

work with undiminished vigour and success, as Mr. Marshman's report in the Appendix will show. An area of 909 acres fenced, ploughed, and sown in a number of blocks in four years, at a cost of about £2 an acre, is a work well worthy of record. As explained in former reports, the Board has 18,493½ acres of planting-reserves to administer. By leasing all that is not under planting operations the funds are derived to go on from year to year with the sowing of fresh areas. The Domain Board at Christchurch has also distributed 763,034 trees since 1869, as will be seen in return furnished by Mr. J. F. Armstrong, in Appendix.

From a very interesting report on the State Forest Administration of South Australia, by Mr. J. Edwin Brown, Conservator of State Forests, 1881-82, it appears that the Government of that colony has in operation a system somewhat analogous to that in Canterbury, inasmuch as the revenue—about £5,500—derived from 239,336 acres of forest reserves is devoted to enclosing and planting parts of the reserves. An area of 4,042 acres in a number of blocks in different districts had been enclosed at date of report, and planted with several varieties of eucalypti and pines, the *Eucalyptus globulus*, or Tasmanian blue gum, and the *Pinus insignis* predominating. In the Canterbury operations the varieties sown have been blue, red, and peppermint gums, stringybark, iron-bark, and wattle.

In South Australia the prime object sought in these plantations is a mitigation of drought. New Zealand is fortunately free from any great apprehension in that respect, although the plains of Canterbury, as the district of least rainfall in New Zealand, could with advantage take more rain and less wind.

In the treeless interior of Otago very little has as yet been done towards planting; but about four years ago a nursery was established in Cardrona Valley, Lake County, by the County Council, and a large number of different varieties of trees have been grown very successfully, as will be seen on reference to an extract from Mr. R. McDougall's report in the Appendix. The trees distributed from the Cardrona Nursery will in a few years, as they grow up around the homesteads, add fresh charms to the attractions of a district already famous for its great natural beauty. Encouraged by the success of the Lake County Nursery the adjacent County of Maniototo applied for and obtained, about twelve months ago, 100 acres of Crown lands for the purpose of establishing a nursery. Operations have been begun on the Maniototo Plains, near the end of Rough Ridge, at an altitude of about 1,700 feet above sea-level. By growing the trees from seed, as is intended, plants will be produced acclimatized to the natural conditions of the district. The success already attained in growing trees for many years at Naseby, 1,800 feet above sea-level, is an assurance of the future of the nursery. It will be a great advantage to the settlers on the Maniototo Plains to have the shade and shelter which the growing of belts and clumps of trees will afford. Any planting on a large scale is at present beyond the means of the two counties referred to; and even if it were otherwise, it would be better to proceed as at present, in a small way, gathering experience.

It is gratifying to observe that all these public efforts in the colony, and others not enumerated, have their origin and impulse in the public spirit of local gentlemen, who render their services gratuitously. There is no department of woods and forests in New Zealand, nor is such really required in the interests of the public estate. There are no arid rainless regions forbidding the approach of the settler, and requiring an organized effort to precede him in the attempt to increase and to conserve the natural water-supply. Here the great object is to penetrate the country with roads, so that the settler may find his way in among well-watered fertile hills and valleys, long ready for his occupation if he could only get to them.

It is quite proper, however, that the Government should supplement local efforts by the grant of sites for nurseries and plantations, and in some cases by money grants, always subject, however, to the condition that the local efforts and contributions are much greater, or, in other words, that the settlers are in earnest in the matter.

Whatever amelioration the climate of New Zealand may require from planting of trees can well await the effects of private and local efforts in that direction. The plantations now made and being made, more especially in the Ashburton and Selwyn Counties, and the admirable system of water-race supply through the plains there, both show how well these things are done when managed by those directly interested in them.

OLIVE, MULBERRY, AND SILK CULTURE.

Arrangements have been made to send between 400 and 500 young olive plants, which have been raised by Mr Armstrong, in the Public Domain at Christchurch, from truncheons imported from South Australia in October, 1881, to the Domain at Auckland, for further propagation and distribution amongst settlers in the north who take an interest in the industry of olive cultivation. The olive-tree is grown in gardens at Akaroa, Wellington, and Napier, but it is believed that it will do better in the northern part of New Zealand; and that it is to that locality that the greatest efforts should be directed to propagate it. As bearing on the suitability of that district for the culture of the olive the following letter from Sir George Grey is copied from the Auckland *Evening Star* of the 3rd May, 1883:—"To the Editor.—Sir, I have thought it might interest those who are fond of agriculture to see a part of the produce of three or four young olive-trees, and that you would allow them to be shown in the *Evening Star* office. A box of olives has therefore been forwarded to you. They ought to have been separated into three classes: Green olives for pickles; small parcel olives, ripe and fit for crushing for oil; larger Spanish olives, ripe and fit for crushing for oil. But there has not been time for thus separating them. You will see, from the specimens sent, how abundantly the trees bear, and what a valuable product olives will be for this part of New Zealand. The boughs of one tree were nearly broken by the weight of fruit.—I have, &c., G. GREY.—Kawau, 2nd May, 1883."

The successful efforts of Mr. Federli, at Christchurch, in rearing silkworms has induced a considerable number of persons in that locality and in other parts of the colony to turn their attention to the subject. It has been made abundantly clear that, so far as the climate and