PART VI.—THE FUTURE OF STEWART ISLAND.

1. AGRICULTURAL CAPABILITIES.

The agricultural statistics for the Dominion give a clear idea of the present position of Stewart Island with regard to farming. Thus, so far as domestic animals are concerned, there are merely 6 horses, 24 pigs, 264 cattle, and 1,492 sheep. Similarly, the agricultural plant-covering consists of 68 acres of pasture (laid down), 557 acres of surface-sown land, 1 acre of corn crop, 7 acres of green crops, 19 acres of gardens, orchards, and plantations, and 23,486 acres of unimproved grass land. If the latter be taken into account, the amount of stock seems ridiculously small, but a considerable part of the so-called grass land—perhaps one-half—is occupied by bogs, swamps, heath, and dunes, the vegetation of which is worthless; while on the other part the plants available for "feed" certainly do not form more than one-fourth of the plant-covering. The only farms—and these are but of a few acres, the land being frequently only partially cleared—are in the neighbourhood of Half-moon Bay, the adjacent shores of Paterson Inlet, and the Neck, the latter more especially feeding the greater portion of the sheep. Were the Mason Bay run occupied, the number of sheep would be greater, but the total which could be carried under present conditions would be trifling for an island of more than 425,000 acres.

However, it is not the present condition of affairs which concerns us here, but rather the question as to the value of the island as a whole and in the future for farming purposes. To this the preceding botanical part of the report furnishes a clear answer. There it has been shown that the present soil and climatic conditions have clothed the mountains above the forest-line—the part, indeed, of much moment to the sheep-farmer in the Southern Alps—with an absolutely worthless vegetation from the grazing standpoint. Furthermore, the ecological conditions which favour such a vegetation are altogether antagonistic to the growth of pasture plants. Even were the land to be drained and the subalpine scrub burned, the climate most adverse to stock could not be suppressed. So, too, with the open lands of the lower country, where the alpine umbrella-fern (Photo No. 23) and Hypolaena lateriflora, covering acres at a time, testify to the worthlessness of the land, and where the one indigenous grass in any abund-

ance is the red tussock (Danthonia Raoulii), a plant rejected by most animals.

The forest lands, then, alone remain for consideration. Those occupied by the yellow-pine (Dacrydium intermedium) may be at once ruled out of court, and that eliminates much of the country to the south of Paterson Inlet, except just along the east coast. There then only remains the rimukamahi forest. When this is removed, economic grasses (see list of introduced plants) and various crops -e.g., potatoes—may be grown successfully, and gardens or orchards established. But the expense of reclaiming the land is very great. The forest when cut down and burnt re-establishes itself, as already shown, most quickly and vigorously, and for years there must be a constant struggle with the rejuvenating forest before the land can be successfully grassed. Undoubtedly the forest can be finally converted into good meadow land, but it seems to me the cost is too great to justify the outlay at the present time. Nor have I mentioned at all the broken nature of the country, its deep gullies and steep slopes, matters much affecting the value of agricultural land. However, as New Zealand becomes more populated, the more difficult lands will be conquered, and then much of north-east Stewart Island will be turned into dairy farms, since its climate will be suitable for grazing and not for cropping. Had the land been adapted for farming it would have been occupied long ago, the cheap water carriage and excellent harbours being most favourable for the development of the island, as pointed out by Mr. W. H. Pearson (68, p. 5). Finally, it may be interesting to quote the opinion of Mr. T. Heale, Chief Surveyor of Southland, as published in the New Zealand Gazette so long ago as the 25th March, 1864: On the whole, it is impossible to resist the conclusion that the colonisation of Stewart's Island presents very great difficulties and drawbacks. It will ultimately, I have no doubt, form a very important and valuable part of the colony, but so much labour will be required to be expended before any portion can be made available that it would be quite idle to attempt to people it by the same means as are applicable to the level, accessible, and well-grassed plains of Southland.'

2. Sawmilling.

Although nearly the whole of Stewart Island is forest-clad, a comparatively small portion of the forests is suitable for sawmilling purposes. This arises from the fact of there being two types of forest, of the rapid decrease in size of the rimu with altitude, and of the greater abundance of the kamahi in many places. Still, especially in the north-east of the island, there is much fine forest, with an abundance of rimu (Photo No. 37), which could easily be shipped from certain of the bays on the east coast. This water carriage is very favourable for the industry. The trees are never of the great dimensions of those of the mainland, and the "plant" required is naturally not so expensive as when dealing with logs of the largest size.

One point to be considered is the value to New Zealand as a whole of the forests of Stewart Island from the scenic point of view—i.e., whether it is more profitable on a purely cash basis to convert them into timber or to let them stand. This is discussed further on; here it need only be said that even from the scenic point of view there can be no harm done by removing the timber from any part of the island where the scenery of the inlets will not be changed by so doing. The forests of the Freshwater Valley along the Mason Bay track, and from the northern shores of Paterson Inlet to the Mount Anglem Range, leaving the shores of the inlet undisturbed, might be advantageously cut down, and the country

finally turned, if practicable, into grazing-land.

3. Stewart Island as a Watering-place.

(a.) General.

The capabilities of Stewart Island as a pleasure and health resort can hardly be overestimated. That it will eventually be celebrated, not only in New Zealand, but throughout Australasia, is certain.