DAWSON, of Victoria, British Columbia, the Widow of the late JOHN DAWSON, late of Saanich B.C. and formerly of the County of Peterborough, Ontario, is desirous of communicating with the relatives of her late Husband. Letters addressed to her at Victoria, B.C. in care of Messrs. Eberts & Taylor, Barristers, or in care of the undersigned, will be duly forwarded.

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PINE PLANTATIONS.

In his official report Mr. R. W. Phipps gives the following account of his personal inspection of pine plantations on the Massachusetts coast:—

All this country around was occupied long ago by the earliest settlers—the men of the Mayflower period. This is the "old colony" of Massachusetts. This rolling land near the sea was rich, was heavily forested, was cleared, cropped and re-cropped, till its fertility was gone. Long lines of ruinous stone fences, centuries old, recall the period when the soil was worth such careful division. Much of it had long lain idle and barren, the home of a few wandering sheep, in great areas of wind-swept hills and hollows, and in sheltered places, some growths of the poplar. Just here was peculiarly barren. Twenty-five years ago one gentleman, Mr. Fay, began to plant pine trees largely, and still more largely to sow their seed broadcast. Many followed his example, and groves sprung up in all directions. There are now more than ten thousand acres of pine plantations, sown or planted, in the vicinity alone, many of them containing trees forty feet in height.

This planting has greatly sheltered and improved the country, and re-settlement—the influx of the class of residents before mentioned—followed fast on the growth of the trees. In one place I was shown what conclusively proved the case of tree planting on hills to hold moisture. "This twenty acres," said one resident, "which, as you see, is high land, when treeless, every spring poured down such floods as filled all the deep gullies around. Now that I have had it for years in groves of pines, the moisture is held in the land, and there are no torrents in spring whatever. The water goes the year round to nourish the creeks." The result of planting in this district is, in fact, that while here twenty years ago was little but a succession of bleak and barren hills, there is now such scenery as my first paragraph described. Nor are the planted groves of small extent. One gentleman, showed me eighty, another one hundred and twenty acres, in one block each, planted by themselves, of rich pine plantations, the trees being 30 and 40 feet in height.

What I want to give my readers an idea of is the way in which this result was secured. Either the seed was sown broadcast on a rough pasture field, or it was sown in the bottom of plough furrows run across the field five feet apart and covered half an inch, or the small pines were taken less than a foot in height and planted with the spade five feet apart each way. These methods have each met with excellent success. The land is a light and rather barren sandy loam, much of the same kind as our poorest Ontario soils. As to the kinds used, they are the Scottish, Austrian, Corsican and our own native white and red pines. Planting and sowing are each done in early spring.

There is no reason why these methods should not succeed in Ontario. Whoever wants a good plantation along the north or west of his lot, or has anywhere—in gully, or field, or hillside—land which gives little return, could not do better than sow it with pine seed. It is easily obtained, easily sowed, and in a few years the annual thinnings will give all the pine fuel he can use, and sticks for many building purposes besides, while as shelter the trees will be invaluable. Woods can hardly tell the difference in climate obtained by a thick pine wood along the north and west of a farm. Of course if the planter be disposed to purchase young seedlings—which can be had at less than a cent apiece—he saves some years. But many rough places could be much more easily sown than planted.

James H. Bowditch, Esq., gives the following valuable statistics in reference to these plantations:—

It is here we find the native pitch pine (*Pinus Resinosa*) grown from seed almost as easily as the ordinary garden vegetables, the sandy soil and moist atmosphere favouring its early growth. No old planter on the Cape would think of planting seedlings; he invariably sows the seed. Now, where are these plantations, how are they managed, and who are the owners? Let us begin at the end of the Cape and work south.

A five hours' drive from Boston on the Old Colony railroad brings you to north Truro, the next town to Provincetown, at the extreme end of Cape Cod. Near here we find twenty different parties whose plantations cover in the aggregate 662 acres, all planted from seed, and all consisting of the common pitch pine, in the various stages of growth, from 1 inch to 15 or 20 feet. As our object is to know just how these plantations are cultivated artificially, we will explain briefly in detail.

Ten years ago these well nigh barren and entirely profitless lands could be purchased for 25 cents per acre, now, in the same unimproved condition, they are worth in no case less than \$2 per acre; not a very heavy price you may think, but when a man sells by the hundred acres it makes a difference in the value received. These broad acres have usually no vegetation whatever, save a light growth of the coarse beach grass, and, in some localities, the low-spreading poverty grass, so-called, and a little moss.

In most cases there is no fencing whatever, a fact greatly to the advantage of the planter in his profit account; the division line between different owners being frequently a simple plowed ridge. We now have the land for planting.

Just before the first heavy frost, usually the latter part of October, the seed is gathered in burrs, balls or cones (thus variously called) from the pitch pine trees, put up in barrels or boxes, away from mice and squirrels, in a cool place, and before spring they will have mostly opened, when the seeds can easily be taken out. Some people heat them a trifle in the oven to make the seed render a trifle more easily, but it is a dangerous practice, and likely to injure the germinating power.

From one to three-quarters of a pound of clean seed is ample to plant an acre of ground. They may be planted at any time in the year, but probably the best time is early spring, as soon as frost is out of the ground. The method now most generally followed, where from 10 to 50 acres are to be planted, is to run a plough over the whole track, turning a single medium furrow, the furrows being five or six feet apart. A few planters make the distance apart four feet; a few from eight to ten feet.

The seed is either planted by hand in hills about three feet apart, dropping three or four seeds in a place, and just covering it very slightly with earth, with a hand hoe, or a regular seed planter is used. The latter is probably the easier method, the one most generally practised, and often quite as successful as the more laborious hand planting. A boy may follow after and cover any seed left exposed. If the cost of planting is variously estimated at from \$3 to \$5 per acre. The market value for seed last season on the Cape ranged from \$1.25 to \$1.50 per pound. It takes about a bushel of cones to render a pound of seed. After planting, no further care whatever is given to the area so stocked in most cases. In some places there may be gaps fifty feet long, but these spaces fill up in time of themselves from seeds of the young growing trees. If you hire a team and drive over the country, a look at the various plantations will abundantly repay an interested observer. A fifteen acre piece with trees about three or four years old, said to belong to Mr. Harvey Collins, seemed very thick and thrifty.

Mr. John Henricks has tried the following two seeds, namely:—White and Norway spruce (*Abies Alba* and *A. excelsa*), white, Austrian, Scotch and Corsican pines, (*Pinus strobus*, *P. austriaca*, *P. sylvestris* and *P. laricio*). The experiment was made in this wise: A tolerably good soil was well ploughed and prepared, and seed planted about one quarter of an inch deep. The whole was covered with boards at first, raised slightly when the seeds sprouted. The white and Norway spruce and white pine seeds scarcely germinated at all. The other germinated and grew well, when planted in cultivated land or nursery rows. When planted in furrows or hills in sward land, they suffered from drought, and made but slight growth. Probably not over twenty one per cent. of the hills are now standing. The Scotch pine did somewhat the best.

In this method of planting forests, whether

by broadcast or furrow planting, it is necessary of course, in order to cover the ground, at first to raise far more trees than are ultimately needed, and it has been long a disputed question whether it is best to let a young forest thin itself, the stronger trees killing out the weaker, or whether, after a time, to thin out artificially.

Some gentlemen here are of opinion that it is better to thin by hand. In support of this opinion an interesting illustration is given by the Hon. Levi Bartlett, of New Hampshire. In that state a tract and been cleared and burned over in a very dry season, about the year 1800. It immediately seeded itself with white and Norway pines, and about twenty five years after came into his possession. He at once thinned out the growth on about two acres, taking over half the number of the smallest trees, the fuel much more than paying the expenses of clearing off. From that time nothing was done with the lot for the next twenty five years—having sold it, however, during that time. Upon examining it he found that, by a careful estimate, the lot which had been thinned was worth at least a third more per acre than the rest which had been left. It was worth at that time at least \$100 per acre. He thought that had the land been judiciously thinned yearly, enough would have been obtained to have paid the taxes and interest on the purchase, above the cost of cutting and drawing out, besides bringing the whole tract up to the value of the two acres which had been thinned out.

At the time when this part was thinned, twenty-five years from the seed, he took a few of the tallest, about eight inches on the stump, and forty to fifty feet high, and hewed them on one side for rafters for a shed. At the next twenty-five years, fifty from the seed, he and the owner estimated that the trees left on the two acres would average six or eight feet apart. They were mostly Norway pines, ten to twenty inches in diameter, and eighty to one hundred feet high. He was greatly surprised seven or eight years after to see the increase of growth, especially the two acres thinned 30 years before. The owner had done nothing, except occasionally cutting a few dead trees. It was now the opinion of both that the portion thinned out was worth twice as much as the other; not, however, that there was twice the amount of wood on the thinned portion, but from the extra size and length of the trees and their enhanced value for boards, logs and timber. There were hundreds of Norway and white pines that could be hewn or sawed into square timber, from forty to fifty feet in length, suitable for the frames of large houses, barns and other buildings. There are some dead trees on the two acres thinned at an early day, but they were only small trees shaded out by the large ones. On the part left to nature's thinning, there was a vastly greater number of dead trees, many of them fallen and nearly worthless. Of the dead trees standing cords might be cut, well dried and excellent for fuel. Estimates were made that this woodland would yield 350 cords of wood, or about 150,000 feet of lumber per acre. Allowing that these were too large, the real amount must have brought a very large profit on the investment.

The opinion of leading planters of trees here of sowing or furrow is that, though not so successful with these, owing to the strong sea gales, as the pitch and Scotch pine, yet that the white or red pine would grow well from seed, by either method, in Ontario. As before remarked, there is much land in Ontario, side hills, waste sandy plains, burnt lands, and so on, where, if successful, the experiment would prove most valuable. If the ground be such as to receive the seeds—that is not a sod or hard clay—broadcast will do; if harder a furrow is easily made. The shade of surrounding woods, if not too dense, will not injure—a partial shade, in fact, is always beneficial. Wherever the pine trees are being cut down the large cones could be easily gathered, and put away till spring in a dry place, secure from mice when the weeds will easily drop out. There is no reason why this should not be done over much land, useless now, but which would then, for shelter and ultimate wood, be very valuable.

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GATHERING IN SOUTHERN PINE

A dispatch from New Orleans, of July 4th says:—On Monday last 20,000 acres of pine lands were entered in a body in Calcasieu and Vernon parishes in this state by a firm from Grand Rapids, Mich. During the last three or four years western firms, mainly from Chicago and Michigan, have gobbled up all the good pine land in this state and Mississippi. This has been done so quietly that the local saw mill men avoiko to the fact that all the good timber in Louisiana had been cornered by Chicago dealers. The fiscal year for the Louisiana land office expired June 30th. From 1882 to June 30th, 1886, no less than 1,150,532 acres of pine lands have been purchased, largely by western speculators and investors. This includes one fourth of the long leaved pine lands of Louisiana and about one half of what the Government owns in the state.

As the land entered is all selected, it naturally embraces the best. What remains unsold is generally of inferior quality and poorly wooded. The purchasers sent surveying parties down here to examine and report on the yellow pine of the south, the quality of the lumber and the value of the land. These reports were favorable and the western men went to work at once buying right and left, but very quietly and without attracting attention. The cost of these initial surveys and selections was only \$70,000. The lands themselves were purchased from the Government at \$1.25 an acre and probably cost the purchaser altogether not over \$2 per acre, making the total cost of these tracts \$2,300,000. They will average 10,000 feet of merchantable timber to the acre, 11,500,000,000 in all, or nearly one-half the amount of long-leaved yellow pine in Louisiana. The lumber at the mill is worth \$7.50 per M foot, so that the owners of those lands can hope to receive \$80,000,000 for their purchase, even if there should be no improvement in the value of their lumber, which is highly probable. It will be seen, therefore, that they have made extremely good investments, from which they may be expected to receive handsome profits at an early day.

The system pursued in Louisiana has been similarly carried out in the Mississippi and Texas. In Mississippi western men have bought 775,000 acres of pine lands, and in Texas 900,000 acres. There have been recently large shipments of this southern pine north. Only a few weeks ago 3,000,000 feet of it were shipped on one contract to Philadelphia, while Texas is sending a large quantity to supply Kansas and other prairie portions of the far west. But comparatively little has been done to develop these lands, and the purchasers seem disposed to make no attempt to do so, but to wait for an increased demand for lumber and improved prices in consequence of a smaller supply from the western states, like Michigan.

The recent heavy purchases have been due to the fear that Congress would withdraw the lands from the market and place them among the homestead entries. The investors are accordingly taking up all the best lands so as to secure them before congress passes one general law prohibiting the sale of tracts larger than a few hundred acres. This they have very effectually done, and Chicago, Saginaw and Grand Rapids capital will control the lumber industry of the southwest as effectually as it does to day the lumbering in Michigan and the west.

Operations on the Saguenay.

QUEBEC, July 17.—Numbers of vessels are loading this year in the Saguenay for the account of Messrs. Price Bros. & Co. The cut of logs in the Saguenay district was very large last winter, and in most of the establishments on the North Shore, operations were conducted entirely on Messrs. Price Bros.' account. In the vicinity of Chicoutimi three hundred thousand logs were cut, and from Grande Baie from sixty to eighty thousand. At St. Elenna Bay the cut was over a hundred and twenty thousand and logs, the St. Marguerite river, and at Sault au Cochon eighty-one thousand. At the little Bergeronnes, eighteen thousand logs have been cut. The Messrs. Price have also bought the deals produced by the logs cut by the English Company of the Seigneurie of Mille Vaches, the site of whose operations is Portneuf on bas.

Chips.

JOHN GILMOUR, lumberman, has been asked to accept the Conservative candidature for Ottawa county, in the stead of Alonzo Wright, the retiring member.

RECRUITS of lumber at Selkirk, Manitoba, are now considerable, and a large force of men is engaged in unloading barges and piling in the yards.

PACIFIC coast cedar shingles at \$1 a thousand and southern curly pine finishing lumber at \$10 have invaded the Minneapolis market to the surprise but not the delight of the white pine dealers.

ON July 16th a young man named Hunter White, engaged in taking float wood from the river at Miller's dam, Trenton, Ont., fell off a pier into the slide, through which a drive of logs for the Gilmour Co. was running, and was crushed to death. The body has not yet been recovered. Hunter was 19 years of age and only out from Ireland a few days.

ON July 19th a large party of men reached Ottawa, who had been at work on French river, on the drive of Emmery & Co., who are cutting an extensive limit situated on the tributaries of that stream and shipping to Michigan. They report the drive as a very successful one. Eugene Marcier, the foreman of the gang, though a young man, has for some time been looked on as a first-class man.

THE first through train on the Canadian Pacific railway, from Montreal to Port Moody, which lately made the run, accomplished the distance, 2,875 miles, in 134 hours, or at an average speed of 21½ miles an hour. This is said to be better time than is made on the older transcontinental lines, but not so fast as it is intended when arrangements have been perfected.

MR. R. M. MARCHANT, says *London Truth*, has perfected an engine in which the steam is returned to the boiler, and, so to say, used over and over again. The saving in coal thus to be effected, is calculated at eight per cent. Besides saving coal, this invention will upset a pet theory of the engineering fraternity, who have always considered this problem as impossible as perpetual motion.

THE Campbellford *Herald* of July 15th says: Rathbun and Gilmour's large drive of logs is still on the move. The tail end is now at Beaver Creek, and will not arrive for about three weeks. It is said to be one of the largest that has ever come down the Trent. Another drive will follow it from the Otonabee river. The drive which passed here last year contained nearly five hundred thousand pieces.

MR. H. P. McCRAVEY, son of Mr. W. McCravey, M. P., was in Vancouver during the first conflagration. He had a narrow escape with his life, and, as it was, lost all his clothes, except those in which he stood. Mr. McCravey having finished a heavy contract on the Vancouver Island Railway, recently purchased an interest in a saw mill in Vancouver city. He was one of the few fortunate ones whose premises were not burned out.

THE Ottawa *Citizen* of July 15th says:—Very few lumber sales are reported of late weeks. The excessive shipping during the early part of the season was owing to large contracts which had been made in advance during the fall and winter by American buyers, who seem now to be fully supplied. A very considerable quantity of three-inch lumber is being put through the saws for a Quebec dealer.

A LETTER from Tadoussac, Que., says the cut of saw logs in that section has been very large this year. At Chicoutimi for Price Bros., 300,000 were cut, and Grand Bay from 60,000 to 80,000; 120,000 at L'Anse St. Etienne; 18,000 at Little Bergeronnes and 81,000 at Sault

au Cochon. Messrs. Price also purchased the deals from the logs cut for the English company of the seignior of Mills Vaches at Port Neuf, where they are loaded for the English market.

THE Muskegon *Chronicle* reports Hamilton's mill at that place as having cut 207,000 feet of pine in nine hours, a rate of cutting that would have turned out 230,000 in ten hours. The statement would be more valuable as a record if the equipment of the mill and size of the logs were stated.

THE *Menominee Herald* estimates that at least 80,000,000 feet of lumber will be sent east from the Green Bay mills the present season, of which nearly 50,000,000 feet have already been heard from. The H. Witbeck company have sold 12,000,000; the Bay Shore Company, 12,000,000; Dunham & Avery, 10,000,000, and A. Spies 400,000 feet, all of which will be shipped to the eastern market—mostly to Buffalo, during the season of navigation. Besides the above amounts, the Oconto Lumber Company has sold 25,000,300 feet of its cut to Buffalo parties.

The World's Biggest Raft.
A St. John, N. B., despatch on July 13th says:—The huge timber raft concerning which so much has been said and written, and which is expected to work such a revolution in the timber carrying trade, still lies high and dry on Joggins' shore, at the head of the Bay of Fundy. Albeit it is in a measure ready for launching and has been in that finished state for a month, it cannot start because the tide has not risen high enough and there are legal difficulties in the way. The latter consist in the builders' claim to be allowed for surplus lumber left over after building the raft. It is believed all will be settled by the end of the month.

The raft is now practically completed, only the outside chain fastening remaining to be put in place. This work could be done in a few days. The raft is 420 feet long, 50 feet wide and 36 feet deep. It is shaped like a torpedo and at its largest part has a circumference of 133 feet. Some idea of its immense size may be obtained from the fact that a mile of timber has been used in constructing launchways for it. There are 300 upright timbers to be cut away before the raft will descend on the slides. It is estimated that three days will be consumed in this job alone.

The raft will weigh 7,000 tons. Great interest has been manifested in this new enterprise, people are coming from the United States and distant parts of Canada to study the construction of the raft.

A Drowning Accident.
OTTAWA, July 21.—Additional particulars received of the drowning accident at Booth's mill, on the Lenoire river, state that a jam took place Monday week. The gang went to work to break it up. The jam broke suddenly, and the men made a rush for the banks. All succeeded in escaping except two men, one of whom, named Fred Whistler, after rushing down with the current for some considerable distance, and being terribly knocked about by the mass of logs, lost his hold and vanished. Shortly afterwards, some of the gang succeeded in saving the other man who was terribly bruised and knocked about, and was carried 120 miles to the hospital in this city.

Sawdust as Food for Cattle.
A German gentleman named Frederick William Wendenburg, of Bagenz, Prussia, has made application to the Government of Canada for a patent for a process of manufacturing cattle feed from sawdust or wood meal and other materials and also to have patented the use, application and employment of the same in Canada.

"Hail! Horrors, Hail!"
Is an expression of Milton regarding the "infernal world." It is not too much to say that those who suffer from catarrh would thus express themselves about that disease. Torture and despair mark their daily existence. However, every case can be cured by Dr. Sago's Catarrh Remedy. Its proprietors have for years made a standing offer in all the newspapers of \$50 for an incurable case. It speedily subdues all bad smells, is thoroughly cleansing, antiseptic, soothing and healing in its effects.

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NEW YORK.

The following is the official list of the prices obtained at the New York Lumber Auction Company's sale at New York on July 13th:—

Lot 1—Sap pine moulding strips, 1 inch, 12,808 ft, \$13.

Lot 2—Brown ash, 1 1/2 inch, firsts, 1,701 ft seconds, 1,280 ft; culls, 406 ft, \$24.

Lot 3—Brown ash, 3 inch, firsts, 3,563 ft; second-3,106 ft; culls 900 ft, \$23 60.

Lot 4—Brown ash, 3 inch, firsts, 1,745 ft; seconds, 1,406 ft, culls, 551 ft, \$20.

Lot 5—Quartered sycamore, 1 inch, firsts, 5,021 ft; seconds, 3,025 ft; culls, 1,149 ft, \$30.

Lot 6—White pine shelving, common rough, 1 inch, 700 ft, \$15.

Lot 7—Brown ash, 1 inch, firsts, 3,070 ft; seconds, 2,064 ft; culls, 1,583 ft, \$20.

Lot 8—Brown ash, 1 inch, firsts, 2,123 ft; seconds, 2,176 ft; culls, 1,250 ft, \$19 60.

Lot 9—Brown ash, 1 inch, culls, 5,872 ft, \$11.

Lot 10—Brown ash strips, clear, 1 inch, 3,006 ft, \$13 60.

Lot 11—Whitewood, 3/4 inch, firsts, 3,240 ft; seconds, 2,075 ft; culls, 344 ft, \$23 60.

Lot 12—Whitewood, 1 inch, firsts, 3,543 ft; seconds, 4,130 ft; culls, 503 ft, \$24 60.

Lot 13—Brown ash, 1 inch, firsts, 2,071 ft; second-2,312 ft; culls, 1,141 ft, \$16 00.

Lot 14—Brown ash, 1 inch, firsts, 2,080 ft; seconds, 1,571 ft; culls, 1,000 ft, \$16 50.

Lot 15—Brown ash, 1 inch, firsts, 1,964 ft; seconds, 1,602 ft; culls, 1,213 ft, \$15.

Lot 16—Brown ash, 1 inch, firsts, 1,740 ft; seconds, 1,689 ft; culls, 1,057 ft, \$15.

Lot 17—Brown ash, 1 inch, firsts, 3,922 ft; seconds, 3,607 ft; culls, 2,275 ft, \$14 60.

Lot 18—Brown ash, 1 inch, firsts, 0,582 ft; seconds, 0,465 ft, \$10.

Lot 19—Sap pine moulding strips, 1 inch, \$17 60.

Lot 20—Whitewood, 3/4 inch, firsts, 3,031 ft; seconds, 4,10 ft; culls, 434 ft, \$22.

Lot 21—White pine box 1 1/2 inch, 10,037 ft, \$14 75.

Lot 22—Cherry, 1 inch, seconds, 744 ft; culls, 1,834 ft, \$21.

Lot 23—Whitewood, pl. 2 s., 3/4 inch, firsts, 2,300 ft; seconds, 2,731 ft; culls, 63 ft, \$20 60.

Lot 24—Whitewood, 1 1/2 and 2 inch, firsts, 3,000 ft; seconds, 2,750 ft; culls, 81 ft, \$23.

Lot 25—Whitewood, 1 inch, firsts, 1,420 ft; seconds, 3,790 ft; culls, 3,143 ft, \$19 60.

Lot 26—White pine shelving, com. rough, 1 inch, 0,352 ft, \$10.

Lot 27—Whitewood, extra wide, 3/4 inch, firsts, 4,163 ft; seconds, 1,275 ft; culls, 01 ft, \$23 60.

Lot 28—White pine select, 1 1/2 & 2 inch, culls, 937 ft; picks, 1 1/2 & 2 in., 2,470 ft; box, 1 1/2 inch, 51 ft, \$23.

Lot 29—W. pine select, 1 inch, 404 ft, picks, 1 inch, 9,120 ft, \$21.

Lot 30—White pine, uppers, 2 inch, 4,071 ft, picks, 2 inch, 170 ft, \$43 60.

Lot 31—Walnut, 1 inch, firsts, 373 ft; seconds, 067 ft; culls, 1,313 ft, \$41.

Lot 32—Red oak, 2 inch, firsts, 463 ft; seconds, 2,307 ft; culls, 5,206 ft, \$10.

Lot 33—Sap pine, moulding strips, 1 inch, 2,451 ft, \$15.

Lot 34—Sap pine, moulding strips, 1 inch, 4,043 ft, \$15 60.

Lot 35—Sap pine, moulding strips, 1 inch, 5,359 ft, \$15 60.

Lot 36—Cherry, 1 inch, seconds, 301 ft; culls, 3,167 ft, \$23.

Lot 37—White pine uppers, 1 1/2 inch, 4,630 ft, \$41 50.

Lot 38—White pine uppers, 1 1/2 inch, 3,654 ft, \$41 60.

Lot 39—W. pine box, 1 inch, 14,700 ft, \$14.

Lot 40—W. pine box, 1 inch, 20,025 ft, \$14.

Lot 41—Whitewood, 1 inch, seconds, 2,976 ft; culls, 9,890 ft, \$19.

Lot 42—Whitewood, 3/4 inch, firsts, 0,316 ft; second-3,545 ft; culls, 379 ft, \$21.

Lot 43—W pine picks and box, 1 inch, 4,274 ft, \$15.

Lot 44—Sap pine, moulding strips, 1 inch, \$16 60.

Lot 45—Brown ash, 1 inch, firsts, 914 ft, seconds, 2,484 ft; culls, 2,479 ft, \$10.

Lot 46—Whitewood, 1 1/2, 2 and 2 1/2 inch, firsts, 0,514 ft; seconds, 3,329 ft; culls, 93 ft, \$23 60.

Lot 47—Pine common stocks, 1x12 inch, 10,715 ft, \$13 76.

Lot 48—Whitewood, 1 inch, firsts, 0,141 ft, seconds, 4,523 ft; culls, 231 ft, \$27 60.

Lot 49—Whitewood, 1 inch, firsts, 1,437 ft; seconds, 1,502 ft; culls, 314 ft, \$23 60.

Lot 50—Brown ash, 2 1/2 inch, firsts, 3,654 ft; seconds, 4,180 ft; culls, 1,012 ft, \$21 60.

Lot 51—Whitewood, 1 inch, firsts, 1,203 ft; seconds, 2,230 ft; culls, 103 ft, \$23.

Lot 52—Whitewood, 1 inch, firsts, 2,342 ft seconds, 3,531 ft; culls, 250 ft, \$24 60.

Lot 53—Brown ash, 3 inch, firsts, 3,633 ft; seconds, 3,151 ft; culls, 953 ft, \$16.

Lot 54—Brown ash, 3 inch, firsts, 4,350 ft; seconds, 3,537 ft; culls, 1,570 ft, \$15.

Lot 55—Cherry, 1 inch, seconds, 655 ft; culls, 4,174 ft, \$18.

Lot 56—W pine shelving, common, 3/4 inch, planed

two sides, 10,207 ft, \$12.

Lot 57—Sap pine moulding strips, 1 inch, 12,507 ft, \$16.

Lot 58—Brown ash, 4 inch, firsts, 003 ft; seconds, 1,217 ft; culls, 167 ft, \$20.

Lot 59—Brown ash, 2 inch, firsts, 1,406 ft; seconds, 2,507 ft; culls, 775 ft, \$17 10.

Lot 60—Whitewood, 1 inch, firsts, 4,245 ft; seconds, 5,000 ft; seconds, 1,331 ft, \$24.

Lot 61—Cherry, 1 inch, firsts, 480 ft, seconds, 1,022 ft; culls, 160 ft, \$50.

Lot 62—Whitewood, 1 inch, culls, 2,101 ft, \$15.

Lot 63—Walnut, 1 inch, culls, 2,894 ft, \$36 60.

Lot 64—Walnut, 1 inch, firsts, 162 ft; seconds, 5,102 ft, \$60.

Lot 65—Pine roofing boards, 1x10 inch, 1 and 1/2 pl 1 s, 4,220 ft, \$18 60.

Lot 66—Brown ash, 3 inch, firsts, 2,231 ft; seconds, 1,670 ft; culls, 413 ft, \$15 60.

Lot 67—Whitewood, 2 inch, firsts, 3,869 ft; seconds, 2,330 ft; culls, 180 ft, \$23 60.

Lot 68—Whitewood, 3/4 inch, firsts, 8,877 ft; seconds, 4,034 ft; culls, 111 ft, \$21 60.

Lot 69—Whitewood, 1 inch, culls, 3,674 ft, \$15 76.

Lot 70—Basswood, 1 inch, culls, 4,010 ft, \$17 60.

Lot 71—Basswood, 1 inch, firsts, 2,903 ft; seconds, 3,710 ft, \$22.

Lot 72—Whitewood, 1 inch, culls, 11,344 ft, \$16 60.

Lot 73—Walnut, 2 inch, culls, 0,319 ft, \$29 60.

Lot 74—Whitewood, extra wide, 3/4 inch, firsts, 10,434 ft; seconds, 5,183 ft; culls, 1,000 ft, \$23.

Lot 75—Walnut, 1 and 3 inch, seconds, 1,231 ft, \$51.

Lot 76—Walnut, 1, 2 and 3 inch, culls, 0,557 ft, \$30 60.

Lot 77—Whitewood, 2 inch, firsts, 3,009 ft; seconds, 1,702 ft; culls, 34 ft, \$30.

Lot 78—Whitewood, 1 inch, culls, 3,485 ft, \$15 60.

Lot 79—Whitewood, 1 inch, culls, 3,207 ft, \$14 60.

Lot 80—Whitewood, 1 inch, culls, 3,079 ft, \$14 60.

Lot 81—W pine box, 1 inch, 12,680 ft, \$11.

Lot 82—Brown ash, 3 inch, firsts, 3,635 ft; seconds, 3,710 ft; culls, 500 ft, \$14.

Lot 83—Brown ash, 2 inch, firsts, 2,391 ft; seconds, 2,877 ft; culls, 534 ft, \$11.

Lot 84—W pine box, 1 inch, 21,291 ft, \$13.

Lot 85—Whitewood, 2 inch, firsts, 400 ft, seconds, 569 ft, \$25.

Lot 86—Whitewood, 2 s, 1 inch, firsts, 3,305 ft seconds, 5,008 ft; culls, 112 ft, \$24 60.

Lot 87—W pine, select and picks, 1 inch, 7,009 ft, \$24.

AN exchange says:—Years ago two fences on a western farm were built of basswood rails. In one, the rails had been cut in summer; in the other the rails had been cut in winter. The winter-cut rails rotted, but the summer cut became hard like iron and lasted for a very long time. It is explained that in the rails cut in winter the sap was a long time in drying, and that in consequence it fermented and spoiled the wood; while the rails cut in summer seasoned rapidly in the hot weather and hardened.

West's World's Wonder or Family Liniment is a remedy that no well regulated household should be without, as it is a positive cure for Rheumatism. It is invaluable for Sprains, Cuts, Bruises, Burns, Scalds and all diseases requiring external application. Price 25 cents and 50 cents per bottle. Sold by—

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Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefited, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King Street West, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star* 1y12.

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do June 8th,	do October 5th,
do July 13th,	do November 2nd,
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Market Reports.

TORONTO.

From Our Own Correspondent.

JULY 24—Our retail yards continue to do a rattling trade, although not near the amount they would do if the wholesale men would stop doing a retail trade.

Shipping from our docks, as predicted by me in a former letter, has fallen off to a mere nothing. The Longford stock being shipped by Christie, Kerr & Co, to a Boston firm is about all that is being moved at present.

Bill stuff cut to fill orders is ruling high. Just now quite a number of the mills have not got in their tons of long logs as yet, so that comparatively few mills are able to fill bills over twenty 29 feet in length and the few that can do so demand a good figure.

One mill man demanded \$50 per M on cars for 45 feet lengths. The same stuff can be bought in Liverpool, England, to day for less money. This is the great fault of many of our mill men, when they get the chance they spread it on too thick.

Dealers in all cases possibly prefer to bring in lumber by the G. T. R or C. P. R., thereby escaping the petty difficulties thrown in the road of the consignees by the N. & N. W. R. R. Co.

Table listing lumber prices for various grades and sizes, including Mill cull boards, Shipping cull boards, and various types of flooring.

Table listing lumber prices for various grades and sizes, including 1 1/2 inch flooring, 2 1/2 inch flooring, and various types of sheathing.

MONTREAL.

From Our Own Correspondent.

JULY 26—There is no essential change to note in quotations during the past week. Business still continues brisk although the demand for large quantities has slightly fallen off.

Enquiry for carloads has improved considerably since last report. It is said that mill owners have taken many orders for future delivery and that present stocks in first hands are light.

Advices from the Saguenay state that the cut of logs in that district last year was very large, upwards of 600,000 logs having been cut, and in most of the establishments on the North Shore operations were conducted entirely on Messrs Price Bros' account.

Table listing lumber prices for various grades and sizes, including Pine, 1st quality, Spruce, and various types of shingles.

Table listing lumber prices for various grades and sizes, including Long Maple, Long Birch, and Long Beech.

CHICAGO.

The Northwestern Lumberman of July 21st says:—

Cargoes to the number of 175 have entered port during the week. The Monday fleet was a fair one, but since then the market has not been liberally supplied with offerings.

The price of piece stuff remains at former quotations, though it is reported a little stronger than last week. Short green piece stuff, as a basis, is now quoted at \$9, and firm at that.

Receipts of lumber and shingles for the week ending July 22, as reported by the Lumberman's Exchange:—

Table showing receipts of lumber and shingles for the week ending July 22, including Lumber, Shingles, and various types of stock.

The demand for long and heavy joists is good. Cargoes of 2x12 sell from \$11.50 to

\$12.50 a thousand. Extra lots of 3x12 bring as much as \$13. Timbers sell fairly well. The call for bridge stuff to go into railroad construction is reported quite urgent by the men who make that feature of business a specialty.

Inch lumber is working off moderately under a demand that cannot be called active. Prices are made within our quoted range. Buyers are not looking to the cargo market for good inch lumber as they once did.

Standard shingles are a little firmer this week than hitherto. The mills over the lake are running with some reference to the demand; that is they are not crowding production to the utmost, as they generally do.

Prices are steady. The following are the quotations at the yards:—

Table listing lumber prices for various grades and sizes, including Dimension, short green, and various types of boards and shingles.

LAKE FREIGHTS.

Table listing lake freight rates for various destinations, including From Muskegon, From Whitehall, and From Alpena.

AT THE YARDS.

There has been a slight increase of movement within the past few days. Whether this is wholly owing to closing out of shipments on the low rate at Omaha, before the incoming of the new rate of 14 cents a hundred, is a question that the dealers are discussing.

Receipts of lumber and shingles for the week ending July 22, as reported by the Lumberman's Exchange:—

Table showing receipts of lumber and shingles for the week ending July 22, including Lumber, Shingles, and various types of stock.

BUFFALO.

We quote cargo lots:—

Table listing lumber prices for various grades and sizes, including Uppers, Common, and Culls.

TONAWANDA.

Table listing lumber prices for various grades and sizes, including Three uppers, Common, and Culls.

OSWEGO, N.Y.

From Our Own Correspondent.

We cannot change quotations, trade is unusually dull. The new cut of lumber is now coming forward quite freely, and dealers are anticipating a better demand, but can see no prospect of an advancing price.

Table listing lumber prices for various grades and sizes, including Three uppers, Pickling, and various types of shingles.

ALBANY.

Quotations at the yards are as follows:—

Table listing lumber prices for various grades and sizes, including Pine, clear, Pine, fourtins, and various types of shingles.

LONDON.

The Timber Trades Journal of July 17th says:—It is too early to hazard any predictions as to the course that trade will take during the remainder of the current year, more especially as the country has scarcely recovered from the disorganization occasioned to business by the recent elections.

We are always being told that things cannot go on for ever in the present ruinous state and a turn must be close at hand; yet still the market keeps on declining, and trade languishes as if hopelessly incurable.

THE HENDERSON LUMBER CO. Limited.

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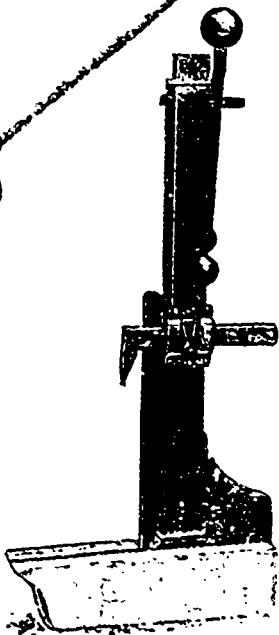
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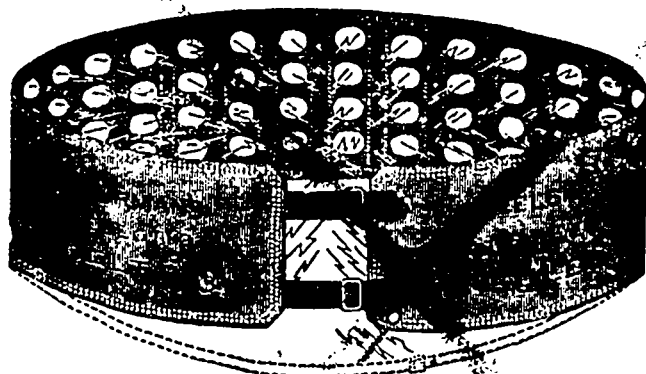
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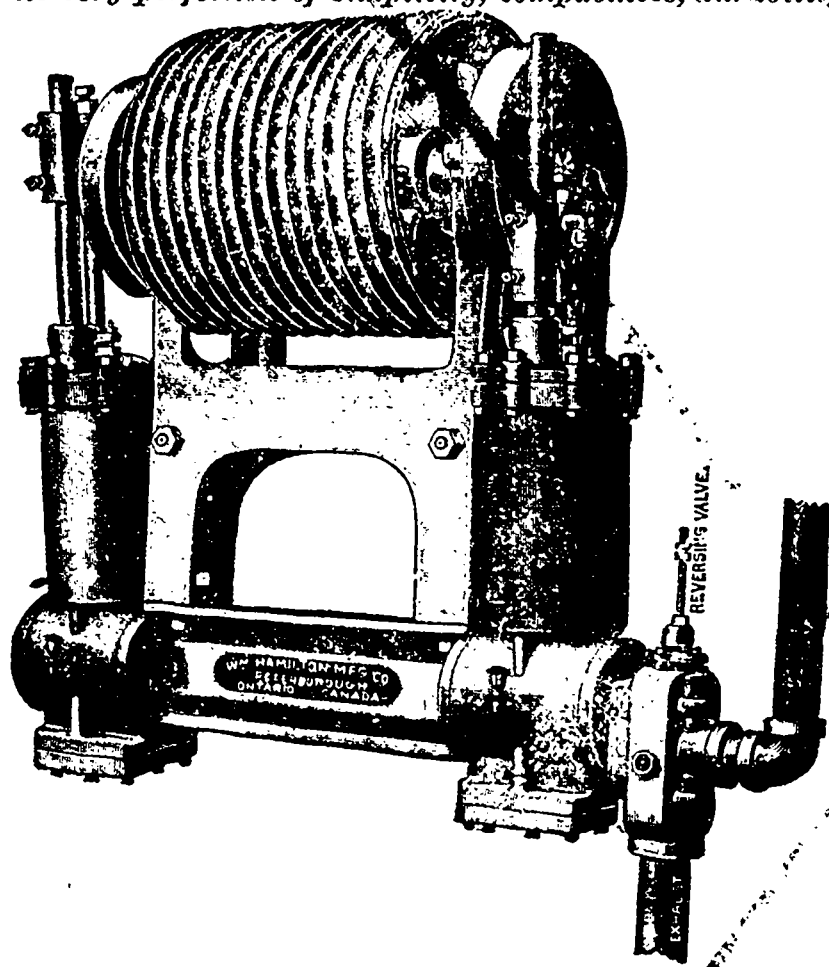
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FOR STEAM FEED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscillation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The Sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the Sawyer has perfect control of it by his lever either to go fast or slow. Should the Sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastened, so that it is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft

from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bar. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the coupling and uncoupling of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubesa, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

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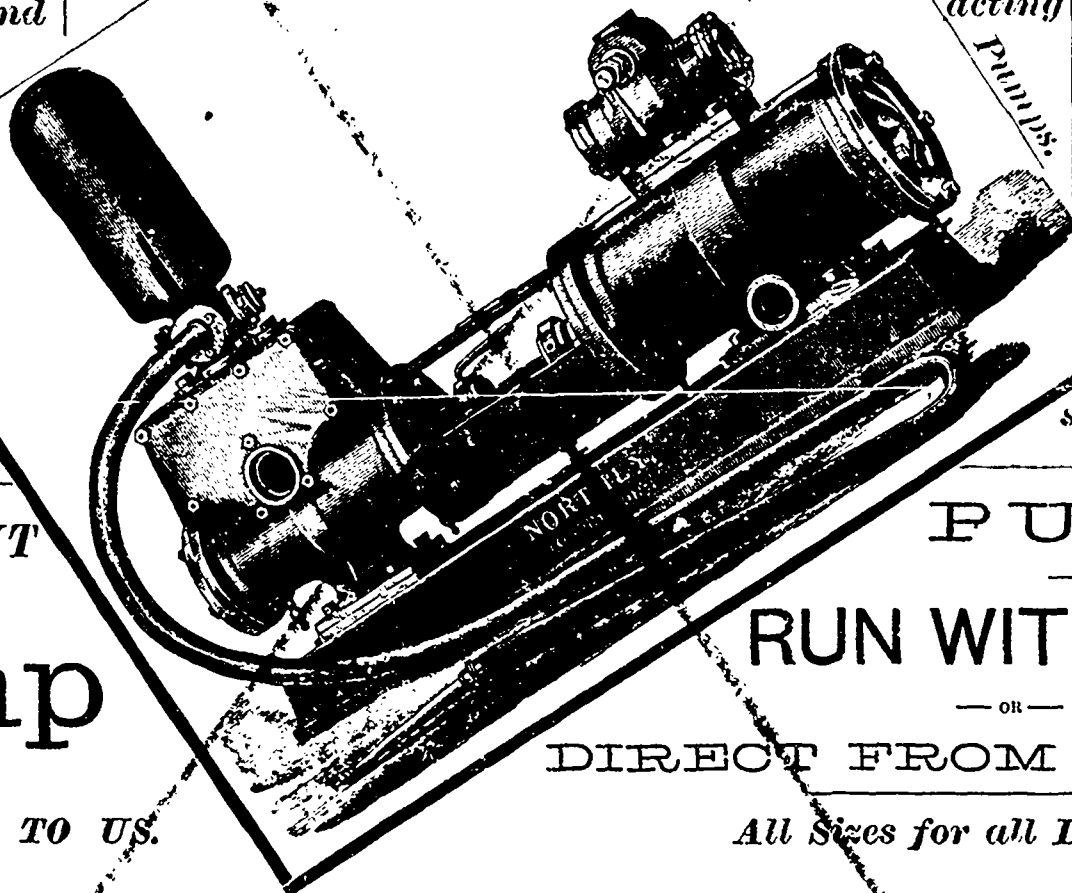
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