

Preserving & Protecting Wood

(Originally Published Early 1900's)

1. FENCE POSTS, TELEGRAPH AND TELEPHONE POLES, ETC. —TO Prevent Decay.—Among the various methods heretofore practiced for preserving the ends of fence posts, telegraph poles, ties and other timber to be placed in the ground, has been charring, or coating with coal tar, but it is said that while neither of these modes is sufficient alone, the two combined answers every purpose. The tar filling the pores of the charred surface, which in itself is indestructible, prevents absorption of moisture from the ground into the interior unaltered portion of the wood. In time the tar is converted into a kind of rosin, which is very durable.—Harpers' Weekly.

2. The Science, Best and Cheapest Way of Preserving Wood. -The Journal of Forestry thus explains what is necessary to preserve wood:

The primary cause of decay in wood is the fermentation and the decomposition of the sap that is within the pores. Wood, pure and by itself, is not easily destroyed by the ordinary agencies of nature, namely, wet and dry weather, heat and cold, etc. If the sap within the pores can either be removed or rendered inactive, the wood may be preserved. There are several methods of doing this, such as saturating the wood with mineral salts, creosote, etc. The cheapest, easiest and therefore the best method seems to be to charge the wood with crude petroleum. Pine (if seasoned), for example, is made almost waterproof by saturating it with this simple material, and therefore, made much more lasting. Crude petroleum is very cheap, and may be applied with a brush until the wood will soak up no more. In the application care should be taken to avoid accidents by fire, and not approach the work with a flame until it is dry. An application of petroleum is especially valuable to much exposed woodwork."

Remarks.— For fence posts, it is well known to be important to place the butt end of the timber upwards, from the greater difficulty that water finds in ascending against the natural course of sap, in the pores. This done, then, and.. the posts painted with the crude petroleum, or by the charring and painting with the coal tar, it would appear they should become almost everlasting; and why our railroad men do not try this on sections of their ties, is almost unaccountable. With the great destruction of our forests, yearly, for this and all other purposes for which timber is used, must soon compel them to resort to-, this practice, else to be compelled to use iron or steel ties, at a much greater expense. Of course this is a free country, and they have a right to use unpainted and unprotected timber, so long as they can buy it; still, the painting with the petroleum would be far cheaper than such constant changing, as is now the necessary custom. Were not only the whole of the posts, but also fence boards, petroleumed thoroughly, it would pay big. Try it a few times, as the fellow said about cedar rails, they would last a thousand years, for he had tried it several times! Of course this man's disregard to truth was very great; but not so great as these railroad men and timber speculators disregard to the destruction of our forests. In some parts of Europe, iron ties have already been tested, hence correct information could easily be obtained upon this important subject. Probably, in the United States, with the improvements in the manufacture of steel, this would take the place of iron for ties; but the importance of protecting fence posts is too great to be so generally neglected it is.

3. Fence Posts, the Importance of Seasoning, etc.—An experimental writer upon this subject very sensibly says: " To have a fence that will last we must have good posts, for that is the part that gives out first by rotting off at the surface of the soil. Then the fence has to come down, new posts be-set, and the boards replaced. Sixteen years ago I experimented with fences, and find seasoned oak posts, oiled and then tarred with boiling coal tar, last the longest. I took green posts that were sawed 5 inches square at one end and 2 by 5 inches at the other, and 7 feet long. I tarred half as many as would build my fence, and the other half I put into the ground green with nothing done to them. In 5 years after, the tarred posts were nothing but a shell under the ground, all the- inside being decayed. Some of the other posts were rotted off, and some were about half rotten. Two years after, I built another fence, with seasoned oak

posts, same size as the first, giving them all a good coat of oil, and in a few days after tarred them, as I did before, with coal tar, heated in a can made for the purpose, 4 feet deep and large enough to hold 4 posts set on end. I left them in the boiling tar for about 10 minutes, then took them out and ended them up to dry. And now, after 14 years, not 1 in 10 needs replacing. I shall never build another fence for myself requiring posts without first thoroughly seasoning, then oiling, and then tarring them. If they are tarred when green, the tar does not penetrate the wood, and in a short time will all scale off. When the wood is seasoned the oil penetrates the wood, and the coating of coal tar keeps out the moisture, thereby preserving the wood from -decay."

4. Fence Posts, Importance of tamping, etc.—A correspondent of the Country Gentleman gives the following as his plan, which the author fully endorses, of setting fence posts, except that when the hole is dug 2 feet -deep to be tamped with stone I should not cut back in sharpening more than 6 inches, while he cuts back 12 to 15. If only to be driven 1 foot, or even 18 inches, 6 is enough in gravelly or any soil except hard-pan or hard clay. He says:

I. "I first sharpen my posts, cutting back from 12 to 15 inches, according to the size. I then dig good sized holes, say 15 inches across and 2 feet deep; then take a crowbar and punch a hole in the bottom 10 or 12 inches deeper, making it large at the top by working the bar back and forth. I then drive the post with a heavy iron maul until the post is fully 3 feet in the ground. [The author can not think he means 3 feet below the hole dug for the stones; if he does it would require a 9 foot post—not at all probable.] I then fill the hole with small stones well tamped with the head of the bar. Posts set in this way will be sound and serviceable when those set at the same time in the ordinary way and tamped with earth will be decayed and useless. A neighbor tells me -that he made a piece of board fence over 30 years ago, in part of which he set the posts with stones, and the rest were tamped with earth. Those set with stone remained sound when the others had rotted away.

II. Straight Post and Rail Fence.—He continues: "The best and most economical fence I can make is a straight fence of posts and rails. I set the posts in a line, 11 feet apart, using 12 foot rails, nailed on alternate sides of the posts, which gives them a small lap. I drive a good stake by the side of each -post, held to the post by a wire placed above the bottom rails and a second wire below the top rails. Fence built in this manner is firm and strong, taking much less room than an ordinary rail fence, and is more serviceable in restraining unruly stock than board fence. One strand of barbed wire across the top of the posts, 8 or 10 inches above the top rail, will cause unruly stock to keep at a respectful distance after one trial."

Remarks.—There is not a doubt but what rails, properly nailed upon the -posts, are more economical than boards, yet, I think, more expensive, especially on our western prairies, and there, too, almost absolutely impossible to get the rails at any price. There is no doubt, either, but what the barbed wire along the top would be respected, even by unruly stock, after a single trial. Now, if the seasoned, oiled, and tarred oak posts of No. 3 are preferred, then set by tamping stones around them, as in this last recipe, and no dirt put on top of the stones, you will have a post that will last much longer than any other way, and well worth adopting especially where timber is scarce.