

*Gold Mining Surveys.*

These consist almost entirely of auriferous quartz lease applications—the maximum area allowed is 16½ acres. They are invariably situated in mountainous districts difficult of access. The cost of survey is necessarily high per acre. It is refunded to Government from the deposit made with the application. The other goldfields' surveys of extended claims and alluvial workings which are soon worked out, and not leased, and therefore not recorded, are not enumerated.

*Road, Railway, and Water Race Surveys.*

The road surveys during the year have been principally in exercise of the right reserved in certain Crown Grants, of taking a road within five years of the issue of the grant, or, in the case of Native lands, of ten years, provided the area so taken does not exceed the 5 per cent. of land reserved for the purpose. There are considerable difficulties in making the selection of roads after the country is occupied, as it frequently happens that the best line runs through cultivations and cuts off corners of fields, and otherwise upsets the plans of settlers. The system which is now in force is to survey the roads first, and then so far as the different land systems will permit, to design the sections so as to front on to them. In this way there is no after interference with settlers. The great main arterial road lines of the Colony may be said to have been nearly all selected, and also formed, more or less. What remains to be done, more especially by the sectional surveyor in laying off the country, is to see that the most practicable cross roads are selected. Where the country is hilly or undulating, and covered with bush, but still suitable for agricultural settlement, the roads are, if necessary, graded. In districts where the country is only fit for grazing, the best natural lines following the course of the valleys or ridges, or mountain spurs, are adopted. A prolific source of what may be relatively termed absurd roads arises from Land Boards requiring mountainous country to be cut up into small sized sections.

*Detention by Native Opposition.*

The direct loss attributable to this is stated at £736 11s. 8d. Indirectly the loss from destruction of trig. stations, disturbance of season's work, and the provoking annoyance of stations unflagged, and pegs pulled up, is very material, although it cannot be definitely stated. A good deal of this is done by stealth, but not always. In those cases where the perpetrators were known, it was deemed best by the Native Office rather to stop the surveys than force them against the opposition made by the Natives.

*Miscellaneous Work*

Comprises all work such as cannot be enumerated in the columns of regular survey work, and consists of services in connection with goldfields, Native Land Courts, reports, and selection of land for settlement, and all other incidental survey work of the Colony.

*Land Transfer Surveys.*

These are conducted entirely by private authorised surveyors, and come before the Survey Department for check and approval before final acceptance by the District Land Registrars. Their number is steadily increasing, and their regulation and control, so as to keep the Government free from granting titles on inaccurate data, is attended with considerable trouble. This arises mainly from the distances and areas of re-surveys disagreeing with the original Crown Grants. In such cases the questions arise as to whether the original or the re-survey is in error, and if the boundaries in existence really represent the ground as originally marked off. The original records being usually very meagre, and in many cases entirely lost, the investigation requires much skill and patience, and sometimes a reference to the ground by an officer of the survey staff. In town and suburban land, where there is a continual interchange and subdivision going on, it has been found absolutely necessary in some cases to have permanent marks laid down at intersections of main streets and roads to which all the adjacent surveys shall be referred. By this means, as the land is brought under the Act and new titles issued on the surveys so referred, the difficulties and uncertainties will gradually vanish. It is manifest that these land transfer surveys require on the part of the private practitioners great skill, care and integrity. The Chief Surveyors, on whom devolve the trouble arising from careless surveying, have in several instances suggested the propriety of exercising greater stringency in the authorisation of surveyors.

*Office Work.*

The usual routine of office work is the check of the plans as they come in from the surveyors, their reduction and entry into the working plans and Record Maps of the Survey Office, and into the Selection and Index Maps of the Land Offices, the preparation of Crown Grants, Agricultural and Mining Leases, Memorials of Ownership, and other instruments of title. Some of the Land Offices were, and still are, very deficient in maps showing clearly the areas selected and those still open for selection.

It is the duty of the Survey Department to supply these maps, and much has been done during the year to bring up the heavy arrears of this work. In the Auckland Provincial District, which is under the able direction of Mr. Percy Smith, selection maps have been prepared for the Land Board, old provincial and confiscated land plans, numbering 3,000, have been registered and compiled on Index Maps, the preparation of the plans for the memorials of ownership for the whole Colony, and issued by the Native Department, and the ordinary work of the office. Also, a set of maps on a scale of an inch to the mile has been prepared of all the counties in the Provincial District.

In the Nelson Provincial District Mr. Browning has had the survey information gathered together as much as possible from the meagre materials at his command, and it is a good beginning of what is yet requiring to be done to bring the maps up to date. This district, from its being cut into three main divisions by natural barriers, requires sets of maps at local offices, such as Reefton. The dissatisfaction which has been expressed on the Nelson South West Goldfields, with regard to the Nelson Land Board, is due in a very considerable measure to the want of good district maps and delays in surveys. This is in course of rectification.