

The three nurseries now contain 12,823,010 trees, of ages ranging from one to four years, representing a value (as per schedule), of £20,636 17s. 1d., and from this number will be drawn the coming winter's anticipated output of slightly over three million trees.

An expenditure of £3,964 15s. 11d. was incurred in the combined nurseries, which, with the inclusion of amounts recorded against the abandoned Starborough and Kurow Stations, increases the total expenditure to date to £53,280 6s. 10d. On the plantations £7,067 17s. 7d. was expended during the year, inclusive of prison labour, and the total amount to date apportioned to areas in the South Island where afforestation has been carried on, reaches £60,794 18s. 9d.

BRIEF REFERENCES TO TREE-GROWTH.

Although each officer has detailed at some length the individual progress of trees connected with his station, it may not be out of place to again allude to the subject from a general point of view. By reason of its fast-growing capabilities and recognized timber-value *Larix europaea* has generally been looked upon as being, perhaps, the most meritorious tree for extensive planting; but recent developments must surely shake the confidence of those holding this opinion. The dryness of the past two seasons has prominently brought to light the extreme sensitiveness of our European larch to drought, whilst, on the other hand, such pines as *Pinus Laricio*, *P. ponderosa*, and *P. austriaca* have exhibited their customary vigour, and adapted themselves to the temporary altered conditions without an apparent cessation of progress.

At Dusky Hill Plantation symptoms of the leaf-shedding fungus *Sphroella larinina* were at one time prominent; but towards the latter part of the summer bounteous rainfalls had the desired effect of freshening up the whole plantation to such an extent that no traces of any disease are now apparent; and this opinion is shared by Mr. A. H. Cockayne, Biologist to the Agricultural Department, who visited the plantation recently, but did not detect larch-disease in any form.

The question of curtailing to some extent the output of larch, and replacing the deficiency thus created with pines, is worthy of earnest consideration.

REVISION OF RECORDS AND SUBDIVISIONAL PLANS.

Much clerical work has been devoted to the rearrangement of statements for displaying annual records in a comprehensive form.

Every effort has been directed towards tabulating all items of expenditure for rapid comparison, and in framing the table relating to trees growing on plantations it has been quite impossible to adhere to the preceding returns.

The presentation of subdivisional working-plans was also aimed at, but as circumstances did not permit of their completion in time, the whole matter will be omitted here, and given special consideration in the subsequent annual reports.

CORRESPONDENCE CLASS ON FORESTRY.

The idea outlined in last report of instituting a correspondence class with an associated library for the benefit of officers of the Department was successfully launched, and much enthusiasm has been shown throughout the term by those connected. A syllabus embracing all practical subjects was drafted, and each officer prepared and submitted his monthly composition. In transmitting replies, a review of each officer's paper preceded my own remarks and instructions, and in this way the blending of practical knowledge with the advanced literary efforts of the most modern continental writers had a decidedly beneficial effect upon the staff generally. The volume of work (some 400 pages of writing) inseparable from the undertaking was rather in excess of expectations, and had to be attended to during the evenings. To incite further interest, the Hon. the Minister of Lands offered a prize of two guineas for competition for the best paper, which, after an exceedingly close contest, was won by Mr. W. T. Morrison. For sustained excellence throughout the term a trophy donated by myself was awarded to Mr. W. T. Morrison.

The library on forestry literature has been brought up to a very high standard, and officers are now able, on application, to secure any of the works of recognized writers on the various branches of silviculture.

FIRE-BREAKS.

Provision against the spread of fire as at present being adopted is perhaps one of our most costly recurring items of labour, and during the past year much deliberation has been applied in formulating a practical, economical, and effective scheme to supersede the present cultivation-work. Some thirty-six miles of fire-barriers, averaging an approximate 50 ft. in width, were ploughed, cultivated, disced, and harrowed last year. This horse-work necessitated an outlay of £115 10s., besides greatly depreciating (through the rough nature of the ground) the value of the implements used. Probably the most judicious means of decreasing the maintenance-cost without impairing the efficiency of the fire-lines would be to erect cheap sheep-proof fences along each side of the main fire-breaks, and after sowing down in grass, keep the area well stocked with sheep during the spring and summer periods. It is just possible, however, that these grassed barriers would eventually become overgrown with tussocks and other undesirable vegetation from seed maturing in the immediate vicinity; but this knowledge can only be gained by experimenting.