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INTERNATIONAL FORESTRY EXHIBITION, EDINBURGH.

The date for the opening of this exhibition (July 1st), to which we have on several previous occasions called the attention of our readers, is now rapidly approaching, and we are very pleased to announce that there is every prospect of its being a most interesting and representative "show." From all parts of the world the committee continue to receive applications for space, and so great has been the demand that it has been decided to erect additional buildings. Norway, Sweden, Russia, Canada, and all the great timber-producing countries will send specimens of their forest treasures, and as to the private exhibitors, who number over 500, the variety of their exhibits, to judge from a preliminary list of exhibitors which we have seen, is astounding, and the only wonder is that the idea of a "Forestry" exhibition should have been allowed to lie dormant so long.

To the timber trade this exhibition cannot fail to be a special attraction, and the great variety of hardwoods and furniture which will be exhibited will in all probability lead to the introduction, for commercial purposes, of many woods which, although well adapted for use in different branches of trade are yet unknown in this country. The forest resources of Japan, Siam, for example, have, with the exception of some few cargoes of teak from Bangkok, not yet found their way to any extent into this market, and yet, we understand, the exhibits from these countries will include specimens of several woods which are in every way fitted to take their place alongside mahogany, black walnut, and other favorite cabinet woods.

The machinery for the working and conversion of wood should also prove a very attractive feature in this exhibition, and the names of Messrs. McDowall & Co., of Johnston, N. B., and other eminent makers seem to guarantee a goodly show in this class. It would be very interesting if some foreign nation were to show us the machines in use for the various converting operations in their respective countries; the tools used in the manufacture of those wonderful and intricate wood carvings from the East, which are so much admired, would, for example, prove very interesting.

A glance at the list of exhibits shows us such a rich treat that, if we once begin to tell our readers what they will find here, we shall hardly know where to stop, besides in some measure anticipating the pleasure which they will derive from a visit to Edinburgh next month; so we must content ourselves with a brief reference to what strikes us as a particularly interesting feature, and that is a contribution from Manitoba and the Canadian North-West, which has just been shipped from Montreal by the steamer Waldensian for Glasgow,

This exhibit, which is made by the Canadian Pacific Railway Company, through their representative in London, Mr. Alexander Bugg, will consist of a homestead farm as it exists in the Canadian North-West. On space reserved for the purpose in the ground of the exhibition will be erected a portable house, such as are in general use in the Canadian North-West, amply supplied with furniture, household and general farming utensils as used by settlers, and manufactured from Canadian woods, the current price of each article being marked as a guide to intending emigrants. A roof stable, roofed with slabs, a driving shed, and all the accompaniments of a homestead farm, will be included; among these are the agricultural implements in general use in the North-West, of which wood is a principal component part; wagons, sleighs, and one of those remarkable and almost extinct means of conveyance, a Red River cart, capable of carrying as much as twelve hundred pounds for hundreds of miles, though in its manufacture not a particle of iron is used. A pump made from native wood will also be shown. Perhaps, however, the most interesting part of the exhibit will be a collection of the native woods of the North-West, comprising some thirty-seven varieties, in addition to a complete assortment of Rocky Mountain timber, and numerous other articles. The exhibit will be arranged as though the farm were in actual use, and, seeing the importance attaching to the emigration movement, it will no doubt prove a notable attraction of the exhibition.

We are pleased to observe that the executive, wisely following the plan so successfully adopted by the management of the South Kensington Exhibition, have taken every means to make the exhibition thoroughly popular and attractive, and the question of evening illumination of the grounds and other attractions have engaged their attention, and with these and electric lighting, which will be displayed in the grounds as well as in the building, the exhibition is sure to be a favorite resort for the visitors and tourists from all parts of the world as they pass through Edinburgh during the summer season. The committee have also arranged with Mr. Pain, the well-known pyrotechnist, for an illumination of the exhibition grounds on the evening of Tuesday, 8th July, and this, it is expected, will be the first of a series of illuminations.—*Timber Trades Journal.*

NEW LUMBER RAILROAD.

The Williamsport (Pa.) *Gazette*, of a late date, had the following concerning a new railroad outlet for mills in the vicinity of Lock Haven: "Last week engineers surveyed a route from Kistler's tannery, Lock Haven, to connect with the Beech Creek road either at Mill Hall or about Flemington. The leading spirit in the movement is W. W. Morrison. A new company

is being organized, of which Samuel Crist will be president. The object of this company will be to reach with the branch roads the saw mills, tanneries and other manufactories south of the Pennsylvania & Erie road. If built, it will be by Lock Haven capital and controlled by Lock Haven people. As it is not unlikely that proper traffic arrangements can be made with the Beech Creek, the Pine Creek and Reading railroad companies, this little road ought to pay the subscribers handsomely, and it ought in a few years to double the business of Lock Haven. The survey for the road is being made by Mr. Jackman, nephew of Mr. Morrison."

COLONIAL SAW MILLS.

In Edward Eggleston's able article, *Commerce in the Colonies*, published in the *June Century*, he has the following about early saw mills: "In all of the colonies there was a trade more or less considerable in timber, which was the quickest and easiest return to be had by a ship bearing emigrants and supplies. But human hands are few in a new country, and the process of getting cut boards and joists, by one man in a pit and another above to pull and push the saw, was tedious, and its expensiveness often counterbalanced the cheapness of the raw material. Two men could saw but about 100 feet in a day after the timber had been squared for them, and a single plank sometimes sold for more than a day's wages. Rude planks were sometimes made by splitting them out, and the first houses were often inclosed with these set upright like palisades against a frame, or with large shingles called "clapboards," rived with a froe. The abundance of timber and the scarcity of timber early suggested the profit there would be in erecting saw mills. One was sent to Virginia in 1620, long before England had such machines; but the mill and the men who ran it probably perished together in Opechancanough's massacre in 1622. Another was built in Virginia in 1632, at a cost of 43 beaver skins. The Dutch built many mills along the Hudson to run by wind or water, and at an early day great quantities of boards were exported. By 1701 there were 40 saw mills in New York, one of them running 12 saws. Planks were often sawn 18 feet long and three feet wide without showing a knot. The New Hampshire settlements were at first almost entirely composed of timber cutters, and here there was a saw mill as early as 1635. About this time Massachusetts also set up one of these devices, which were new to Englishmen, but 1,200 years old in Germany. Lumbermen also thronged the harbors of Maine, and at a later period New England abounded in cheap saw mills built upon small brooks. An important branch of the trade on the northern coast was the supplying of the royal navy with yards and bowsprits. White pine trees over two feet in

diameter were reserved for the navy, to be used for masts, which were at that time made of one piece. Nothing more exciting was ever seen in the lumber woods than the dragging to the water side of one of these great pines, which might reach 120 feet in length. It was drawn over the snow by 70 or 80 yoke of oxen; and since it was difficult to start so many beasts at once, the immense train was never allowed to stop, however long and hard the road. If an ox became exhausted, he was cut out of the yoke, without a moment's pause. Ships of peculiar construction, and about 400 tons burthen, were employed to carry these masts, and were able to take about 50 at a time, with yards and bowsprits."

A New Field to Conquer.

N. Slaght & Co., of Greenville, Mich., who have 13,000 acres of fine timber land on the headwaters of Pine river, in Lake County, have concluded to begin operations this season, with a view to getting the product on the market early next spring, and have accordingly contracted with Wm. F. Stuart, of Sand Lake, to remove his shingle mill from that place to a point eight miles west of Tustin, which work has already been begun. Mr. Stuart will also erect another shingle mill in the fall, and two more in the spring, each mill to have a capacity of 45,000 per day. A saw mill will be in operation by winter, and will have a daily capacity of 40,000 feet. The firm estimate that the tract contains 160,000,000 of shingle timber, three-fourths of which will run to staves. The hemlock and hardwood timber bordering the stream is estimated at 50,000,000 feet. The product of both mills will be piled until spring, when the firm propose to put in an eight mile spur track, narrow gauge, striking the Grand Rapids & Indiana railroad about midway between Tustin and Hobart. It will take from five to eight years to cut all the timber on the tract.—*Northwestern Lumberman.*

The oak tanbark industry of the mountain region of Tennessee is becoming important. Fully 1,500 men are employed in the occupation of getting bark along the Cumberland & Ohio railroad. A man who could not sell his land at \$3 an acre, has bark enough off it to amount to \$50 an acre. The season for cutting the bark begins in April and lasts five weeks.

Ludington Appeal. The Ludington Shingle Company's mill, employing 35 men and boys, has shut down indefinitely, owing to the low prices that shingles are bringing. The Lyon shingle mill is only running to half its capacity, and when Butters & Peters start up it will be to run only one side. There is talk of all or nearly all the shingle mills on the shore shutting down, but it is likely to end in talk, nothing more.

MANUFACTURING IN EUROPE.

Of all European nations only three, England, France, and Germany, claim to have a textile industry. Manchester, Bradford, Glasgow, Lyons, Elbeuf, Crefeld, Chemnitz, and many more are well-known centres of European textile industry, and the manufacturers of these towns can be found in almost every part of the world. The lion's share of this trade is, however, taken by England, whose cotton industry, with its 42,000,000 spindles (that is more spindles than the rest of the world put together), has reached a stadium of development that the inventors of the spinning-frame and power-loom would have hardly dreamed of one hundred years ago. In order to protect themselves against the too great productivity of England, the European States have nearly all placed high import duties on foreign goods so as to secure the home market to their own manufacturers. Lyons is still the centre of the silk industry, but the Swiss and German silk trade keenly compete for the trade of Lyons. The country which shows the relative increase in textile industry during the last ten years is Germany, and that country is now aspiring for a good share of the world's textile trade, as is proved by the efforts made to establish in several cities permanent exhibitions of samples for export. But, notwithstanding all the efforts of the French and Germans, England has so far retained her industrial supremacy, and her industries show no sign of decay. Will the efforts of Continental Europe be at last crowned by success, and will the Continent succeed in obtaining the principal share of the world's textile commerce? Time will show. But as civilization travels westward so does commerce also, and the position and resources of the United States, and its progressing industrial capacity, permit us to expect that in the fight for the world's commerce the industrial powers of Europe will not have to fight alone, but will have to count as a competitor the great American Republic, whose incalculable resources will be a heavy odd in favor of the younger continent.—*New York Dry Goods Bulletin.*

ANTWERP INTERNATIONAL EXHIBITION.

We have received the prospectus of the great international exhibition to be held at Antwerp in the year 1885, commencing on the 2nd of May, and lasting for five months. This exhibition which, while the inception of the project was due to private enterprise, is supported by the Government of Belgium and the city of Antwerp, being under the patronage of the King of the Belgians, is intended, as a matter of course, to further international exchange and to offer to all the nations an opportunity to exhibit their various products to the people of the Low Countries more particularly, and its originators believe that, from the commercial position of this city, a vast number of visitors will attend it.

The exhibition proper will be divided into five sections, education and the several arts, navigation, commerce, fisheries and pisciculture, electricity and agriculture, forestry and horticulture. It will likewise conclude with an exhibition of painting, sculpture, architecture and engraving, with a convocation of the artists of all nations. The grounds secured comprise an area of 54½ acres, and a dock for the accommodation of the marine section, and the buildings, which will be very large, are being constructed upon the most approved principles.

The first section, that of education, will comprise schemes of organization and appliances for instruction, maps, books, photographic apparatus, musical instruments, mathematical instruments, &c. Distinct classes in this section will be devoted to furniture of all kinds, including cutlery, bronzes, clocks, leather work and heating apparatus, and to textile fabrics of all kinds, including, strange to say, along with all manner of woven goods, portable weapons, hunting and shooting, travelling and camp equipage and toys.

The second section, that of industry, includes many varied classes, among which are the product of the mine and all appliances used therein; products of the forest, and of hunting and fishing, agricultural products not used as food, chemical and pharmaceutical products, pro-

cesses for bleaching drying, printing and dressing leather and skins; machinery in general and all apparatus used in cultivation and working of forests, in agriculture, chemistry, tanning, spinning and rope making, weaving and making of cloaks, furniture, paper, carriages, railway appliances, telegraphic apparatus and military appliances and apparatus. Under this section will also be placed in a separate group, all alimentary products of every possible kind.

The third section, navigation, will comprise vessels of all kinds, and apparatus for the saving of life, &c. Fishing vessels and all the varied apparatus used in fishing and fish culture, including statistics, &c., will be placed in a separate group, and a separate group of this class will be composed of statistics, commercial museums and exports to foreign nations.

The fourth section, electricity, will comprise all relating to the generation or use of the electric fluid, such as steam plant, electric piles, chemical batteries, cables, instruments of all kinds, and the appliances of electricity of every form practically illustrated.

The fifth section, agriculture, includes special classes of cattle, dogs, horses and asses, and flowers and small fruits, as well as regular classes for all domestic animals, fruits, seeds, trees and plants.

All foreign governments are requested to appoint commissioners to whom all applications for space may be sent, and who will have the discharging of all questions relating to flower space, but in the event of commissioners not being appointed, would be foreign exhibitors can correspond with the executive committee at Antwerp directly.—*Montreal Witness.*

STEAMERS FOR TIMBER CARRYING.

Steamers are an innovation in the wood trade, and are taking up the office of wood-built ships without being constructed for the purpose of carrying timber. It would not be wise to say they are so unsuitable that they will have to retire from this class of carrying, for they are running the old ships off the water one by one, and one who runs and reads can see they are the ships of the future. It is thus clear that we must admit their presence in the wood trade, and it is equally clear that some change must be effected in their construction to enable them to safely take in and discharge cargoes of timber.

The first entry of steamers in the trade was in connection with carrying deals, and for this they cannot even be termed suitable, as all the cargoes have to be hauled on to the deck, and lowered into the hatchways. In discharging, the deals are hung in chain or rope slings, and hauled high into the rigging, and lowered over the sides. This is, of course, done by steam, otherwise the working of wood as stowage for such vessels would be madness. The damage to goods from being handled in these slings is so great that we have seen charter-parties framed in which the use of chain slings was prohibited. We have also seen such prohibitions disregarded, and claims made for damages to goods by the chains breaking off the edges. It is being found in practice that chain slings are unsafe, for they are more liable to slip than slings of rope.

This question of handling goods in connection with steamers is one very patent to ship-owners, as in case of accident or death to any of the hands employed the penalties under the Employers' Liability Act are very serious. The effect of this may be seen in the sparing of chain slings, and the invariable introduction of new ropes to the loading and discharging of every cargo.

The difference between wood vessels and iron vessels, in regard to their suitability or unsuitability, lies in the fact that steamers have no bow ports through which the goods can be discharged after the holds are broken into. They are built on lines of speed, and the angles of the cutwaters are so acute that, independent of the policy or risk of constructing these costly vessels with portable bow-plates, they in a large measure are impracticable.

We must not overlook the fact that steam vessels trading to the Baltic are invariably built with a series of small portholes at their sides

immediately under the level of the decks. These are most useful in discharging sawn deals and boards on to quay or lighter, but they are no use for hewn or sawn timber.

It is to the point of hewn or sawn timber that we more especially direct our attention. The unsuitability of steamers for carrying these goods is noticeable under several headings. The first is that the holds are divided into "fore" and "aft" by the engine and boiler being placed amidships. Again the fore hold is invariably divided into two, the "forehold," or the "forecastlehold," and the "main hold." The effects of these divisions, even in large and long ships, are such that they render one or more of the holds too short for practically stowing timber of such long specification as we are in the habit of receiving from the pitch pine ports of the Southern states of America.

We write with a case before us of a large vessel which has brought a cargo of sawn timber from Pensacola. Her forehold was too short and too inconvenient to stow timber, and it had to be entirely filled with deals. Her aft hold was too short for the regular run of the cargo, and the shorter lengths had to be picked out to suit it. The main hold was reserved for the long lengths, and consequently the stowage was bad; deals were used when possible, but a lot of dead space was unavoidable. Here the whole of the timber had to be hauled over the bulwarks and the deck and lowered on down through the hatchway into the hold. The stowage of the wings, which comprised nearly two-thirds of the hold, was interfered with by iron columns or pillars, which supported the deck cut into by the hatchway. The stowage of the lower part was interfered with by a beam which crossed the vessel in a line with one end of the hatchway.

The loading and discharging of this, the best hold in the vessel, was one long struggle with difficulties, and the dangers connected with it were such as to make one wonder where men could be found to risk their lives for their daily bread in such a calling.

The process is to work the logs free in the hold, to clip them with hooks about one-sixth from the end, and in this state to hoist them into the rigging until the lower ends are clear of the deck. This being done the ends are carried over the bulwarks, and the balks are lowered across the deck, the hooks are then moved to the ends of the logs, and they are tilted up until they shoot like darts into the dock, making long dives into the water, and coming to the surface at some distance from the ship.

You cannot look on this work without coming to the conclusion that it is both costly and dangerous, and endorsing the remark of an expert of fifty years' experience amongst baltic timber, which was "something different to this will have to be done if steamers are to carry baltic timber; the steamers will have to be built for the purpose."—*Timber Trades Journal.*

SAW MILL WASTE.

A correspondent of *The Industrial Journal*, Bangor, Me., writes from Waterville: "The Lockwood Company, proprietors of the cotton mills at Waterville, are on the track of the saw mill owners located on the river at Fairfield and Skowegan, seeking to restrain them from depositing their debris in the river.

In the spring of 1876, soon after the first cotton mill at Waterville started up, the slabs, edgings, shingle waste and other debris from the lumber mills above came down upon them in such quantities as to obstruct the flow of water through the raceway and canal, and also gathered on the rocks to such an extent that it was impossible to rake it off, fast enough to let sufficient water through to run the wheels. The following winter the legislature was asked to pass a law prohibiting the throwing of such refuse into the Kennebec and its tributaries. The law was not passed that year, but was passed by the legislature of 1878. Some little attention was paid to it, but it was not until three years ago, when the pulp mill at Fairfield was built, that much of the waste was kept out of the river, and then only the slabs and board edgings, which were valuable for wood and to grind into pulp.

Meantime the Lockwood Company continued to experience great damage and expense, and tried often to secure the desired end by friendly negotiations. One year ago the treasurer met the Fairfield mill owners, and they promised that the nuisance should cease at once. This year the trouble came in a still more aggravated form than ever before, causing the mills to shut down for several days, thus occasioning great loss in production, and expense to the company as well as loss of wages to the help. An application was then made for an injunction, and Judge Peters came here to hear the parties on both sides. Hon. E. F. Webb appeared for the Lockwood Company, and S. S. Brown, Esq., and Col. J. W. Spaulding for the saw mill owners. Acting upon the advice of the judge, it was agreed between the parties, since the May term of the law court is so near at hand, to the evidence before a commissioner and have it reported to the full court at Augusta, when the chief justice will grant a temporary injunction, provided the facts in the case warrant it, pending the consideration of the question of a permanent injunction by the full court. R. E. Dunn, Esq., president of the Lockwood Company, and J. W. Danielson, treasurer, have already given their depositions, from which it appears that the damage has been from \$40,000 to \$50,000 to the company, besides a like sum to the help. The company employs 1,100 hands, and the monthly pay rolls is \$25,000. The result of this case will be watched with deep interest, for it is reasonably sure that no more cotton mills will be built in Waterville if this nuisance is to continue."

SHADE TREES ON THE FARM.

A few well-formed trees along the fence rows, and even scattered here and there in the open fields, add greatly to the appearance and value of a farm. Cattle, sheep, and other farm animals, suffer greatly from the hot sun when confined in a shadeless pasture in midsummer. They will seek the slight protection from the boiling sun a fence may afford, or stand huddled together for hours, with their heads shaded by each other, in a most unhealthy manner. Animals thus exposed do not give the best returns to the owners, and for this reason, if not for comfort's sake, they should be provided with shade. Some farmers object to trees in the pasture, because their shade is too inviting, and keeps the live stock from feeding. Farm animals need not graze all the time, and with good pasturage, can get all the graz they need in the cool portions of the day, between which they should have refreshing shade for chewing the cud of contentment. Men are not the only creatures that may be sun-struck; cows unduly exposed to heat, frequently become sick, quickly fall off in milk, and may require weeks of expensive nursing to bring them back to good health. Trees are an obstruction to the cultivation of a field, and occupy the soil for several feet around them, to the exclusion of grain and other crops, and therefore it is best to plant most of the trees along the line of boundary fences. The tired laborer is thankful for a few minutes of shade and rest, and doubtless will do more work by taking an occasional "breathing spell" under a tree. A tree in midfield may be a chestnut or hickory, and make good returns for the space it occupies in nuts, as well as refreshing shade. In many fields there is a low place with a spring or small running stream and is well fitted for a small group of trees. In short any part of a field not suited for cultivation, may profitably grow a few trees, thus affording a retreat for the live-stock from the midday sun and driving storms. If the pasture has no shade trees, it will pay to provide a temporary shelter. Four strong posts with forks at the top, may support two poles; across these lay smaller poles for rafters. The top may be covered with straw, swale hay, or, if more convenient, brush may be cut and laid upon the skeleton roof.—*American Agriculturist.*

The furniture interest in the United States is enormous. Three years ago it amounted in New York to 300 factories and a product of nearly \$10,000,000. Cincinnati had 119 factories with a product of \$4,500,000. Chicago turned out above \$5,000,000; Philadelphia, \$5,000,000, and Boston, \$4,000,000.

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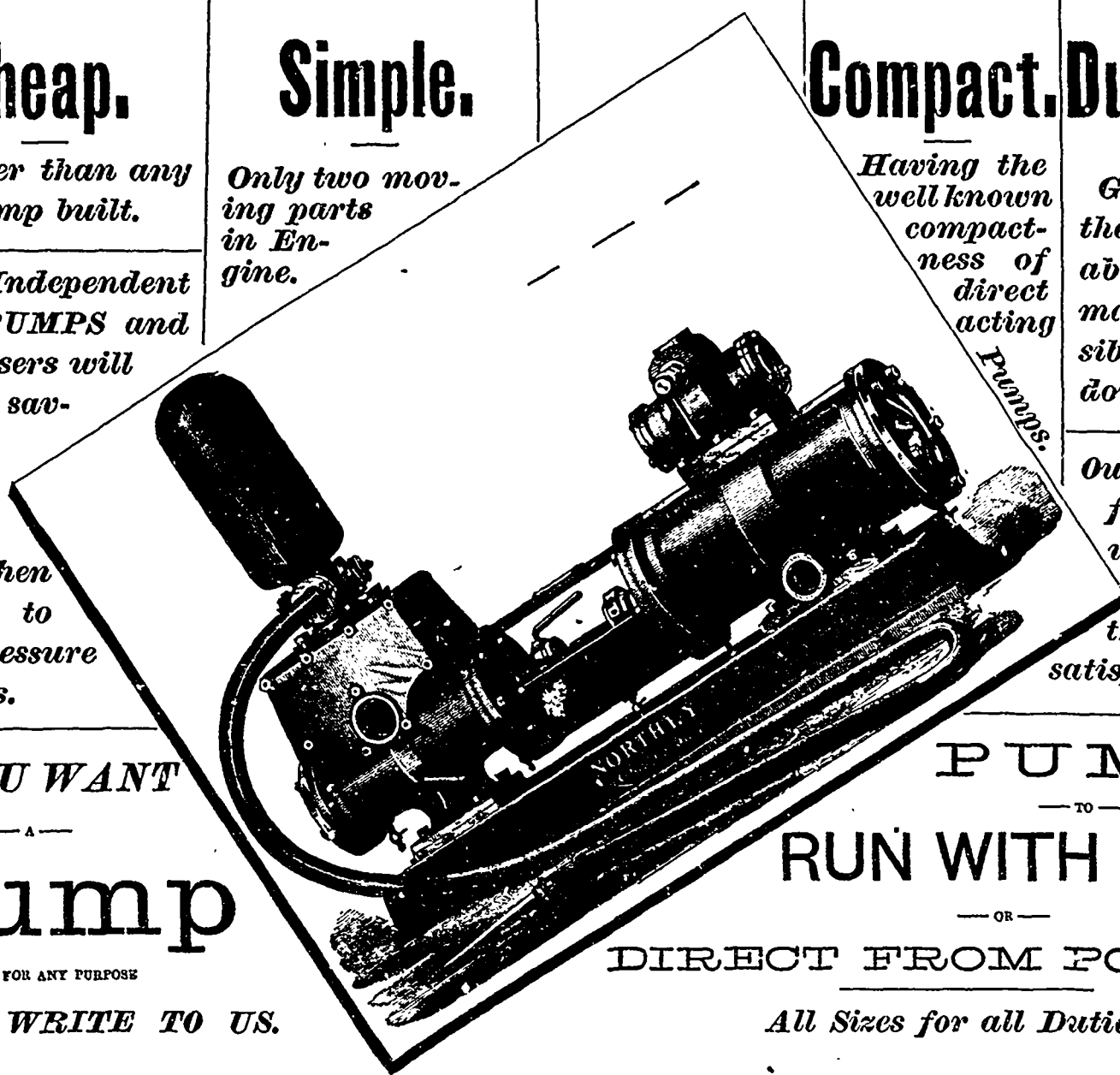
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SOUTHERN HARDWOODS.

An Indiana firm that has been in the hardwood lumber business for twenty years, writes: "As for us, we are firm believers in the future of hardwood." It would be difficult to find men of broad discerning powers, men who can consider the past and judge of the future, who would render a different opinion. The man who has not the strongest faith in the future of hardwood, does not understand to what extent the hardwood lumber has been cut by lumber dealers as the "hardwood states"—Michigan, Indiana and Ohio; neither does he understand the present enormous demand for hardwood lumber, or what it will be hereafter. In the life of a nation it has been but a moment almost, since the states named above were settled. Within the memory of young men hardwood timber in these states has been logged into heaps and burned. Thousands of trees thus destroyed might have been left standing at no detriment to the farms which were being cleared, but the foresight of the settlers did not discover that there would ever be a demand for them.

The great bodies of hardwood timber are now in the south. Michigan, Indiana and Ohio cannot properly be called hardwood states any longer, because the heaviest operators in hardwood lumber now look elsewhere for their supplies, and chiefly to the South.

It is interesting to reflect on the changes that have taken place in this respect. Chicago is not only the greatest pine market in the world, but it stands head and shoulders above all others as a hardwood market, yet, until a very few years ago, all the hardwood lumber that supplied this great market came from the northern states. The southern hardwood lumber fields were little known. For years after the civil war a combination of circumstances held down all the industries of the South. There was no business vigor there; no inclination shown by northern or European capitalists to invest their money there. All this has changed. There is now emphatically a southern boom. Some of the northern papers, that for political effect belied, for the purpose of belittling, the southern people, have wearied in their wrong doing, while the ones that still persist in such a course are credited with no honesty of purpose.

Prejudice is often a quality of the strongest minds, which accounts for the feeling that has existed against the hardwoods in the South. A few years ago the agricultural implement manufacturers in the northern states would have scoffed at the idea of putting southern hardwood timber into their products, but now they will not only use it, but often demand it. At least 3,000,000 feet of southern ash will go into the yards of one Chicago manufacturer this season, and this gentleman says he will use no other.

The tricks of the trade to overcome this prejudice, if the methods can be called tricks, are worthy of note. Not long ago a man who had made oars in Wisconsin came to the conclusion that he must look elsewhere for timber. He examined the ash in Arkansas, and though satisfied that it would answer admirably for his purpose, he knew that there was a feeling against it in the European ports. The different foreign governments want the best timber in their oars, and until recently they have specified that the material of which they were made should be northern states timber. This oar-maker, however, decided that he might as well take the bull by the horns first and last. He thought he would make a test case, as it were, so he made a bill of oars out of southern ash. It would not do to tell the buyers across the ocean that the oars grow in the rough in Arkansas, so he shipped them by way of New York, the port from which his former shipments had gone. He waited with a feeling that approached fear and trembling for the result, and at last word came back that the oars had been accepted, and were highly satisfactory. The ice was broken, and after this the tars of several of the foreign powers will handle oars made of southern ash.

The course of a Canadian dealer in timber in getting his first shipment of southern oak into a Scottish market is fully as interesting. This dealer examined the southern oak, and was convinced that prejudice only barred it out of

the hands of European users. He cut several thousand cubic feet of oak timber, some of which was forty-two inches square. This timber might easily have been floated down to New Orleans on barges and then shipped direct to its destination. But had it been so shipped the old prejudice would have met it at the wharfs on the other side and unhesitatingly branded "rejected" on it. The shrewd Scotchmen must be deceived. The timber was shipped from Memphis, Miss., to Detroit, Mich., thence to Quebec, and loaded at that port as Canadian oak. It was an expensive job as it had to be loaded and re-loaded five or six times. Word came back that no better oak was ever received at the ship yards of Scotland. The ash question had been solved and this settled the oak question. Within the next year it is expected that nearly 1,000,000 cubic feet of oak will go down the Mississippi river and be loaded on vessels at New Orleans for the markets abroad. Looking to extensive foreign shipments, these victories are certainly glory enough for the hardwood interests of the South.

It would be misleading to convey the idea that all the hardwood timber in the South is of the quality of the ash and the oak referred to in the above named transactions. This timber was cut from the bottom lands, but all the oak and ash on this land is not of the same quality. A novice would ruin his trade by cutting indiscriminately. There is nearly as much difference in the ash that grows on the alluvial lands of Mississippi and Arkansas as there is between the calico ash of Indiana and the white variety found further north. All agree that what is called cane ash—or ash that grows among the cane—is by far the best. Between the cane ridges ash is found in large quantities, but the quality of the soil, or more probable, perhaps, the degree of dampness, that produces cane, also produces good ash.

Facts by the column could be cited to show that the hardwood industry of the South has a great future. There are chances of investment in hardwood lands that will bring sure, speedy and profitable returns. It should be remembered, too, that as it was in the North so it is in the South—the land best suited for agricultural purposes are timbered with hardwood. This fact, considering the rapid increase of our population, is worthy of consideration.—*Northwestern Lumberman.*

PATENTS AND PATENT LAWS.

That the farmer who, finding a design for a gate in the *American Agriculturist*, or other journal, has built one from it, should feel aggrieved when some one subsequently calls upon him and demands a royalty, is not at all surprising. Another farmer has read that the patent on a driven-well is not valid, puts down the tubes for such a well, and soon finds himself obliged to pay a royalty, or to stand a suit at law. He of course feels that he has been wronged, and looks upon all patents as frauds. These gates of different kinds, and the driven well, are but examples. There is scarcely any other device used by the farmer, even if of his own invention, for which he may not be called upon to respond—honestly it may be, but often dishonestly—for an infringement of somebody's patent. Such cases have occurred so frequently, especially in the Western States, that farmers—and we do not wonder at it—have become exasperated. They have now, through their granges, clubs, and other associations, made themselves heard by their members of Congress, in their demands for relief. As a consequence bills have been introduced looking to the abolishing of the patent office. Hasty legislation is undesirable at all times, and would be especially unfortunate in the present case. While general attention is called to the matter, the present is a good time to revise our patent laws, and endeavor to remove their objectionable features. Our present system, liable as it is to abuse, is vastly better than none at all. In agriculture alone, the patent inventions have been of a benefit that cannot be computed. The present mowers, reapers, headers, threshers and a host of other farm machines would never have been in use, could not the inventors have been able to patent them. One must be shortsighted who cannot see that patents have done

much to advance our agriculture. Our patent system is open to abuse, and no doubt has been made use of by swindlers. That this is the case is not so much the fault of the patent laws, as of the farmers themselves. If the farmers of every township, or school district, had an association, the members of which would make common cause against all frauds which claim to have patents on the commonest farm devices, and instead of compromising these claims, could contest them, this would usually be the last of them. When our patent rules are revised, and the present seems a good time for doing it, we would suggest that much of the trivial stuff that is now patented, be rejected altogether. The present rule seems to be, to give a patent to everything that has not been patented before. A farmer may have used a simple device for many years, some sharp fellow coming along sees it, and procuring a patent, may prevent the farmer from using his own invention, unless he pays a royalty. Abuses of this kind are not rare; they should be made impossible. At present a patent is worth nothing to the inventor, until he has been at the expense of defending it in the courts. The government should keep out all the trivial stuff, and allow patents for only useful and important inventions, and having once granted a patent, and taken pay for it, should defend it in the courts without cost to the inventor. A treaty, which has been made by representatives of our own, European and South American Governments, has been presented to the Senate. The nations in this union or league, agree that a patent granted in any one of these countries, shall be valid in all the others. This scheme seems to be favorable to our own inventors. But the people have something to say, as well as inventors, and before concerning ourselves with our foreign relations, let us have patent laws that are acceptable to farmers and other at home, and not be open to the abuses at present possible.—*American Agriculturist.*

VALUE OF TRADE JOURNALS.

The continual multiplication and consequent cheapening of technical journals and papers with their enlarging circulation among the mechanics of this country afford a strong ground for earnest hope for their future. From the rarity of 50 years ago these journals have increased until to-day there is hardly, possibly not one, branch of mechanical industry that is not represented. Carpenters, masons, iron-workers, machinists, car-builders, painters, lumbermen and many others have them, and to them probably more than any other influence is due the great advancement in their several departments of industry. With the taste for reading there not only comes the supply, but what is more to the point and of greater advantage, also the thought, the questioning of old methods and styles, and the inquiry if that is best, but also study into the why and whereof of all work and processes of work with continual discoveries as to a betterment of the ideas of our fathers, and an improvement of the old plans, and with each discovery comes discussion and deeper inquiry, leading on to something still higher and better. Practical knowledge of any industrial pursuit is a good thing, but he who depends alone on the education of the shop, the bench, the forge or the laboratory, without a solid theoretical knowledge of all the means requisite to the desired end, and all the varied capabilities of the subject matter, the raw material, in hand, will find himself to be contented with the lowest position and smallest pay in the department in which he may work. Boys! apprentices, in any trade, study up all the points of your business if you wish to make successful mechanics.—*Lumberman's Gazette.*

RUSSIAN papers are full of talk about the destruction of forests. Many Russian forests are becoming extinct. Within a century the area of forests in that country has been reduced from 11 per cent in Tver, to 45 in Riazan. In many provinces wood is becoming very scarce, so great has been the destruction. Even the great forests along the Volga and Don, which extend a long way towards the Ural mountains, are destroyed. Only a fringe exists of the once celebrated chestnut wood of Vassilursk that date back many years.

BURNING DOWN TREES.

In the Southern States, especially Florida, the pine trees are usually burned down when clearing the land. This practice could often be advantageously followed at the North. A hole about twenty inches deep and two and a half feet square is dug on the leaning side of the tree, so that when it falls the opposite roots if any remain unburned will be pulled out. The lower part of the trunk thus exposed is struck a few times with the axe, and left a short time for the pitch to exude. A fire is kindled in the hole. Trees ten inches in diameter are burned off and the roots burned out below the plough line in twenty to thirty hours. A more expeditious way is also given. A hole is dug as before described, also removing eight or ten inches of the earth from the opposite side. With an inch and a half or two inch augur, a hole is bored through the tree at an angle of 45 degrees. For this purpose a ship augur is used, or a long shank may be welded to a common one. The hole thus bored acts as a chimney, and soon not only the side of the tree is on fire, but the chimney part as well. The tree is burned down in less than one-third of the time required by the old method. A strong man can bore nearly fifty of these holes in a day. Stumps are removed in the same manner, and if dry, in a considerably shorter time than trees.—*American Agriculturist.*

The Pioneers Lumber Company.

The Pioneers Lumber Company was one of the mill concerns at Eau Claire that started out piling lumber with the greatest enthusiasm last season. On account of the advance in westward freights the Pioneers has changed its mind, and is now constructing a new raft-works, which means that its cut this season will go down the river this season in the shape of rafts. When the Pioneers begins to raft its output, only the Sherman Lumber Company's mills will be going into pile, and the lumber from these mills, it is said, would be rafted if it could be got to the water without too much expense. It is rather remarkable that so much calculation for piling and direct distribution was made last year at Eau Claire and Chippewa Falls, when the entire enterprise depended on a matter of seven and a half cents freight rate. It is likewise surprising that the railway freight commissioners can elect to throw overboard the business of an important section like the Chippewa Valley. It is likely that the necessity for catering to Chicago and middle river traffic has pinched the Chippewa valley business out of the question.—*Northwestern Lumberman.*

A Large Contract.

It is stated on the north Pacific coast that the Pine Manufacturers' Association, with headquarters at San Francisco, which controls all the large mills in the Puget Sound region, has made a contract to saw and deliver 15,000,000 feet of lumber at South American points, the stock to be cut to order. The different mills in the association share in this contract. It will be a slight relief to the dullness prevailing at Puget Sound mills, and take a quantity of lumber from the overcrowded San Francisco market. The method of combination pursued by the Pacific coast lumbermen has a tendency towards pushing out for new markets as a means of relief; for the two associations are bound to keep up the market price at San Francisco if they have to dump their surplus in foreign ports.—*Northwestern Lumberman.*

Of the prospects of the lumber trade the *Saginaw Courier* says: "There is some inquiry for lumber, and the docks are filling up. Sales of about 4,000,000 feet were reported Thursday, all to go east except 1,500,000 feet to Ohio. The prices were not ascertained. It is reported that owing to the stringency of the money market, some manufacturers desiring to realize are shading previous quotations. Probably 15,000,000 feet has changed hands during the week, a good portion of which was coarse stock and sold at 20. It is also reported that eastern parties are negotiating for 25,000,000 feet of coarse lumber, to be used chiefly in box manufacturing.

THE LATE WALL STREET FLURRY AND THE LUMBER TRADE.

The New York financiers, and the bankers of the country outside the metropolis, have taken pains to inform business men that the late collapse of the stock gambling bubble was only a speculators' panic, and that it would work no appreciable injury to general trade and industry. The people have been bid to cast their anxious eyes around and behold the the prosperity everywhere in sight. We are told that the business of the country is in a prosperous condition, money is plenty, crop prospects are good, the new lands of the West are settling up fast, the railroads, especially in the Northwest, are earning as much, and some of them more, than ever before. Attention is called to the marvelous prosperity in the new South, the opening up of Mexico to American trade, the late completion of the Northern Pacific railroad and the impetus thus given to emigration to Montana, Idaho, Washington and Oregon. We are told that the affairs of this country have acquired such momentum and prodigious volume, that industry has become so diversified, and commerce so ramified and over-spreading, that nothing in the shape of a flurry in Wall Street can arrest our progress; business will move along in spite of any little impediment like that.

Lumbermen, in particular, are comforting themselves with the assumption that the failure of a few banks and brokers in New York means nothing to them. They call attention to the large amount of building being done, the steady consumption of lumber, the generally prosperous condition of farmers, the new Northwest and Southwest to be supplied with lumber; and finish with saying that if good crops shall be assured this year all will be well with the lumber trade.

It is possible that the rosy view suggested in the foregoing may be the right one to take of the present condition. But let us not be to sanguine about this as not to see the possibilities of an opposite character. In the first place we may be quite certain of one thing: That the "speculator's panic" in New York did have effect outside the circle of the stock gamblers and the bankers that were in collusion with them. The failures that resulted from the flurry were of stupendous character. They were the result of a decline of more than \$2,000,000,000 in stock and bond values. When banks fail for \$10,000,000 or \$12,000,000 each, brokers for from \$1,000,000 to \$2,000,000, and country banks, and even monster industrial institutions, go down on account of the "speculator's panic," it is vain to say that the general business of the country will be unaffected by it. To say nothing more, the loss of confidence in our fellow man, as Russell Sage says, is an influence that circles outwardly until it ripples in the stillest business pool in the remotest corner of the land. Any one already, by conversing with business men can ascertain that the Wall street trouble has affected business.

Let us inquire how the lumber trade may be affected as the result of a want of confidence in financial stability. For a year or more past there has been considerably more lumber crowded on the market than it has taken with avidity. There was a feeling this spring that values had stood a tension during the winter that was all that they could bear; and since dimension lumber has sold at \$1 less than it did last spring, the manufacturers in Michigan have been greatly dissatisfied, have withheld offerings, and largely piled their lumber at the mills. This would not be the condition of things if there was not more lumber to sell than can be worked off at what the manufacturers consider paying prices. While yet this strained state of affairs is prevailing, the New York panic comes. We ask in all candor, will lumber, after what has happened, be likely to advance in price, or even hold present prices, as the mill men think it should? Is it not more reasonable to think that, as green piece stuff on this market hung doggedly at \$9 a thousand before the panic it will certainly not go higher now? And it is not probable that country dealers and contractors will get the idea into their heads that it is just as well to wait a while before purchasing beyond present wants? Certainly nobody will load up for the future. The trading in lumber

that will be done hereafter for some time to come will be from "hand to mouth," and no boom, and no stiffening of prices ever resulted from that kind of business. Trade may drift along with a fair business doing through the summer, in expectation of good crops, and under the momentum that has been acquired by a vigorous, early start of the building season in the large cities and towns."—*Northwestern Lumberman.*

A Bright Spot in a Dinky Street.
Business took us, a few days ago, through one of these streets in New York city that one never visits unless from necessity. It is a crowded thoroughfare where more than one half of the shops are beer saloons and gun mills, and the others devoted to junk dealing and small trades. The upper part of the houses are crowded tenements. One of the dingiest of the buildings retained as a relic of former prosperity, a narrow iron balcony, running across the whole building, at the foot of the second floor. The balcony was occupied by a box for its own length, perhaps twelve feet long and about a foot wide and high. The box had been filled with soil, upon which grass seed has been sown, and the and there were three young trees of the Ailanthus, one in the middle and one at each end, forming, with the fresh green of the grass and the tropical foliage of the Ailanthus, as pretty a piece of "sub tropical gardening" as could be imagined. This green spot brightened up the street for a long distance, and afforded the eye a refreshing rest, after gazing upon the displays of the second hand clothing stores. Whoever instituted that window box is a public benefactor, and we thank him for the refreshing glimpse of balcony gardening he afforded us.—*American Agriculturist.*

Advice to Mothers.
Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable. It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea, regulates the stomach and bowels, cures wind colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system. Mrs. Winslow's Soothing Syrup for children teething is pleasant to the taste, and is the prescription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world. Price 25 cents a bottle.

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PETERBOROUGH, Ont., JULY 15, 1884.

OBITUARY.

By the death of the Hon. James Skoad, of Ottawa, one of the most prominent men in the lumber business has been removed. For years he held a leading position in the trade in the Ottawa Valley, the very headquarters of Canadian lumbering. His loss will be generally regretted.

Mr. Skoad during his active career was President of the Dominion Board of Trade, President of the Ottawa Agricultural Society, President of the Upper Ottawa Steamboat Company, a Director of the Ottawa Association of Lumber Manufacturers, a Director of the Madawaska River Improvement Company, and of the Caughnawaga Ship Canal Company; was Vice-President of the Canada Central Railway Company, and of the Montreal and Ottawa City Junction Railway (now Canada Atlantic), also President of the Ottawa Iron and Steel Manufacturing Co., President of the Agricultural and Arts Association of Ontario, and President of St. George's Society. For many years he was a member of the Municipal Council, and on many occasions was urged to accept the position of Mayor. He was one of the judges on timber at the U. S. Centennial at Philadelphia in 1876, and held many other offices of a similar character. In 1874 he was unanimously chosen Chairman of the Liberal Conservative Association that met in Toronto. He was up to within three years ago President of the Liberal-Conservative Association of Ottawa, and in 1876 was presented with a handsome gold cross of St. George for active services in promoting the society's affairs.

CANADIAN FORESTS.

Among other gratifying proofs of the more general interest that is being awakened in regard to our forests and the industries connected therewith, is the publication of a work on "Canadian Forests, Forest Trees, Timber and Forest Products," by H. B. Small, of the Department of Agriculture, Ottawa. There have been previous publications in some of our Provinces on these subjects, but Mr. Small's is the first that embraces the whole Dominion,

and treats these matters from a Canadian rather than a local point of view. The information thus collected and given to the public in a readable form, will be found both valuable and interesting, while it is thoroughly trustworthy, resulting from personal observation, for which the author has had exceptional advantages, and from the official records of the Dominion and its several Provinces. The importance of our forests to the community may be seen from the fact that of the industries more especially connected with timber the factories number 17,677, the hands employed being 95,741, and the annual value of the products \$95,029,823. The Canadian exports of forest products and manufactures of wood were valued in 1883 at \$26,761,892. After the general account of the forests of Canada and their products, the author gives separate descriptions in detail of the timber districts of the Dominion and of each Province, with lists and descriptions of the trees in each, and of the uses to which their timber is put. The minor, though in many cases important products of the woods, also receive due notice, as do "Forest Enemies" from the insect to the ravaging conflagration. In conclusion there is a short but graphic account of the manner in which lumbering is carried on.

While describing the forest wealth of Canada, Mr. Small does not fail to call attention to its rapid diminution, to the want of economy in utilizing it, and to the necessity for adopting means for its conservation and reproduction. This is a question that is forcing itself upon the consideration of all thoughtful minds, and this is true of the lumbermen no less than of others.

The publishers, Messrs. Dawson Bros., of Montreal, have done their part in producing a work, which should be widely circulated and attentively perused.

MODERN FOREST ECONOMY.

THE approaching International Forestry Exhibition at Edinburgh, among its other benefits, has already called forth from the pen of the Rev. John Croumbie Brown, L. L. D., a most useful work entitled "An Introduction to the Study of Modern Forest Economy." This work is really much more than a mere introduction, for the author who has already published many instructive volumes on the subject of forestry, gives us in this book a fund of information in regard to it. One of his chief objects is to show the urgent necessity for the establishment of a National School of Forestry in Great Britain, where scientific and practical instruction can be given for training up forestry officials. He gives a forcible illustration of the want of such institutions from the experience of the Government of India. That Government, which with those of the Australian and South African colonies, sets an example to the Mother country and to Canada, some time ago adopted a system of forest conservancy with a distinct branch of the service to administer it. Neither trained foresters or the means of training; them could be found. Those who were selected for the service positively had to be sent to Germany and France to study the science in the schools of Forestry in those countries. It certainly is not creditable to the British Empire that such a state of things should exist.

One part of Mr. Brown's work describes the extensive destruction of forests in Europe and other parts of the world, with the disastrous consequences that have followed. In connection with this he shows how replanting has been extensively adopted as a means of putting an end to droughts on the one hand and to floods and inundations on the other, as well as for the fixing of shifting sands, and not alone is this the case in France and Germany, the leading nations in the science of forestry, but even among people supposed to be so backward as the Spaniards and Hungarians.

The most important part of the work, and the most instructive for this country, is the excellent description of modern forest economy as developed and practiced in many European countries with Germany and France at their head. From this we may learn how constant and regular crops can be obtained from forest as from agricultural land, without the forests being destroy-

ed to get a return once for all at the cost of the sacrifice of this valuable property.

As our author describes the system it is: "All being so arranged as to secure simultaneously, and without prejudice to one or other of them, an improved condition of the forest, a sustained supply of products, and a natural reproduction of the forests by self-sown seed."

What has been and is now being done in those countries can also be done in Canada, and we should learn the lesson before it is too late.

RAFTS ARRIVED.

The Quebec Chronicle has the following list of rafts arrived:

June 23.—Flatt & Bradley, deals, boards, etc., Wolfe's cove.

Collins Bay Co., oak, elm, ash, etc, Sillery and Indian Cove West.

Cook & Gibbons, ash, waxy white pine, etc., St. Michael's cove.

A. Fraser & Co., (2), white pine, Olin's booms.

D. D. D. Calvin & Co., oak, pine, etc., sundry booms.

June 24.—D. Moore, white and red pine, Cap Rouge.

McLaughlin Bros., red pine, Cap Rouge.

LIST OF PATENTS.

The following list of patents upon improvements in wood-working machinery, granted by the United States Patent office, June 24, 1884, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of American and foreign patents, No. 617 Seventh St., N. W., Washington, D. C.:

300,996.—Bark peeling machine—F. Merzger, Prussia, Germany.

300,829.—Bark stripping machine—F. F. Angermair, Wurttemberg, Germany.

300,780.—Bench dog.—C. O. Johnson, Springfield, Vt.

301,058.—Bit brace—W. A. Ives, New Haven, Conn.

300,771.—Bit stock.—J. S. Fray, Bridgeport, Conn.

300,958.—Fence picket machine—T. Coyle, Apponaug, R. I.

300,820.—Log rolling machine—G. Wiborn, Manistee, Mich.

300,805.—Saw—G. P. Scott, Sadalia, Mo.

300,907.—Saw handle—R. H. & W. D. Shumway, Lebanon Springs, N. Y.

300,976.—Saw table gage—H. L. Hopkins, Caro, Mich.

300,814.—Saw tooth, adjustable—G. W. Stinebring, Shreve, O.

300,784.—Saw tube—M. F. Lucas, Newton, Mass.

300,786.—Stump extractor—R. M. McMeen, Mount Vernon, Ill.

300,844.—Wood polishing machine—J. Casey, New York, N. Y.

PATENTS ISSUED JULY 1.

301,339.—Bit brace—W. R. Clarkson, Buffalo, N. Y.

301,466.—Chuck, lathe—C. Hopkins & O. E. Van Norman, Waltham, Mass.

301,438.—Clutch, friction—J. H. Elward, St. Paul, Minn.

301,185.—Lathes, back-rest for—J. Tyler & J. W. Railey, Claremont, N. H.

301,241.—Pavement, wood—W. M. Johnson, Dallas, Tex.

301,225.—Saw cleaner, gin—B. R. Edlon, Middle Settlement, Ark.

301,216.—Saw, drag—E. F. Crawford, Honey Bend, Ill.

301,254.—Saw, drag—W. M. McFarlin & C. Plum, Ono, Cal.

301,091.—Saw mill carriages, steam brako for—W. A. Campbell, Frankfort, Mich.

PATENTS ISSUED JULY 8.

301,842.—Clutch, friction—D. C. Walter, Piqua, Kan.

301,695.—Gear-wheel, sectional—L. W. Doeg, New Market, N. H.

301,632.—Lathe-dog—S. N. Silver, Auburn, Me.

301,841.—Saw—F. A. Troeno Becker, Saint Quentin, Aisne, France.

301,787.—Saw-drag—P. N. Applegate, Gosport Ind.

301,715.—Saw mill dog—W. Gowon, Wausau, Wis.

301,472.—Saw mill head block—H. R. Barnhurst, Erie, Pa.

301,828.—Saw mill set works—A. A. Osborn, San Francisco, Cal.

301,696.—Saw awaging machine—D. Donaldson, Rock Island, Ill.

301,481.—Veneer cutting machine—J. H. Costello, New York, N. Y.

301,843.—Saw awago—J. Dinning, Silver Cliff, Colo.

301,431.—Saw tooth, insertible—J. H. Brown, South Tronton, N. Y.

301,095.—Sawing machine, hand—F. H. Clement, Rochester, N. Y.

301,123.—Shingle sawing machine—D. F. Hunt, Antrim, N. H.

301,236.—Stump extractor—J. Seitz, Dundee, Mich.

301,233.—Wood-working machinery, device for conveying and precipitating dust arising from—D. D. Drummond, Chicago, Ill.

THE LUMBER TRADE OF GHENT, BELGIUM.

From the Government consular report for April, the following is gleaned concerning the importance of Ghent, Belgium, as a lumber port and distributing point: "Ghent is one of the most important places in this part of Belgium in the lumber trade. Its topographical situation is well adapted to this commerce. The constant building of proper docks, the sheds which encircle these docks, built exclusively for this purpose, and the railway tracks which connect most of the lumber yards, are all exceptionally favorable to the traffic of a commodity which requires a great deal of room and special handling, more so than in the United States, as the people hereabouts are slow to adopt any labor-saving machines for handling such bulky merchandise. In 1882 the importation of timber gave an impetus to the port of Ghent. During the year 200 vessels laden with timber, registering 62,67 tons, and 38 vessels laden with logs, registering 9,893 tons, entered this port. The lumber merchants were deceived in their hope that the year 1883 would be a profitable one for their business; they contracted for large importations from Swedish and Russian ports, relying on a large demand for the projected public improvements; but unfortunately these have been temporarily deferred, and their heavy stock remains largely unsold. Naturally the supply exceeded the demand, a decline in the price took place, which brings a considerable loss to those who handle lumber."

A Smart Mill.

On Monday, May 15, the mill of the Arthurs Coal & Lumber Company at Swismond, Pa., was tested as to its capacity. The mill is a single circular, 66-inch saw, 4-inch feed, with gang edger, both built by the Stearns Manufacturing Company. The engine was built by the Westinghouse Machine Company of Pittsburgh, and is 14x14. Hemlock logs were used exclusively during the day, ranging from 13 to 34 inches in diameter, taken promiscuously from the pond. During the day S. E. Gill, the treasurer of the company, while endeavoring to put out a fire on the tramway at the alab fire, made a misstep and fell a distance of 20 feet and was severely injured about the face and head. By this accident a delay of half an hour was occasioned. When the tally was made up it was ascertained that the product of the day's sawing by actual count at the tail of the mill was 91,740 feet. The product was in the usual proportions of 4x4, 4x8 and 4x12 stuff as demanded by the Philadelphia market. This is certainly lively work for a single mill working 10½ hours.—*Northwestern Lumberman.*

THE *Monetary Times* of July 4th says:—The longest raft ever known to have floated on St. Clair river passed down in tow of the tug Mt. King Bird last week. It contained 3,250,000 feet, and on Saturday afternoon, within two hours, twenty-four barges passed Amherstburg downward bound, having in the aggregate 3,600,000 feet of lumber.

GREAT NEGLIGENCE.—There is great neglect with most people to maintain a regular action of the bowels, which causes much disease. Burdock Blood Bitters cure constipation.

PROPAGATION OF TREES BY LAYERING.

Layers are really nothing more than a form of cutting, the only difference being that they are allowed to adhere or remain attached to the parent stock—drawing sustenance therefrom until roots are emitted, after which they are detached and become individual plants. In making layers of trees or shrubs, we bend down a branch, and cover that portion with earth upon which we wish to produce roots.

An incision is usually made on the under side of the branch before it is laid down, and the knife inserted just below a bud if there is one convenient, passing into the wood, and then an inch or more lengthwise of the branch forming what is termed a tongue. A hooked peg, may be employed to hold the layer in place, or a stone laid on it, as it is quite important that the branch be held firmly in place. If the branch is large, the end may be tied up to a stake. It is not often that forest trees, except some ornamental varieties, are propagated in this way, but it is well enough to know how to do it, when necessary to increase the stock of some choice or rare specimen. Layers may be made at almost any season, but they will root sooner if made when the trees are growing rapidly, than at any other time.

Some kind of trees will produce roots when layered without cutting the branch, and exposing the alburnum—in fact, all will, in time, but the surest way to cut the branch as described. With some kinds, roots will be emitted so slowly that the layer must remain at least two seasons before it will be safe to sever it from the parent stock. Evergreens may be layered in the same way as deciduous trees, but the operation should always be performed during the period of active growth, else the wound made on the layer is likely to be covered with resin, which may prevent the emission of roots.

Sometimes a part of a tree or a small branch will vary from the original; when this occurs on a large tree and where the branch cannot be made to reach the ground, we are compelled to elevate the soil, or some similar material to the part we wish to propagate, unless it is some species which can be readily propagated from cuttings buds, or grafting. If we desire to obtain a layer, we have only to place a pot or box of soil near the branch, so that it can be covered with earth, the same as if near the ground. After the branch is layered, the soil surrounding it must be kept moist until roots are produced. If the pot is surrounded with cloth or moss, it will in a measure prevent the earth from drying, and therefore less frequent waterings will be required.—*American Agriculturist.*

Bush Fires.

Bush fires are already doing much damage in the lumbering districts of the Ottawa Valley, and yet we are only at the beginning of the heated midsummer period in Canada. These fires are too often caused by criminal carelessness. Millions of dollars damage have resulted from the want of ordinary care on the part of individuals who kindle camp fires or light their pipes in the woods. Too often the railway companies, who do not look after the roadside flames kindled by sparks from their locomotives, are to blame. The forest laws of Sweden should be carefully studied and adapted to our country.—*Witness.*

A Great Consumption of Sapling Pine.

Keene, N. H., is the centre of a great tub and pail industry, which largely consumes sapling pine. A contemporary says that there are 40 pail and 30 tub lathes in operation in Cheshire county; each lathe turns out on an average 100,000 pails a year, consuming 450 cords of saplings, which gives a product of 4,000,000 pails from 18,000 cords of pine. The 20 tub and bucket lathes use a proportionately large quantity, and as great quantities of staves are sawed and sold for use outside the county, it is probable that 40,000 cords of sapling pines are cut every year.

Downs in Dixie—The wife of Mr. J. Kennedy, dealer in drugs in Dixie, was cured of a chronic cough by Hagyard's Pectoral Balsam. The best throat and lung healer known.

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SETTING AND FILING SAWS.

Having had charge of table saws for a good many years, and wishing to get all the work out of them obtainable, I have experimented considerably in shape of teeth, setting teeth, swaging teeth, jointing saws, etc., a few points in regard to which it may do some one good to know. Firstly, a saw should fit the mandrel, not tight, but slip on without play. Next, it should be jointed up true, which I do by holding a piece of one and one-quarter gas pipe, twelve inches long (the size or length is immaterial except that that is the handiest size) square against the edge of the teeth. The saw should run full speed. By taking hold of each end of the pipe and crowding down on the table top and up to the saw, it is soon jointed up round and with the corners of the teeth full, which will not be the case when a stone is used, as the saw sets into the stone and rounds the very part that one wants full. The gas pipe is soft iron and does not glaze or harden the points of the teeth. I file the front of the teeth nearly square across the saw, but file from both sides. The old rule for setting is to have the front of tooth line to a circle of half the diameter of the saw.

I file to a circle of two-thirds the diameter and leave the tooth quite crowning the back to give them strength. I take off the saw to file and set. I prefer setting to swaging saws. I set with hammer, by laying the saw down on a little table with a flat piece of steel, very hard, beveled off on the edge to an angle of 25 degrees; put the point of tooth three-sixteenths over, and hit it directly on the point. A saw set in this way runs much easier than to have the set extended back on the tooth. We make on one table 5,800 cuts through two and three quarter inch white oak plank, 28 inches long, each day of ten hours, with 14-inch saws. The mandrel should be lowered so that the saw does not stick more than one-quarter of an inch above the work.—*Correspondent of Lefell's Mechanical News.*

WHITEWOOD.

Whitewood is gaining favor rapidly. Not many years ago it was used in this vicinity chiefly for collins and wagon box boards. Further south in the sections where the wood grows, it has been used in finishing to a considerable extent, but builders who could readily get white pine, discarded whitewood.

Until recently, for finishing purposes and for the manufacture of sash, doors, and blinds, whitewood was little thought of north of those sections where it grows plentifully. A representative of one of the largest sash, door and blind factories in the country recently said in this office that if he were building he would have little choice between pine and whitewood for the purposes above mentioned. He admitted that his interest is purely identified with white pine, and that he would not admit openly that whitewood is the peer of pine; such, however, in his opinion, is a fact. This is a big admission to come from such a source, but one that is based on a good foundation.

It can be easily understood why whitewood can be used successfully for many purposes for which pine is employed. It is more inclined to twist than pine, but this is not much of an objection where it can be used in small pieces, or if in large ones securely fastened. Even gum, the most rebellious wood that grows out of the ground, if properly nailed, answers for finishing admirably. Whitewood is very easy to work—it probably ranks next to pine in this respect—takes a good finish and works a close joint. There are complaints against cypress for sash, doors and blinds because, it is said, it is too hard a wood to drive together and make a perfect joint. Too much work must be put on the pieces where they come in contact to make them fit closely. In pine work this extra work is unnecessary. The wood is so soft that it readily gives, and the tight joint is at once produced. There are others that claim that such a fault with cypress not exist; but that it does somewhat there can be no question. Not that perfect cypress sash, doors and blinds are not made, but it requires a little more attention and labor to make them than it does from pine. In regard to softness, whitewood probably ranks next to pine; it is not quite so easily worked

as pine and a little more easily than cypress.

The easiness with which whitewood can be smoothed is greatly in its favor, as it is prepared at light cost for the paint. Its ability to hold paint well is questioned, and justly where the lumber is used on the outside of the building. Place two boards, one pine and the other whitewood, side by side in an exposed condition, and paint them at the same time with the same number of coats, and the pine without question would look the better for the longer time. For inside work, though, any difference that may exist in this regard would not count for enough to take into consideration. The paint holding quality of whitewood is good, while in white pine it is extra good.

The cost of whitewood is decidedly in its favor. When clear whitewood can be bought for \$20 per thousand less than clear pine the difference shows up in the light of a big inducement to the consumers of lumber. With many there would have to be big advantages in favor of pine to counterbalance this difference in price. Twenty dollars in a thousand of lumber is a good deal of money, and when such a difference exists there ought to be more points in favor of the higher price lumber than in this case really exist. As the prices of different kinds of lumber are now raging, whitewood, considering its value, is the cheapest finishing lumber to be had.

With the popularity that whitewood is winning it is not to be wondered at that whitewood stumpage is increasing in value, and it may be expected to be worth still more. Not many years ago it did not take much money to buy as much timber as any man cared to own; and few cared to own much of it; but now it is sought not only where it can be immediately gotten at, but in the out of way places which will necessitate the timber standing until improvements in streams and in the way of building railroads are made. It has also come to light it is not so plentiful as many, a few years ago, supposed it to be. In some of the best Tennessee districts a good share of the available whitewood has been cut; a big proportion of it when it is considered how short a time the whitewood mills have been at work.—*Northwestern Lumberman.*

A NEW SOURCE OF ASH SUPPLY.

Ash timber plays an important part in house building and manufacture. As a flooring and finishing wood, it is the peer of any that grows in the forests.

It is a fine cabinet wood for certain classes of work. For agricultural implements, wagons, and other manufacturing uses it has become a regular stock material. But there is one form in which ash is employed that renders it indispensable, and that is for oar making. A white ash oar is the best that ever strained the muscle of man. This is on account of its long, tough grain, and its extreme lightness when perfectly seasoned. Ash is the only wood used for this purpose, because it is not only tough and light, but it does not absorb water when seasoned, and consequently does not warp. It is also not liable to aliver by wear of the hands. Such is the exclusive adaptability of this wood for oars, that when the ash supply is exhausted, steel or other substitute for wood will have to be used.

The making of oars is a particular and separate industry. The oars of this country are preferred, and are shipped all over the world, because our ash is considered better than any other for making oars. The British and French navies, as well as the merchant marine of all Europe, are supplied from this country. Ohio and Michigan ash has hitherto contributed to the manufacture of oars, but now it is growing scarce, and operators are reaching around for the discovery of new supplies. It is now thought that the ash growing in the lower Mississippi bottoms is admirably adapted to oar making, and if for that purpose, certainly for any other to which ash may be applied.

Mr. J. LaDuo, whose headquarters are at East Saginaw, Mich., is probably the leading oar maker in the country. He has four mills, one at Breckinridge, Mich., one at Montpelier, Ohio, a third at St. Mary's, Ohio, and a fourth at Carson City, Mich. He not only supplies a vast demand in this country, but ships quanti-

ties to Europe. His make of oar is used in the British and French navies. Lately, Mr. LaDuo has found it difficult to find timber enough of the right sort, and at reasonable prices, to keep his four mills running. This has led him to go South, for the purpose of investigating the ash that abounds on the bottom lands of the Mississippi and Yazoo Delta. After spending some time in the northern half of the Delta, he recently returned, bringing a good record of his experiences, and specimens of ash which were cut in Concho county. Mr. LaDuo and his companions travelled over portions of Quitman, Tuma, Cochoma and Sunflower counties and found large and abundant growths of ash, besides oak and other timber. The ash he regards as of excellent quality for the various uses to which it is put, and much more especially adapted to oar-making. The latter statement is certainly corroborated by the specimens left at his office.

It is stated that Mr. LaDuo will purchase large tracts of land in upper Sunflower county, and proceed immediately to put in machinery for getting out oar timber, and that he will also utilize the oak and other merchantable woods. It is understood that he is highly pleased with the outlook. He had been led to think by timber-lookers who had preceded him that the ash of the Mississippi and Yazoo Delta was of such a heavy variety, when seasoned, that it would not answer the purpose for oar-making; but his personal inspection has convinced him to the contrary. He is also happily disappointed as to the quantity of ash to be found in the Delta, the growth being much more abundant than he had been led to expect.

If Mr. LaDuo has not overestimated the matter through enthusiasm, there will be others who will seek the Delta for a supply of ash. Already quite a movement in the direction of the Mississippi bottoms on the Arkansas side has been begun. Considerable ash is coming to this city from the vicinity of Helena, and the Helena Lumber Company, with Moline, Ill., connections, has lately completed a mill for the cutting of the ash in that vicinity and shipping it north. Without a question there is to be an increase of going South for ash. The Mississippi bottoms will be the favorite region of ash supply, because it is to be found there in greater abundance than elsewhere in the South, accessible by river and rail to the manufacturing centres of the Northwest.

The Mississippi and Yazoo Delta, now that it is known to abound in ash of excellent quality, is sure to attract a large share of attention from hunters for that timber.—*Northwestern Lumberman.*

WATER POWER IN AMERICA.

The extraordinary development of waterpower for economic purposes is an American idea. In no other country has it been so successfully utilized. This will be apparent by considering some of the rivers which have been dammed for the benefit of mankind, and the force which they furnish reduced to the standard of horsepower: The Passaic at Paterson, New Jersey, 1,000 horse power; the Merrimac at Lowell, 10,000; the Mohawk at Cohoes, 14,990; the Connecticut at Hadley, 17,000; the Androscoggin at Lewiston, 11,000; the Housatonic at Canaan Falls, 3,000; the Mississippi at the Falls of St. Antony, 15,000; the Oswego at Oswego, 4,000. The sum total of these is 75,000 horse power, as estimated at a given point on each river. But this is used over again on an average not less than three times. This would show a large total of 250,000 horse power. There are also very many smaller streams in all the hill sections of the country which are utilized and may furnish, used and unused, power equal to the last named total of 250,000; thus giving a grand total of 500,000 horse power; distributed over a wide extent of country and supplying in their way, the wants of 50,000,000 people.

But these are only in minor powers, so to speak of the hills and valleys. The grand dominating power that could absorb them all and still have room to give hospitable refuge to a million times as many remains to be noticed. It is the Niagara river. From data furnished by the United States lake survey bureau in 1875, it appears that the average flow of the

river above the falls is 10,000,000 cubic feet per minute. Converting this into horse power under a head of 200 feet, we have a grand aggregate of 3,000,000 horse power—a mighty force that would supply the economic wants of 200,000,000 of people.—*Lumberman's Gazette.*

THE CYPRESS.

The cypress, of which there are three varieties, the red, and white or bald, is gaining in favor every day in the south. It is heavier than white pine, as a substitute for which it is being used, by several hundred pounds more per thousand feet. This wood contains a very small amount of resin, and a very high polish can be given it; in fact, because of its not being affected by moisture, it is being used for cisterns, hogsheds and sugar, molasses and honey barrels. The red cypress is the favorite, and some of it is so heavy that it will sink upon being placed in the water. The white variety is much lighter and will float after being deadened shortly before cutting, but it has not the firm grain of the red. The red cypress has a straight trunk with a small top, and the bark cut has a reddish tint.

In the south cypress is used principally for shingles and sash, door and blinds; it also makes a handsome finishing lumber when used with white or yellow pine as a contrasting material for door and window casings or for wainscoting. Many of the shingle manufacturers have only their shingle mill, and cut up entire sound logs into shingles alone, and thus, while producing fine shingles, waste much valuable timber that might be put to better use.—*Ex.*

TO SAW ROUGH TIMBER.

All tough timber, when the logs are being sawed into lumber of any kind, whether scantling, boards or planks, will spring badly when a log is sawed in the usual manner, by commencing on one side and working toward the other. In order to avoid this it is only necessary to saw off a slab or plank, alternately, from each side finishing in the middle of the log. We will suppose, for example, that a log of tough timber is sawed into scantling of a uniform size. Let the sawing be done by working from one side of the log towards the other, and the ends of the scantling will all be of the desired size, while at the middle of them will measure one inch broader than at the ends. After the log has been spotted, saw off a slab from one side; then move the log over and cut a similar slab from the opposite side. Let calculations be made by measuring before the second is cut off, so that there will be just so many cuts, no more and no less, allowing for the kerf of every cut. If the log is to be cut into three inch scantling for example, saw a three-inch plank from each side, until there is a piece six and a quarter inches thick left at the middle. The kerf of the saw will remove about one-fourth of an inch. When a timber log is sawed in this way, the cuts will be of a uniform thickness from end to end. Now turn the log down and saw the cuts the other way in the same manner, and the scantling will not only be straight, but of a uniform size from one end to the other, if the saw be started correctly.—*Sine's Lumberman's Form-Book.*

English Patents and Canadian.

According to the new English patent law, specifications of patents are to be published in blue-book form, which is to be offered for sale before the patent is granted. Engineering condemns the new arrangement as likely to afford opportunities to unscrupulous persons who would not be slow to avail themselves of their advantage. We, however, do not share the pessimistic views of the journal mentioned. Referring to our own country we are sure that a good many suits for infringement on patents would never have arisen if the Ottawa Patent Office had similar regulations in force.—*Ex.*

The smart engineer who knows a boiler cannot be exploded if a full guage of water is kept in it, and who, to prove it, sits on the cover of safety-valve while he eats his lunch, is liable to be transported very suddenly to the land where "fring" is a continuous business, unrelieved by boiler explosions or any other kind of pleasant recreations.—*Ex.*

Chips.

It is estimated that the output of saw logs in the Ottawa valley this year will amount to considerably over 500,000,000.

There are 250,000 trees in full foliage along the 160 miles of avenues and streets in Washington.

S. C. BRYANT, of Tawas City, lately sold eastern parties 1,000,000 feet of lumber and from Au Sable 600,000 feet. The terms of both sales were private.

LUMBERING on the Saginaw Bay and Northwestern railway will be continued all summer three or four parties. The amount of logs handled over the road this year will reach nearly 100,000,000 feet.

THE saw mill and shingle factory of Joseph Lecch, at Blurvale, Canada, was entirely destroyed by fire on the morning of June 21. Loss \$2,500; no insurance. The origin of the fire is unknown.

ALEXANDER GIBSON, the New Brunswick "Lumber King," cut 34,000,000 feet of logs on the river Nash in addition to 90,000,000 being got out on the St. John River and its branches by other operators.

THE Winnipeg Lumber Company have now 13,000,000 feet of logs at Crookston, Minn., which they propose to float down the Red Lake River and Red River to Winnipeg. They are mostly white pine logs of the best quality.

A VERY large quantity of fine black ash timber was recently loaded on pine rafts and shipped from Quebec to England. This timber is fast rising in favor in that country for furniture and upholstery on account of its strong and beautiful grain.

THE Scottish Canadian Lumber Company's logs which were offered for sale by the receiver of the company a short time ago were purchased by E. B. Eddy. The total number of pieces was 140,000. They will be cut up at Skosd mills, New Ottawa, this season, for the New York market.

BUILDINGS to involve a total cost of \$652,000 are under way, at Winnipeg, Man. Among them is a post-office to cost \$150,000; a city hall, \$100,000; the Manitoba Loan Company's buildings, \$75,000, and a tenement flat building, erected by the Manitoba Investment Company, to cost \$80,000.

J. CUMMIN & SONS are building a logging railroad from their mill at Cadillac, Mich., to Muskrat lake. They recently purchased a Shay locomotive for use on this road. It is of a new design, the boiler being upright, the flues lying horizontally. It is thought to possess great advantage over the horizontal boiler for heavy grade work.

It is stated by a railway journal that a company three years ago bought 6,000,000 feet of black walnut on the stump, near Waynesville, N. C., for \$3 a tree. The extension of the Western North Carolina railway will enable the purchasers to market the walnut during the present season at the rate of \$150 a tree. That deal was better than one on the stock board.

THE Chippewa Lumber Company keeps an armed force of men at the dam they have built across the Chippewa river. They are having trouble about their dam, and the fish other than government planted in the lake are dying on account of this dam. They also kept a force of men on Friday night watching their lumber yards and mills for fear some one would set fire to them. They receive no sympathy.

THE finest floors are said to be seen in Russia. For those of the highest grade tropical woods are exclusively employed. Fir and pine are never used, as in consequence of their sticky character they attract and retain dust and dirt, and thereby soon become blackened. Pitch pine, too, is liable to shrink, even after being well seasoned. The mosaic wood floors in Russia are often of extraordinary beauty. One in the Summer Palace is of small squares of ebony inlaid with mother-of-pearl. A considerable trade is done in Danzig and Riga by exporting small blocks of oak for parquet floors. There is an active demand for these abroad, but none in England.

LUMBER NOTES.

An Ottawa despatch says: The logs on the upper Gatineau drive are pretty well into the Desert. Mr. Brigham, who is superintending it, is making good progress with the work.

An immense number of lumber trains passed down from Pembroke during the week, containing on average about 19 cars.

The water in the Coulonge this season is remarkably low and has considerably upset the calculations of the lumbermen. A large quantity of timber is stuck at "Ragged Shute," and may be said to be practically stuck for the season. The greater portion of it is owned by Mr. R. W. Thistle.

A considerable quantity of logs are stuck on the Black River drive, and it is doubtful if they can be got out.

The Messrs. McLachlin have got their Bonnechere drive into Round Lake, and cleaned out the Madawaska Creek last week.

All the Madawaska River drive went over the Palmer Rapids last week with the exception of the York branch where there is still a considerable quantity. It is doubtful if Messrs. Bronson's logs will be got through this season, as the stream is very low.

It is reported that Martin Russell's limits on the Bonnechere have been sold to Messrs. Patten & Perley for the sum of \$60,000.

Mr. W. D. McAllister's raft, taken out on Indian River, and which reached New Edinburgh last week, has made the fastest trip on record. It was taken from Pembroke to New Edinburgh in two weeks by 42 men and the pilot Mr. Baptiste Tossier. The timber, which is of first-class quality, was purchased by Mr. McLaren, and will be manufactured at his New Edinburgh mills. The raft contained 227 cribs.

Reports from Quebec speak of the timber trade as very languid, and when the vessels now in port have cleared a still duller season is expected. One raft of white pine, which 29 cents was offered in 1882 and refused, was sold last week for 22½ cents. Another raft of white pine, two-thirds square and one-third waney, about 18½ inch, for sold for 23 cents.

Cheap Timber Lands.

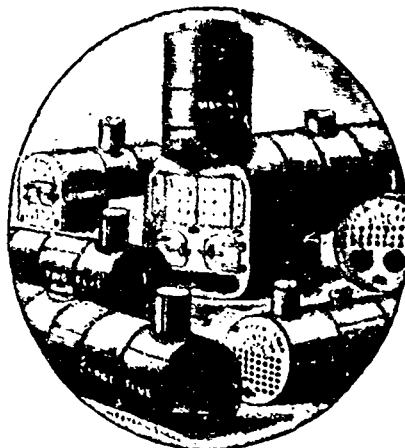
The St. Ignace Republican lately remarked thus: "Hon. C. F. Moore, of St. Claire, a prominent Saginaw lumberman, and owner of many thousand acres of pine and hardwood land in Mackinac and Chippewa counties, visited this office, Thursday, on his way home from Sault Ste. Marie, where he had been bidding for certain lands at the annual tax sales. Both from him and Supervisor Kaye, of Nowberry (also in the city on Thursday), we learn that many a forty went for ten cents, the value or worthlessness of the parcel failing to disturb the ruling price. To instance: The Hill lands, delinquent for two or three years, on which the aggregate taxes amounted to a very large sum were, most of them bid in at a ridiculously low figure by Hill's agent. In short, the bidders were a harmonious lot, none poaching on another's intended preserves."

For the past two or three weeks fires have been raging in the timber at Turtle Mountain, Manitoba, and has worked its way south into Dakota. The damage is extensive and can hardly be calculated. There is considerable annoyance felt on the part of the settlers at the action of the government in prohibiting the removal of fallen timber, as had it been removed the fire would have been checked and prevented from spreading. Fires are also raging near the Eagle Hills, and have destroyed considerable property.

THE Vermont forestry commission has issued a circular asking the earnest co-operation of all practical men in the different sections of the state, to furnish full information as to the decrease of forest acreage, the amount of wood used for fuel and exported, the manufacture of lumber, the injuries inflicted by forest fires, the diseases affecting forest trees, the effect of the removal of the wood upon streams, springs and ponds, and similar information, which when fully compiled, will be of much interest to the public.

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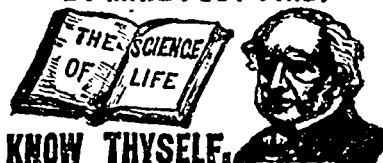
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This book should be read by the young for instruction, and the afflicted for relief. It will benefit all.—London Lancet.

There is no member of society to whom this book will not be useful, whether youth, parent, guardian, instructor or clergyman.—Argonaut.

Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bullfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obdurate diseases that have baffled the skill of all other physicians are a specialty. Such treated successfully without an instance of failure.

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A FEW SIMPLE TESTIMONIALS THAT SPEAK FOR THEMSELVES.

OTTAWA, September 3rd, 1883.

A NORMAN, Esq.—Dear Sir,—I have experienced considerable benefit from your appliances. I feel stronger and better every day.

Yours truly,

R. E. HALIBURTON.

PETERBOROUGH, October 16, 1883.

A. NORMAN.—Dear Sir,—Soon after I commenced to use your Electric Appliances, they opened my bowels, cured my cough and cold, relieved my head and considerably relieved my catarrh in consequence. The discharge from my head and chest are now easy, and I feel altogether better. My digestion has improved, my stomach less sour and windy, and I am less troubled with lascivious and vivid dreams. I had previously tried almost all the advertised patent medicines without deriving any good.

Yours truly,

J. GREEN.

CURATIVE BATHS, Electric, Vapor, Sulphur and hot and cold Baths. Baths have been admitted in all ages by every school of medicine, to be one of the best means of curing ailments, maladies and diseases. The Electric Bath is the latest and best discovery in this line. Come and try them, at

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A. NORMAN, Proprietor.

D. FOWLER'S
EXTRACT OF WILD
STRAWBERRY
CURES
CHOLERA
CHOLERA-INFANTUM
DIARRHOEA,
AND
ALL SUMMER COMPLAINTS
SOLD BY ALL DEALERS.

something like 700 standards, which formed quite a mountain of wood on the dock quay in the Albion Dock, alongside which this huge vessel discharged. These deals are mostly 1st and 2nds of a well-known Quoboo shipment, and looked a very clean and well-assorted cargo. A considerable portion has been already piled, and merits can, therefore, be better seen than when heaped promiscuously on the quayside. The Malabar brought only a portion of her cargo of deals, but it was a tolerably large part, and being some 330 standards, would go far to fill up one of the ordinary sailing vessels that cross the Atlantic. It would take a five hundred ton ship to carry it anyway. These goods, a nice assortment of Gilmour's pine, are piled at Cross Bank, Centre Yard, having been lightered into the Surrey Commercial Docks as the steamer discharged her deals overboard in the river. The steamer Tantalion the most recent of the arrivals, brings an entire cargo about the size of the Romeo's, which she was delivering overboard into the lighters out in midstream in Canada Dock, her cargo consisting of 580 standards of Montmorency pine, and some 200 standards of Breaksey's spruce, so that we have with these steamers and others previously mentioned in the *Journal*, partly or wholly laden, something like 4,000 standards of Quebec pine and spruce delivered in the docks within six weeks of the St. Lawrence being open for navigation; a bigish contribution so early in the season to receive from the other side the Atlantic, and quite a month earlier than we used to get fresh goods prior to the adoption of steamers in the pine trade.

The readiness of steamship owners to adapt themselves to the trade, by loading up for two or more consignees, no doubt induces many to keep in the import trade who, were they obliged to charter the whole vessel, would rather supply themselves at the public sales, even at some disadvantage, than risk an over-stock.

We expect, however, the freight would be somewhat tighter for calling at two places than if the vessel were taken up to load at one port solely.

The general tendency has been one steady decline. Of course there will be the better descriptions of Cronstadt and White Sea goods to come on the market yet, but there is nothing to found any hopes on of the market taking a favorable turn just yet, at least such are the conclusions naturally to be drawn from the result of recent sales.

The arrivals into London this week amount to a total of 55 vessels, against 73 that came forward this time last year. Of this week's number 35 are steamers and 20 sailing ships, so that the bulk of the Baltic trade is still in the hands of the former, which seem likely to do a bigish share of the Colonial trade as well. Sweden is the largest contributor of course, but if the limitations expected by the shippers are to be fulfilled we might see a marked falling off by and by.

LIVERPOOL.

The *Timber Trades Journal* of June 28, says: During the past few days a larger number of vessels laden with timber and deal cargoes have arrived than has been the case for some time past, and as these are pressed upon the market prices especially for spruce deals are weak. In other woods there is no change in quotations.

The directors of the Lancashire and Yorkshire Railway have issued a notice inviting tenders for the erection of buildings to include an hotel, shops, and offices in front of their new Exchange Station. Tenders are to be lodged by 21st July. It is reported that the new plans show the proposed building will be upon a very extensive scale, and furnish employment for a large number of hands whilst they are in progress. The reconstruction of several stations on the Liverpool and Southport branch of the same system is also in contemplation when the work of doubling the line is completed, and which is now being pushed forward with great vigour.

With regard to further dock improvements and accommodation, the Works Committee of the Mersey Dock and Harbor Board intend to submit the following recommendation at the general meeting of the Board this week: "To lower the foreshore or river bed, in the vicinity of the entrances to the Herculeum system of

docks, and to construct sluices in the river wall abreast of these docks, with a timber lie-by in connection therewith, at an estimated cost of £68,000." This will assist in livening up trade at the south end of the port, which needs a stimulus.

GLASGOW.

The *Timber Trades Journal* of June 28, says: The arrivals at Glasgow for the past week have been very light, consisting of small parcels of staves and planks, &c., per steam liner. The imports at Greenock are a large cargo of pitch pine; there also has just arrived there, though not in time to be particularized in this week's import list, the first sailing ship this season from Quebec, after a passage of 42 days. She is a vessel of about 800 tons, and the cargo was loaded at the close of last year, but when about to sail for the Clyde the ship was caught in the ice, and had to winter in the St. Lawrence. There has been a large import for the past week of north of Europe wood goods at Grangemouth, thirteen vessels being employed, giving an aggregate tonnage of 4,040, the cargoes consisting of deals and battens principally.

The arrivals at Grangemouth since the beginning of the year are represented by a carrying tonnage of 15,000 tons, as against 10,000 tons in 1883 at corresponding date, and 19,000 tons in 1882.

As regards imports from Quebec to Clyde, the spring fleet is likely, from all reports, to be less than usual, which will be in keeping with prospective trade, or probable wants; for, although large quantities of Canadian timber, part without reserve, have gone lately into the hands of dealers and consumers at sales, there is still a considerable stock on hand, particulars of which will be shown in the comparative statement to be made up in a few days.

At Glasgow the market is fairly well supplied with walnut, whitewood and birch, but anything like a brisk demand for wood is not likely to spring up until our summer holidays are over.

There has been a falling off in the deliveries of deals lately from Yorkhill Yards, Glasgow, the following being the figures compared with previous years:—

	1884.	1883.
	pts.	pts.
May.....	52,358	61,446
June.....	51,448	63,000

There are no auction sales to report since last writing.

TYNE.

The *Timber Trades Journal* of June 28 says: The importation of the past fourteen days has been very large, and covers almost all kinds of wood goods. Staves and pit-props form, as your readers will see, a large item, and sawn goods from the Baltic are also a very important amount.

One very gratifying feature of this year's importation is the uniformly good condition of the goods coming forward. So far as we are aware there have been no cases to the Tynes of discoloured or damaged goods, and certainly all yet delivered will, from their bright appearance and uniformly good quality, bear credit to the Swedish shippers. Stocks of sawn goods goods have not to all appearances in the docks grown much larger, the greater part of the spring arrivals having gone direct into consumption. Of other goods, pit-props and mining timber are very much too large, and were another prop not imported this season it would scarcely cause much inconvenience, except, perhaps, for some special lengths.

In American goods stocks are still very large, and the demand absolutely nowhere. Perhaps this applies more especially to yellow pine log timber, of which the stock is high. Pitch pine is selling at very unremunerative rates; yellow pine deals are the only goods of which stocks are small and inquiries abundant. It is, perhaps, difficult to predict the course of events for the next few months, but it is not likely that the demand will improve during the summer.

This being the race week at Newcastle, business is entirely at a standstill from Tuesday morning till the end of the week, the opportunity being usually taken advantage of to do all the necessary repairs in the various manufacturing.

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GROWING LUMBER TOWNS

Menominee, Mich., and Marinette, Wis., occupying opposite banks of Menominee river at its mouth, are rapidly growing. A census has just been taken, which shows that Menominee has a population of six thousand, and Marinette, and Menokaunee, the latter a sort of tender to Marinette, having seven thousand resident people. These places owe their growth and importance to the immense lumber industry that centres at that point. A new start has been given to these places by the building of the Milwaukee and Northern (Wisconsin and Michigan) branch, which gives them two important railroad outlets southward and westward. Now another impetus to growth has been given by the certainty that the St. Paul and Eastern Grand Trunk is to be built to the mouth of the Menominee. Not only so, but the probability is that Menominee and Marinette will have additional connections with the Lake Superior region through the further extension of the Milwaukee and Northern, and probably in the near future connections with the Northern Pacific system and the Minneapolis, Sault Ste. Marie and Atlantic railroads, thus affording Menominee a range of the entire Lake Superior country, and northern outlets east and west. With all these railroad advantages added to lake commercial facilities, Menominee and Marinette combined should constitute the leading center of the shore country north of Milwaukee, in population and general importance.

A Courageous Proposal.

The *Monday Times* of July 11, says:—A Duluth, Minn., despatch dated July 6th, states that the lumbermen of the northwest are considering a proposition to shut down all mills on Sept. 1st for the remainder of the year. They say that at present prices it is impossible for lumbermen to make anything, and that some such movement as this is not only needed, but demanded, to restore prices. The proposition has been talked of by lumbermen all over the northwest, and if agreed upon all the manufacturers will go into it.

The Late Senator Skead.

The *Monday Times* in the obituary of the late Senator Skead says:—Senator Skead formerly carried on a large lumbering business, on the upper Ottawa, in which he was, like so many others, ultimately unsuccessful. He was honourable and energetic in his dealings, and his death will be regretted by a large circle of friends.

Bankers' Association.

The Annual convention of the American Bankers' Association, will be held at Saratoga, N. Y., on August 13th and 14th. Its deliberations this year, it is stated, will be of special interest. Each bank in the United States is entitled to send one delegate.

RESPECT OLD AGE.—An old favorite is the remedy known as Dr. Fowler's Extract of Wild Strawberry. Thirty years reliable for cholera morbus, diarrhoea and summer complaints.

THE CANADIAN TREATY.

The proposition to restore the reciprocity treaty of 1854 between the United States and Canada has received the quietus for the present year. The sub-committee of the House committee on Foreign affairs has reported against it. The resolution which was referred to the committee specifically directed that inquiry be made as to the policy of renewing the abrogated treaty, giving the committee no further power.

The sub-committee that was charged with the actual inquiry arrives at the conclusion that it is undesirable to renew the treaty, and gives as a reason therefor the same that caused its abrogation—that is, because it was inequitable in its operation toward the United States. Stripped of the circumlocutory verbiage of the committee's report, the reason is simply this: Canada has any amount of cheap lumber and timber to sell in this country, and therefore wants a reciprocity treaty, the United States have little to sell in Canada, and for that reason could secure little advantage from a treaty. This is the argument of the opponents of the international measure. The committee, however, overlooks the fact that the manufacturers of the Northwest would gain a great advantage by being able to ship lumber, agricultural machines, wagons, etc., into the new Northwest of Canada. A reciprocity treaty would without doubt benefit the communities on both sides of the line west of the great lakes, while it would be of more doubtful policy in the East. This is another pointer to the future probability that the Canadian and American Northwests will seek to be united under one commercial relationship, if not under one flag.

The committee finished its report by recommending that the old treaty be not re-enacted, but suggested, instead, a "commercial union," whatever that may mean, between the two countries. There is no probability that the House committee will adopt the report of the sub-committee at this session, much less enter upon the consideration of its suggestion. The matter is laid by for the present.—*Northwest Lumberman*.

Collision of the Alberta.

WINNIPEG, July 10.—The C.P.R. Steamer Alberta on her up trip collided with the steam barge Pacific at the foot of No. 14th Rapids. Both vessels were considerably damaged, notwithstanding which the Alberta continued her journey and arrived at Port Arthur to-day, with her port bow stove in and other injuries. She had 200 passengers and 800 tons of freight.—*Globe*.

Port Arthur.

Tenders for constructing a breakwater to protect the harbor at Port Arthur, the present eastern terminus of the Canadian Pacific railroad on Lake Superior, have been advertised for. This is considered equivalent to fixing the fact that Port Arthur is to be the permanent Lake Superior port of the Canada Pacific system.

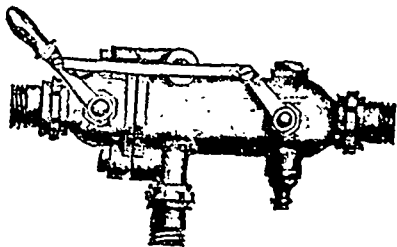
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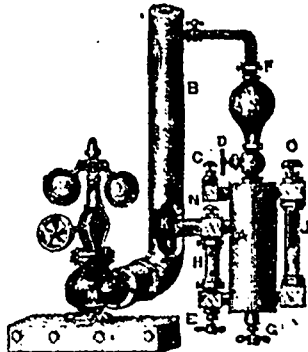
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Will lift 20 feet, and take water at 150 degrees. Only one handle to start and stop. No valve to regulate. CHEAPER than any other Injector in the market. Also, PATENT EJECTORS for conveying Water or Liquids. CIRCULARS ON APPLICATION.

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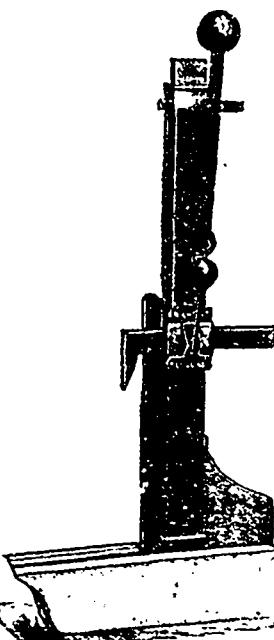
The Sawyer's Favorite

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

MISSISSAUGA, June 7th, 1883.
HUGH GIBSON, ESQ.—Your Patent Excelsior Mill Dogs give entire satisfaction, and is certainly up to your recommendation. They are the best Mill Dog in the market. I am very much pleased with them.
Yours respectfully,
PETER McLAREN.

BRACKLEY, April 20th, 1883.
HUGH GIBSON, Sir.—The Dogs I bought of you give satisfaction. They beat any Dog that I ever saw for ripping or edging lumber on carriages. They are just the thing for scantling. I would not take \$50 for them to-day and have to wait for another pair to come from you, because I believe they make two dollars a day for me.
Yours truly,
GEO. S. BROWN, JR.

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

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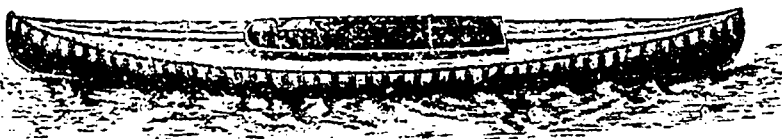
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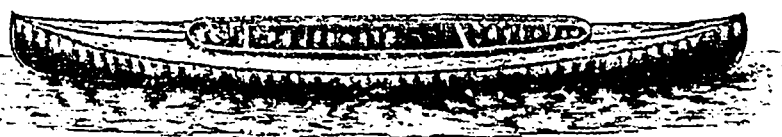
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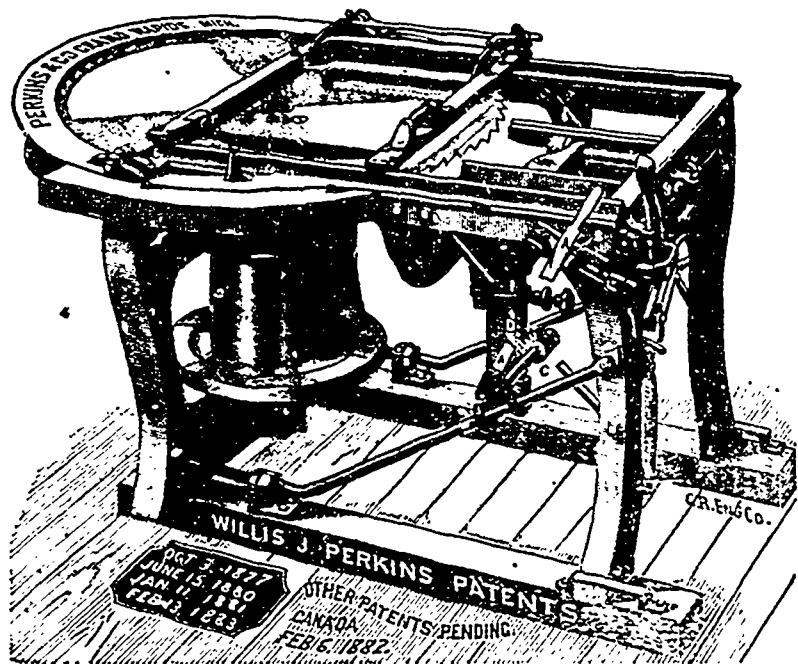
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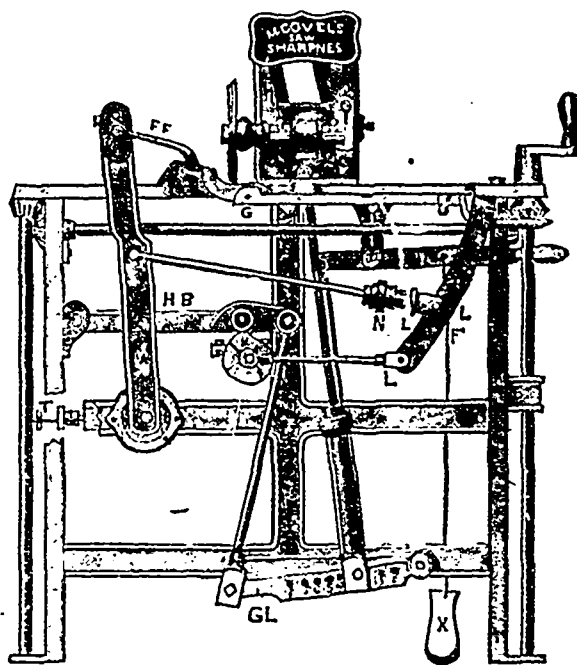
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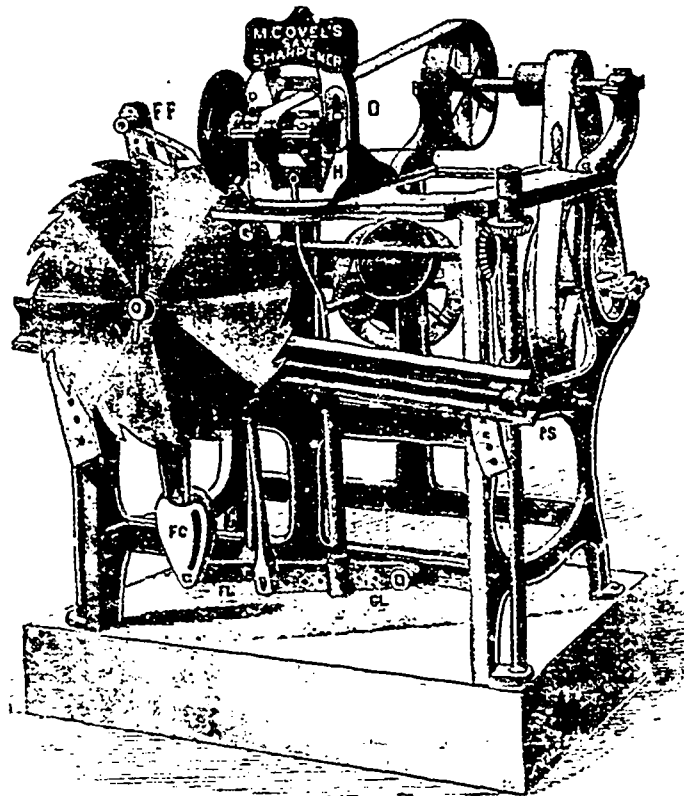
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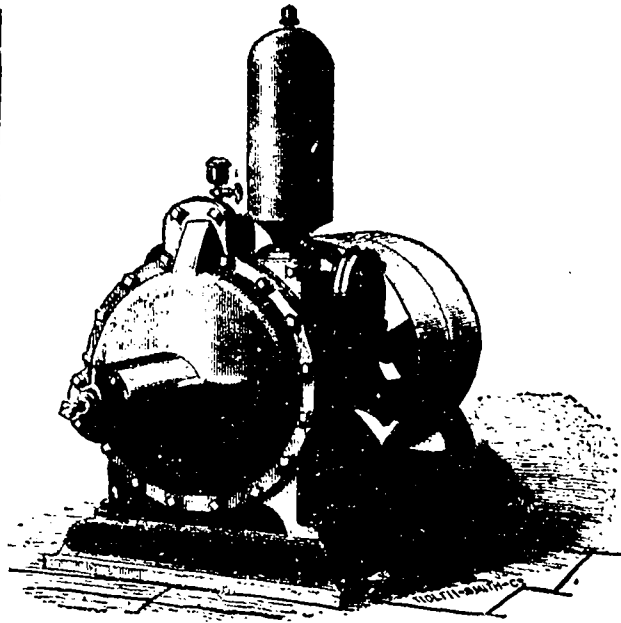
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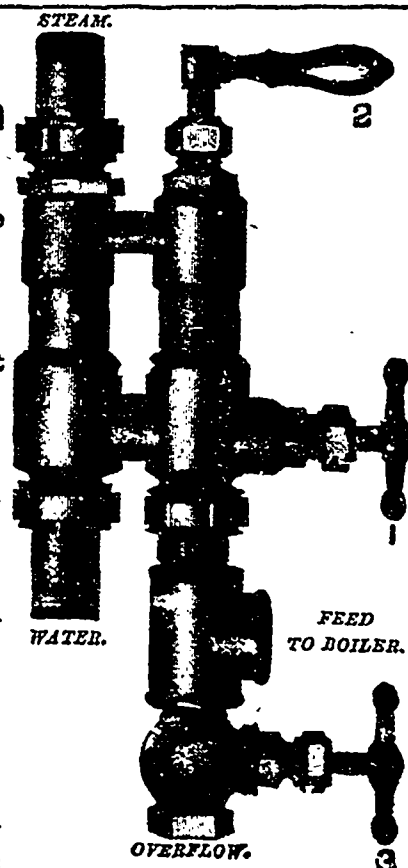
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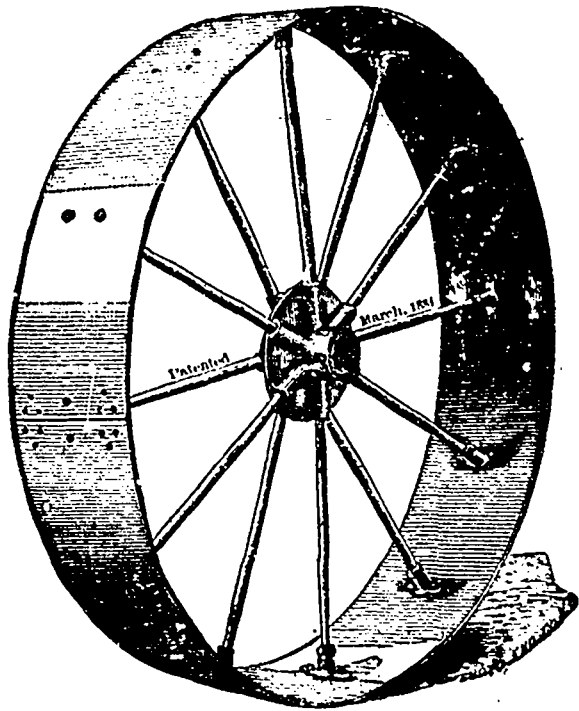
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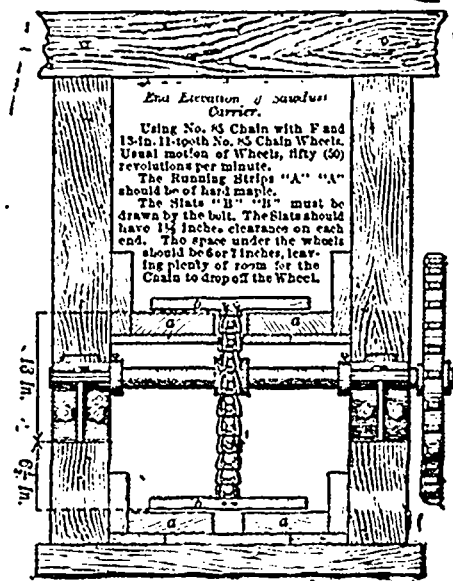
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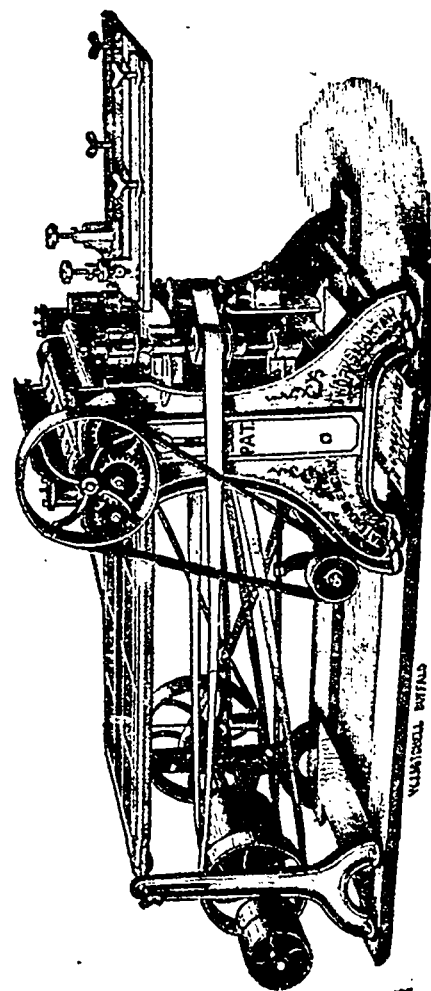
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