

OIL FROM PINE.

Within the last few years an important industry has sprung up in the French department of Landes. It consists in the extraction and application of oils from pine. These oils are of two sorts, the heavy (pinoleum) obtained by distilling the resinous wood at a low temperature, and used for painting and wood preserving; and the light oil for illumination, got by distilling in special apparatus, and purified with chemical agents. This light oil has the same chemical composition as oil of turpentine and distils at the same temperature (150 to 160 degrees), but has the advantage of not turning into resin. It contains neither pinic nor sylvic acid. As it does not emit vapour except at a high temperature, its use for lighting purposes is quite safe. Its luminous intensity is said to be greater than that of petroleum; it contains 88 per cent. of carbon, while petroleum has 82 per cent. Two similar burners showed the pine oil to have an advantage of 33 per cent. in luminous intensity; the consumption is also less. In the department of Landes, roots and old stumps of pine, formerly unutilized, are now made to yield considerable quantities of oil.

CHARCOAL.

We have before spoken of the process that has now passed beyond the stage of experiment, for making charcoal from wood and saving during the operation more in value of various chemical constituents than it costs to make the charcoal. The Chicago Tribune in speaking of it says that the Milwaukee, Lake Shore & Western Railway Company has sold about 5,000 acres of land near Birnamwood, Shawano county, Wisconsin, to a number of New York capitalists. The hardwood therein will be utilized in the manufacture of charcoal, acetic acid and alcohol, and a plant costing \$25,000 is to be established at once for this purpose. The capitalists have secured the right of a French patent, which, by the use of retorts, is made to condense smoke from burning wood. By a peculiar process six gallons of 85 per cent. alcohol and 50 lbs. of acetate of lime, the base of acetic acid, are extracted from one cord of wood, leaving sixty bushels of charcoal. It is the intention to invest a large amount of money in addition to the first cost of the plant.

DRIVING DIFFICULTIES.

The Northwestern Lumberman says the owner of logs above the Gerrish dam, in the Tittabawassee and its branches, met at Saginaw, Mich., the other day, to settle upon some means of controlling the driving of the stock of logs now in the stream, which, for want of harmony among owners, was in a fair way to be left till late in the season. The meeting represented about 73,000,000 feet of logs, and about all the action taken was to draw up an agreement fixing the prices to be paid for driving from different points to the boom limits, which ranged from 12½ to 20 cents per thousand feet. This compact was signed by the representatives of 63,000,000 feet of logs, though it could not have any binding effect till 75,000,000 feet was represented, so the interested parties began scratching around to secure enough signatures to close the matter up, a skirmishing committee being appointed for that purpose.

Suddenly Seized.

Mr. Arthur Fisher, of the Toronto Globe observes: "On my last trip to the States, I caught a very bad cold from a severe wetting. I received one night in the city of Philadelphia, which settled into a very bad case of rheumatism, and made me most miserable. I did not know what to do for it, and could not think for a long time, until I bethought me, that on previous visits to that side, I had always bought for Mr. Gay, of our paper, a couple of bottles of St. Jacobs Oil. I remembered also, fortunately, that the last two bottles had cured that gentleman of the rheumatism, and so I resolved to purchase St. Jacobs Oil for my own use. I went at once to a drug store and made the purchase; that very night I began applying the Oil, and in two weeks time I was as well as ever."

"AND FOOLS who came to scoff remained to pray."—We receive many letters from those having tried while doubting, yet were entirely cured of dyspepsia and liver troubles with Zepes, Clergymen write us earnestly as to its wonderful effects.

HOW TO PRESERVE A SUGAR BUSH.

The Cultivator and Country Gentleman says: "An old farmer who is the owner of a fine 'sugar bush' that has been tapped many years in succession, but is yet in a good state of preservation, says that trees will be little injured by tapping if the holes are tightly plugged when the spiles are removed; that instead of finding a large decayed spot the next year surrounding the hole made by the bit, the wood will be sound and green clear up to the hole, and that the tree can be tapped within one-fourth of an inch of the old hole and a good flow of sap obtained. He uses pine for plugs, and to have them fit nicely he makes them from long sticks which have been driven through the right sized hole made in a piece of iron."

THERE is an elm in the south of England, sixty-one feet in circumference, whose trunk is hollow, having a door fastened by a lock and key. Festal parties have sometimes gathered in this tree, and it is said that a child was once born there. Another great elm has a winding staircase cut within it and a turret at the top which will accommodate twenty persons at once.

THE Ottawa Citizen says that a house on the new patent which Mr. Logan has taken out for the construction of portable houses for the North-West has been ordered for one of the road companies in Ottawa to be used as a toll-house. These houses are composed entirely of wood, and one of the peculiarities of their construction is that they are all pegged together, no bolts or nails being required for their erection.

A NOVEL method of taking lumber from the river has been put into practical operation by the Hannibal (Mo.) Transfer Company. The scheme is to run flat cars down to the river bank and out on the bed of the river for a distance of 200 feet, and cribs of lumber are then floated on top of the flat cars and drawn out by two engines upon the bank. The cribs are 32 feet long and 16 feet wide, and contain 10,000 feet of lumber. They are then removed to the yards of the company and taken apart, the boards being washed by hydrant water clear of the sediment dirt which attaches as they come down the river. The method will have the effect of making it possible to handle several times the amount of lumber shipped in former years.

BUT few people comparatively have any idea of the amount of timber used in the construction of a single railroad. It yearly takes 200,000 acres of forest to supply cross-ties for the railroads of the United States. It takes 15,000,000 ties to supply the demand on their railroads, for which on an average the contractors get 35 cents a piece, making in the aggregate \$5,250,000. In building a new road the contractors figure on 2,700 ties to the mile, while it takes 300 ties to the mile to keep a constructed road in repair. Contractors, of course, buy pieces of timberland as near to the proposed line of road as possible, paying for the timber an average of about \$20 per acre, or giving the proprietor 10 cents for every tie got out. The average of a good piece of timber land is 200 ties to the acre and twelve ties to the tree.

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THE Rev. Charles E. Piper, formerly of Pittsfield, N. H., but now of Wakefield, R. I., writes: "I have used Baxter's Mandrake Bitters in my family for over two years, and as a result have not called a physician in the whole time. My wife had been an invalid for two years, but these bitters have cured her."

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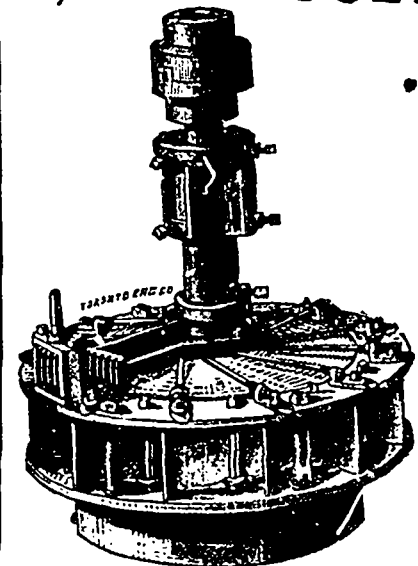
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