

NELSON.

Topographical and Trigonometrical Survey.—Under this head an area of 116,123 acres has been executed, at an average cost of 2d. nearly. With the exception of the area covered by Messrs. Smith and Thompson in the Amuri District, the remainder has been chiefly extension of triangles sufficient only to cover outlying sectional surveys. In the Collingwood District, Mr. C. Lewis has in hand triangulation; but being employed also on sectional and mining surveys, and his services having been required for road exploration during three months of the summer season, but slow progress has been made there. A portion of the Grey District, lying round the Kopara Lakes, and in the Haupiri District must, if possible, be taken in hand next year, in order to locate a number of outlying applications, and triangles should be extended up the Ahaura Valley to connect with the work of Messrs. Thompson and Smith in the Amuri District, lying on the other side of the main range. The officers named above have 130,000 acres of triangulation well in hand, which cannot be returned this year. Most of the stations were erected and partially observed, when the winter set in with heavy snowstorms, compelling a cessation of their arduous work and a return of their parties to the lower lying lands. During the past season, exceptionally high winds were experienced, which greatly retarded their operations.

Rural Sectional Surveys.—The work executed during the past year shows an increase in the number of surveys made, and a larger area as compared with the work of the previous year, viz., 457 sections of an area of 42,056 acres, as against 395 sections containing 31,349 acres surveyed in 1880-81, while the average cost per acre is slightly less. The whole of this area may be classed as "isolated sections in bush," among old surveys, requiring revision.

Mining Surveys.—To the above must be added 186 surveys of mining sections, making a total of 643 sections, with an area of 45,251 acres of an average size of 70 acres. The mining surveys are all situated in rough broken mountain ranges, covered with bush, at altitudes reaching up to 4,500 feet. During the past year a great impetus was given to quartz-mining by good returns having been obtained from several low level leads, at a greater depth than had been previously worked, and also new indications of auriferous quartz having been found in the several parts of the coast, nearly simultaneously. A large area of auriferous cement composed of a white conglomerate of sandstone and quartz pebbles in Sankey's and Murray Creek localities, hitherto worked in a primitive way, has been applied for under lease, for the purpose of working more systematically by companies, while mineral leases are being applied for to work for minerals other than gold, the existence of hematite, antimony, native platinum tin and silver ores having been found. Leases have also been applied for to work auriferous quartz on the upper slopes of Mount Owen, at an elevation of 4,500 above sea-level, near which a seam of coal 14 feet 6 inches thick is reported. The excitement caused, became general, and a rush of applications took place for mining and mineral leases, many being in localities far away from previous surveys and on old workings, abandoned for want of funds and other causes. This taxed the energies of this branch of the department to the utmost in meeting the demand for surveys, and five surveyors have been employed, viz., Messrs. Montgomerie, Snodgrass, Jennings, Bullard (Cadet), and Mr. R. Young, authorized Surveyor. One hundred and eighty-six applications for leases have been surveyed, averaging 17 acres (with mineral leases), and there still remains 180 on hand on 30th June. Nineteen applications having been made during the last month, and, if they continue, I shall have to ask for more assistance, as at present rural section survey is falling into arrears again in that part of the district.

Land Transfer Work.—During the year 144 plans have been examined and passed, and 314 plans placed on certificate of title. As the arrears of Crown grants had been overtaken in the previous year, only 5 have been prepared, and 8 certificates of title for sections purchased, have been issued. Purchase has been completed of 60 rural sections, of which for 23 we have sufficient data to issue certificates, and 37 require revision survey before they can be prepared, and in addition to the last there are 40 town sections on magnetic survey requiring revision for certificates of title. Mr. F. Curtis only is employed on the above work, and requires assistance to prevent the work accumulating, as little assistance can be given him by other officers.

Office Work.—During the year three cadets have left the office for field work, and one office and one field cadet taken on. Mr. J. Knyvett has been temporarily employed for six months as clerk and assistant draftsman. Mr. D. Brown is in charge of the plotting work, and arrears are accumulating of surveys requiring to be placed on block sheets. Plans of 643 sectional and mining surveys have been examined and passed during the year, and another plotting draftsman is required, all the other officers being fully employed. Mr. J. Pollock, with Mr. P. Carrington's assistance, has been employed mostly in preparing sectional and mining leases. 601 plans have been placed on 394 leases and licenses containing 210,839 acres, and there are now 165 leases awaiting preparation. Besides the issuing of new leases, there is a current work of preparing new leases for the renewals, after the first term of years, during which they are held, has expired; and also of preparing fresh leases for rural and mining sections, which, after having been held, are cancelled or forfeited from various causes, the surveys of which, having been once made, do not appear in field work again. 5 Crown grant record maps, 47 new block sheets, and 2 application maps, have been constructed, and 96 tracings, with other information, have been furnished to Commissioner of Crown Lands, and others. A sketch map has been compiled, from additional data collected in the field, of 170,000 acres of pastoral run country, reported on and personally inspected by Chief Surveyor, assisted by Messrs. Smith & Thompson, previously to being submitted to public auction. Reports and sketch plans have been forwarded of explorations by Mr. C. Lewis, for practicable lines of road to connect the East and West Coasts, also the table land and Mount Arthur District with Takaka. I have also compiled, from all the sources available, the results of previous explorations and observation into one sketch map, extending from the Goulard Downs, on the north, to the Lyell Ranges, on the south, and Mount Arthur Ranges, on the east, and have condensed all the information obtainable to date, in a report on the north-west portion of the district, which has been already forwarded to you. The correspondence with Surveyors, other departments, County Councils, Road Boards, and the public, together with the accounts of the