

ARKANSAS PINE AND CYPRESS.

LITTLE ROCK, Ark., April 6.—The variety of yellow pine found in the forests of Arkansas is of the short leaf description which occupies a position midway between the long leaf pine and northern white pine, and is used all over the south for flooring, weatherboarding, bill stuff and other uses to which lumber is applied. It is clear in color and has a beautiful grain when finished with shellac. It is estimated that there is in this state 40,000,000,000 feet south of the Arkansas river, of this variety of pine, much of which find a ready market in Texas, Kansas, Missouri and Illinois. Its weight (dressed strips) is about 2,300 pounds per thousand. It is free from pitch and softer than long leafed pine. It makes a better floor than white pine, and can be delivered north as far as Chicago, or west to Kansas, for about one-half the cost of white pine. Its durability, strength and other good qualities, must soon make it an active competitor for these purposes with white pine. It is pushing its way into Kansas, Texas, and the north and northwestern markets.

There are three kinds of cypress in the South, white, yellow and black. The variety found in Arkansas is the white; the yellow and black grow in Louisiana and along the gulf states. The white variety is soft, clear grained and light in color. It is used all over the south for ash, doors, blinds and all kinds of finishing lumber. It is also used for shingles. It stands the weather better than white pine, does not warp or twist, and does not shrink or swell after being once thoroughly seasoned. Exposed to the weather it will last twice as long as white pine, makes a better shingle, and better tank stuff, fence posts, etc. I have doors in my house that were made seventeen years ago of this timber (about the first made here), and not a single joint has yet opened sufficient to crack the paint. My outside doors are to day as true and solid as when they were made. It works nearly as easily as pine, but is a little harder on tools, I am told.

This timber grows very tall, straight and thick, in isolated patches, in shallow swamps or lakes, usually in from one to two feet of water. The trees are felled in the water, and cut off in full lengths, and towed to the mill, which is generally on the bank of the lake, hauled up and cut into any length of logs required. There is generally enough timber in one of these brakes to justify putting a mill upon it. Brakes can be found here that contain from 25,000,000 to 100,000,000 feet. This variety of cypress is limited in quantity. There is not probably more than 2,000,000,000 or 2,500,000,000 feet in this state. Louisiana, Mississippi, Alabama, and Florida have large quantities of yellow and black varieties, but little white. Cypress has stayed the importation of white pine here entirely, and gives entire satisfaction wherever used. It has risen in price for local uses from \$10 to \$20 in the last five years, and I fail to see why it should not, in the near future, go to the price of white pine that could be laid down here, say from \$45 to \$55.—*W. in Northwestern Lumberman.*

AN ARCTIC WOODLAND.

Popular impressions are often far from the truth, and in regard to the Arctic regions they are undoubtedly so. A treeless land would be, in the opinion of most people, the idea which would suggest itself in regard to the regions in question. Yet this, though true, is not all the truth. Within the Arctic circle are found trees often forming considerable, though stunted, forests. In eastern Siberia pines and other trees come down almost to the water's edge; while over all western Siberia, Arctic Russia, and Lapland, the tree limit runs within the Arctic circle; trees extend even to the North Cape. In Greenland we find, even in the most southern parts of it, no herbage more worthy of the name of tree than the stunted birch, which, in the more sheltered valleys of that country—equally inappropriately named with Iceland—attain the proportion of little shrubs; and it is not until we come to the milder latitudes of the Pacific that the tree line, which had descended a southerly curve in the cold regions of Central North America, again rises to the north, and until we reach the shores of Behring Strait we find nothing which we can dignify by the

name of trees. * * * The wooded banks of the Yukon touch the Arctic circle, and forests of white spruce are found on the Noatak, a river which falls into Eschscholtz Bay, which infringes on the Arctic circle. In Lapland the spruce ceases at about the 68th parallel, and Scotch fir at the 69th; but in Norway, owing probably to the warm Gulf stream, which sweeps along the coast and into the Arctic sea—at least as far east as Nova Zembla—we find forests of Scotch fir, 60 feet in height, as far north as Altenfjord, and birches, about 45 feet high, in an equally northern latitude. In 70° 28' the hardy Scotch fir still maintains its ground, though the spruce fails a degree or so further south. In the vicinity of Hammerfest, a well known Lapland town, in latitude 70° N., there are dwarf alders and aspens, bird cherries, raspes, and currants. In the Scandinavian peninsula, probably owing to the warmth which a sea, unincumbered, and in addition laved by a current of a higher temperature affords, barley is cultivated as far north as the 70th parallel, the latitude of Disco island on the Greenland coast, and was up to the 65th "in sheltered valleys, where rocks and cliffs reflect the sun's rays with much power."—*Woods and Forests.*

BEECH TREES AND BEECH-NUTS.

The beech is one of the most valuable and celebrated trees indigenous to the Northern Hemisphere. It is true that the American Beech has not been so widely celebrated in story and song as its European namesake, still, it is in no way inferior, or less worthy of all the praise that has been bestowed in centuries past upon its near relative of the old world. Our American Beech (*Fagus ferruginea*), as found in nearly all of our Northern forests, is a noble tree with an exceedingly graceful habit; for while the main branches are very strong and sturdy, they are always furnished with an abundance of small slender branchlets, that give to the tree a graceful outline, no matter how large or old the specimens may be. The bark of the tree is also somewhat peculiar, it being smooth, with no cracks, fissures, or corrugations, to hold dust or afford lodgement for mosses and lichens. The stem of the beech tree is a solid, firm and smooth column, almost as rigid as marble, and far more valuable than stone. This smoothness of bark extends to the minutest twigs, and even the buds in winter; and the expanded leaves in summer are smooth and glossy. To call the beech a "clean tree" is but faint praise; for, in addition to its neatness in appearance, it is peculiarly free from insect enemies and is seldom injured by these pests. Even the dead trees are not very attractive to the wood-destroyers of the insect kingdom. The beech is also a very hardy tree, thriving in very cold regions to the northward, and its flexible and tough branches withstand high winds well, when planted in exposed situations. It will also thrive in very thin soils, rocky or otherwise, the roots keeping near the surface, and are so numerous that they will penetrate the smallest interstices among the rocks, and seek every spot where nutriment can be found. Any one who has had experience in clearing a beech forest will bear me out in saying, that beech roots will fully occupy all the land within their reach.—*A. S. Fuller in American Agriculturist for March.*

SAW DUST AS FUEL.

"As utility seems to be one of the characteristics of the day," says a correspondent of our eastern namesake, "It may interest the inexperienced to know how to make that that evergrowing 'pile' (of sawdust) a source of profit. For years I have not wasted any of it, and find its use the saving of a large percentage of wood. Our mill has a 42-inch boiler, 22 feet long, with two return flues. Our cylinder is 12x24, cutting off steam at half stroke, the motion being regulated by a Judson valve. The engine makes 80 revolutions per minute, driving a six foot circular saw making 300 revolutions per minute. The steam blows off at 120 lbs., using green wood and burning all the walnut, oak, poplar and gum dust the mill makes, and easily maintaining the steam at the point named. 'Green dust contains more water than any we have; and once I had a fireman who

thought he could not burn cypress, and so he let the pile grow until it frightened him away from the mill, when I took the shovel and in three days caught up.

"Several years' practical work has taught me that sawdust needs a tight fire-front, a strong draft through the grates, wood to prevent it packing, unless the boiler is longer than the usual size, and the chambering alluded to above, in order for the gaseous matter to reverberate and produce a perfect combustion. After our furnace becomes hot the utmost crowding of dust does not show the least sign of smoke at the chimney top, this non appearance is conclusive evidence of perfect combustion. In firing dust never stir it, unless it be with a small rod, to make a road for the flame; after firing half a day without stirring, I have gathered as perfect cinders as from a smith's forge. I have taken the shovel from an inexperienced hand when steam was down to 75 or 80 pounds, and gradually raised it to the blowing off point with little besides dust.

"I once visited a friend who was carting all his dust out from the mill, and on asking the fireman why he did not burn it, I was told: 'It smokes the fire out,' and from the small pace underneath the boiler it was quite evident that gaseous matter would be half strangled in 'running the gauntlet' to the outer world. I sketched the plan alluded to and gave my friend the reasons why that must come nearer a producing a perfect combustion. He ordered the mason to re-construct the walls, but he, true to the way he had learned, at first refused, and nothing could convince him of his prepossession but the sight of the living flames rolling over the walls and filling the chambers, and that from the same kind of dust that was said to have smoked the fire out. In two months I saw my friend again, and he said that all the dust went under the boiler with ease; and in that time the slabs, as they were thrown off, had reached the top of the first story of the mill; it not needing them, while before it took all of them. If possible, let some one who has handled the dust shovel show a more perfect way of economy of fuel."—*Wood-Worker.*

WASTED FORCES.

Those who have enjoyed the pleasure of travel by water both at home and abroad must have wondered at the immense power allowed to run to waste on our larger rivers, which, practically could be made to do more work than is now done by the combined steam power of America.

Among the pineries of Michigan we have seen since last year began, sufficient power wasted in the onward course of some of the streams used only for rafting, to convert all the logs cut in that State for five years into shavings. A stream running only five miles per hour has a power, which if harnessed and controlled, would baffle our mathematical calculations in estimating the horse power. In fact, we can imagine how many horses it would take, less the friction, to carry from the mouth to the source the aggregate number of gallons of water any stream carries to the ocean, and this would give but a faint conception of its actual value as a motive power if utilized. Again, the crude manner which we use this power in floating logs and rafts of lumber would be augmented by the natural gravity of the load's weight; to illustrate let us suppose a large raft of logs loose in any of the larger northern streams, where the water is running in the channel, how long would the combined belts used to-day in the mills of Michigan hold this raft steady in one place? We anticipate the answer, there, of course, the power is correspondingly great. Another feature, suppose with some smooth line a large raft was attached to a drum, and these forces of nature allowed their natural sway, does any one doubt for a moment that the power thus generated could be estimated by a comparison with a number of horses? No, it would stagger the belief of the best engineers and mill operators; still it must be remembered that no small portion of the stream's force is allowed to pass the raft below and on either side.

Who in his boyhood days has not affixed the little water wheel to the log across the stream and excited his childish wonder at the result? Later, have we not all read of and many of us seen the crude appliances brought into requi-

sition to utilize the force of gravity of a loaded car going down the inclined plane to bring back the empty up the plane for another load, and seen the pressure needed—wasted force—to keep the drum at the top from running too fast? A short time ago what was considered an obtuse, ignorant laborer in the construction of a large bridge noticed the power lost in removing the stone from the river bank down to the water's edge; he arranged an ingenious contrivance attached to the lifting crane, and this power was made to lift the stone bodily to its place, the courses away high on the pier, and to help materially in elevating them to the very top; and some day we will all be astonished that some hower of wood or drawer of water will so harness the forces present in some of our rapid streams, that the timber placed in at the head waters will gradually float downward to market, and by the time it reaches its destination, instead of the rough, ungainly log, will all be worked up by its own gravity and the power of the water in seeking its level alone, into merchantable commodities, the refuse all utilized, and everything so well balanced that by the time the market is reached the last vestige of the wastes will have disappeared, thus disposing of the three great factors now regulating the price of all wooden things, namely, power, transportation and waste.—*Lumber World.*

Worn-out Boilers.

Whoever said the following, "told the truth": "It would be a saving of life, I think, to oblige everybody to know that steam boilers wear out; that their strength continually decreases. Every day a boiler is used it becomes weaker than the day before. Boilers should be kept clean, though cleaning them does not strengthen them. When a rotten sidewalk goes down with a man, he sustaining serious injuries, damages are demanded and allowed, but when a rotten boiler goes up the case is different. Low water, undoubtedly, the man should have had another pail full of water in the boiler, you know."—*American Miller.*

THE winter has been a hard one upon the stock raisers and holders, but it has been very good for lumbering, the best for several seasons. The snow had fallen and lain evenly. Mr. Robinson and a gang of men went north on Wednesday to the head waters of the Mississippi, in order to commence for Mr. McLaren the drive of timber towards Carleton Place, as soon as the creeks and streams were clear of ice. Mr. McLaren has, it is stated, got out over 200,000 pieces of timber. Mr. Caldwell's cut is not known, but it must be almost as great as that of Mr. McLaren's.—*Kingston Whig.*

Fire at Collingwood.

COLLINGWOOD, April 20.—Warren, Tobey & Co.'s tannery was destroyed by fire to day. Loss, \$40,000 to \$50,000. Twenty five men are thrown out of employment. Insurance:—North British and Mercantile on building, \$2,724, on machinery, \$1,819, on stock, \$5,457; Phoenix, on building, \$1,092, on machinery, \$727, stock, \$2,181; Royal, on building, \$1,092, on machinery, \$727, on stock, \$2,181; Commercial Union, on building, \$1,092, on machinery, \$727, on stock, \$2,181, and \$4,000 extra in North British, making a total insurance of \$27,000.

"All Men are Liars."

said David of old. He was probably prompted to make the above remark after trying some unreliable catarrh remedy. Had he been permitted to live until the present day, and tried Dr. Sego's Remedy, he might have had a better opinion of mankind. We claim that no case of catarrh can withstand the magic effects of this wonderful medicine. One trial of it will convince you of its efficacy. By druggists; fifty cents.

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.