Owing to the numerous demands made to the department for establishing telegraph stations, as well as the constantly increasing work, it is found necessary to keep a class of cadets constantly in training. This accounts for the increased nominal strength of the department, which at the 30th June, 1877, was 612, as compared with 567 of the previous year.

Since the date of the last report the new offices at Dunedin have been completed, and afford the greatest satisfaction. It was found necessary to make additions to the Head Office of the department, as well as to the Wellington instrument room. A large and commodious clearing-house has been erected, affording the greatest convenience for the proper checking of the accounts. A new office for the General Manager has been added, as also a workshop for the mechanician. The old clearing-house has been converted into an instrument gallery, and will afford sufficient accommodation for eight additional instruments.

Since the date of the last report, the duplex system of telegraphy has been further extended between Christchurch and Dunedin, Government Buildings and Blenheim, and Blenheim and Dunedin. This latter section is about 500 miles in length, and is one of the longest circuits upon which the system has yet been tried without translation.

The Government Buildings and Blenheim duplex is worked on the No. 2 Cook Strait cable,

thus giving the three wires of No. 1 for the work of commerce.

On the 2nd November, 1876, the Blenheim office was totally destroyed by fire. By the strenuous exertions of the officers comprising the staff, all the instruments of value were saved, and the wires joined through until temporary accommodation could be obtained. Little delay was experienced. Temporary offices are still occupied until the completion of new office, for which tenders have been let.

Arrangements are now being made for taking over the whole of the railway telegraphs hitherto worked by the late Provincial Government of Canterbury. At every railway telegraph station telegrams will be accepted from the public for transmission, and at every railway station adjacent to a telegraph station (as in the case of Timaru) telegrams will be received from the public and forwarded to the telegraph office proper for transmission. The details of working of railway wires so as to prove of the greatest advantage to both departments, without impairing the efficiency of either, are now under consideration.

Appended to the report are plans showing the various telegraphic circuits, as also maps showing the geographical position of the various telegraph stations throughout the colony.

The following line, which was in course of construction at the date of the last report, has been completed:—

HAWERA TO NEW PLYMOUTH.

Since the date of the last report this line has been completed throughout, and has since its completion maintained good electrical condition. The direct communication thus established with New Plymouth proves of great advantage to that town, as well as to the colony generally. The total cost of the line is shown in Table K.

LINES AND WORKS PROJECTED AND FINISHED DURING THE YEAR.

REEFTON TO WESTPORT.

This line, which was completed on the 19th June last, is 50 miles in length, 28 miles being new line, and the remaining 22 miles, from the junction of the Inangahua and Buller Rivers to Reefton, the wire is carried along the poles carrying the Reefton and Lyell line. This line will now render that section of line between Westport and Brighton, which has proved very expensive to maintain, useless; and, as the work performed of late years by the Brighton office has been of trifling importance, it is proposed to dismantle that section and close the office at Brighton. This will effect a very considerable saving to the department. The poles on this line are sawn from heart of totara, and for the better protection of the line an extra bush clearing of one chain wide has been made throughout. More than ordinary expense has been incurred in the construction of this line, owing to the rough nature of the country, the expense of delivering material, and the rocky nature of the country making it difficult to sink holes. The cost of this line is shown in Table K.

PALMERSTON NORTH TO FEILDING.

This line was completed and an office opened at Feilding on the 28th March, 1877. The line follows the railway line for its whole distance. The bush has been cleared to a sufficient extent on either side to insure the line against the probability of injury by falling trees. The cost of this line, which is 12 miles in length, is shown in Table K.

Waiwera Line from Warkworth.

A substantial guarantee having been offered for the establishment of a telegraph station at Waiwera, it was decided to extend communication to that place. The line, which is 16 miles in length, was completed and an office opened at Waiwera on the 5th February, 1877. This station will doubtless prove a source of very great convenience to many of the business people and residents of Auckland, who spend several days during the summer months at the Hot Springs at Waiwera.

LINES AND WORKS IN COURSE OF CONSTRUCTION.

KAWAKAWA TO MONGONUI.

From Kawakawa to a point known as the Black Bridge, a distance of 11 miles, the wire will run on the poles carrying the Ohaeawai and Hokianga wire. The general direction of