STR,-

Department of Lands and Survey, Wellington, 30th May, 1915.

I have the honour to forward herewith the annual report of the Forestry Branch of this Department.

Dealing alone with the main features of the report, it may be stated that in the last year about fourteen million trees were raised at the four State nurseries, rather more than half being raised at Rotorua, and the balance at the different State nurseries in the South Island. During the same period six and a quarter million trees were sent out to the State plantations, and 265,887 to outside places; and at the 31st March last it was estimated that there were twenty-one million trees in the nurseries available for planting out in the coming and following seasons. Since the nurseries were started in 1896 about 71½ million trees have been sent to the plantations, and three and three-quarter million trees to outside places.

The total cost to date of the seven nurseries (three of which are now closed) has been £128,090; but of this, however, £25,476 has been expended on permanent works.

During the last year, in the nine plantations in which operations are now being carried on, an area of 2,165 acres was planted, making a total of 24,563 acres planted since the start of operations in 1896. The average cost per acre of planting ranged from £3 4s. 9d. to £6 1s. 6d. The total expenditure (inclusive of the estimated value of prison labour) on the plantations since 1896 amounts to £204,980, of which £31,236 was on permanent works, such as buildings, formation, roads, fencing, &c.

The abnormally long period of dry weather that was experienced in both the North and South Islands was responsible for rather severe losses in both nurseries and plantations.

No work was done by prison labour in the South Island; but the prison camps near Rotorua were kept well filled, and the average number employed there was considerably in excess of that of the previous twelve months. The total value of the work done during the last twelve months by prisoners was £2,902, bringing the total value of the work done by prisoners in the North Island to £37,865.

Thinning was started in the larch plantations in the Rotorua district, but efforts to find a market for the thinnings were not successful. Where the thinnings would be most useful is in the big mines; but these can obtain mining-timbers under such easy conditions from the adjacent native forests that there does not seem much hope that they will for some years yet take our thinnings. In the South Island thinning was started in a small *Pinus radiata* plantation at Hanmer, and, as there is there a scarcity of firewood, the thinnings were profitably sold.

Owing to the difficulty in disposing of the thinnings that must be made at an early date in plantations with an espacement of 4 ft., it has been decided to increase the planting-distance for several of the species of trees. This will reduce considerably the cost per acre of establishment.

On account of the restricted use there is in this country for larch it has been decided to give up planting any more of this tree. On the other hand, the planting of the Monterey pine will be much extended.

Owing to the extra precautions taken, there has been no serious damage this year from fires. The grazing of sheep on the firebreaks has proved very successful, and it will have the further effect of keeping down the expense of maintenance.

In connection with our afforestation operations I must here point out that our present supplies of native timber will be exhausted in about thirty years' time, and as a very small proportion of the area now planted will then be ready for conversion (as a matter of fact, the whole area planted up to the present would not keep the country supplied for two years), we shall be for some years dependent on foreign supplies. To shorten the period of such an undesirable state of affairs it will be necessary to increase very much our present operations. It is estimated that the probable annual consumption will then be about 720,000,000 ft., and to produce this amount we should plant 14,000 acres annually until a total of 700,000 acres of forest is reached. We cannot, of course (for financial reasons), at once increase our operations to this extent, but we should gradually work up to this.

It must be pointed out that there is only sufficient land at the present plantations (excepting Kaingaroa Plantation, where there is enough for some years ahead) for about another year's operations; and it is now highly important that suitable areas of Crown or other lands of poor farming value be set apart for future planting operations. This has been arranged for in connection with some pastoral runs in the neighbourhood of the Mackenzie country, the leases of which had expired; and arrangements are also being made for the setting-apart of about 24,000 acres of gum lands in the Kaipara district with navigable water-frontage. I have also submitted to you a scheme for the setting-aside of an area of about 258,000 acres on the pumice plateau between Rotorua and Taupo, comprising most of the Kaingaroa Plains, and adjoining the lands we are now operating on there. It is not quite intended that lands so set apart should be locked up, but it is advisable they be made reserves. In some instances, where suitable, those portions not likely to be required within the next