H.—5.

there may be enough for from forty to fifty years' supply, because there are always young trees growing. Of course this is supposing that the destruction of bush will not continue at the same rate as for the last seven years.

PART I. Reports, 1874: Otago.

12. Unless very stringent regulations are made and enforced, the bushes in the northern

part of the Province will soon not be worth protecting.

13. I would respectfully suggest that District Inspectors, or they might be called Contractors, should be engaged, who should be under the supervision of the Ranger, whose duties should be to cut fencing and firewood for sale, and to clear away the waste wood, and plant young The proceeds from sale of wood should be ample to secure this.

14. Inducement might be offered, with success, in a money grant of from £3 to £5 per acre, for an area of not less than five acres planted with young trees; or a grant of from three to five acres of land for every acre planted with trees in blocks of not less than five or ten acres. A supply of good seed should be kept on hand to encourage planting, or a stock of young trees supplied by tender. From observation and information from settlers and Mr. Matthews, I think the following are some of the most profitable trees to raise:—The Scotch, Pinaster, Austrian, and Martima pines, Norway spruce, many of the Californian coniferæ and British hard-woods. The Australian gum tribes are the quickest of growth, but they will not grow away from the seaboard. The larch fir will not grow but on the south side of the hills and in shaded sites.

15. The bushes in the northern district are all on the sea-board. Twenty miles from the coast, and in many places less than half that distance, there is no native bush with the exception of some about the Lakes, at the sources of the Waitaki, and the head of the Waipori bush. The up-country districts are dependent for firing, some on the charred logs lying on the mountains, and coal pits, others on the peat bogs on the high grounds.

16. The area of the northern district is 2,300,000.

J. T. Thomson, Esq., Chief Commissioner of Crown Lands.

Mr. McArthur to Mr. Thomson.

Utilizing and Conserving the Forests.

There has been a considerable proportion of the Colonial forests falling annually for centuries from natural decay, and this process is still going on, which, when combined with the additional area dotted over with the crops and branches of felled trees, prepares the forest for extensive and destructive fires.

In this preparatory process the splitter, not intentionally but necessarily, is more destructive than the saw-miller, for he must have trees that will split, and therefore requires to go over a large extent of ground for comparatively few trees, while to the other it is a matter of indifference whether the tree is even-threaded or not. He (the saw-miller) may therefore, if necessary, be made to utilize all the available trees above a foot in diameter within his lines in a face, and having laid down an expensive plant, including miles of tramway, he will, of course, be more careful about fires.

In most of the Southland forests there is a considerable number of young trees, from a foot in diameter to the mere seedling, therefore every hundred acres gone over by the saw-miller ought, as in Scotland, to be fenced to prevent cattle destroying the saplings. There would also be less risk from fire, as no one would require to go inside the fences, which, if of turf and for long stretches having wet ditches on each side, would tend to check fires from the outside.

In these enclosures the crops of the felled trees would be both food and shelter for the young plants growing up through them; and there should be Scotch fir, larch, oak, elm, &c., planted where the native plants were not thick enough.

It may be a matter for serious consideration by the Government, whether those who are fortunate enough to have good bush on their own properties ought not to be prevented cutting in the reserves; while it would be but reasonable that certain provisions should be made for settlers in the open plains who have none, and who would be quite willing to pay for the privilege.

D. McArthur,

Invercargill, 2nd March, 1874.

Inspector of Forests, Southland.

Sir,—

Referring to the circular from the Colonial Office re the "wasteful destruction of the forests of the Colony," I have the honor to submit the above for consideration, and hope some of the suggestions made may be found of service in reference to utilizing the forests of the Colony, while at the same time they may be conserved and be a source of perpetual wealth and comfort to the inhabitants of the country.

That British forest trees will thrive amidst the native woods of New Zealand there can be no doubt. I have planted some oaks and firs on my own land, and have seen larch and Scotch

firs here also, and all thriving beautifully.

I have, &c.,

D. McArthur,

The Chief Commissioner of Crown Lands, Invercargill, 19th March, 1874.

Inspector of Forests, Southland.

4—H. 5.