PRESERVATIVE TREATMENT FOR FARM TIMBER.

I. METHODS OF DEALING WITH FENCING-POSTS.

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FENCING-COSTS have risen to such heights during the last few years that they now form one of the major expenses of farm maintenance and improvement. Post and other timber prices have led the general upward tendency in the prices of construction materials, and reflect the serious depletion of our forest resources. Hitherto farmers have procured their fencing-posts from timber growing on the farm or in the immediate vicinity, but they are now becoming increasingly alive to the scarcity of naturally durable woods.

Many non-resistant species are available at comparatively low prices from the native forests and the farm plantations. Labour costs, however, form such a large proportion of the total fencing-charges that the use of these posts is a poor investment except for fences of a purely temporary character. This disadvantage may be overcome by so treating the posts with an approved wood-preservative that they are able to compare favourably and economically with posts of the more durable timbers. The treatment is a relatively simple one, and its principles easily understood. For those methods available to the farmer the equipment required is cheap and easily procurable. The use of ordinary care in its operation will render a high degree of efficiency in the treatment.

A similar position exists with reference to other farm timbers, such as service telephone and electric-power poles, foundation timbers, barn timbers, bridge timbers, wooden gates, windmill-frames, well-kerbing, &c. For the up-to-date and progressive farmer the preservative treatment of such material will conserve his wood-supplies and render a substantial saving in expenditure.

NATURAL DURABILITY OF TIMBER.

The destruction of wood by decay is due to low forms of plant-life known as fungi which use as food certain substances of the wood. These fungi consist for the most part of fine thread-like filaments which penetrate the wood-cells, disintegrating the wood substance and leaving behind the punky powdery residue so characteristic of decayed wood. In places the filaments grow out to the surface of the wood to form compact bodies, such as the bush fungus of commerce, frequently found growing on the trunks of both living and dead rimu, beech, tawa, mahoe, and other trees. They are an indication of advanced decay, and function as spore-producers, spores corresponding to the seeds of the higher orders of plant-life. Like these latter, they are distributed principally by the wind. Certain conditions of air, moisture, temperature, and food are necessary for their germination and the subsequent growth of the fungi. According to the control exercised over these factors, either by the nature of the wood itself or by the conditions under which it is used, will the natural durability be affected.