

buy for cash and stack green, and then wait a year before selling in order to obtain a much higher price for dry stuff, even this will not affect the local market to any great extent, a great deal of the timber we use being sent direct from the mill to its destination, and thus escaping the timber-yard altogether. Here, then, is the plea for a general trial of kiln-seasoning.

Finally we should make development a chief factor; but if development should lessen the gain of profiteers, we may expect to reap a harvest of hatred; but never mind, we are in this world to develop ourselves and the world's resources, not merely to get rich, and if former ideas stand in the way of this development they should be dropped without hesitation.

We are living in serious times, yet in times of great possibilities. The old world is dying fast, and a new one is forming. Caste, custom, privilege must sooner or later, forcibly or peaceably, give way to the new idea, and if we can arouse ourselves to action we may still avert the curses of the next generation for the wasting of our great national birthright, "Timber."

The Case for Natural Seasoning.

By V. B. TRAPP.

I would not be at all surprised to learn that when Noah built the Ark there was a paper controversy whether it should be built with artificially or naturally seasoned timber. For many years past there has been considerable discussion as to whether artificial seasoning is satisfactory or not. In Australia there is no reliable information, and as there are at least 500 patents for the seasoning of timber, it is about time it was decided which one, if any, is the best. The Americans have taken this vast question up, and even to-day are in doubt. With their own timber (I mean the Pines) artificial seasoning has been proved anything but a success. For several years many have been experimenting on the Eucalypt, as it was believed to be the best of all the Hardwoods. In an article by H. D. Betts and C. Stowell-Smith in reference to seasoning, they report:—

"The seasoning of the Eucalypt offers the most difficult and pressing problem in connection with extending the use of Californian-grown Eucalypts. In strength, hardness and durability, several of the Californian-grown Eucalypts have shown themselves practically equal to certain of our native woods that are particularly useful on account of those very properties, but no satisfactory method of seasoning Eucalyptus lumber has yet been worked out on a commercial basis."

The American Bureau of Science has taken this matter up, and decided that every effort should be made to find out whether the Eucalypt could be artificially seasoned and the best way.

In a report by Reynolds Hill to the United States Department of Agriculture, he mentions:—"In the case of different kinds of timber or of different timbers of the same kind grown under different climatic conditions they have to be differently treated."

This is too true about our Eucalypts, and so far we in Australia have done little or nothing to find this out. In his report he further states:—"The most effective seasoning is without doubt that obtained by the uniform slow-drying which takes place in properly-constructed piles out of doors under exposure to the sun and the wind."

In summing up his report, he emphasises the fact that "artificial seasoning is only a makeshift at the best," and should be used only to complete the open-air seasoning when timber is urgently needed.

The reports from Great Britain are most disconcerting. The whole of their stock of seasoned timber has been used up, and it is estimated that it will be five years before the same stock will be available. It is a well-known fact that goods manufactured in Great Britain are always reliable, and it is also well known that there is really no artificial seasoning of timber, certainly not for the better class of work.

In Australia we have heard much about artificial seasoning, but no one has been able definitely to decide whether it is satisfactory or not. Some five or six years ago a few of those interested in our timbers decided to make all enquiries, and were quite willing to place £100,000 into the venture. Two well-known experts in timber were instructed to visit America and inspect the various seasoning plants and report. On their return they emphasised this fact, that with the Eucalypt it should certainly be stacked in the open 9 to 12 months before attempting to be artificially seasoned, and recommended if this were so it would be far better to have it wholly open-air seasoned. I may mention that this confirms the opinion Professor Ewart has always had.

The Americans have thoroughly studied the artificial seasoning of the Eucalypt, and have pointed out that it is different from other Hardwood. It is quick-growing, and trees should be matured from 40 to 60 years, whereas with the other Hardwoods it takes from 100 to 150, perhaps 200 years to mature. If artificial seasoning is forced on the Eucalypt, or rather if the Eucalypt is artificially seasoned before open-air stacking, in all probability some fungus growth or dry rot would take place. The outside of the board may be seasoned, but the inside not, and the pores of the timber should be allowed to dry in the open.

The British manufacturer holds this view, that he knows natural seasoning, and as it is reliable he is not going to jeopardise his reputation by artificial seasoning.

Some time ago a private test was made to prove that artificial seasoning was better than open-air seasoning. Several samples of natural-seasoned timber were weighed and measured and then treated artificially, and in each instance these timbers did not shrink but increased in weight. No one can explain the reason.

Undoubtedly for cheap work and work that is not required to last, artificial seasoning may be found satisfactory, but on the other hand, there is no getting away from the fact that naturally-seasoned timber must give a far better result.