

Schedule IV.—Property Account.

	£	s.	d.
Land (845 acres) ; Crown land, not charged to Forestry Account ..	..	..	..
Buildings	368	18	6
Stock	..	..	..
Improvements	366	7	2
Fencing	258	2	3
Stores in hand	26	11	1
	£1,019	19	0

Balance-sheet.

	£	s.	d.
Total expenditure	12,459	1	7
Less Property Account	1,019	19	0
Cost of operations (845 acres planted ; average age, seven years) ..	£11,439	2	7
Estimated value of plantation per acre	£11	0	0

F. BENFELL,

Plantation Foreman.

R. G. ROBINSON.

Superintending Nurseryman.

CONICAL HILLS PLANTATION, OTAGO.

(Area, 3,672 acres ; altitude, 400 ft. to 1,050 ft.)

It is again possible to render a favourable review of tree-growth generally and amount of work performed at this station during the past year. The effect of intense dryness throughout almost the whole summer period has not been so conspicuous here as at the other local plantation, and perhaps premature fall of needles from the lower branches of larch occupying exposed westerly positions is the only indication that the absence of sufficient moisture has been keenly felt by plant-life.

The annual development of trees somewhat exceeded that of the previous year, although in either case vigorous headway cannot be claimed. It is not surprising that *Larix europaea* have again grown with greater uniformity and vigour than other trees planted ; but where occupying stony surfaces, in company with pines, they have latterly assumed a somewhat parched appearance, whilst evergreen conifers appear to find the position to their liking. The variation in the progress of *Picea excelsa* is due principally to the amount of shelter provided. On the most elevated sites perhaps an annual vertical growth of 4 in. has been made by the spruces, whilst exceedingly fine specimens, increasing in height about 15 in. annually, are prominent throughout gullies and semi-sheltered flats. None of the pines appear to be influenced to any great extent by the dry weather, and particularly prominent in this respect is the *Pinus ponderosa*, which maintain a yearly growth of from 6 in. to 12 in.

On all occasions *P. Laricio* are allotted more favoured situations than the former species, both as regards shelter and soil, and probably this consideration is responsible for the more speedy headway being made by the Corsican pine.

The *Pseudo-tsuga taxifolia* have escaped injury from high winds, which, fortunately, were not prevalent during that period of greatest activity in growth, when Oregon pine leaders are very easily broken off. Fortunately, our projected hardwood-planting has not been adhered to, as neither ash, oak, nor sycamore have made the expected headway, even in the most select spots. We still retain the belief, however, that when shelter is made available by the faster-growing trees in the vicinity, the hardwoods will then respond to the altered conditions.

Our season's experimental work included a trial planting of *Sequoia sempervirens* and *Thuja plicata*. The result indicates that both varieties will undoubtedly succeed, and arrangements will accordingly be made to raise a limited number annually in the associated nursery.

About 200 *Fagus sylvatica* were also experimented with, and specimens put on 16 in. of growth. As one of the chief characteristics of this tree is its shade-enduring capabilities, it will be interesting to note its future progress, particularly as in the course of a few years a system of under-planting will require to be established.

Arrangements are now in hand to introduce *Cupressus macrocarpa* into plantations. Although strong lateral branches are usually connected with this tree, close planting—about 3 ft. apart—will have the desired effect of stimulating the upright growth at the expense of the side branches.

Tree-planting.—During the year 1,468,975 trees (over 506½ acres), as enumerated in tree schedule, were planted, principally by contract, at 12s. 6d. per thousand. This price is slightly in excess of similar work at other stations, but the rough tussocky hills and abrupt fern-clad gullies now being operated upon make it impossible to conduct the work at reduced rates, although the proximity of the camp to the ensuing year's planting-ground may induce employees to arrange for an adjustment in contract prices in favour of the Department. Although on no previous occasion has contract planting been attempted, the excellence of the work, combined with the desired speed, justifies a repetition of the system. Notwithstanding the unfavourable season, probably 6 per cent. would cover the planting-losses. On No. 1 Block the small maintenance gang of three workers were fully occupied in replanting some 89,275 failures, which are mostly found amongst the ash and sycamore blocks.

Pitting.—The required number of grubber pits were prepared by contract at 12s. 6d. per thousand. This rate may be regarded with mutual satisfaction by both the Department and employees, who require to work steadily for fully eight hours daily to complete 700 pits up to the specified standard.