

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 reloaded 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 shed, 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 avenues 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 \$3. It is also reported that eastern parties are negotiating for 25,000,000 feet of coarse lumber, to be used chiefly in box manufacturing."