

Rabbits have been so well kept in check that not more than a dozen trees have been barked. The enclosure has been poisoned twice during the year, and a man has been employed ferreting, trapping, and digging out, as well as keeping the young trees free of rank weed-growth, repairing fence-lines, and attending to water-tables and culverts during wet weather.

For next year's planting 71,900 pits have already been made up to the 31st March, at a cost of £1 12s. 6d. per thousand.

Thirty acres of land has been ploughed, disked, harrowed, sown with oats (for horse-feed), and rolled, resulting in a very fair crop, which is now being harvested. One hundred and eight chains of ditching and some 32 chains of 4 ft. horse-tracks has been roughly formed to give access to some deep valleys where pitting operations are now in progress.

Next season's work will consist of the preparation of pits for further planting, the extension of oak and Oregon-pine plantations, larch, and walnut, black Italian poplar compartments, and trial allotments of the native kowhai (*Sophora tetraptera*), which gives promise of considerable success as a timber-tree for alluvial lands and river-flats.

Details of the numbers and varieties of trees to be planted during the ensuing year are given in Schedule B².

The total expenditure and estimate of values are also attached hereto.

ALBURY ESTATE PLANTATIONS, SOUTH CANTERBURY.

There are two flourishing plantations on this estate reserved as State forests. The larger one of the two (about 47 acres) is chiefly of *Pinus insignis*, now from 50 ft. to 60 ft. in height. They have been planted at about 8 ft. apart, and, as the trees are now getting "drawn" through close confinement, they are being thinned out to about 16 ft. apart, and the timber sold for fencing and fuel. Three men are employed at this work, and good progress has so far been made. It is anticipated that the sale of timber will more than defray the cost of thinning. The timber of *Pinus insignis* has lately come into use in Canterbury District for fruit-cases, weatherboards, &c., for which it seems eminently adapted. Butter-boxes have also been made of it, with good results, the highly resinous nature of the wood seemingly having no injurious effect on the butter.

The other plantation, of 13 acres, is on a limestone bluff, and has been planted half with the celebrated yellow-pine of America (*Pinus ponderosa*) and the other half with Oregon pine (*Abies douglassi*). Both these species have made excellent growth, and are now fully 30 ft. in height, with an average diameter of 12 in. at 3 ft. from the ground. They have been planted at 16 ft. apart, without "nurse" trees between them to prevent the excessive growth of side-branches at the expense of the whole. The timber will consequently be only of second-class value, on account of its knotty character. The necessity for close planting cannot be too closely urged when the production of first-class timber, free of knots and other defects, is the desired object. All the dead branches to a height of 6 ft. have been carefully sawn off close to the butt, in order to minimise the chances of fire spreading along the ground.

Statement of expenditure is attached hereto.

PLANTATION RESERVE, WHAKAREWAREWA (Area, 817 Acres).

In June two contracts were let to parties of Natives to dig 68,000 holes at 6 ft. apart at £1 per thousand, for the planting of gums in spring. The work was completed satisfactorily, and in September and October 23,000 gums, in six varieties, were planted. Of these, about 10 per cent. failed to grow; the balance have made a good start, and particularly good growth is noticeable in *Eucalyptus globulus*. The fern-growth was cut away in summer, and not allowed to smother the young trees.

Twenty-six acres of heavy manuka land was cleared, at a total cost of £14 11s., and a block of about 50 acres, covered with fern and manuka, was cleared by being first rolled down with a heavy Cambridge roller, drawn by bullocks, and then burnt, the manuka-stumps being cut down close to the ground to allow of holes being dug for tree-planting. Fire-breaks were marked off, and a co-operative contract let to a party of Natives to dig 50,000 holes at 5 ft. apart. This work is now proceeding. Here it is intended to plant Californian redwoods (*Sequoia sempervirens*) at 20 ft. apart, with sycamore as a secondary crop, and *Pinus austriaca* or *Pinus laricio* as "nurses." The light, open, free, pumice lands seem eminently adapted for the redwood, whose rate of growth is only exceeded by the fast-growing *Pinus insignis*. Several specimens quite 20 ft. in height are growing on Pukeroa Hill, in Rotorua, and these are in good health, and give promise of considerable success as timber-trees. It is also proposed to extend the Eucalypti plantation during the coming spring by about 30 acres.

The fire-breaks will be planted with walnuts, chestnuts, hazel, and filbert nuts, similar to those described under Dusky Hill Plantation report.

The total expenditure and estimates of values are attached hereto.

THE PLANTATIONS ON THE GALATEA ROAD (KAIANGAROA PLAINS), AND AT WAIOTAPU AND TURAKENGA.

Kaiangaroa Plains.

Upon the whole, the coniferous trees have made splendid growth here. *Abies excelsa* is adapting itself well to this locality—over 12 in. of new growth was noticeable in many instances. *Abies menziesii* is also thriving well, and does not appear to suffer in the least from the exposure. *Pinus laricio* has made excellent growth, and *Pinus austriaca* appears to be the very hardiest of all the Conifers here, and is growing quite as well as if on heavier sheltered land. The English larch are very healthy throughout, although they have suffered from strong winds through being planted too far apart.