1878. NEW ZEALAND.

TELEGRAPH DEPARTMENT.

(FOURTEENTH ANNUAL REPORT.)

Presented to both Houses of the General Assembly by Command of His Excellency.

My Lord,— · Office of the Commissioner of Telegraphs, Wellington, 14th August, 1878.

I have the honor to submit to your Lordship a report as to the operations of the Telegraph Department of New Zealand during the year ended the 30th June, 1878, being the Fourteenth Annual Report of the department.

I have, &c.,
J. T. FISHER,
Commissioner of Telegraphs.

His Excellency the Most Hon. the Marquis of Normanby, K.C.M.G., Governor of New Zealand.

REPORT.

The revenue for the year was estimated at £70,000, but it has exceeded that amount by £3,284 ls. 10d. The total earnings of the department for the year 1877-78, exclusive of General Government telegrams, amount to £73,284 ls. 10d., being an increase over the previous year of £8,723 6s. 3d. The total cash revenue of the department from all sources, as shown in the debtor and creditor statement, amounts to £74,683 l4s. ld.

The number of telegrams of all codes transmitted during the year was 1,260,324, showing an increase over the previous year of 135,892, and over the year 1875–76 of 209,238 messages. Including the value of General Government messages, the gross earnings of the department for the year amount to £93,704 2s. 8d., and exceed the expenditure by £6,104 16s. 3d. The cost of maintenance of stations for the year amounts to £69,340 1s. 8d., and maintenance of lines to £18,259 4s. 9d. The former item shows an increased expenditure over the previous year of £5,986 10s. 10d., and the latter of £327 16s. 9d. The large increase in the cost of maintenance of stations is attributable to the large number of stations opened during the past year, the majority of which were established to facilitate the business of the Railway Department. A large portion of this expenditure will be recovered from the Railway Department, an adjustment being arrived at upon a basis mutually agreed upon by the departments interested. The total amount expended to date upon lines and cables, as shown in Table H, is £394,414 12s. 2d. The profit on the year's transactions may therefore be said to represent interest on the capital expended at the rate of $1\frac{1}{2}$ per cent. This credit balance will of course be considerably enlarged when the adjustment with the Railway Department is made, and therefore the rate of interest will in consequence be augmented.

The number of telegrams transmitted during the year, as compared with the letters posted during the same period, shows that 20.71 telegrams were sent for every 100 letters. The comparative number for the previous year was 20.29; there is therefore a slight increase over the previous year.

The number of money-order telegrams sent during the year was 12,800, representing a value of £54,922 10s. 5d., being an increase in messages of 464, and decrease in value of £399 12s. 1d., as compared with the previous year. The commission collected by the Post Office on these transactions amounts to £1,555 4s. 8d., from which has to be deducted £640 due to the Telegraph Department as fees on telegrams, leaving £915 4s. 8d. to the credit of the Post Office, which is equal to 1.658 per cent. upon the total amount transmitted. It will be seen, on reference to Table I, that the largest number of orders were issued in Wellington, Dunedin coming next, and Christchurch next, the value of the transactions ranking in the same order.

1—F. 2.

During the year, 175 miles of line, carrying 272 miles of wire, have been erected, and 340 miles of wire erected on existing lines. On the 30th June, 1878, 3,434 miles of line, carrying 8,035 miles of wire, were in circuit, showing an increased mileage upon the previous year of line 175 miles, and wire 612 miles.

The number of stations open to the public on the 30th June was 182, 28 of which were

opened during the past year, 8 being in the North Island and 20 in the South Island.

The extent of line maintained during the year was 3,318 miles, the average cost per mile for maintenance being £5 10s. (116 miles of line not included in maintenance table: see foot-

note, Table E).

Since the date of the last report the whole of the lines previously under the control of the Provincial Government of Canterbury, and used for railway purposes, have been taken into the charge of this department. The railway work is, however, performed as before, and in all cases takes precedence upon the wires set apart for its use. In the majority of cases the railway operators are officers of the Railway Department, but, to bring them also within the control

of this department, a small additional salary is granted them.

Wherever a railway telegraph station is or has been opened, and where an ordinary telegraph station has not been established, the office is thrown open for the convenience of the public. At railway stations where a telegraph office proper is within a convenient distance, a receiving office is established, where messages are accepted and forwarded to the telegraph office for transmission. These stations prove a source of great convenience to the travelling public. Since the inauguration of this system, the following railway telegraph stations have been established—viz., Burnham, Coalgate, Cust, Dunedin Railway Station, Elbow, Horndon Junction, Manuka Creek, Oreti, Orari, Rangitata North, Rolleston, Sheffield, Southbridge Junction, Springston, Waipahi, Winslow, Washdyke, Waitahuna, Waimate Junction, in the South Island; and Farndon, Inglewood, Kopua, and Waitara, in the North Island. The cost of crection of lines and establishment of stations is in the first instance borne by the Telegraph Department, and that and subsequent expenditure divided between Telegraph and Railway Departments upon a basis agreed upon by the two respective departments. To instruct the officers of the Railway Department in telegraphy and the proper mode of rendering telegraph accounts and performing the duties connected with a telegraph station generally, travelling instructors were appointed, and the desired end attained at a comparatively small cost.

To provide sufficient staff for the working of new stations, and to supplement existing staffs to keep pace with the ever-increasing work of the department, it is found necessary to instruct cadets all the year round, which is done at the Head Office, two classes of six in each being constantly under tuition. At the end of three months, or less, they are sufficiently advanced to draft to stations. By these means the department is enabled to introduce from fifty to sixty young operators every year, which fully meets the requirements of the service, providing for officering new stations, strengthening existing staffs, and supplying the places of officers leaving the department. This system of training cadets affords respectable employment for lads leaving school, and is eagerly sought after by the colonial youth, who, as a rule, prove themselves apt operators. The salary upon entry awarded them being liberal, the department is enabled to

obtain a superior class of boys from all parts of the colony.

The nominal strength of the department on the 30th June, 1878, was 716, against 612 on

the same date in the previous year.

On the 1st July, 1877, an "urgent" code was introduced by Order in Council, giving precedence to telegrams upon which the "urgent" or double transmission fee is paid. All such telegrams are forwarded before ordinary telegrams, but in their order of receipt as regards other messages of the same code. The number of "urgent" messages sent during the year was 13,455, the value of which amounts to £2,099 16s. 8d. One-half of this may be looked upon as extra revenue, obtained by the introduction of the system. It might be but fair to give the system credit for the whole of the revenue derived by it, as the question arises whether the messages would have been sent at all if the transmitters were not inclined to the belief that they would receive more than the ordinary expedition in forwarding to their destination. Every care is exercised that "urgent" messages receive the quickest despatch; and to business people and traders generally the system presents great advantages, and is duly appreciated. In thus speaking of the "urgent" code, it must not be concluded that the department loses sight of the necessity for quick transmission of "ordinary" messages. Every officer in the service is carefully cautioned of this, and any unnecessary delay on a telegram on the part of any officer is met by fine or reprimand.

In the last report the destruction by fire of the Blenheim transmitting station was noted. A new office, built of concrete, has since been erected, and is now in the occupation of the

department.

The work passing through the Australian cable and foreign lines appears to be steadily increasing.

The duplex system continues to work without the slightest difficulty, and proves of immense advantage to the department.

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 now been completed:—

F.—2.

KAWAKAWA TO MONGONUI.

3

This line, which is 53 miles in length, was completed in September last, and stations established at Whangaroa and Mongonui. A general description of the route adopted was given in the last report. The total cost of line, under various headings, is shown in Table H.

LINES AND WORKS PROJECTED AND FINISHED DURING THE YEAR.

BLENHEIM TO TOPHOUSE VIA WAIRAU VALLEY.

The insecure condition of the existing line between Blenheim and Nelson, as well as the increased work on the West Coast, necessitated the addition of a third wire. It was therefore deemed advisable to erect a new line carrying two wires to the Tophouse from Blenheim, adopting a route through the Wairau Valley. The adoption of this route avoided the clearing of a large extent of bush, which would have been necessary had the line been carried upon the old route, and avoided, moreover, the strengthening which would have been required to render it capable of carrying a third wire. The section is 60 miles in length, 57 miles of which run through open country, the remaining 3 miles passing through bush, which has been felled $1\frac{1}{2}$ chains on either side of the line to insure its safety from falling timber. The cost of this section is shown in Table H.

THIRD WIRE, NELSON TO GREYMOUTH.

The erection of this wire was commenced in September, 1877, and completed in March, 1878. The addition of this wire affords to Hokitika, Greymouth, and Reefton direct communication with the Blenheim transmitting station on the south side, and places Nelson and the Wakapuaka cable station in direct communication with Blenheim on the north side, thus relieving Nelson of the transmission of a large amount of work from the West Coast for the North. The cost of this work will be found in Table H.

CHRISTCHURCH TO WAITAKI RECONSTRUCTION.

This section has been carefully examined, and all necessary repairs effected. Every pole has been tested, and all unsound ones removed and new ones substituted. The cost is shown in Table H.

CHRISTCHURCH TO GREYMOUTH RECONSTRUCTION.

This section has received attention during the past year. Between Bealey and Taipo, a distance of 10 miles, the line has been entirely repoled, and the general route at various points altered to render it safer and more durable. Other alterations, shown under the heading of "Maintenance," have been effected. The cost of repairs, alterations, &c., is shown in Table H.

WINTON TO LOWTHER.

This line, which is 37 miles in length, was completed in November last. The extension of railway communication rendered the work necessary, and the wire is used almost solely for railway purposes. Stations on this line were established at Oreti, Elbow, and Lowther, the two former being also public offices. The latter was for some time kept open for the convenience of the public, but, as the business performed by it was of so trifling a nature, it was deemed desirable to close it and use it simply as a "flying station," the instrument being worked by the railway guard. This line will be eventually extended to Kingston, at the south end of Lake Wakatipu. The cost of erection is shown in Table H.

Wellington Pilot Station.

It was deemed advisable to remove the telegraph station from the Signal Station to the Pilot Station; two additional miles of line had therefore to be erected. An additional wire from the pilot's house to the Look-out Station was at the same time erected, and communication by telephone established.

THIRD WIRE, WELLINGTON TO WANGANUI.

The increasing work on the West Coast line, North Island, rendered this work necessary. A direct wire for the New Plymouth work is now available when necessary, and the pressure upon the wires between Wellington and Wanganui is relieved by placing some of the intermediate stations upon another wire. Cost of erection of this wire is shown in Table H.

Wellington to Wainui Reconstruction.

This portion of the Wellington to Napier section has been reconstructed, new poles having been inserted almost throughout, angles strengthened, and all necessary repairs effected. The cost is shown in Table H.

WAIPUKURAU TO KOPUA.

This line, which is 19 miles in length, was completed in January last, and a station opened at Kopua the following month. The line was erected for the purposes of the Railway Department, and the telegraphist at Kopua also acts as stationmaster. A guaranteed station upon this section at Takapau will shortly be opened. The cost of line is shown in Table H.

NEW PLYMOUTH TO WAITARA AND INGLEWOOD.

This line was completed in February last, and stations at Waitara and Inglewood opened in the same month. The wire, which was erected for railway purposes, runs upon the main telegraph line south, with the exception of a loop of four miles into Waitara. The cost of erection is shown in Table H.

LINES AND WORKS IN COURSE OF CONSTRUCTION.

FIFTH WIRE, WELLINGTON TO MASTERTON; AND FOURTH WIRE, MASTERTON TO TENUI.

The increasing work on the northern lines called for this additional wire accommodation, the erection of which is now being rapidly pushed forward. The fifth wire, terminating at Masterton, will be used for the more important of the intermediate stations. The fourth wire, extending from Masterton and terminating at Tenui, will be joined up to the Castlepoint wire, and will also do the work of the remaining stations between Wellington and Castlepoint. The loop of Nos. 1 and 2 wires from the Tenui junction into Castlepoint will be dismantled, and the wires joined through at the junction.

MAINTENANCE AND REPAIRS.

RIVERTON TO BALCLUTHA.

All lines on this section have, during the past year, been carefully overhauled, and all necessary repairs effected. The section between Clinton and Invercargill received considerable damage in May last owing to a severe snowstorm. The necessary permanent repairs are now being carried out. The cost of maintenance of this and other sections will be found in Table E.

BALCLUTHA TO WAITAKI.

The lines comprising this section are in efficient working order, and in a good state of repair. New poles have been erected through the Town of Port Chalmers, and any necessary repairs have received attention.

TOKOMAIRIRO TO QUEENSTOWN.

This section is in good repair and efficient working order, having during the past year undergone a thorough overhaul.

CHRISTCHURCH TO HOKITIKA AND GREYMOUTH.

Within the past few months this section has received extensive repairs, being for ten miles almost reconstructed. The route between Bealey and Taipo, in addition to being repoled, has at different points been slightly altered to render it safer. Two bad river crossings—viz., the Cass and Otira—have been altered so as to carry the wires across in one span. The encroachment of the Bealey and Otira Rivers rendered necessary a considerable amount of bush clearing. Some of the tube poles in the Waimakariri have been broken by floating timber in heavy floods. These are now being replaced by stronger ones. The whole of the section is now as safe as it is possible to make it.

CANTERBURY LINES.

Between Christchurch and Heathcote Valley the line has been entirely reconstructed; the old round iron poles have been taken out, as they were found not to be of sufficient strength to carry the three extra wires to be placed upon them. Square poles of totara have been erected in their stead. The line over the hill has been examined and strengthened.

The line between Christchurch and Akaroa has been overhauled, and put in good repair, as also that between Waitaki and Christchurch, which is referred to under heading of "Construction."

Upon the section between Christchurch and Cheviot a thorough overhaul to Saltwater Creek has been effected. From that point to Hurunui the line is in good order; but between Hurunui and Cheviot some minor repairs are required, which will receive attention in a short time.

About two miles of the Waiau line have been shifted out of the way of traffic, having originally been erected in the middle of the road reserve. At the river crossing, tube poles have been inserted, which renders the line at that point safer in the time of heavy floods.

CHEVIOT TO NELSON.

Between Cheviot and the Wairau River many of the old arms and black-pine poles having shown signs of decay, it has been decided to thoroughly overhaul and reconstruct this portion of the section. At some of the more exposed points the line will be removed inland; and, to further improve the insulation, the white Prussian insulators will supply the place of the Varley insulators now in use.

The remaining portions of the above section are in an efficient state of repair.

NELSON TO GREYMOUTH AND HOKITIKA, INCLUDING ROSS LINE.

In running the third wire from Nelson to Greymouth, advantage was taken of the opportunity for overhauling and strengthening the section throughout. A considerable extent of timber standing in dangerous proximity to the line was removed. On the Hokitika to Ross section a number of the sapling poles used in construction are showing signs of decay. They will shortly be replaced by new ones of larger dimensions,

WELLINGTON TO NEW PLYMOUTH.

During the running of the third wire between Wellington and Wanganui this line received a thorough overhaul, all poles showing the least sign of weakness or decay being removed and replaced by poles sawn from the heart of totara. The remaining portion of the section is in good working order, and has maintained its state of efficiency during the year, with the exception of one or two minor interruptions in the bush behind Mount Egmont.

Owing to a severe thunderstorm at the end of the year, the line between Turakina and Wanganui met with considerable damage. In the same storm the leading-in wires of the Wanganui office were fused by lightning, and considerable damage done to the instruments and internal fittings. Hasty arrangements were at once made for renewing communication, and instruments were immediately despatched from Wellington. Necessary repairs were effected and communication restored within thirty-six hours from the time of the accident.

Wellington to Napier.

Between Wellington and Masterton this line has during the past year received a thorough overhaul, and a working party is now engaged overhauling that portion between Masterton and Wainui. Between Waipukurau and Napier the line has been carefully examined by a working party on foot, and all defective arms, poles, insulators, &c., replaced by good ones. A fifth wire is now being erected from Wellington to Masterton, and a fourth wire will shortly be erected from Masterton to Tenui. The section throughout is now in good repair.

Napier to Grahamstown.

Between Tauranga and Katikati, for a distance of 14 miles, the line has been removed from difficult and swampy ground and erected adjacent to the main road. When the line was first constructed in 1871-72, the road had not been surveyed or laid off, and it was then deemed most desirable to carry the wires by such a course as would cross the numerous rivers at the fords then in use, in order to provide for inspection and repairs. The road now having been formed, and the majority of rivers having been bridged, the maintenance of this section will be greatly facilitated by the deviation. Between Katikati and Grahamstown several culverts have been renewed, and the track used by linemen for inspection, where it passes over swamp and through bush, has received proper attention. All the lines comprising this section are now in good and efficient repair.

AUCKLAND LINES.

Between Mercer and Pukorokoro some sixty decayed poles were removed, and replaced by new ones. Near Drury three miles of the line were altered to bring it into the new office. The alteration thus made also had the effect of strengthening the line by cutting out some severe angles. At the crossing of the Waiwera River, it was found necessary to clear some bush, and to slightly alter the line to make it more convenient for the shipping. On the Riverhead line several alterations have been made, necessitated by landslips, &c. Between Warkworth and Waiwera some minor alterations have been made. The towers at the Piako and Thames Rivers have received all necessary repairs. At Grahamstown and Parawai slight alterations have been made to meet with road deviations, and for the same reason the line passing through Parnell has been altered. Between Auckland and Riverhead a few decayed poles have been replaced. On the Manukau Heads line a dangerous swamp has received repairs. Between Helensville and Warkworth a creek has been bridged and a track cut for the linemen when on inspection.

AUCKLAND TO KAWAKAWA AND MONGONUI.

This section calls for no special remark. Between Auckland and Kawakawa some small but necessary repairs have been effected. South of Whangarei about three and a half miles of the line have been removed to alongside of the main road lately formed; and at the Wairua River about half a mile of line has been removed owing to erection of bridge. Fern and scrub have been cleared from round the poles, culverts and swamp tracks repaired, and everything which was deemed necessary to render the line lasting was done. Between Kawakawa and Mongonui the line is in good condition, being almost new.

COOK STRAIT CABLE.

No. 1 Cable.—This cable has, since the date of the last report, continued to work in an uninterrupted and satisfactory manner. It will be seen, on reference to the record of tests given in Table F, that Nos. 1 and 3 wires continue in their usual good electrical condition, while No. 2 maintains its usual low standard. No difficulty, however, is experienced in working this wire, and only from actual tests for insulation and resistance can it be judged faulty

No. 2 Cable.—This cable continues to work in a satisfactory manner, and, from the monthly tests shown in detail in Table G, it will be seen that it is in as good electrical condition now as when first laid. It is, as well as No. 3 wire in the No. 1 Cable, worked upon the duplex system, and the results have been so far satisfactory. The No. 2 Cable is used exclusively for the southern work to or from Government Buildings.

SCHEDULE OF TABLES.

- Table A.—Cash Revenue and Expenditure, Signals Department.

 B.—Number of Telegrams sent for every 100 Letters.

 C.—Comparative Quarterly Return, years ending June, 1877-78.

 D.—Annual Comparative Progress of the Department.

 E.—Cost of Maintenance of Lines.

 F.—Insulation Tests, No. 1 Cook Strait Cable.
- TABLES.

 TABLE G.—Insulation Tests, No. 2 Cook Strait Cable.

 H.—Total Cost of Lines.

 I.—Number of Telegraph Money Orders issued.

 K.—Value of Government Telegrams.

 L.—Debtor and Creditor Statement.

TABLE A.

Cash Revenue derived from Private and Press Messages; Value of General Government Messages; Number of Messages transmitted by each Station; and the Working Expenses of each Station for the Year ended 30th June, 1878.

Name of Station.	Total Cash Revenue derived from Private and Press Telegrams.	Value of General Government Messages.	Total Value of Messages of all Codes.	Total Number of Private and Press Messages.	Total Number of General Government Messages.	Total Number of Messages of all Codes.	Amount Paid for Salaries.	Contingencies.	Total Cost of Maintenance of Station.
Head Office Abbotsford Ahaura Akaron Alexandra, Auck-	£ s. d. 27 7 6 204 6 11 284 7 9	£ s. d. 0 16 2 72 1 7 28 10 9	28 3 8 276 8 6	472 3,133 3,941	 743 384	486 3,876 4,325	£ s. d. 3,225 18 5 59 11 8 239 3 4 167 10 0	3 0 0 8 19 6	£ s. d. 3,909 8 4 62 11 8 248 2 10 220 15 0
land Alexandra, Otago Amberley Arrow Ashburton Auckland Balclutha Bealey Blenheim Blueskin Bluff Brighton† Bull's	126 19 4 94 10 5 123 17 2 183 9 3 509 19 5 6,020 0 11 409 2 3 42 0 7 640 17 9 38 3 17 1 0 4 7 345 7		101 19 10 130 8 7 232 12 4 607 4 10 7.427 19 11 459 11 9 86 13 9 787 18 0 70 5 4 540 12 3 1 1 7 367 7 11	2,049 2,592 8,326 78,066 6,720 677 8,468 987 6,422 4 5,378	911 110 98 460 494 12,254 655 700 1,919 153 1,996	3,087 1,650 2,147 3,052 8,820 90,320 7,375 1,377 10,387 1,140 8,418 11 5,696	145 4 2 123 6 8 153 18 4 185 0 0 249 4 6 2,680 1 8 309 5 3 225 0 0 3,312 14 11 114 11 8 488 16 8 	27 7 9 74 4 10 36 11 0 84 2 10 253 19 9 107 4 7 46 13 0 685 5 4 13 4 6 42 0 2	243 14 2 150 14 5 228 3 2 221 11 0 333 7 4 2,934 1 5 416 9 10 271 13 0 3,998 0 3 127 16 2 530 16 10
Burnham Cambridge Carterton Castlepoint* Caversham Charleston Cheviot Christchurch Clinton* Coalgate Coromandel Cromwell Cust Cust	9 10 3 357 3 2 131 14 7 50 19 9 34 16 9 120 3 4 117 4 5 6,548 17 10 144 17 0 159 9 1 29 9 2 285 19 9 237 2 0 17 10 9	1 15 10 84 7 0 18 3 9 28 0 8 3 2 1 13 6 5 4 5 7 1,205 2 9 30 2 6 62 3 8 5 6 3 65 15 9 9 13 7 9	441 10 2 149 18 4 79 0 5 37 18 10 133 9 9 121 10 0 7,754 0 7 174 19 6 221 12 9 34 15 5 351 15 6 250 9 9	160 5,257 2,292 813 622 1,997 1,115 75,466 2,270 2,142 491 4,991 3,346	30 958 193 493 30 196 63 10,668 364 667 38 730	190 6,215 2,485 1,216 652 2,193 1,178 86,134 2,634 2,839 5,721 3,549	194 11 8 123 15 0 134 11 8 64 11 8 182 17 3 131 0 10 4,033 16 3 237 13 4 132 10 0 2 10 0 198 6 8 181 0 0	44 14 11 74 19 10 72 8 1 52 16 6 13 12 6 77 18 2 63 18 2 596 15 0 30 18 9 14 9 4 9 18 5 50 5 3 9 13 6	44 14 11 269 11 6 196 3 1 187 8 2 78 4 2 260 15 5 194 19 0 4,630 11 3 268 12 1 146 19 4 12 8 5 248 11 11 190 13 6
Cust Drury Dunedin North Dunedin Railway Dunsandel Edendale Elbow Farndon Featherston Feilding Foxton Geraldine* Gisborne	17 10 9 11 8,004 16 11 268 2 0 27 18 7 45 16 0 54 13 2 48 18 1 46 9 2 192 17 9 177 10 7 27 12 5 312 11 9 93 5 10 1,039 0 10 176 7 7	5 11 11 1,038 14 1 16 8 6 213 19 4 0 15 11 6 19 6 3 2 0 18 3 0 48 17 10 24 13 10 24 13 10 3 19 9 89 12 11 5 13 5 288 18 4 11 6 1	43 I 10 9,043 II 00 284 IO 6 241 I7 II 46 II II 61 I2 8 52 0 II 64 I2 2 24I I5 7 202 4 5 31 I2 2 402 4 98 I9 3 I,327 I9 2	309 623 101,107 4,479 460 798 925 840 758 3,210 2,935 440 5,020 1,456 2,878	6 64 9,446 170 2,009 10 99 42 74 544 296 39 1,091 83 3,092 162	315 687 110,553 4,649 2,469 808 1,024 882 832 3,754 479 6,111 1,539 6,111 1,539 1,6660	4 13 4 109 3 4 4.371 1 1 256 3 4 12 18 4 118 15 0 2 10 0 135 2 10 185 11 8 130 0 0 257 10 0 140 0 0 420 0 0 127 18 0	581 9 8 35 2 6 14 15 7 4 5 0 14 6 10 8 0 6 13 11 0 19 17 8 5 2 6 17 2 6 6 19 0 85 10 8	14 9 1 146 14 4 4,952 10 9 291 5 10 12 18 4 133 10 7 4 5 0 14 6 10 10 10 6 148 13 10 205 9 4 135 2 6 274 12 6 146 19 0 505 10 8 176 8 0
Government Buildings Grahamstown Greymouth Greytown Hamilton Hampden Hattings Hawke's	781 17 10 1,376 7 11 1,954 13 9 329 14 0 551 11 6 82 12 5	3,514 17 1 215 18 3 350 1 0 34 13 0 77 8 2 16 15 0	4,296 14 11 1,592 6 2 2,304 14 9 364 7 0 628 19 8	12,565 17,629 26,112 4,852 6,967 1,299	28,794 1,681 3,617 406 816 187	41,359 19,310 29,729 5,258 7,783 1,486	736 0 4 1,185 19 5 1,266 9 2 391 1 8 184 6 8 134 11 8	29 14 5 155 7 7 278 19 8 11 11 0 43 0 8	765 14 9 1,341 7 0 1,545 8 10 402 12 8 227 7 4 199 7 5
Hastings, Hawke's Bay Hastings, *Thames Havelock Hawera Helensville Herbert Hokianga* Hokitika Horndon Junction Huranui Hutt Inglewood Invercargill	232 17 0 315 7 1 116 3 9 39 4 3 166 15 7 1,625 0 0 9 3 7 80 5 11 75 17 4 24 18 11 1,542 2 11	72 16 5 28 16 11 5 0 0 57 3 4 622 13 3 0 4 0 7 6 7 4 5 11 2 0 0 465 3 9	10 19 8 255 17 7 388 3 6 145 0 8 44 4 3 223 18 11 2,247 13 3 9 7 7 87 12 6 80 3 3 26 19 8 2,007 6 8	3,799 4,806 1,854 669 1,894 21,951 154 1,248 1,245 402	63 9 299 789 294 61 711 5,165 3 78 65 23 4,550	1,977 175 4,098 5,595 2,148 730 2,605 27,116 157 1,326 1,310 425 24,479	84 11 8 140 0 0 155 0 0 192 4 2 125 0 0 119 11 8 119 11 8 1,062 6 10 9 11 8 114 11 8 18 0 0 821 13 4	10 10 0 24 3 3 57 0 2 20 4 9 16 15 0 14 6 0 329 12 0 11 10 0 20 1 9 10 13 6 14 5 3 184 17 2	97 16 8 150 10 0 179 3 3 249 4 4 145 4 9 136 6 8 133 17 8 1,391 18 10 21 1 8 135 10 1 155 5 2 32 5 3 1,006 10 6
Kaiapoi Kaikoura Kaitangata	202 15 1 154 16 11 56 19 9	28 17 3 55 12 3	231 12 4 210 9 2	3,274 2,214	354 805 40	3,628 3,019 1,020	221 10 0 125 0 0 130 0 0	38 19 0 16 1 4	260 9 0 141 1 4 150 19 0

^{*} Operator; also Lineman. † Station now closed.

TABLE A—continued.

CASH REVENUE derived from Private and Press Messages, &c.—continued.

Canal Revenue Covernment Covernment
Kakania
Southbridge Junction 10 8 4 0 4 5 10 12 9 169 4 173 19 13 4 30 0 0 49 13 4 Spit 515 16 9 114 13 11 630 10 8 7,873 1,833 9,706 315 12 9 29 16 0 345 8 9 Springston 10 17 3 0 2 0 10 19 3 171 2 173 2 10 0 13 13 8 16 3 8 St. Bathans 67 17 3 3 16 6 71 13 9 1,038 61 1,099 80 0 0 11 7 6 91 7 6 Stirling 37 8 5 7 15 1 45 3 6 655 119 774 25 0 0 16 13 0 41 13 0 Tapanui 180 15 11 16 13 8 197 9 7 2,913 216 3,129 154 13 4 53 6 0 207 19 4 Tarawera* 24 5 0 13 19 2 38 4 2 388 152 540 140 0 0 11 13 3 151 13 3
Taupo* 112 1 0 114 2 4 226 3 4 1,750 1,156 2,906 134 11 8 22 3 6 156 15 2 Tauranga 574 0 4 301 10 3 875 10 7 7,931 2,857 10,788 340 0 9 34 6 5 374 7 2

TABLE A—continued.

Cash Revenue derived from Private and Press Messages, &c.—continued.

Name of Station.	TotaI Cash Revenue derived from Private and Press Telegrams.	Value of General Government Messages.	Total Value of Messages of all Codes.	Total Number of Private and Press Messages.	Total Number of General Government Messages.	Total Number of Messages of all Codes.	Amount Paid for Salaries.	Contingencies.	Total Cost of Maintenance of Station.
Te Awamutu* Temuka Te Nui Te Nui Tokatea Tokomairiro Tophouse* Turakina Upper Hutt Waihola Waikaia Waikaia Waikaia Waimate Junction Wainui* Waipahi Waipahi Waipawa Waipawa Waipawa Waitotara Waitaki Waitotara Waitara Waitara Waitara Waitara Waitara Waitara Waitara Waiwera Wakapuaka Wanganui Warkworth		## s. d. 21 8 11 23 9 9 0 7 8 248 4 9 18 2 4 30 2 3 25 11 11 11 14 10 13 18 1 23 14 3 3 12 10 9 9 3 26 11 4 65 11 10 05 1 10 05 1 10 01 3 3 1 22 12 2 3 12 10 18 3 0 38 14 8 1 0 9 22 12 4 10 7 7 7 7 4 10 6 8 8 12 9 6 1 7 7 7 309 15 7 7	11 16 2 2,154 2 4 76 18 5 1 42 17 2 93 10 10 129 8 4 130 13 2 36 12 7 72 17 7 174 2 9	1,587 3,690 188 23,502 9,22 3,967 2,57 1,367 2,026 1,537 580 1,003 2,557 5,560 314 529 449 4,441 641 3,028 3,392 647 464 1,563 856 964 1,483 13,272 27,448	Messages. 195 288 4 3,212 389 368 135 196 254 43 128 321 672 274 13 26 306 40 234 450 13 286 100 367 79 95 18 3,656	1,782 3,978 192 26,714 1,234 4,356 625 1,502 2,222 1,791 623 1,131 2,848 6,232 588 542 475 681 3,262 3,842 650 750 1,663 1,223 1,043 1,578 13,209 31,104 1,099	£ s. d. 204 11 8 289 1 8 739 0 0 104 11 8 159 3 4 124 11 8 106 6 8 104 11 8 110 0 0 133 1 3 294 17 8 9 11 8 140 0 0 165 11 8 119 11 8 124 3 4 160 0 0 49 11 8 98 6 8 34 11 8 117 10 0 91 3 4 382 9 8 822 13 5 106 5 0	54 17 11 77 17 11 182 18 7 17 17 11 182 18 7 17 17 19 33 14 11 18 14 2 91 19 4 61 9 2 24 18 0 3 16 6 139 5 7 26 0 0 0 66 16 9 27 18 0 26 16 6 0 10 5 0 35 6 0 26 3 3 12 15 0 70 19 2 16 6 0 11 9 5 4 2 0 73 8 0 21 12 8 41 3 3 24 1 3 3 24 1 6 99 15 1	\$\int \text{ s. d.} 209 15 2 343 19 7 77 17 11 1921 18 3 143 5 10 198 6 0 10 134 1 4 68 8 2 249 5 7 351 14 15 5 6 4 8 195 6 6 1 1 1 168 13 8 171 14 8 56 4 4 2 158 13 115 4 6 589 4 2 922 8 133 13 6
Washdyke Waverley	25 17 7 142 19 4	0 7 6 12 17 7	26 5 1 155 16 11	437 2,393	4 159	441 2,552	100 10 0	8 6 10 51 15 11	18 16 10 152 5 11
Wellington Westport Whangarei Whangaroa	6,496 9 6 812 0 2 143 4 10 51 16 10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8,193 18 0 1,139 7 7 177 18 1 61 1 11	154,985 10,057 1,872 781	17,985 3,603 517 179	172,970 13,660 2,389 960	4,931 0 10 326 5 0 148 13 4 77 18 4	544 0 8 123 1 7 12 13 7 32 1 11	5,475 I 6 449 6 7 161 6 II 110 0 3
White's Bay* Winton* Winslow	80 19 6 16 5 2	9 2 2 0 6 0	 90 1 8 16 11 2	 1,414 271	 146 5	 1,560 276	135 0 0 140 0 0 19 3 4	16 0 0 15 12 0 21 6 9	151 0 0 155 12 0 40 10 1
Totals	73,284 1 10	†19,148 12 4	92,432 14 2	1,065,481	194,843	1,260,324	57,877 4 2	11,462 17 6	69,340 1 8

^{*} Operator; also Lineman. † From this amount £128 3s. 9d. to be deducted, being cash received from Government Annuities Department.

TABLE B.

Number of Interprovincial Letters forwarded during the Year ended 31st December, 1877; Number of Telegrams despatched in each Provincial District during the Year ended 30th June, 1878; and proportion of Telegrams to every 100 Letters; together with a similar Return for the previous Year.

			1877	7-78.				1876-77.		
		Number of Letters.	Numl of Telegra	Tel	Proportion of egrams sentery 100 Lette	for	umber of etters.	Number of Telegrams	Telegra	ortion of ms sent for 00 Letters.
Wellington Marlborough Nelson Canterbury Westland Otago Southland Hawke's Bay Taranaki Auckland	 	1,068,204 155,993 248,802 1,357,049 316,257 1,275,874 234,768 298,009 114,228 1,009,200	74, 183, 88, 237, 46, 75,	828 526 229 118 832 192 765 599	28·63 15·27 29·95 13·5 27·89 18·64 19·67 25·42 26·79 19·25	1,1 2,1,1 2,1,3 2,2 2,1,3	26,387 43,719 37,257 76,688 80,730 19,753 30,200 62,623 01,300 62,263	260,449 21,016 57,055 157,143 90,700 223,615 38,533 65,645 23,348 186,928	1 2 1 3 1 1 1 2 2 2 2 2	8·11 4·62 4·04 3·35 2·3 6·94 6·73 4·99 3·04 1·67
Total No. of Letters Total No. of Telegrams Proportion of Telegrams to every 100 Letters	1	1875-76. 4,731,873 1,051,086						1869-70. 2,374,060 185,423 7·81	1968-69. 2,749,488 146,167 6·12	1867-68. 1,938,578 106,104 5:47

TABLE C.

Ordinary, Press, and Provincial Government Telegrams despatched during each Quarter of the Year ended 30th June, 1877; Ordinary and Press Telegrams despatched during each Quarter of the Year ended 30th June, 1878; and the Revenue derived from each Class.

						1876–77.							
-				Septem	September Quarter.	Decem	December Quarter.	Marc	March Quarter.	June	June Quarter.		Totals.
				No. of Telegrams.	Revenue derived, Telegrams.	No. of Telegrams.	Revenue derived.	No. of Telegrams.	Revenue derived.	No. of Telegrams.	Revenue derived.	No. of Telegrams.	Revenue derived.
					£ s. d.		æ. s. d.		£ s. d.		£ s. d.		£ s. d.
Ordinary Telegrams	:	:	:	197,156	13,168 6 10	217,573	14,442 13 8	226, 151	14,878 16 6	227,726	14,910 1 5	868,606	81 668,29
Press Telegrams	:	:	:	18,282	2,049 9 1	16,985	1,441 12 9	21,181	1,457 11 9	19,345	1,385 18 11	75,793	6,334 12
Provincial Government Telegrams		:	፧	4,515	478 11 0	3,369	347 13 8	:	:	:	Ē	7,884	826 4
Totals	:	:	÷	219,953	15,696 6 11	237,927	237,927 16,232 0 1		247, 332 16, 336 8 3		247,071 16,296 0 4		952,283 64,560 15 7

1877-78.

						September (iber Quarter.	Deceml	December Quarter.	Marc	March Quarter.	June	June Quarter.		Totals.
	•					No. of Telegrams.	Revenue derived. Telegrams.		Revenue derived.	No. of Telegrams.	Bevenue derived. Telegrams.	No. of Telegrams.	Revenue derived. Telegrams.	No. of Telegrams.	Revenue derived.
							£ s. d.		£ s. d.		£ s. d.		£ s. d.		ئۇ بە
Ordinary Telegrams	:	÷	:	፥	:	222,588	14,964 2 8	235,974	235,974 15,834 13 9		258,138 17,288 14 2		254,715 17,255 17 11	971,415	971,415 65,343 8 6
Press Telegrams	፧	:	:	:	:	23, 292	2,347 7 4	22,810	22,810 2,108 0 7		23,106 1,701 8 1	24,858	1,783 17 4	94,066	7,940 13 4
E	Totals	:	:	:	:	245,880 17		258,784	311 10 0 258,784 17,942 14 4		281,244 18,990 2 3	279,573	279,573 19,039 15 3 1,065,481 73,284 1 10	1,065,481	73,284 1 10

TABLE D.

COMPARATIVE TABLE showing the Progress of the Telegraph Department during the Financial Years ended 30th June, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, and 1878.

	-			9										
Number Number		ź	Vimbon	Number of T	Number of Telegrams forwarded during the Year.	led during	Revenue derived from Private, Press,	Value of	Total Value	Cost of	Cost of		Cost of	
of of of the Miles of Line. Wire.		St. St.	Stations open.	Private, Press, and Provincial Government.	General Government.	Total.	and Provincial Government Messages, and Incidental Receipts.	Government Messages.	of Business done during the Year.	Maintenance of Stations.	Maintenance of Lines.	Total Expenditure.	Main- tenance of Lines per Mile.	Tariff in Operation.
							£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
699 1,390	1,390		13	24,761	2,476	27,237	5,561 19 2	483 3 2	6,045. 2 4	3,934 3 4	2,443 2 11	6,377 6 3	3 9 10	
757 1,498	1,498	_	21	55,621	15,331	70,952	9,070 10 1	3,770 4 8	12,840 14 9	8,017 14 7	2,541 4 11	10,558 19 6	3 7 1	- Mileage taniff.
1,110 2,223	2,223		31	72,241	26,244	98,485	11,652 3 7	6,672 0 3	18,324 3 10	9,489 17 10	5,406 7 3	14,896 5 1	4 17 4	
1,329 2,495	2,495		3	106,070	20,037	156,157	18,520 10 4	13,430 11 9	31,951 2 1	14,266 12 7	8,547 4 9	22,813 17 4	9 8 9	
1,661 2,897	2,897		26	122,545	62,878	185,423	17,218 1 4	12,252 6 0	29,470 7 4	16,417 7 4	14,120 4 10	30,537 12 2	8 9 11	tion up to 1st Sept.,
*1,976 3,247	3,247		72	253,582	59,292	312,874	22,419 8 8	9,876 17 6	32,296 6 2	21,254 4 3	11,344 3 8	32,598 7 11	5 19 6	tariff from 1st Sept.,
†2,185 3,823	3,823	_	81	344,524	67,243	411,767	28,121 10 0	11,043 3 9	39,164 13 9	23,593 9 9	8,858 19 7	32,452 9 4	4 2 3	1870; and 1s. tariff
12,356 4,574	4,574		86	485,507	83,453	568,960	39,680 18 9	11,105 2 0	50,786 0 9	27,040 18 10	9,479 5 4	36,520 4 2	4 1 11	110m 18t April, 1670.
\$2,530 5,782	5,782		105	645,067	107,832	752,899	46,508 18 10	12,618 11 6	59,127 10 4	38,801 19 4	11 21 120'51	53,823 17 3	6 3 11	
2,986 6,626	6,626		127	786,237	130,891	917,128	55,301 12 3	13,679 10 9	68,981 3 0	45,814 11 4	14,240 19 7	60,055 10 11	4 16 4	From 1st November
¶3,154 7,247	7,247		142	890,382	160,704	1,051,086	62,715 10 4	16,154 6 0	78,869 16 4	61,696 14 5	21,074 8 8	82,771 3 1	5 18 10	1873, address and signature given in
**3,259 7,423	7,423		155	952,283	172,159	1,124,432	65,644 15 3	17,024 8 9	82,669 4 0	63,353 10 10	17,931 8 0	81,284 18 10	5 12 11	free.
113,434 8,035	8,035		182	1,065,481	194,843	1,260,324	73,284 1 10	19,148 12 4	92,432 14 2	69,340 1 8	18,259 4 9	87,599 6 5	5 10 0	
			-			-		-		1				

* From this mileage 78 miles to be deducted before computing the cost per mile for maintenance.
† From this mileage 32 miles to be deducted before computing the cost per mile for maintenance.
‡ From this mileage 42 miles to be deducted before computing the cost per mile for maintenance.
§ From this mileage 106 miles to be deducted before computing the cost per mile for maintenance.

|| From this mileage 31 miles to be deducted before computing the cost per mile for maintenance.
| From this mileage 174 miles to be deducted before computing the cost per mile for maintenance.
| From this mileage 85 miles to be deducted before computing the cost per mile for maintenance.
| From this mileage 116 miles to be deducted before computing the cost per mile for maintenance.

TABLE E.

Cosr of Maintenance of Telegraph Lines for the Financial Year ended 30th June, 1878.

Section.	Number of Miles.	Salaries of Linemen and Inspectors.	Travelling Expenses of Linemen and Inspectors.	Extra Labour.	Cost of Material used for Repairs.	Total Cost of Maintenance.	Cost per Mile.
Riverton to Balclutha, including Winton and Switzer's Lines	200	£ s. d. 373 15 0	£ s. d. 286 4 10	£ s. d. 57 15 5	£ s. d. 17 2 10	£ s. d. 734 18 1	£ 8. d.
Tokomairiro to Queenstown	142	275 0 0	122 16 9	17 2 6	28 16 5	443 15 8	3 2 6
Balclutha to Waitaki, including Naseby, Ophir, St. Bathans, Kaitangata, Outram, and Otago Heads Lines	293	548 19 0	176 17 10	144 0 2	47 17 4	917 14 4	3 2 7
Waitaki to Christchurch, including Akaroa, Geraldine, Oxford, and Lyttelton Lines	231	473 7 8	890 15 10	337 3 6	482 6 4	1,683 13 4	7 5 9
Christchurch to Greymouth, including Ross Line	196	392 18 4	720 9 7	158 12 7	126 4 4	1,398 4 10	7 2 8
Greymouth to Westport, including Reefton and Lyell Lines	177	443 10 0	426 9 5	192 0 11	118 3 11	1,180 4 3	6 13 4
Christchurch to Blenheim, including Rangiora Line (8 miles), Southbridge Line (30 miles), and Waiau Line (37 miles)	283	698 15 0	444 7 0	208 8 0	8 6 06	1,441 19 3	5 1 10
Blenheim to Nelson, including White's Bay and Wakapuaka Lines	86	258 15 0	266 16 0	108 14 6	29 5 2	663 10 8	7 4 2
Nelson to Lyell, including Motueka Line	150	190 16 8	349 15 5	42 8 7	18 7 9	601 8 5	4 0 2
Wellington to New Plymouth, including Opunake Line, and Lines Palmerston North from Foxton (25 miles), and Palmerston to Feilding (12 miles)	338	573 19 6	761 1 1	, 283 5 4	174 0 4	1,792 6 3	5 6 0
Wellington to Napier	221	463 6 8	415 13 9	155 9 8	158 12 11	1,193 3 0	5 7 11
Napier to Tauranga, including Gisborne and Opotiki Linea	363	977 4 8	490 19 11	183 9 0	128 7 0	1,780 0 7	4 18 0
Tauranga to Grahamstown	73	410 18 4	247 12 8	171 5 8	48 2 10	877 19 6	12 0 6
Auckland to Coromandel and Alexandra, including Manukau Heads, Tokatea, and Waiwera Lines	586	951 5 0	612 3 7	493 6 6	302 8 8	2,359 3 9	8 4 11
Auckland to Bay of Islands and Hokianga, including Kawakawa to Mongonui	273	525 8 4	2 1 929	128 1 4	11 11 7	1,191 2 10	4 7 3
Totals	3,318	7,557 19 2	6,238 5 3	2,681 3 8	1,781 16 8	18,259 4 9	*5 10 0

* Total average cost of mainentance per mile.

Note.—Blenheim to Tophouse (60 miles), Winton to Lowther (37 miles), and Waipukurau to Kopua (19 miles), not included in this table.

TABLE F.

INSULATION TESTS of the Cook Strain Cable for the Years ended 30th June, 1869, 1869, 1871, 1872, 1873, 1874, 1875, 1876, 1877, and 1878 respectively, showing the Resistance per knot after Two Minutes' Electrification in Megohms (British Association Units of Resistance).

No. 3 Wire.	843 460 460 360 360 360 4118 4452 4452 4452 4452 4452 4452 4452 445	
No. 2 No. Wire.	1.095 1.151 1.357 1.380 1.380 1.380 1.222 1.222 1.222 1.222 1.223 1.233 1.231 1.231 1.231	-
No. 1 Wire.	5575 5620 570 511 512 513 514 515 516 517 518 518 519 519 519 519 519 519 519 519	-
	448 44444844444 488444	-
Date.	1876—Oct. Nov. Dec. 1877—Fan. Fan. Fan. Fan. Fay. May June July Aug. Sept. Oct. Nov. Dec. 1878— Jan. Fan. Fan. Fan. Fan. Fan. Fan. Fan. F	
No. 3 Wire.	1,277 1,139 1,277 1,064 1,064 1,251 1,251 1,251 1,251 1,391	
No. 2 Wire.	444 30.4 37.6 41.7 41.9 120. 165. 161. 649 2.886 623 154 178 178 178 178 178 178 178 178 178 178	
No. 1 Wire.	764 636 636 636 712 712 749 6692 622 291 291 812 835 835 838 835 838 835 838 835 836 836 836 836 836 836 836 836 836 836	
Date.	1875— Feb. 23 March 24 April 23 June 24 June 24 June 24 Oct. 23 Nov. 24 Dec.‡ 1876— Jan. 30 Feb. 24 March 24 March 24 May 11 May 24 June 26 July 24 June 26 July 24 Sept. 25	
No. 3 Wire.	1,231 1,203 1,564 1,1193 1,214 1,429 1,312 1,488 1,217 1,106 1,564 1,564 1,563 1,564 1,563 1,695 1,695 1,695	
No. 2 Wire.	29.7 50.0 61.3 68.3 187.2 187.2 187.2 187.2 187.2 187.2 187.2 188.0	
No. 1 Wire.	650 661 661 662 663 663 663 663 663 663 663 663 663	
	22222222222222222222222222222222222222	-
Date.	1873— May June July Aug. Sept. Oct. Nov. 1874— Jan. Kay June July Aug. Sept. Oct. Nov. 1875— Jen.	
No. 3 Wire.	1,123 1,481 1,079 1,079 1,073 938 979 979 1,173 1,735 1,735 1,307 1,271 1,271	-
No. 2 Wire.	1:31 2:65 9:98 9:99 8:29 9:5 18:7 39:1 173 208 220 10:3 18:1 228 220 220 220 220 220 220 220 220	-
No. 1 Wire.	517 641 570 570 578 649 687 763 826 770 770 763 867 763 867 642 642 643 644 645 667 668 676 676 676 676 677 677 677 677	
Date.	1871— Sept. 25 Oct.† Nov. 7.3 Nov. 7.3 Dec. 28 1872— Jan. 27 May 27 May 28 July 23 July 23 July 22 July 23 July 22 July 22 July 23 July 23 July 22 July 23 July 23 July 23 July 23 July 24 July 23 July 24 July 23 July 24 July 23 July 24 July 23 July 24 July 23 July 24 July 25	
No. 3 Wire.	865 707 967 619 812 871 623 893 1,108 1,149 1,121 1,211 1,286 1,288 1,444	
No. 2 Wire.	2 3 9 8 4 8 6 4 8 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	-
No. 1 Wire.	4412 4412 4412 4413 3344 430 430 4413 450 450 471 471 471 471 471 471 471 471 471 471	-
	1	-
Date.	1870— Jan. Feb. March March April May Juny Juny Aug. Sept. Oct. Nov. Dec. 1871— Jan. Feb. March April May June June	
No. 3 Wire.	554 684 667 643 709 1,094 1,000 729 729 729 729 950 968 950 968 950 968 970 1,104 1,205 1,275 1,253 1,253	
No. 2 Wire.	71 1021 1049 1056 1006 1006 1006 1006 1006 1006 1006	
No. 1 Wire.	473 634 634 5547 6638 6630 697 697 6649 6649 6649 6649 6649 6649 6	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-
Date.	Sept. Sept. Sept. Sept. Nov. I Nov. I Nec. 1869 – June Sept. Sept. Sept. Sept. June April I May June July April I May June July April Nov. Dec. Dec.	

* This test was taken with zinc to earth; all the others with copper to earth. † No tests taken. ‡ Cable broken.

TABLE G.

INSULATION TESTS of SECOND COOK STRAIT CABLE for the Years ended 30th June, 1877 and 1878, showing the Resistance per knot after two Minutes' Electrification in Megohms (British Association Units of Resistance).

Length of Cable Laid, 44.315 Knots.

Capacity not farads. S5						
12, 1877 Five Cells. Fifty Cells. Perfector 12, 1877 3,341 2,870 11:5085 3885 24 3,341 2,870 11:5085 3885 24 3,341 2,877 3551 24 2,689 2,674 24 2,689 2,674 24 2,613 2,833 24 2,613 2,834 24 2,613 2,834 24 3,014 2,834 24 2,545 2,545 24 2,085 2,251 24 2,386 1,897 24 2,096 1,777 24		Dielectric Resi	stance per Knot.	Copper Resistance	Inductive Capacity	Ramanke
12, 1877 3,341 2,870 11.5085 3885 24 3,341 2,141 24 4,000 2,347 24 2,689 2,674 24 2,689 2,674 24 2,613 2,538 24 3,964 2,834 24 2,545 24 2,545 23 2,085 2,251 24 2,085 2,251 25 2,396 1,897 24 2,396 1,897 24 2,052 1,777 24 2,052 1,777	Tanc.	Five Cells.	Fifty Cells.	Ohms.	in Microfarads.	TROMOTINE.
24 3,341 2,141 24 4,000 2,857 24 4,000 2,347 23 2,689 2,674 24 2,613 2,634 24 2,613 2,834 24 3,964 2,834 24 2,054 2,834 24 2,085 2,251 23 2,085 2,251 23 2,085 2,126 24 2,396 1,897 24 2,396 1,897 24 2,052 1,777 24 2,052 1,777	March 12, 1877	=	2,870	11.5085	.3385	First test taken immediately after laying.
24 3,000 2,857 24 2,347 24 2,689 2,674 24 2,689 2,689 24 2,613 24 2,613 24 2,613 24 2,545 2,834 24 2,545 2,813 24 2,645 2,251 25 2,265 24 2,096 24 2,096 24 2,052 1,777 24 2,052 1,777 24 2,052 1,777	224	3,341	2,141		:	
24 2,347 23 2,689 2,674 24 3,134 2,583 24 2,613 2,538 24 2,634 24 2,545 2,834 24 2,545 2,313 24 2,545 2,251 23 2,098 2,251 23 2,096 1,887 24 2,036 1,897 24 2,052 1,777 24 2,052 1,777	24 ,,		2,857	;	-3351	
23 3,689 2,674 24 3,134 2,833 24 3,134 2,833 24 3,134 2,838 24 3,014 2,834 24 3,014 2,813 24 3,014 2,858 24 3,257 2,251 23 3,227 2,251 23 1,887 24 3,33 1,777 24 3,323 1,777 24 3,052 1,777	24		2,347		:	
24 3,134 2,833 24 3,134 2,538 24 3,064 2,538 24 3,014 2,834 24 3,044 2,813 24 3,245 2,358 23 3,227 2,251 23 3,227 2,126 23 3,227 2,396 1,897 1,897 24 3,323 1,777 24 3,052 1,777	23 ,,		2,674		: :	
24 2,613 2,538 24 3,964 2,834 24 3,014 2,813 24 2,645 2,358 24 2,085 2,251 23 2,096 1,887 23 2,396 1,887 24 2,323 1,727 24 2,052 1,777	24 ,,		2,833		: :	
24 3,964 2,834 24 3,014 2,813 24 3,014 2,813 24 2,545 2,358 24 1878 2,251 23 3,227 2,126 23 2,096 1,887 24 2,396 1,897 24 2,323 1,727 24 2,062 1,777	24		2,538		: :	
24 3,014 2,813 24 2,545 2,358 24 3,027 2,251 24, 1878 3,227 2,126 23 1,887 24 1,887 25 1,887 24 2,396 1,897 24 2,323 1,727 24 1,992 1,777	24 ,,		2,834		: :	
24 2,545 2,358 24 2,085 2,251 24 2,096 23 2,096 1,887 24 2,396 1,727 24 2,323 1,777 24 2,052 1,777	24 ,,		2,813		: :	
24 " 2,085 2,251 24, 1878 2,085 2,126 23 " 2,096 1,887 24 " 2,396 1,727 24 " 2,323 1,777 24 " 2,923 1,777	24		2,358		_	
24, 1878 3,227 2,126 23 " 2,096 1,887 28 " 2,396 1,897 24 " 2,323 1,727 24 " 2,323 1,777 24 " 2,923 1,777	24 ,,		2,251		: :	
23 2,096 1,887 23 2,396 1,897 24 2,323 1,727 24 2,052 1,777 24 1,992 1,777	24, 1878		2,126			
23 , 2,396 1,897 2,323 1,727 2,4 , 2,052 1,777 24 1,992 1,777	23,		1.887			
24 ,, 2,323 1,727 2,052 1,777 2,052 1,777	23		1,897		: :	
24 ,, 2,052 1,777 2,4 ,,	24 ,;		1,727		: :	
1.992	24 ,,		1,777		: :	
	24		1,777			

TABLE H.
Total Cost of the Lines of Telegraph throughout New Zealand, and of the Cook Strait Cable.

Section of Line.	Length of Section in Miles.	Cost of Clearing Bush.	Total Cost of Poles, including Delivery.	Cost of Wire, Arms, Insulators, &c., including Carriage.	Cost of Erection.	Total Cost of Section.	Cost per Mile
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£s.
liverton to Invercargill	24		547 2 10	96 10 11	262 12 7	906 6 4	
sluff to Invercargill	19				812 15 6	812 15 6	
nvercargill to Mataura	32	• • • •	1,199 0 0	739 1 4	469 11 0	2,407 12 4	
lataura to Waitaki	189	•••	8,353 18 0		1,720 13 3	13,108 19 0	
aitaki to Hurunui	218	1.229 3 3	6,554 8 8 5,213 14 0	3,427 13 6 $3,953$ 3 4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	13,743 1 2 $14,057$ 6 7	$\begin{array}{cccc} b63 & 0 \\ c58 & 6 \end{array}$
urunui to Nelson	$\begin{array}{c c} 241 \\ 7 \end{array}$,		,-	503 12 6	503 12 6	
hite's Bay Line ort Chalmers Line	8	•••	•••		800 0 0		e100 0
ristchurch to Greymouth	176	•••		1	3,808 0 0	3,808 0 0	
reymouth to Westport	67	1,951 7 6	1,070 16 5	960 15 4	3,019 17 9		104 10
enheim to Woodend, re-		,	,				
construction (including	ĺ						
White's Bay Line), 194							
miles		100 0 0			3,484 12 0	10,743 19 9	
lmerston to Naseby	54		754 14 10	247 2 2	435 19 9	1,437 16 9	
komairiro to Queenstown	140	•••			4,432 1 4	4,432 1 4	g31 13
komairiro to Queenstown,					2045 2 10	9945 9 10	10 1
reconstruction, 140 miles			•••		2,247 3 10	2,247 3 10	16 1
ird Wire from Dunedin to Oamaru (including] }				İ	
			}				
loop line to Kakanui, 4	4		264 12 0	830 16 11	426 15 9	1,522 4 8	16 3
miles), 94 miles rristchurch to Hokitika,	, 4s	***	#03 14 U	030 10 11	120 10 0	2,022 TO	-00
reconstruction, 146 miles			1,881 16 5	446 13 5	873 12 11	3,202 2 9	21 18
reconstruction, 140 miles	50	65 10 0			817 18 5	2,409 16 7	48 3
elson to Motueka	32	10 10 0			321 11 2	1,580 0 0	
revinouth to Reefton	50	2,649 0 0	1		1,795 9 11	6,986 10 6	
ithfield to Waiau	37		801 12 4	688 2 5	847 4 6	2,336 19 3	63 3
vercargill to Winton	14	,,,	295 2 0		209 1 0	660 7 11	47 3
okitika to Ross	20	401 3 0			200 12 6	$982 \ 19 \ 6$	
niapoi to Rangiora	8	,	207 0 0	48 2 8	37 17 6	293 0 2	36 12
reymouth to Westport,					1 0 1 0 1		
reconstruction, 67 miles			675 14 3	69 16 9	1,216 9 1	1,962 0 1	29 5
vercargill to Balclutha,	1		1001 0 0	110 15	5 00 10 0	0.041.77. *	00 0
reconstruction, 70 miles		•••	1,221 3 0	113 15 5	706 12 3	2,041 11 5	29 3
avelock to Nelson, recon-			250 10 6	17.15.0	144 5 8	5/1 10 O	07 10
struction, 25 miles		•••	379 18 6	17 15 0	144 5 2	541 18 8	21 13
oird Wire, Oamaru to			936 2 10	1,935 7 2	1,077 10 8	3,949 0 8	24 16
Christchurch, 161 miles			930 2 10	1,555 7 2	1,077 10 8	0,040 0 0	24 10
cond Wire, Christehurch to Hokitika, 146 miles			290 6 0	1,286 7 0	518 13 6	2,095 6 6	14 7
cond and Third Wires,	•••		200 0 0	1,200 , 0	010 10	-,000 0 0	1.0
Hokitika to Greymouth,	1	1			1	'	
60 miles				499 7 0	216 2 5	715 9 5	11 18
ourth Wire, Palmerston				1			
to Dunedin, 33 miles	·		15 0 0	335 11 3	212 13 10	563 5 1	17 1
efton to Lyell	32	3,863 3 6	898 5 6	799 15 9	503 11 0	6,064 15 9	189 10
panui and Switzer's Line,	į				ļ		ļ
from Clinton	48		615 13 4	669 9 5	393 13 4	1,678 16 1	34 19
ourth Wire, Blenheim to							
Christchurch (completed	ļ				1		
from Christchurch to				990 0 =	101 75 0	470 = 1	١
Leithfield), 29 miles		•••	0.071.10.0	286 9 7	131 17 6	418 7 1	14 8
aseby to Clyde Line	56	•••	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		632 19 9 $217 6 10$	6,296 1 6 $1,220$ 4 0	
uthbridge Line	30	•••	049 9 2	999 G U	217 6 10	1,220 4 0	40 14
rgill's Line from Rox-	2		16 4 0	157 1 0	24 0 10	197 5 10	00.10
burgh eraldine Line from Te-	4	*	10 7 0	107 1 0	22 0 10	101 9 10	98 12
muka	12		30 11 9	324 1 10	33 17 3	388 10 10	32 7
ourth and Fifth Wires,	12	•••	90 11 0	021 1 10	00 1, 0	000 10 10	024 7
Christchurch to Bluff							
(completed from Christ-	1						
church to Dunedin and	1						
from Bluff to Clinton),							
307 miles		•	1,041 7 8	6,339 19 6	1,768 14 10	9,150 2 0	29 16
ristchurch to Hokitika,						I	
reconstruction, 146 miles		2,610 0 6	252 11 0	462 2 0	1,294 5 3	4,618 18 9	31 12
komairiro to Queenstown,	l	ļ					
reconstruction, 140 miles		•••	685 8 0	41 12 9	110 15 0	837 15 9	5 19
eymouth to Hokitika,			F00 10 -	451 2 2	1 500 0 -	4100 -	
reconstruction, 30 miles		1,181 9 0	789 19 1	451 6 5	1,757 9 1	4,180 3 7	139 6
enheim to Christchurch,	1	107 10 7	1 000 15 6	1005 10 0	1645 0 5	4700 TF -	00 - 1
reconstruction, 206 miles	110	101 18 1	$\begin{bmatrix} 1,099 & 17 & 6 \\ 5,429 & 8 & 3 \end{bmatrix}$		1,645 9 7	4,732 17 5	22 19
elson to Lyell	118	4,210 5 8	5,429 8 3	2,649 19 1	2,435 2 9	14,724 15 9	124 15
cond Wire, Greymouth	1		405 7 6	654 1 0	619 5 4	1679 19 10	90 0
to Lyell, 82 miles	•••		±∪0 / 0	001 1 0	010 U 4	1,678 13 10	20 9
Carried forward							
Carriou for waru		•••		•••	***	•••	

a Purchased from Southland Government. b Includes £450, purchase of Lyttelton line. c Approximate cost. d Approximate cost of poles, &c. e Purchased from private firm. f Purchased from Canterbury Government. g Purchased from Otago Government; total cost includes £2,047 18s, 10d. for new material.

TABLE H—continued.

Total Cost of the Lines of Telegraph, &c.—continued.

Section of Line.	Length of Section in Miles.	Cost of Clearing B		Total C Poles, in Delive	cludin	Insulat incl	ms,	&c.,	Cost Erecti			Total C Section		ď	C per	ost Mil	e.
Brought forward Fourth and Fifth Wires, Christchurch to Dunedin, and Third and Fourth		£s.	d.	£	s. ć	£	s.	d.	£	s.	d.	£	8.	d.	£	s.	d.
Wires, Dunedin to Bluff, completion of (79 miles double wire)		•••		150	12	405	11	2	53 9	3	7	1,095	6	9	13	17	3
Second Wire, Tokomairiro to Lawrence, 34 miles	ļ ,			20	0	37	8	5	137	6	1	194	14	6	5	14	6
Otago Heads Line	$\begin{array}{c} 14 \\ 6 \end{array}$	•••		345 184		3 174 2 78	15		374 139		2	894 398		11 1		17 7	
Kaitangata Line Rangiora to Oxford	21	•••		663	14 1	197	7	5	95	14	11	956	17	2	45	11	3
Outram Line Reefton to Westport	7 28	1,189 17	7 0	$\begin{array}{c} 151 \\ 602 \end{array}$		8 55 0 502	17	6 7	$\begin{array}{c}92\\636\end{array}$	4, 1	10	298 $2,931$	9	6 5		12 13	
Reefton to Westport, addi-		1,100 1	V	002	•			•		_		-,00-	•				
tional expenditure, 28 miles		6 15	5 0	514	19	194	1	8	247	4	4	963	0	0	34	7	10
Blenheim to Tophouse	60	199		2,115		1,219				8	8	4,343	9	5	72		
Third Wire, Nelson to Greymouth, 200 miles		•••		70	2	1,796	2	10	1,025	8	11	2,891	14	0	14	9	2
Christchurch to Waitaki,		•••				'				9			2	4	ب ا	1	. 71
reconstruction, 143 miles Christchurch to Greymouth,	•••	•••		462	19	9 48	13	2	217	Э	5	729	2	4	5	. 1	11
reconstruction, 176 miles Railway Wires,—		•••		62	19	23	6	9	367	3	1	453	8	10	2	11	6
Dunedin to Tokomairiro, 33 miles		•••		104	12	522	2	9	231	9	10	858	4	9	26	0	, 1
Hampden to Waitaki, 35							12	4	135			392	4	2	11		
Winton to Lowther *Canterbury	37 			348		1		7	341	. 14	9	958	. 0	4			10
Totals—South Island	1,861	19,769 11	. 11	59,219	11	47,411	. 9	2	55,999	4.	3	182,399	16	7	98	0	2
Lyell's Bay to Wellington Wellington to Patea Wellington to Masterton Masterton to Castlepoint Castlepoint to Porangahau Porangahau to Napier Napier to Tauranga Auckland to Alexandra	4 180 60 36 53 68 200 152	67 18 264 4 22 18 176 9 74 (153 18	6 6 1 4 0 0	123 4,647 2,362 2,459 9,404	12		9 4 3 18 2 18 3 9	4	57 3,062 2,357 1,267 1,105 1,252 5,767 3,256	6 9 16 10 18	0 9 3 1 10 2 5 0	10,093 3,460 1,679 4,367 4,704 21,090	$\begin{array}{c} 15 \\ 2 \\ 14 \end{array}$	0 3 1 8 8 4 0	56 57 46 82 69 105	1 18 19 8 3 9	6 4 6 2 9 0
Auckland to Newcastle, reconstruction, 70 miles (including new line from Hamilton to Cambridge, 12 miles) Mercer to Thames, including four towers for span-	12	•••		1,393	14	841	. 15	9	1,453	3	8	3,688	13	11	44	19	8
ning Thames and Piako Rivers	36	**1		2,158	8 1	1,386	3	10	1,492	7	5	5,037	10	1	139	18	7
Second Wire from Napier		793 19	9	31	17	2,607	, 9	1	880	11	1	4,313	16	17	21	11	4
to Tauranga, 200 miles Tauranga to Katikati	30			1,041	3	530	5	9	1,266	0	10	2,837	9	7	94	11	8
Katikati to Grahamstown Third Wire from Auckland	43	1,584	1 3	2,521	19	1,461	. 8	6	1,482	19	3	7,050	4	5	163	19	2
to Mercer, 40 miles		4.4.7				234	l 0	9	383	18	5	617	19	2	15	9	O,
Third Wire from Auckland to Grahamstown, 76 miles Third Wire from Welling-				173	1	816	9	7	1,136	6	11	2,125	18	0	27	19	5
ton to Masterton, 60	ļ																
miles; from Napier to Waipukurau, 42 miles				146	17	188	3 17	2	1,020	11	10	1,356	6	6	13	5	10
Grahamstown to Coromandel	30	1,108 18	3 6	605	6	3 414	l 6	9	2,076	12	\mathbf{o}^{i}	4,204	18	6	140	3	3
Patea to New Plymouth,		1,100 1	, ,					Ī	_,-,					Ĭ			
90 miles; less 28 miles not yet erected	62			4,026	17 1	0 1,144	11	3	2,002	5	9	7,173	14	10	†115	14	1
Onehunga to Junction, re- construction, 5 miles				,		.]	4 6			19			10	- {		_	
Third Wire, Napier to Grahamstown, 270 miles				37	18	3,680	10	4	1,844	11	4	5,563	0	4	20	12	0
Granamavoun, 210 miles				l	-	_								-			

	erected by the Pr	ovincial Government	of Canterbury, have, since the date	of the last report	, been taken over
by this department:-	Miles of Line.	Miles of Wire.		Miles of Line.	Miles of Wire.
Dunsandel to Timaru	2	80	Horndon Junction to White Clif	12	12
Christchurch to Southbridge		32	Heathcote Valley to Lyttelton.	•••	13
Christchurch to Amberley	25	34			25
Rangiora to Oxford	***	22			71/4
Rolleston to Sheffield	***	28	Heathcote Valley to Lyttelton.	***	8
	† This line now	dismantled from Sto	ny River, and new one substituted,	•	

TABLE H—continued.
Total Cost of the Lines of Telegraph, &c.—continued.

Section of Line.	Length of Section in Miles.	Cost Clearing		ı.	Total Co Poles, inc Delive	ludi		Cost of Arn Insulato includ Carri	ns, rs, & ling	\$с.,	Cost Erecti			Total Co Section		of	C per	ost Mil	le.
		£	s. (d.	£	8.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	8.	d.
Brought forward Manukau Heads Line	36				833	17	8	340	5	8	1,057	15	7	2,231	18	11	61	19	11
Cambridge to Alexandra,					044	-	C	940	_				H				96	11	0
reconstructiou, 50 miles Maketu to Opotiki	54	•••		-	844 1,959	7 8	6 3	$\frac{349}{1,238}$	5 9	8 10	$643 \\ 1,301$	4. 4.	7 6	1,836 4,499		9 7	83	14 6	
Wellington Signal Station	4				, co	c	^		Δ	6	94	10	c	105	7.4	ถ	10	10	c
Line and Lunatic Asylum Second Wire, Wellington	41			ļ	62	6	0	90	9	8	94	18	U	187	TA	ند	40	10	6
to Wanganui, completed																			
from Wanganui to Bull's, 26 miles					54	0	0	385	4	3	202		6	642	0	9	24	13	10
Poverty Bay Line Kaipara and Bay of Islands	107	23	15	0	$3,\!524$	10	0	5,610	4	0	4,519	6	3	13,677	15	3	127	16	7
Line	220	5,323	6	8	4,993	15	0	2,685	16	0	5,256	0	6	18,258	18	2	82	15	4
Masterton to Waipukurau, Third Wire, 115 miles					96	5	6	1,542	9	0	555	6	5	2,194	O	11	19	1	6
Foxton to Palmerston	25				653		3	283		•	241							3	
Fourth Wire, Wellington to Masterton, and Wai-																	ĺ		
pukurau to Napier, 102							Ì										!		
miles Tokatea Line					138 83	7	6 10	932	$\frac{5}{12}$		677 91	$\frac{2}{5}$	5 8				17 50	2	- 8 11
Tokatea Line Thames Alteration, includ-	4				09	1	10	21	1.4	9	91	J	0	201	19	11	30	Ð	1.1
ind Pukorokoro Line, 9		49	9	0				420	8	4	811	8	3	1,281	5	7	142	7	3
miles Second Line, Wanganui to		4:5	ð	U		•	Ì	440	0	130	011	O	9	1,231	υ	•	192	′	0
Hawera, 58 miles	•••				. 19	7	0	693	16	0	211	16	0	924	19	0	15	18	11
Second Wire, Wellington to Wanganui, completed																			
from Wellington to Otaki																			
and Bull's to Foxton, 82 miles					551	0	3	2,875	4	4	1,937	6	5	5,363	11	0	65	8	2
Fourth Wire, Waipukurau		į.			321	17	۸	216	16	3	354	7	11	893	1	2	40	10	9
to Porangahau, 18 miles Second Wire, Wellington			•		521	17	U	210	ΤÛ	3	904	•	. 11	099	T	ت	49	12	3
to Wanganui, completion		S I			187	14.	6	328	1.	6	976	10	9	1,492	6	9	10	12	0
of, 32 miles Ohinemutu Line	2					12	0	109				16	0		1	0		10	
Rangiriri to Mercer, reconstruction, 9 miles					-			26	177	6	66	16	3	O3	13	9	10	8	2
Hawera to New Plymouth	'''	•••			••									33	10	Ð	10	0	4
via Mount Egmont Palmerston to Feilding	49 12	25		0	$1,236 \\ 235$	3 6	6	946 93	10 19		1,629 111		6 9	3,837 440	4 8	$\frac{4}{9}$		$\frac{6}{14}$	
Waiwera Line from Wark-				_			-						_						
worth Wellington Pilot Station	$\begin{array}{c c} 16 \\ 2 \end{array}$	499		6	426 30	10	3	$\frac{178}{21}$	3 4	3 11	616 53		$\frac{2}{0}$	1,720 104			107 52	10 9	
Third Wire, Wellington to	-						- 1			İ								_	_
Wanganui, 140 miles Wellington to Wainui, re-			•		172	12	0	1,146	5	8	923	z	1	2,241	19	9	16	0	3
construction, 127 miles	٠		_		1,094		6	865			1,138		7	3,098			24		
Kawakawa to Mongonui Railway Wires,—	53	84	7	9	962	10	6	654	z	Đ	1,493	9	2	3,194	19	10	60	5	7
Auckland to Penrose, 8									10	.,,	40	10			10		_	٠.	
miles Waipukurau to Kopua	19				627	5	11	$\frac{33}{143}$			$\begin{array}{c} 43 \\ 247 \end{array}$	19 18			13 5				2 10
New Plymouth to Ingle-				i															
wood, including loop line to Waitara	4				88	16	11	187	19	11	233	10	7	510	7	5	127	11	10
Totals—North Island	1573	10.251	5	_	50 382	7.4.	11	46,790	14		58,655	10	<u> </u>	166,080	1	 	*105	14	
Totals—South Island	1861	19,769						47,411						182,399					
	3,434	30,020	17	3	109,602	6		94.202	3	$\frac{}{2}$	114,654	14	8	348,480	1			•••	
Mr. 1 Cook Struit Cokla	- 	<u> </u>	·					<u></u> -						,			· · · · ·	<u></u> -	
No. 1 Cook Strait Cable, including freight from										ĺ									
London and expenses of										ļ		٠		90.004	^	0			
laying No. 2 Cook Strait Cable,			•			•		••	•	1	**	•		29,864	U	U		••	
including freight from																	ı		
London, expenses of lay- ing, and 84 miles of spare																	ı		
cable, and demurrage of ship "Zealandia"														13,248	e	٥			
Five miles spare No. 1	,		•		••	•		••	•		••	•		13,240	υ	o	: [
Cable, including freight from London	ì						Į							2,822	4	9	1		
HOM TOHOM	•••		•			•		••	•		**	•	:					••	
							ı												
Total expenditure, exclusive of lines in progress		l												394,414	12	2	ı		

Total number of miles of line, 3,434; total number of miles of wire, 8,035. This mileage of line in wire is exclusive of Canterbury Railway wires.

TABLE I.

RETURN of the Number and Amount of Telegraph Money Orders Issued within the several Postal Districts during the Year ended 30th June, 1878.

	District.	·		Number.	Commission.	Amount.
					£ s. d.	£ s. d.
Auckland	•••	•••		1,533	192 14 8	6,965 16 7
Thames		•••		161	$18 \ 0 \ 4$	598 14 0
New Plymouth	•••	•••		433	54 13 4	1,982 5 8
Napier	***	***		1,102	138 9 8	5,003 9 6
Wellington				2,749	338 7 8	12,056 2 4
Blenheim			J	493	57 7 0	1,962 13 11
Nelson				256	32 12 4	1,189 19 5
Westport		•••		374	48 3 0	1,767 0 3
Greymouth	•••	***		962	119 0 0	4,254 15 1
Hokitika		•••		576	65 4 8	2,186 14 11
Christchurch	•••			1,767	207 19 8	7,178 11 1
${\bf Dunedin} \qquad \dots$	***	•••		2,030	240 8 4	8,335 17 5
Invercargill	•••	***		364	42 4 0	1,440 10 3
Tot	al	•••		12,800	1,555 4 8	54,922 10 5

TABLE K.

Cash Value of Shipping Telegrams, and Amount chargeable to each Department of the General Government for Telegrams transmitted, during the Year ended 30th June, 1878.

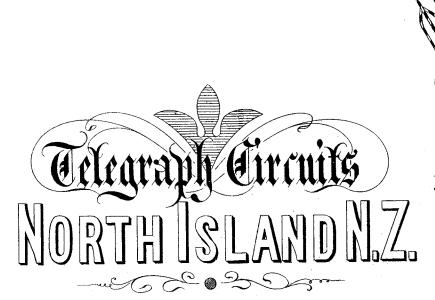
					£		d.
Colonial Secretary	***		***		2,376		11
Customs					768	3	2
Defence					2,501	1	5
Government Annuities			•••		128	3	9
Judicial					1,846	19	10
Postal		•••			2,239	0	8
Registrar-General					321	17	4
Treasury					846	1	3
Public Works		•••	•••		5,367	9	5
Shipping Reports					1,876	2	7
Weather Reports					877	8	0
				1	9,148	12	4
Less amount received in	n cash from	Governmen	t Annuities		128	3	9
$\mathbf{T}_{\mathbf{G}}$	otal			1	9,020	8	7

TABLE L.

DEBTOR and CREDITOR STATEMENT.

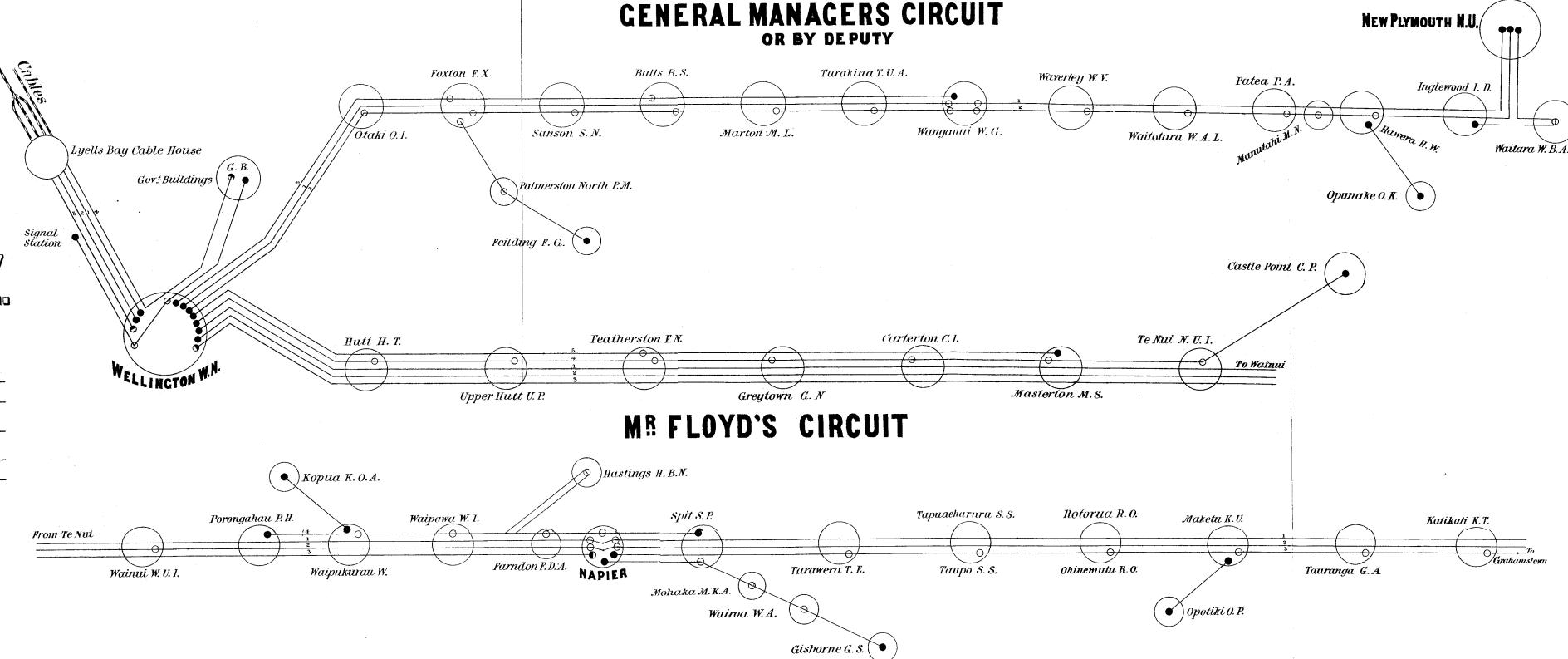
Dr. To Total Cost of Maintenance of Stations Total Cost of Mainten-	£ 69,340		d. 8	£	s.	d.	CR. & s. d. & s. d. By Cash Receipts as under:— Ordinary and Press Telegrams* 73,284 1 10
ance of Lines	18,259	4	9	87,599	6	5	Incidental Receipts not included in tables:— Excess on Ordinary Telegrams
							Government Annuities Department for Telegrams transmitted Collections for Copies of Telegrams, &c Amount collected by
							Postal Department for Money Order Telegrams 640 0 0 Proceeds of Sale of Condemned Line, Horses,
Balance—being Receipts in excess of Expendi- ture				6,104	16	3	Sundry Material, Old Furniture, &c. 537 1 2 Value of General Government Telegrams 19,020 8 7
				£93,704	2	8	£93,704 2 8

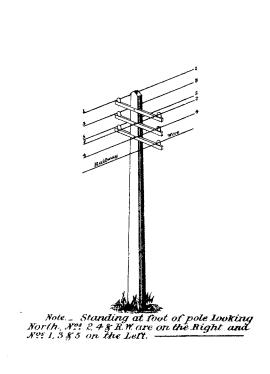
^{*} Of this amount, £1,007 1s. 5d. was collected in postage stamps.

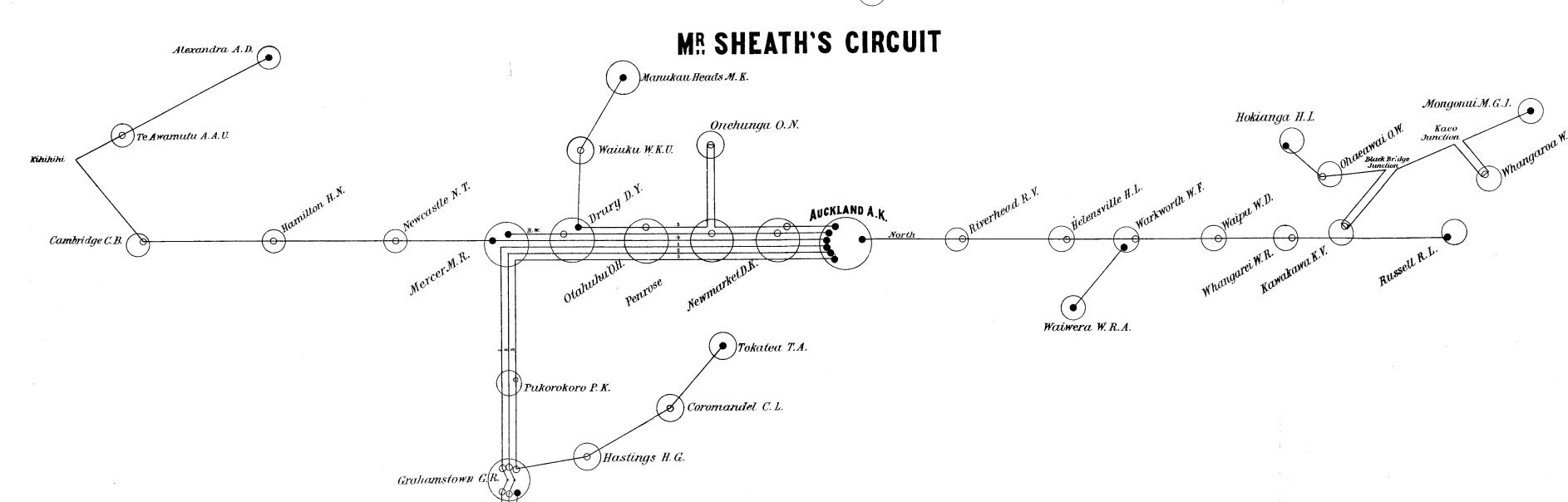


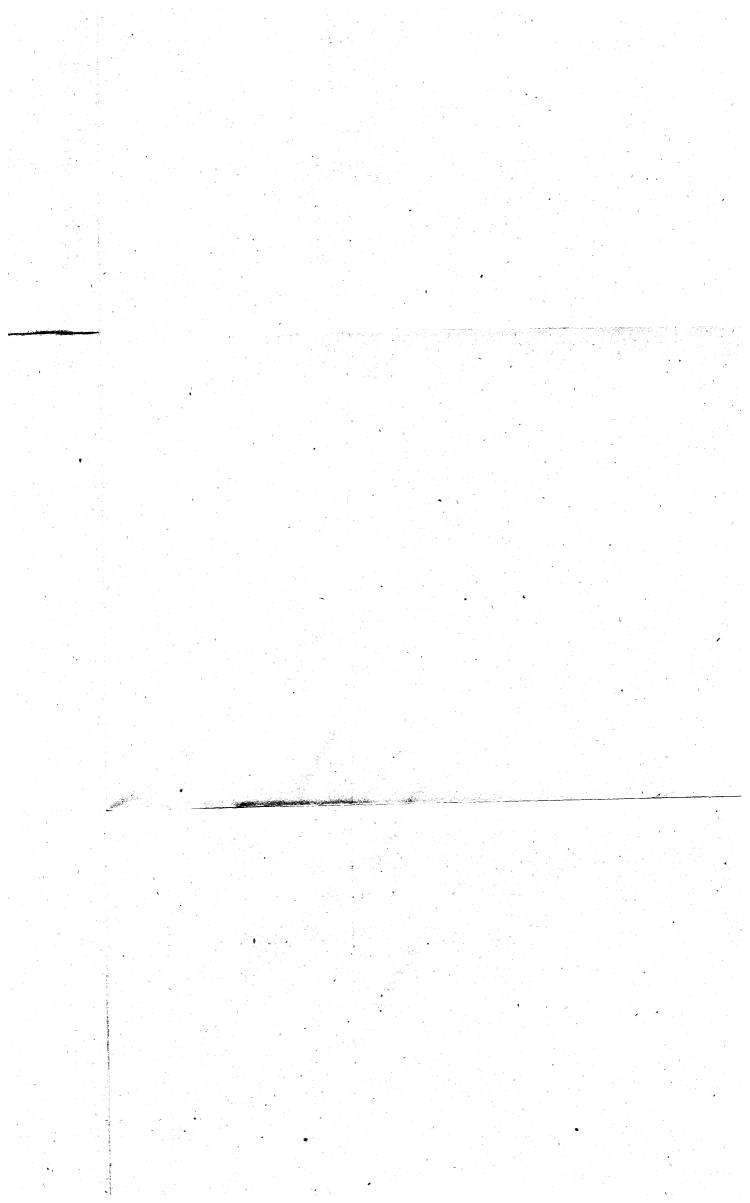
EXPLANATION

A.KOCH. DEL.

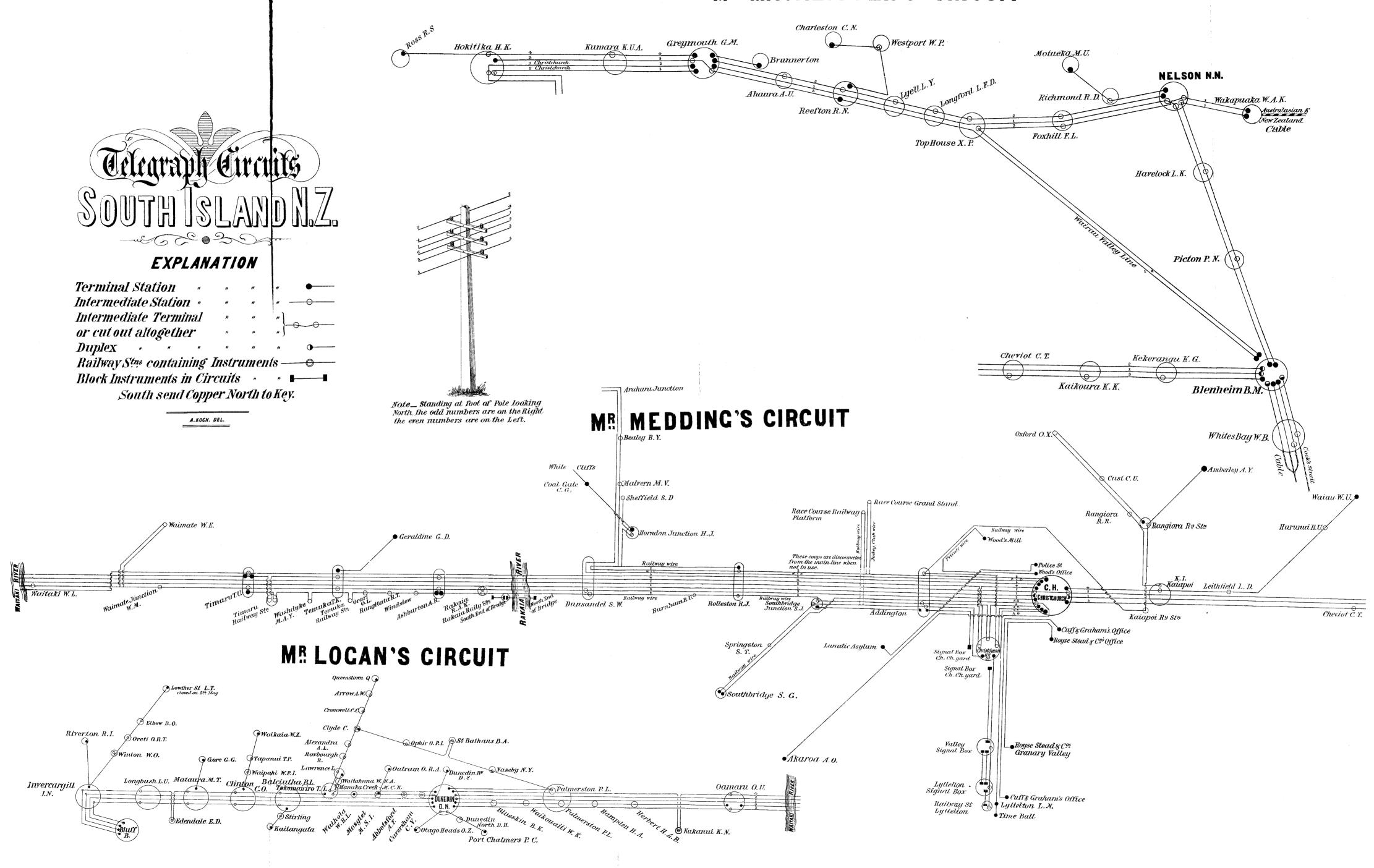


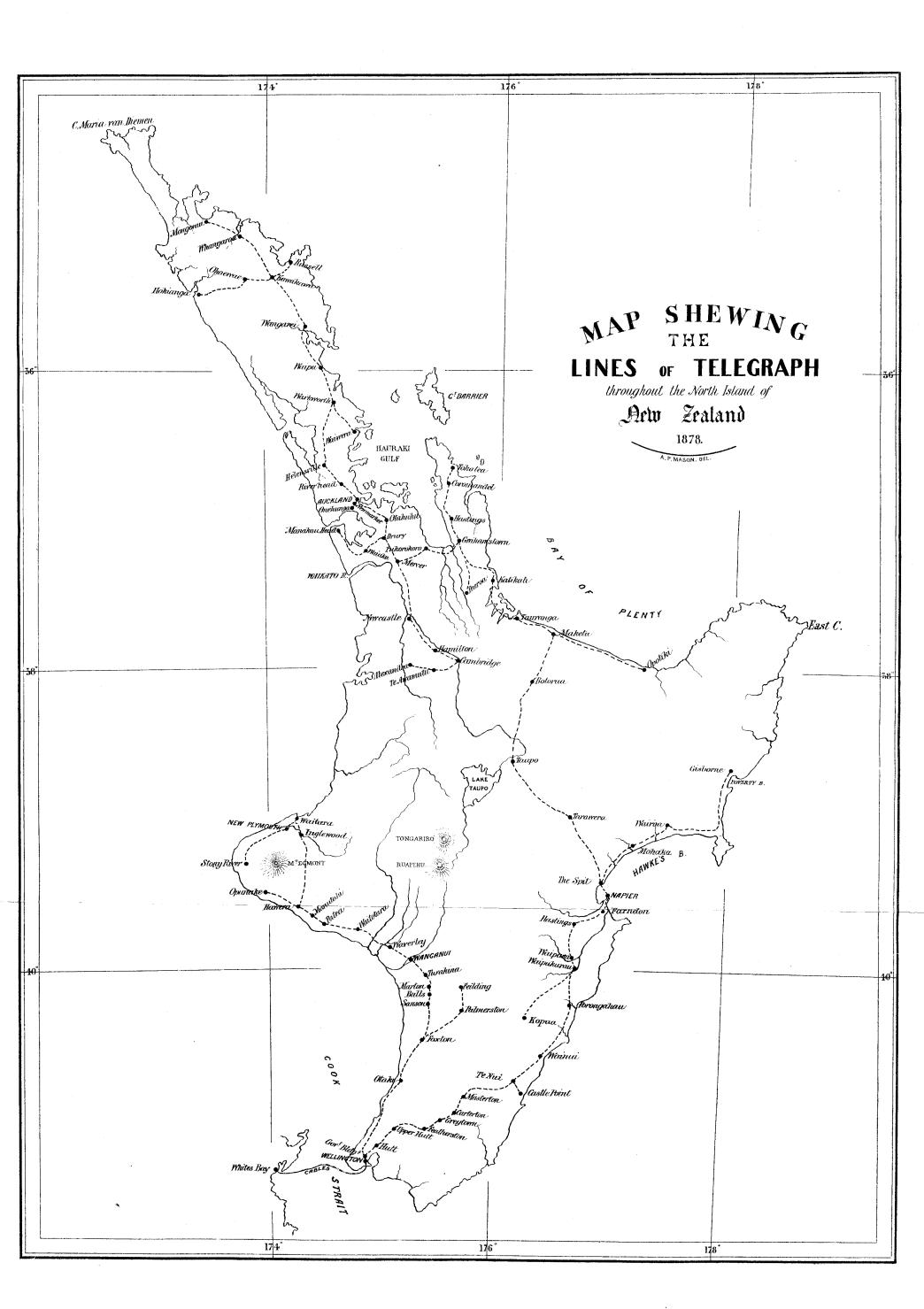






MR MACALISTER'S CIRCUIT





echit. May Statent throughauf, the system to said of TIMES OF TELECHARIT "AN SHEWIA.

