19 C.—5.

In addition to these, we had a trigonometrical and topographical survey made of some 55,000 acres in Stewart Island. This latter survey comprises a network of triangulation extending from Port Pegasus to near Port Adventure, one of the chief objects of the triangulation being, in addition to procuring a more accurate and complete map of the country, to connect the tin-mining areas applied for at Port Pegasus and at Kopaka with the geodesical trig. at Breaksea Island, and, again, to connect the areas at Pegasus and Kopaka with each other. It will be remembered that the tin-mining "fever" at Pegasus broke out somewhat suddenly, and at a time when the nearest trig. station was at Breaksea, some twenty-three miles distant. To delay the surveys of the mining areas until the triangulation was extended would, I think, have been a most unwise course, and would have led to endless complications in respect of boundaries, and to endless disputes on the part of applicants. The dense bush and scrub-clad nature of the country around Pegasus made the process of "pegging" claims and of following up the pegs by survey no easy matter, and that we were able to push the surveys through, practically without dispute, reflects credit on the care and skill of the surveyors engaged—namely, Messrs. John Hay (staff), and T. S. Miller and H. R. Dundas, authorised surveyors. Owing to the absence of connection, the surveys were started and carried on on an assumed bearing, a uniform correction being applied to the bearings when the true bearing had been carried down from Breaksea by the triangulation. The triangulation includes the paring and measurement of a base-line, and, having been conducted over country most of which is covered with dense scrub, it has been a work of considerable labour. The work is now finished on the ground, but, owing to the inaccessibility of the Lord's River locality, and the want of regular communication, the plans have not yet come to hand. The tin-mining areas at Kopaka, some seven in all, were surveyed by Mr. James Blaikie. Having also been started on an assumed bearing, a correction will have to be applied to the bearings when the triangulation is complete.

The work under the head of "Rural and Suburban" comprises a considerable number of

sawmill-areas and several isolated purchases, many of which were in bush. An unusually large number of sawmill-areas were surveyed during the year. Some of these were applied for during the previous year, but, owing to the demands made upon the department in respect of the survey of the tin-mining areas at Pegasus, the surveys had to be delayed until the bulk of the mineral areas had been overtaken. The surveys of these sawmill-areas are now well up to date. The demand for fresh areas has slackened very much of late, and this is readily to be accounted for by the fact that, in the form either of sawmill-areas or of reserves thereto attached, the most of the forest-land that is at present readily accessible has been taken up. There can only be a temporary lull, however, because the great forests of Longwood and Tautuku still remain nearly intact in the hands

of the Crown, and will afford scope for the sawmilling industry for a long time to come.

In regard to the tin-mining industry, there can be no doubt that the excitement in connection with the field reached high-water mark a considerable time ago, the demand for mineral areas having suddenly dropped down to nothing. It is clear that the areas will not be worked in the individual forms applied for, and many of them, in fact, have already been abandoned. There can be little doubt, however, of the presence of tin in considerable quantities over the field, and if a large company possessing experience and capital could be induced to "set in," the mineral wealth of the place might soon be turned to profitable account. I do not think that fortunes will be made, but the chance of a fair return for steady industry seems very good. The industry (tin-mining) is new in the colony, and its profitable prosecution will involve considerable preliminary expense. Apart from the necessity of capital, a practical experience of the tin deposits occurring, and the modes of working pursued in other countries or colonies, would be an indispensable factor towards success. The presence of some old tin-workers on the ground with capital to invest in smelting, machinery, &c., might change the whole character of the place and be the means of establishing a hive of successful industry in a locality which is now occupied by a few prospectors. The newness of the industry, the necessity of securing both experience and capital, and the money that has already been spent on the field are strong arguments for a lenient administration, meanwhile, of the regulations in respect of compulsory acreage labour. I do not think that further areas are likely to be applied for for some time.

In regard to gold-mining, there has been considerable demand during the past year for special claims, &c., situated on creeks, rivers, and ocean-beaches. The Welman dredge on Waipapa Beach and its success to date have pioneered the way for dredging and dredging claims throughout the Matters have now come to a lull, a good many areas having been applied for; but the success of the subsequent dredges ordered might at any time revive the dredging excitement and cause still further areas to be taken up. We have numerous auriferous beaches and rivers where

dredging, if proved payable, would find abundant scope.

The surveys of land applications throughout the year have not been very numerous, though, perhaps, more so than usual, owing to some unsurveyed land being gazetted under "The Land Act Amendment Act, 1887." The perpetual-lease system, owing to the small payments required, is the favourite tenure applied for; but in bush-clad country, &c., care requires to be exercised in parting with land on this principle, the payments being trifling, and the desire to secure, cheaply, bush suitable for milling and fencing, &c., being considerable.

In regard to the work of the staff surveyors, it will be seen that Mr. John Hay has been engaged during the year partly with the survey of tin-mining areas and partly with the minor triangulation (and topography) above referred to in Stewart Island. The work in both cases has been extremely rough and trying. Mr. Straughon has during the year been chiefly surveying in the Otago District, but has now entered upon the subdivisional survey of a block of land in Waikawa District. As the block is partially scrub- and bush-clad, the survey will necessarily occupy more time than would otherwise be the case.

Office-work.—During the year, in addition to the usual routine duties of the office which are incapable of being tabulated, 105 certificates of title in lieu of grants, involving the preparation of