

It is worth noting that our good friends the Russians, who are steadily getting into order their huge areas of wild forest, had, when the war broke out, no less than eight hundred trained foresters doing "working plans." By "trained foresters" I mean university men, ranking in their scientific training with medical men and scientific agriculturists in New Zealand.

The success that has been achieved in the forest plantations, particularly the fine plantations at Rotorua, makes it quite clear that with ordinary business precautions forest-planting in New Zealand is a State necessity of the first importance. Besides the special planting of *insignis* pine and poplar to replace white-pine for box and case timber, plantations of fir, poplar, &c., for paper-pulp, and special eucalypt (ironbark, &c.) plantations for railway purposes in the North, much planting will be required to put the native forest in order and to introduce the valuable self-spreading timber-trees, such as silver-fir, spruce, Douglas (Oregon), *Thuya plicata*, *Tsuga Mertensiana*, *Cupressus Lawsoniana*, &c., which are some of the picked timber-trees of the world in these latitudes. They are the trees that are looked forward to for the "new forestry" of England. They are mostly already growing well in England, and may be expected to do equally as well in the New Zealand native forest, since they are shade-bearers in temperament, and grow naturally under conditions similar to those of the New Zealand bush. They also spring up self-sown amongst scrub, gorse, and fern.

I may cite one case in point: *Thuya plicata*, the western red-cedar of America, is coming up like a weed in the grounds of one of the old houses at Hokitika. It is a tree that delights in the swamps and wet of the West Coast forests of the South Island. Amongst the fine collection of coniferous timber-trees on the Pacific slope it is one of the best. Its timber is very durable, soft, and easily worked. It represents about one-third of the forest resources of British Columbia. It attains magnificent proportions: trees 16 ft. in diameter and 200 ft. high have been found. The seeds are very small and light, and travel far, and it is an abundant seed-bearer. It is described as growing best in America in moist places, such as beds of moss or on decaying logs and stumps in regions of heavy rainfall. The seedlings have a remarkable power of thriving in dense shade. Naturally they cannot grow much under these conditions, but they do not die, and when the forest is opened out they shoot up. The average growth is reported as exactly the same as New Zealand kauri.

For the planting of such trees in the native forests of New Zealand small "bush" nurseries require to be made; and the self-spreading timber-trees can be introduced by ring-barking and planting in strips.