25 C.—3.

Thinning.

The area thinned to date is 995 acres, distributed as follows: Waiotapu Plantation-Larch, 448 acres; pines, 228 acres; other species, 4 acres. Whakarewarewa Plantation-Larch, 216 acres; pines, 18 acres; eucalypts, 81 acres. At Waiotapu 10 acres were underscrubbed preparatory to thinning.

Tree and Seed Sales.

Sales to farmers, local bodies, afforestation companies, and transfers to other regions accounted for 3.226.372 trees.

The sale of tree-seed amounted to 2,045 lb.

Arboretum.

Fencing this area was completed, and good progress made with the internal layout of roads and blocks.

Fire Protection.

An unusually dry summer caused a high fire hazard throughout the plantations, and it was necessary to meet the situation by doubling the fire-patrol personnel and extending the working-hours at certain points where the fire risk was most dangerous. In spite of these adverse conditions, and although several fires occurred close to the plantations, no damage was done or loss sustained. During the year thirty-two fully-equipped fire-fighting tool-depots were placed in the plantations.

Equipment.

One 2-ton caterpillar tractor and a 1-ton Ford truck were added to the equipment at Kaingaroa, and a single-wheel Gravely garden tractor to the Rotorua Nursery equipment. The machine first mentioned has been of great benefit in carrying out the heavy roading and fire-break-formation work, but the Gravely machine has been of only limited utility.

Objectives for 1928-29.

- 1. To establish 30,000 acres of new plantations—20,000 acres by direct planting and the balance by direct seeding.
- 2. To raise 25,000,000 trees.
- 3. To increase sales of trees and seeds.
- 4. To further develop an improved technique in seed-bed and direct-sowing methods.
- 5. To extend fire districts and increase fire-fighting depots.
- 6. To topographically survey and lay out planting areas for 1929–30 season.
 7. To construct fifty-two miles of roads and improve and extend existing telephone system.
- 8. To carry out further experimental planting at Kaingaroa—(a) With mixtures of conifers and broadleaf species; (b) with varying espacements; (c) spot-seeding.
- 9. To secure more and heavier motor equipment.
- 10. To secure a water-boring plant.

WELLINGTON REGION.

Karioi Plantation.

Good progress was made on this new project, and it is pleasing to record that 1,306 acres were planted with 906,200 trees, 6 acres in excess of the objective aimed at when the year commenced. Labour costs amounted to 8s. 10d. per acre.

Drill-sowing.

A good seed-drill was purchased, and with certain mechanical alterations it rendered good service. By this method 155 acres were sown on Tangiwai Block at a cost of 5s. 10d. per acre with 6 6 oz. of seed per acre.

Spot-sowing.

An area of 18 acres which was too rough for drill sowing was spot-sown with an espacement of 8 ft. at a cost of 7s. 11d. per acre.

Nursery.

Sixteen acres, with a sowing of 1,016 lb. of seed, were put down, and the estimated crop is 4,231,600 trees. Trees lined out for two-year-old stock numbered 240,000. Seed-bed results were not entirely satisfactory, partly owing to the dry season and lack of covering. Weeding was kept well in hand.

Buildings.

The buildings on the property were reconditioned and painted. One cottage and four huts were purchased and altered where necessary. The huts have been removed to No. 1 planting camp. cookhouse was improved and lighted with acetylene gas.

Sand-dune Reclamations.

A detailed report on the experimental work carried out on the sand-dunes at the mouth of the Rangitikei River is given in an earlier portion of this report.