

A practicable road-line was, under instructions, found by me across the wild gorge of the Lee Stream, which, though not all that could be desired, will still be a vast improvement on the dangerous pack-horse track hitherto in use between Outram and Hindon. It is now nearly finished; and the worst part of it, at the Lee, will be very little steeper than Pitt Street, Dunedin, or about a grade of 1 in 8. All I claim for it is, that it will be a fair dray-road, and be a great boon to the settlers on "Boyd's Run" (No. 75 on map) and the gold-diggers at Hindon. As this work will only cost the Government the sum of £3,000 voted last session, I deem it well spent in opening up this somewhat inaccessible district. I may also mention, in connection with Mr. Edie's work, that practicable roads have been carefully laid out and graded from the Taieri River up on to the table-land at Hindon. Two of these I personally staked out along with Mr. Gillies, who was then a cadet. Mr. Greenlaw's original line also has been picked up and laid off anew; so that sufficient provision has been made for giving access to the railway-line.

TOWN SECTION SURVEYS.

Of these, 881 sections, at 15s. 10d. each, have been surveyed.

SURVEY PARTIES AND INSPECTION.

During the past year there have been ten survey parties at work. One of these, however, and two contract surveyors, have only been engaged part of the time. I have personally made all the inspections and checks. Sixteen inspections, including two offices, have been made, and twelve checks have been forwarded to Head Office. The effect of the system of inspection, and of check by traverse reductions, is that the average work of the surveyor is of a better class; for he does not know at what particular points check-triangles may be thrown over his work to test it. The selection of practicable road-lines, under the system of observing the grades, is also having good effects generally. But this cannot always be attained—as, for example, where roads have to be continuous, and to be connected to old surveys, or to be taken over very broken country where no choice of routes exists. As a rule, however, very fair lines are got; and where the country is very rough I cause tables of the grades to be sent in by the surveyors along with the maps. The average error in chaining has been 3 links per mile.

GOLD-MINING SURVEYS.

Of gold-mining surveys, 1,604 acres have been laid off, consisting of 98 sections, the average cost per acre being 9s. 7d. This indicates a large increase in mining ventures, as many of the applications are for quartz-reef or cement claims. This description of survey is always necessarily expensive; but the cost per acre is very much less this year than last. I account for this fact chiefly because the greater number of claims laid off were all together or near one another, at Waitahuna, Wetherstone's, and Hindon.

ROADS, RAILWAYS, AND WATER-RACES.

Of these, 130½ miles have been surveyed, at a cost of £2 18s. per mile. The existence of water-races running through nearly every survey in a gold field renders the surveyor's work more tedious and expensive than elsewhere. This is, however, unavoidable, as no proper title can be given by the Crown to land unless the position of a water-race, road, or other reserve has been accurately surveyed and indicated.

DUNEDIN OFFICE WORK.

Land Transfer Branch.—This work increases. Land Transfer plans, 47 in number, have been checked and passed during the year. These are not the work of the staff surveyors, but come in from private surveyors to this office to be passed by me. When passed I deposit the plans finally with the District Land Registrar, so that titles or certificates may be issued from them. I find still that constant watchfulness and care on the part of Mr. Thompson and myself are necessary, in order to secure that these maps conform to the regulations, and are made thoroughly distinct and intelligible. Owners of land, and even many surveyors, I find, do not understand how needful it is that in re-surveys of original sections every care and precaution must be taken to find old pegs, or the identity of position with the line of these of fences which have replaced them. As the Crown guarantees the new title on the faith of the accuracy of the new survey, it is manifest that that survey should be very reliable.

Of the Otago Peninsula, where much confusion has arisen because of the original surveys not having been pegged, plans are beginning to come in in detail. These are chiefly for road-deviations under "The Public Works Act, 1876;" but, as the ultimate destination of such will be the Land Transfer Office, I treat them as to accuracy by the same rules as apply to ordinary surveys for that office. The effect of this detail manner of arranging boundaries will be that each survey will be settled and passed by itself. The question is really more one of title than survey. Of other work there are—examining and checking applications, 191; examining and checking transfers, 1,253; examining and checking mortgages, 1,147; examining and checking draft certificates, 1,124; placing plans on certificates of title, 2,248 (duplicates); engrossing "Pursuant" on same, 2,300; &c.

GENERAL OFFICE WORK.

Mr. Douglas, chief draughtsman, and the staff in this office have been very fully employed during the year. Besides the work of checking maps as they come in from the surveyors, lithographing them, recording them on the Crown-grant record-maps, copying on to Land Office maps, and recording roads on maps, a large amount of work has been done by the draughtsmen of an extra kind, as for the Police Department, Land-Tax Office, Crown Lands Office, Education Office, County Councils, Defence Office, and Marine Department; and there is still, besides the ordinary routine work, large arrears which we are beginning to overtake, as new copies of the original reconnaissance