С.—1в. 21

to permanent positions also assisted in minimising the success in dealing with these trees from Marlborough.

There were 449,725 trees planted in grubber pits, at 11s. $4\frac{1}{2}$ d. per thousand; and 247,000 by

the bar method, at 9s. 3d. per thousand.

The amount of ground planted for the year was $300\frac{1}{2}$ acres, and the total area under trees at present is 806 acres, containing 1,973,392 trees. It may be mentioned that throughout the burnt-out block a fair proportion of trees have revived, and these were pruned and allowed to remain.

There were 133,848 grubber pits prepared by day-labour, at 12s. 10d. per thousand; and

76,077 scuffled spots, for bar-planting, at 9s. 6d. per thousand.

The formation of 34 chains of ditching was necessary to carry off surplus water from an area where excessive moisture was proving detrimental to young trees, and 16 chains of new track was

also made, to enable employees to reach various parts of the plantation with greater facility.

Fire-breaks were again ploughed and disc-harrowed, this work being considerably lighter than in the previous year, when about 35 acres was broken up for the first time. During mid-summer a grass-fire from an adjoining property approached the plantation enclosure, but the employees had no difficulty in suppressing the flames at the boundary fire-break before any damage was done.

The season has been an excellent one for tree-growth generally, and in no previous year has such marked progress been made by the different species established at this station. The absence of the customary early spring growth of larch was very noticeable; but subsequently, when copious

rains had fallen, a steady growth was made, and numbers have increased in height by over 3 ft.

Heavy winds experienced during September proved destructive to the leaders of *Picea sitchensis* and *P. excelsa*. The damage is, of course, not irreparable, but it means, at least, the loss of a year's growth to the trees affected, and also additional work in pruning. The pines continue to put on sturdy growth, and the shelter created by these trees is proving beneficial to the slow-growing hard woods—oak, ash, and sycamore. The Juglans regia (walnuts) and Castanea sativa (sp. chestnuts) that are occupying sheltered positions in one of the old broadleaf gullies are rapidly developing into fine trees, and now average about 7 ft. high.

The Pomahaka River, which forms the south and western boundaries to the plantation, was

much affected by the scanty rainfall during the summer, and quite failed to check the ingress of stock from property on the opposite side. No damage resulted, however, although at times difficulty was experienced in ejecting the cattle from the reserve. As may be expected, a few rabbits also succeeded in gaining access during the dry season, but by systematic trapping and poisoning

no traces of the pest are now seen.

The presence of deer on local plantations made it necessary to obtain a permit for destroying same, and one of the employees managed to shoot a stag after a number of nut trees had been barked by the intruder. An expenditure of £507 13s. was incurred in the general upkeep of This item included the removal of undergrowth from around trees, tree-pruning, cutting scrub, and mowing noxious weeds. For the next season preparations are being made to complete all replanting of failures, and this work may be carried out satisfactorily by the ordinary maintenance staff of five men.

A statement of expenditure is appended.

		Statement	t of Expe	enditure.			£	. s.	đ.
Amount at 31st March, 1908						10	,314	9	. 5
Pitting			·				122	6	2
Tree-planting					• • • •	٠,,٠	369	15	4
Formation				• • •			4	14	6
Clearing		• • •					1	19	7
Cartage of trees and railage						73	0	5	
General upkeep o	of plantati	\mathbf{on}					507	13	0
General repairs	•••						10	1	6
Tools, implement		•••		•••				19	-8
Miscellaneous wo	orks						14	8	11
Salaries—									
Free labour			•••	•••	• • •	•••	30	0	0
Nurseryman	's proport	ion of				• • •	22	0	0
Supervision		•••					24	6	8
						£11	,499	15	2

F. Benfell, Plantation Foreman. R. G. Robinson, Forester in Charge.

CONICAL HILLS PLANTATION, OTAGO. (Area, 3,672 acres; altitude, 400 ft. to 1,050 ft.)

Tree-planting operations at this station were carried out under fairly satisfactory conditions, although a dry spell of weather, with an occasional strong south-west wind, naturally helped to increase the death-rate in trees planted.

There were 350,920 trees, as per Schedule 4, received from Starborough Nursery, and 170,075 from Tapanui Nursery. Although the trees from Marlborough appeared to be well packed, some of the consignments were subjected to an extended delay during transit, and a considerable number of Pinus Laricio became heated in consequence.