

Chips.

THE mill belonging to the Ontario Bank at Parry Sound is being put in order and is expected to commence running about the 1st of May.

Is the manufacture of shoe lasts it is estimated that 500,000 cords of birch, beech and maple timber is used, and an equal quantity for small tools.

MR. ALEX. McARTHUR, of Kinmount, is shipping birch lumber to the front. So is Mr. Geo. Cluxton. All the factories along the Grand Trunk are glad to get it.

THE lumber exports from St. John, N.B., for the past three months to trans-Atlantic ports reached 11,121,679 feet, not including 499 tons of birch timber.

A PINE TREE was recently cut in Clearfield county, Mich., that made three sticks of square timber, 62, 60 and 36 feet long respectively. At 36 feet from the stump the tree squared 27 inches.

THE large belt referred to in our last issue as having been made by Messrs. Robin & Sadler at their factory in Hamilton, should have been credited to Montreal as it is in the latter city these gentlemen are located.

THE official statement of the banks of the Dominion for the month of March show an increase of \$100,000 in circulation; an increase in Dominion deposits both on demand and on time and an increase in assets of \$1,000,000.

THE *Omnice Herald* says Mr. John Kincard, of that place, manufactures a cedar shingle the surface of which is as smooth as if it had been planed or sand papered, and that the point and butt are cut perfectly true and square.

J. H. REIFFENSTEIN, D.L.S., who has just returned to Winnipeg from the Shell River district, where he has completed a subdivision survey of six townships, says it is principally a timber tract of country, consisting of poplar, balsam of gilead, and spruce, a belt of the latter having been struck in the eastern part of the survey. Poplar trees averaged thirteen inches in diameter.

DURING the winter several improvements have been made in the Parry Sound Lumber Company's saw mill at that place, with a view to economizing labor and increasing the capacity of the mill. A new iron burner has been erected, and upon trial, although the sawdust and wood thrown into it was mixed with large quantities of ice, it proved a complete success. The company expect to cut from fourteen to sixteen million feet during the season.

AN English paper predicts that wooden railway sleepers are to be replaced by steel, just as iron rails are being superseded by steel rails. Steel sleepers, it says, are very flexible, and will outlast the toughest rails, while their greater cost over timber sleepers will be compensated by their greater endurance, and the diminished expenditure of relaying. They are now manufactured in great quantities at Düsseldorf, and 70,000 tons have been laid down as an experiment in various parts of the continent.

A MANITOBA exchange suggests that it would be an interesting experiment if the farmers in Manitoba would enclose a few acres of prairie with a strong fence, carefully excluding cattle and other animals. The result would likely be a vigorous growth of young trees, perhaps mostly poplar. On a piece of ground which, for at least two years, was protected from cattle and fires, immense numbers of young poplars made their appearance last season. Claims for tree culture might, perhaps, in this way be retained. In any case a fine grove of trees at every farm house could be secured with very little trouble.

At the installation of the officers of the Buffalo Board of Trade on the 15th April, the newly elected president said:—"There is no doubt but that our citizens with very few exceptions are in favor of a new reciprocity treaty, and are therefore desirous that a joint committee should be appointed on the part of Great Britain and our Government to take the matter into consideration, and devise a plan that would result in giving the people of Canada and this country a just and equitable treaty, one that would be so fair that the good resulting from it would be mutually advantageous to the people of both countries."

YELLOW PINE TIMBER.

The very best of yellow pine timber is not that of greatest density. Pitch pine is not as good for decks or deck frames as other fine-grained pine from the South. Before the war of 1861 there was a species of yellow pine grown about Wilmington, N.C., whose specific gravity equalled the best pine on our coast, the mean of which was 437 39 lbs. 13 oz. when squared; when round and in bark, 781 48 lbs. 13 oz. The very best yellow pine timber is that in which the even fineness and firmness of the grain is continued to the centre or pith of the tree, ranging from 15 to 25 grains to the inch. By careful observation much information that is valuable may be obtained from the table of specific gravity. Notwithstanding the thickness of the bark of the yellow pine and its lightness (the specific gravity differing not materially from that of cork), we find that the pine timber in bark weighs much more than the square timber. This, to the casual observer, would hardly seem possible; the man unacquainted with the nature of yellow pine sapwood would be likely to doubt the correctness of the table. But such is the nature of the exterior coating immediately under the bark of yellow pine, that we cannot find a substance more analogous than sponge; its retentive properties are very similar, and the turpentine with which this sapwood is saturated is the cause of its increased specific gravity above that of the squared timber when covered with bark.

The thinner the sap wood, the less the specific gravity.

There is an error in the prevailing opinion in relation to the durability of yellow pine timber. Our Government has become a heavy stockholder in this prevailing error, by acting on the supposition that yellow pine timber requires a great amount of seasoning. The consequence has been that large timber houses have been erected and filled with this timber, and kept for many years, and when in a state of decay it has been used for new vessels and vessels undergoing repairs. This is a very great mistake; an equal number of months would have answered a better purpose than as many years, as regards the shrinkage and durability of yellow pine. When in pieces of any considerable size, it shrinks but little after the vessel is in active service; when used as deck plank, they should be made narrow. Our judgment, based upon a large experience, leads us to the conclusion that yellow pine requires no seasoning to make it durable. The ebb and flow of the turpentine are through the sap, as the specific gravity will show; hence we say that the capillary tubes of the heart would have no more of the resinous property if cut at the proper season than is required for strength and to render it durable.

The continued use of yellow pine timber in the private shipyards of New York has proved it incontestably. We could name ships built in this city more than thirty years ago that have their first yellow pine beams in their decks, and we could point to others that have exhibited a durability unknown to our navy. Proper care should be taken to clear the timber of all sap; and as regards shrinkage in naval vessels, if the same measures were adopted as in private yards, making strakes of planks narrow, there would be no cause of complaint. The strakes of clamps, deck plank, bulwarks and ceiling of naval vessels are too wide by at least twenty per cent.—*American Ship*.

A New Water Wheel.

One of the novelties in water wheels, patented some time since, consists of an endless belt of any suitable construction, passing over an upper and lower pulley, and fitted with a number of water buckets whose upper portions are formed with a rearward curve to permit them to pass through the water easily at the bottom of the wheel, and whose lower ends are secured to the belt by elastic connections to permit them to turn easily over the pulleys. The weight of the water in the buckets operates directly to drive the upper pulley, which, being fixed to a shaft, furnishes the desired power. The inventor claims for this simple form of water wheel a larger percentage of efficient power, with a given flow of water, than is obtained by the best turbine wheels.

ANOTHER LARGE ROLLWAY.

A correspondent of the *Lumberman's Gazette* writing from Pinconning, claims there is the largest rollway on the bay at the termination of the Saginaw Bay and Northwestern railroad. This road runs west from Saginaw Bay through Pinconning a distance of 10 miles, then north 12 miles. It has several branches from one-half to two miles in length. At the bay there are two trestles, their united length being a trifle 3,000 feet; they stand about 20 feet above high water mark. On the line there are 22 camps in operation—three camps belonging to Yawkey & Bradley, three to H. W. Sage, two to Folson & Arnold, and four operated by W. J. Miller & Co., the last named getting out logs for T. H. McTraw. These camps run on an average about 80 men to a camp divided into two gangs, one working in the day and the other nights. At the bay there is about 80 men divided in the same way, the former to load cars and the latter to unload. The road has six engines, five in constant use night and day, two gangs to each train, in fact we have two gangs to every thing as we run day and night.

At the bay the logs are dropped off of the trestles and rolled a distance of 600 to 800 feet, and then tiered up, and as fast as they come we keep on piling them on top so we have them all in perfect straight tiers each mark by itself, and as every camp has a mark of their own, you can imagine how they look.

They claim that at Averill they had up to the 10th of this month, 14,506,318 feet, which I think is about the right figures. We can see them on that figure and go about 12,000,000 better, for we have banked at present about 25,000,000, and if any one wishes to see the largest rollway in Michigan, and I think in any State, tell them to come to Pinconning. It won't cost them anything from Pinconning to the bay, a distance of two miles, as W. J. Miller, general manager, is a very accommodating gentleman, and any train going to the bay will be at the service of visitors. Remember that the logs are all tiered up and not dumped like nails from a keg, as at Averill. The president of the company operating this road is W. S. Gorrell, of Muskegon; W. J. Miller, general manager.

To Fasten Cloth on Wooden Surfaces.

The following is said to be an excellent method of fastening cloth to the top of tables, desks, etc.: Make a mixture of 2½ pounds of wheat flour, 2 tablespoonfuls of powdered rosin, and 2 tablespoonfuls of powdered alum; rub the mixture in a suitable vessel, with water, to a uniform, smooth paste; transfer this to a small kettle over a fire, and stir until the paste is perfectly homogeneous without lumps. As soon as the mass has become so stiff that the stirrer remains upright in it transfer it to another vessel and cover it up so that no skin may form on its surface. This paste is applied in a very thin layer to the surface of the table; the cloth, or leather, is then laid and pressed upon it, and smoothed with a roller. The ends are cut off after drying. If leather is to be fastened on, this must be moistened with water. The paste is then applied, and the leather rubbed smooth with a cloth.

Utilizing Tide Power.

When the venerable Peter Cooper was an apprentice he invented a water wheel to utilize the natural current of the tides. His plan was to cause the waterwheel to rise and fall with the tide, at any desired speed, by the action of its own machinery. It was so arranged that the whole power could be thrown on a mill, or be made to force compressed air into a reservoir to be used as a motive power to propel ferry boats across the river. This last was done by making the hull of a ferry boat to consist of two strong iron cylinders, to provide for the buoyancy of the boat, and form at the same time a reservoir for the compressed air used to drive it across the river. The wreck of the model of this tide mill is still preserved in the garret of Mr. Cooper's house.

That Marvellous Purifier BLOOD BITTERS, will speedily change the sallow face to one of freshness, health and beauty. It regulates the bowels, acts promptly on the liver and kidneys and strengthens the system when broken down by nervous and general debility. Ask your druggist for a trial bottle, the cost is only 10 cents. Large bottles \$1.00.

AUSTRALIAN FORESTS.

According to the London, Eng., *Journal of Forestry* there has been a marked advance in forest conservancy in South Australia during the past year. The extent of the forest reserves has been increased by 4,762 acres, the total area now reserved being 239,368 acres. The reserves are distributed throughout various parts of the colony, but chiefly in the northern and southern districts. During the year, 996 acres have been put under a crop of trees in these reserves by planting, seed sowing, and natural regeneration which, added to the 931 acres planted in previous years, gives 1,840 acres now inclosed and put under a crop of trees by special cultivation and designated plantations. This can only be called a small beginning, considering the immense area that still remains to be treated, but it is nevertheless highly creditable to the forest board of the colony that it has accomplished this much in the short time since the board was constituted.—*Northwestern Lumberman*.

Pine Forests in Georgia.

The wanton destruction of the pine forests of Georgia is creating considerable alarm. Georgia has untold wealth in her pine forests, and yet they are diminishing rapidly and bringing but a nominal return. Georgia contains an area 35,515,526 acres. The pine belt contains nearly one-third of this area, say 11,505,174 acres. Allowing about one-half of this amount to be already taken up and employed for cultivation, milling, and turpentine purposes, we have only 5,752,587 acres left in the original forest. There was consumed during the year 1880, as near as we can estimate, a little over 250,000 acres of timber. This timber found its way to foreign markets principally, leaving but little money in the country as compensation. At this rate, it will be seen that it will only require about twenty years to destroy the last original pine in Georgia, even if there is no increase in consumption. The supply, however, is not equal to the demand now, and now mills and turpentine farms are being brought into existence continually. Certainly such a showing is calculated to alarm any thinking man. We were told by a mill-owner in southern Georgia that it requires 2,600 acres annually to supply that one. All the merchantable timber for miles on either side of the railroads, rivers and creeks has been cut and sent to market. A section of uninclosed pine timber will be a fortune to any man in less than twenty years.

Wash For Outside Walls.

I have long used for whitening my dwelling and also for barns and sheds the following preparation: Dry zinc, 1 lb; white glue, 1 oz; or in the same proportion of ingredients for any quantity needed.

The zinc must be ground or pulverized and dissolved in water moderately hot, stirring it thoroughly during this process. The glue is to be dissolved in a vessel by itself in the usual manner and added to the zinc mixture while hot, stirring the same during the process and for some little time afterward. The object desired is a thorough admixture of the ingredients. The preparation when ready for use should be of the consistency of ordinary whitewash. It is best applied with a wide brush. Walls treated with this mixture, which has not been limed, will preserve a pure white for several years, and will not rub off. Twelve years since I applied this mixture to my barn and sheds, and to-day it is nearly as white as when first put on, and cannot be rubbed off with the hand. If tinting for border is desired, I have no doubt that a slight admixture of lamp-black would give a leaden color. I have not used it on newly dressed surface, and do not know whether it would adhere. A good quality of dry zinc should be purchased for from 6 to 7 cents per pound.

Strength of Insects.

At a meeting of the Maryland Academy of Sciences recently Dr. Theobald showed a species of a beetle and gave the following figures:—Weight of beetle, two grains; weight moved by it 5½ ounces—2,510 grams, or 1,320 times the weight of the beetle. A man weighing 150 lbs., endowed with the strength of this insect, should therefore be able to move 198,000 pounds, or nearly 100 tons.