

DIFFERENT KINDS OF WOOD, AND WHERE THEY GROW.

The following communication appears in the *Northwestern Lumberman*.—Perhaps a few observations on how to choose wood for the different purposes to which it is applied, and where to look for the different kinds, might be of use to some who may not have the opportunity to see for themselves. With that object in view, I propose to give a few facts as I have seen them.

To begin with, in Maine, perhaps the oldest and best lumber country east of the Rocky Mountains, and, taking everything into consideration, as good as any in the world, we find the different soils and locations producing a variety of woods, varying in quantity and quality according to the circumstances. There is probably an impression among many that the pine timber lands were occupied exclusively by the pine, but such is not the fact, except in certain locations. The immediate sea coast, and back from the sea from 10 to 20 miles is very rocky—in many places almost or quite solid rock—yet there are valleys and spaces between and among the rocks where there is good soil; also sandy places. This formation was once mostly covered with pine, with a very little hardwood mixed. Where the timber has been cut off it is inclined to grow up to the soft woods again. Occasionally the white and yellow birch take the places of the soft woods.

It is a curiosity to see how little earth or soil in the crevices of the rocks will answer to support a pine or cedar tree. It is a common thing to see trees growing on the side of almost perpendicular cliffs, where there is hardly room for the roots. These trees never grow to much size, nor are they of much value; still it shows how nature utilizes everything. As you went back into the country there was less pine and more hardwood. The pine was extra in quality and very large in the old growth; also very durable, as the old stumps testify to this day. There are old roots and remnants of stumps still in existence from which the trees were cut 60 or 80 years. The pine has no tap root, so that when the stumps become decayed enough they can be turned up and set on the roots. This fact causes the farmers to utilize them for fencing, making an impassable barrier for any animal larger than a dog. I have seen fences of that kind a hundred rods long. It was not very ornamental and an adage sprung from its looks, in common use in my boyhood, of "as homely as a stump fence."

The mixed timber was composed of pine, spruce, rock or hard maple, beech, birch, ash, hemlock, and some other kinds of not much value, with a heavy growth of brush and small trees, making it very difficult to get through the woods without cutting roads; very different from the old timber lands of the West, where a wagon can be driven in almost any direction without having to cut anything. This fact, in connection with the accumulation of dead timber and brush, which lie on the ground sometimes for years, is what makes forest fires so terribly destructive in the eastern states. Fire started in a very dry time will sweep everything before it. A forest fire of this kind burned over about 20 acres of my father's farm 60 years ago, cleaning up nearly everything. He let the land lie idle to grow up to timber again, and a thrifty young growth of hardwood came on, the largest trees 10 years ago being six or seven inches in diameter. Another fire a few miles away burned over a tract two miles square, about 40 years ago, where a good deal of cord wood and ship timber had been cut. This fire had also swept everything before it, not leaving even stumps.

The white oak growing on the rocky lands is very tough, and makes excellent timber for wagon or carriage work. The beech growing in the open land is also extra good for plane and other tool stocks, being very close-grained and hard. The fact that timber growing in the open land makes better timber where strength is required is perhaps not generally known, but such is the case. To have good timber to work easily, the closer it grows the better. The soil has a great deal to do with the growth as well as the quality. This is more marked in the west than in the eastern states. We frequently see entirely different kinds of wood divided by

a small stream. This country is a very fine illustration of this fact. A creek running through it has poplar, maple, beech, walnut and the more valuable woods on one side, while on the other the oaks, black and sweet gums and the less valuable woods occupy the lands. There are large tracts of land through this region called "flat wood land," being very flat and wet. This land produces a very scrubby quality of timber, mostly black gum, black jet oak and other scrub oaks. The black gum is about as worthless a species of wood as the earth produces. The best use I have ever seen it put to is making large rollers for moving houses, as its toughness well fits it for this purpose. The texture is more like a woven fabric than like dry wood. The poplar is a high land wood and requires a dry foot. The beech, larch and maple also require dry land. The walnut will grow from the highest to the lowest land, being well adapted for planting in waste places. This fact should be taken advantage of by land owners having land not available for cultivation, such as the borders of rivers, creeks and low bottom lands. Such places planted now would, in a few years, be worth more than the best land.

To make long-bodied timber it must be planted close, as trees growing in the open land are inclined to be short in the body, with large branching limbs. The cypress and tamarac are water plants, or at least always grow in the low lands, sometimes in the water. The cottonwood and willow are also found in low, wet lands, though they grow on high ground. The tamarac is a northern swamp timber, while the cypress is a southern swamp growth. The term "swamp" in the different locations has a description peculiar to itself. A northern swamp is generally a low, springy bog or accumulation of vegetable and sedimentary matter, in many instances having a tough mass of roots, and soil unfit to trust with a heavy weight. This crust can be shaken by jumping or running across it. There are all grades of these swamps, the very wet ones producing alders, cranberry bushes, etc. As they become more firm, other aquatic woods spring up. In this kind of earth the tamarac or hackmatack delights to grow, and like its southern brother, the cypress, is inclined to have large roots, a wise provision of nature, especially for the ship-builders. The hackmatack knee is a standard article in the building of wooden ships. The "knee" is simply a very large root growing from one side of the stock of the tree, so that when hewed they can be made square, to fit the side of a beam and the ship's side, the angle being formed of straight-grained wood as it would be if bent, thus making a very strong brace. I know of no other timber that will answer the purpose, without taking very large trees. Vast quantities of hackmatack knees are taken from Nova Scotia to Maine and Massachusetts, for use in ship-building.

The southern swamp is pure and undefiled mud, formed as all the bottom land is by the accumulation of sediment, but by the changes in the river courses these places are not filled as other parts of the bottom, consequently they hold water and should be called ponds, while the land is covered with timber, but when drained and cleared they are dry and solid, producing enormous crops of everything. I might qualify the word solid by saying that there is very little solid ground in the West during the wet seasons. The bottom lands dry out quicker than the up lands and can be worked much sooner and easier than high ground. The cottonwood is in its glory in this soil, taking possession of every available spot as fast as the water courses change their beds. It is a sight worth seeing to see long stretches of new formed land, sometimes miles in length, with a growth of cottonwood from a few feet to 100 feet high, the tops stepping up in an inclined plane almost as straight as a line. If the paper makers could get to this timber, or get the timber to them without too much expense, they could get an inexhaustible supply of stock.

The black locust is another valuable wood, easily raised, of very quick growth, and can be grown in waste places to good purpose, for fence posts or railroad ties, and is one of the most durable kinds of timber grown in the west. It

is also valuable and much used for tree nails for fastening the planking to outside of vessels. The tree nail is a locust pin one and a quarter inches in diameter and from 10 to 24 inches long. These pins are turned in a machine made for the purpose, and are driven through the outside plank, the frame and inside plank, at distances of 18 to 24 inches apart. This constitutes an item in the building of a large ship. For fuel, locust is equal to hard maple, so that it could be profitably raised in locations that are treeless, for that purpose. Thus we see climate, soil and location govern the productions of wood, in species, qualities and quantities.

There seems to be a diversity of opinion as to the time when wood should be cut to get the best use of it. From the best data I can get my opinion is that the time when wood is at its best is when it is ripe. That point is reached in November or December. At that time the year's growth is complete. The wood takes a rest and will last better and wear better than when cut at any other time. It also has time to season before insects can bore it. The hickory, ash and oak are liable to become "powder posted" or worm eaten if cut in the early part of the season because the wood is full of sap and green. The tree cut at that time is like an animal killed in hot weather and is attacked by flies that deposit their eggs, producing the worm that eats the wood. Another reason for cutting in the fall or early winter is the fact that the tree in the early part of the season is full of sap, which ferments and commences to decay immediately. Before the wood has time to season the sour sap destroys the life of the wood. Hickory is peculiarly liable to be worm eaten, and when the worms once start to work in it they never leave it until it is all consumed, literally ground to powder.

We also observe the fact that each climate has its productions governed by certain limits. The white pine is in its glory at about the forty-fourth degree of latitude. The poplar ranges from the thirty-fifth to the fortieth. The yellow pine or the hard pine, as all the southern pine is called, seldom grows north of the thirty-fifth. There is no white pine, except on mountainous land, south of the fortieth parallel that is of any value. The vast timber forests of Ohio, Indiana, Illinois, and the most of Kentucky had not a single pine tree in the original forest as far as I know. The evergreens have been set as ornamental trees but they never thrive very long.

Mt. Vernon, Ind.

CHICAGO PROSPECTS.

The *Northwestern Lumberman* of Dec. 29 says:—The lumber business at large is nearer to a stand-still now than it has been for three years past. No note that indicates activity comes from any quarter. It was to have been expected that December, especially during the holiday season, would be a quiet time for trade, but the extreme dullness that has characterized the present month is so much of a contrast to the briskness of November, both in receipts at the wholesale markets and distribution from the yards, that the reaction is almost too much for the philosophy of lumbermen. The season's business swelled out full and large in November, but the sudden stoppage of navigation and building by cold and stormy weather chopped it square off. Lumber merchants and manufacturers are keeping their minds cheerful with the reflection that this is a dull season, and nothing but a quiet trade is to be looked for. Many of them are doing more than that; they are making themselves believe that they do not want a lively business just now. They want to rest, take account of stock and get ready for next season's tussle. They are evincing a good deal of independence. In the Northwest they are holding firm prices, and asserting that they will not sell for less than the list figures, nor will they make a move or an offer to stimulate the demand, when such a course would tend to weaken prices. A reaction against the weakness of the past year's values seems to have set in. How long the present attitude will be maintained is a question. A fair demand after January comes in would serve to preserve the present strength. But if the existing lack of

demand should be prolonged till towards spring there would be some letting go of grip. Lumbermen, like all other merchants, don't like to bottom chairs long at a time, and are apt, after waiting a while for trade, to get up and dust about for business. It is a fact that all over the country there is a surplus of coarse lumber, and it is a question if present prices could be maintained under long-continued dullness.

There is, however, no question about good common, and even cull inch lumber, in the country tributary to this market, neither about selects and uppers. Much of this stock is as good as sold now, for before spring even a dull trade would absorb all that will be decently dry. But dimension lumber is in ample supply, and if it should not move liberally before March it would likely become tired. There is an abundance of coarse stocks of all kinds at Saginaw, and plenty of coarse and a fair supply of good lumber at Albany. There is considerable lumber at Oswego, Burlington, Buffalo, Tonawanda, Cleveland, Toledo, Detroit, and other points to the eastward, but nowhere, except at Albany, is there a claim made that choice stock is in ample supply. The same is the condition on the Mississippi and in Wisconsin. Of course at the mill points around Lake Michigan the merchants here, and at other accessible places, have left no good stocks to amount to anything, so that what is piled at the mills is mainly common and cull lumber.

Under this general condition of things, it is likely that a continuance of a meagre demand would create uneasiness among holders, and after a while concessions would be made in order to coax trade. But the springing up of a fair inquiry in January and February would have the opposite effect.

Four Million Pails.

The pail and tub industry of Keene, N. H., consumes more timber than all others carried on in Cheshire county. There are forty pail and 90 tub lathes in operation in the county: each lathe turns out on an average 100,000 pails a year, consuming 450 cords of sapling, 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. Besides much hardwood that is cut for manufacturing purposes, a vast quantity is used for fuel. Yet many competent judges think the yearly growth equals the amount cut and that there is as much growing wood and timber in the county as there was 30 years ago.—*Lumberman's Gazette*.

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain of 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 physicians and nurses in the United States, and is for sale by all druggists throughout the world. Price 25 cents a bottle.

On Thirty Days' Trial.

The Voltaic Belt Co., Marshall, Mich., will send Dr. Dye's Celebrated Electro-Voltaic Belts and Electric Appliances on trial for thirty days to men (young or old) who are afflicted with nervous debility, lost vitality and kindred troubles, guaranteeing speedy and complete restoration of health and manly vigor. Address as above.—N.B.—No risk is incurred, as thirty days' trial is allowed.

HOW TO TREAT WEAK LUNGS—Always breathe through the nose, keeping the mouth closed as much as possible. Walk and sit erect, exercise in the open air, keep the skin scrupulously clean, and take Eschard's Pectoral Balsam for coughs, colds, and bronchial troubles.

BE CAREFUL WHAT YOU EAT—The best medical authorities declare that worms in the human system are often induced by eating too freely of uncooked fruit and too much meat, cheese, etc. Whatever may be the cause, Freeman's Worm Powders are speedy and safe to cure; they destroy the worms, and contain their own chathartic to expel them.