

radiata timber for building purposes both from witnesses whom we have examined and from letters we have received, some of which appear as appendices.

Leaving the question of constructive timber altogether on one side, there is an enormously increasing demand for wood for box purposes, an increase due to the rapid development of the dairy and fruit industries. *Pinus radiata* is admirably suited for the purpose in question, and is now being used for fruit-cases, as also for soap and candle boxes. A deputation from the fruitgrowers at Whangarei urged us to recommend the extensive planting of *Pinus radiata* in the vicinity of that town. Several travelling sawmills are now annually employed in Canterbury during the winter months in converting *Pinus radiata* into building-timber, thus finding employment for men and machinery after the threshing season is concluded. As for the suitability of *Pinus radiata* for growing under forest-conditions, the small Government plantation of that tree at Waiotapu is a true object-lesson in the straight clean trunks of the trees, their evenness and rapidity of growth, and the general vitality of the plantation. Of all the trees in the State plantations, none can be grown so cheaply and readily as *Pinus radiata*, or can be planted out at so early an age. Had *P. radiata* been sufficiently hardy in Great Britain, or in central or northern Europe, or even had it been a common tree in its natural land, its claims to admission into forestry practice would have been recognized long ago. As it is, it is being used extensively for afforestation purposes in Australia, where it also grows with great rapidity. The value of a tree cannot be overestimated which can supply box timber at twenty years of age, and which can so much shorten an average rotation as to yield three crops of adult timber in 120 years or perhaps less under favourable circumstances. There is a never-failing supply of excellent seed of *P. radiata* to be produced in New Zealand, and it is quite probable that by means of selection an improved variety of the species may be established.

The Corsican pine (*Pinus Laricio*) is closely related to the Austrian pine (*Pinus austriaca*). It thrives remarkably well wherever it has been planted in the Dominion, and grows well in almost any soil and situation. Regarding the actual value of the timber, there is not a great deal of information available to us. Maw* states: "The timber is light, soft, resinous, and durable. It is very similar to that of Austrian pine, but is, when grown in this country, of greater technical quality, and possesses fewer knots. It is worth as much per foot as Scots pine." Kent writes†: For quality, quantity, general utility, and early maturity it may have equals but no superiors among the true pines.

Its wood, when matured and seasoned, is very resinous, elastic, and tough; very durable, long grained, and though a little coarse in texture is easily worked." As compared with Austrian pine, the advantages are with *P. Laricio*, in its somewhat more rapid growth, its much weaker development of lateral branches, and its immunity from attack by the aphid, from which the Austrian pine suffers so greatly in many of the Government plantations.

The Australian blackwood (*Acacia melanoxylon*) will grow rapidly on the driest sandhills. It is not hardy in every locality, but it tolerates the frost of the Rotorua district, according to the Forestry Report for 1910-11, p. 23. The timber is much prized in Australia, where it is used for furniture of the highest class and for ornamental woodwork indoors. According to Mueller,‡ it is "the best wood in Victoria for bending under steam; it does not warp or twist. Local experiments gave the strength in transverse strain of blackwood equal to *Eucalyptus* wood of middling strength, approaching that of the American white oak, and surpassing that of the kauri."

4. On the Procuring of Seed.

It is a matter of extreme importance that only seed of the highest grade should be used. Nor is it sufficient that the seed should be merely that of the species desired, but rather of the best variety of that species for forestry

* *Op. cit.*, p. 208.

† Veitch's "Manual of the Coniferae," 1900, p. 420.

‡ "Select Extra-tropical Plants," 1885, pp. 7-8.