FOURTH

ANNUAL REPORT

ON THE

WORKING AND PROGRESS.

OF THE

NEW ZEALAND TELEGRAPH DEPARTMENT.

PRESENTED TO BOTH HOUSES OF THE GENERAL ASSEMBLY, BY COMMAND OF HIS EXCELLENCY.

WELLINGTON.

1868.

FOURTH ANNUAL REPORT

ON THE

TELEGRAPH DEPARTMENT, NEW ZEALAND.

General Post Office,
Wellington, 5th July, 1868.

Sir,—

I have the honor to submit for the information of your Excellency the Annual Report on the Telegraph Service of the Colony, for the year ended 30th June, 1868.

At the date of the last Annual Report I was compelled to state that the Telegraph Department was in a condition far from satisfactory; I am now able to say that great improvement has been effected. The Service has been placed under the charge of Mr. Lemon, as General Manager, who has displayed much energy in improving the organization and discipline of the Telegraph Staff, and in furthering the re-construction and extension of the various lines throughout the Middle and North Islands. His report shews that the work of the New Zealand Telegraph is conducted on a very economical footing, and that considering the peculiar difficulties attendant upon the construction and maintenance of Telegraph Lines in this Colony, the cost of those recently erected has been moderate, and the interruptions arising from injuries to the lines have been of short duration.

The increased extent to which the public have made use of the Telegraph during the past year, notwithstanding the prevailing commercial depression, and the augmentation of the Cash Receipts of the Department, is very satisfactory; there is a reason to anticipate further progress during the current year.

The re-construction of the lines in the Middle Island, which had become very defective, owing in a great measure to the manner in which they had been originally erected, has made good progress, and the extensions from Wellington to Napier, and from Greymouth to Westport, have been either actually completed or are on the point of completion.

The route by which the Main Trunk Line shall be extended from Napier to Auckland is yet undetermined, but the difficulties in the way of a settlement of this question will very shortly be removed, and I trust that the greater part of this line will be completed during the current year. The whole of the necessary material is already in the Colony.

Elaborate and valuable tables are appended to this report, showing in great detail the cost, the progress, and the condition of the existing machinery for supplying telegraphic communication throughout the Colony.

I should be glad if the financial condition of the Colony would admit of the early extension of the Telegraph from Wellington, or rather from Masterton in the Wairarapa Valley, to Wanganui and Taranaki. The revenue which would doubtless be returned by a Telegraph in this direction would be considerable, while its importance in a political point of view is a matter for serious consideration.

Mr. Lemon's report does not treat of the Telegraph between Auckland and Waikato, as that line has not hitherto been under the control of the Head Office in Wellington. It was however on the first day of this month placed on the same footing as other portions of the Telegraph Service. A considerable reduction will have to be effected in the cost at which this line has hitherto been kept up, and which is altogether out of proportion to the revenue derived from it.

I have the honor to be,
Sir,
Your Excellency's most obedient Servant,
John Hall,
Commissioner of Telegraphs.

His Excellency Sir George Ferguson Bowen, G.C.M.G.
&c., &c., &c.

New Zealand Telegraph Office,
Wellington, 3rd July, 1868.

SIR,—

I have the honor to submit for your information the following Report on the progress and condition of the Telegraph Department under my supervision during the financial year ending 30th June, 1868.

EXTENSION OF LINES.

DURING the past financial year the contracts for the extension of the Electric Telegraph in hand at the close of the year 1866–67 have been completed.

WELLINGTON TO CASTLE POINT.

These contracts comprise the portions of the line between the City of Wellington and Masterton, in the Wairarapa Valley, and between Masterton and Castle Point.

Considerable trouble and delay has been experienced in carrying out these works, owing to the fact of the line not having been regularly surveyed in the first instance. The omission of this important feature in the construction of a new line has added much to the cost of this section, which should have been the cheapest line yet constructed, owing to its proximity to timber suitable for poles.

Some difficulty was found in making a good line between the City of Wellington and the Hutt, owing to a very great number of sharp turns in the road, but by the occasional use of large poles and long spans, these difficulties have been overcome.

The poles between Wellington and Castle Point, are either heart of matai or heart of totara, and the line consists of a double wire throughout. Offices have already been opened at Featherston and Greytown, the cost of maintenance being defrayed by the Provincial Government. It is in contemplation to open an office at Masterton. A temporary office has also been opened at Castle Point.

The length of the line between the City of Wellington and Masterton is 59¾ miles, and between Masterton and Castle Point 35¾ miles; making a total length of 95½ miles between the City of Wellington and Castle Point.

CASTLE POINT TO NAPIER.

Tenders were called for in May, 1867, for the supply and delivery of telegraph poles between Castle Point and Napier, in two sections, viz., between Castle Point and Porongahau, and between Porongahau and Napier. Tenders for both sections were accepted at the same time. The contractor for the first-mentioned section, however, failed to proceed with the work, and forfeited his deposit money. Under these circumstances, and for the purpose of avoiding the serious loss of time which would have been involved in calling for fresh tenders, arrangements for the completion of the work were made with the contractors for the Porongahau and Napier section. Had the original contractor carried out his contract, Wellington would for some time past have been in telegraphic communication with Napier. Every effort is being used to hasten the completion of this portion of the line, viz., between Castle Point and Porongahau; and I have no doubt that it will be accomplished within a few days.

The contractors for the supply and delivery of the poles between Napier and Porongahau, completed their contract in the early part of February last. While this delivery was in progress tenders were called for the erection of the line, and were accepted in the early part of January. The contractor, Mr. E. O'Malley, used great exertions to complete his contract within the time specified, and was most successful in doing so. The Inspector has borne frequent testimony to the workmanlike and efficient manner in which the contractor has performed his work; a circumstance which it will be well to bear in mind in any future works.

The poles used between Tenui and Napier are all heart of totara, and although the country in which they are erected is in many places very broken and unfavourable for a telegraph, yet owing to the great care that has been taken in the selection of the timber, and in supervising their erection, the poles will without doubt stand good for ten or fifteen years, if not longer. Stations have been opened at Waipukurau, and a temporary one while the new office is being built at Napier. It is in contemplation to open one at Waipawa, should the inhabitants of that rising township agree to guarantee the Department against loss in its maintenance.

The length of line between Tenui and Porongahau is 53 miles, and between Porongahau and Napier 68 miles; making a total length of 121 miles between the town of Napier and the junction with the Castle Point line at Tenui.

NAPIER TO WAIROA.

This portion of the trunk line of telegraph between Napier and Auckland has been very carefully surveyed by Mr. Edward H. Bold, who, after a complete examination of the country, has recommended that the line should follow, generally, the bridle track between Napier and Wairoa. The survey was completed at the beginning of May, and tenders have been invited for the supply and delivery of the poles.

Blenheim and Woodend.

Owing to the inferior description of wood used for poles on this portion of the line when it was first erected, it has become necessary to entirely reconstruct the whole of it.

The exceedingly injudicious and even discreditable manner in which this line was first laid off has without doubt hastened its decay, the great number of unnecessary angles which were introduced having caused a very severe strain on a large number of the poles. Considerable difficulties have had to be contended with in the re-erection of this line, but its future permanency will, I am confident, amply repay the expenditure now being made upon it. The course of the telegraph wires has in many parts been altered with advantage, and some miles of wire have been saved by taking the new line in a more direct route than that originally adopted.

The old poles are now being replaced by others cut from the heart of totara, and although these had to be brought from a considerable distance, they have been delivered along the line by contract for the sums of 32s. and 37s. for 20 and 25 feet poles respectively, being not much in excess of the price originally paid (27s.) for the birch and manuka saplings which have so soon become useless, especially when the superior and lasting character of the timber now used is taken into consideration. The price, 27s., above stated, was the average for the entire section between the Hurunui and Nelson, but as about sixty miles of this distance near the Nelson end runs through bush where the contractor was able to supply poles at a very small rate, the real price paid for the poles between Blenheim and the Hurunui was very much more than 27s.

Considerable attention has been paid to the carrying the telegraph wires over the several rivers crossed by them, in such a manner as to provide against the breakages which have hitherto been so frequent, and which have caused not only great public inconvenience, but serious loss of revenue to the Department. The heavy floods of February last have furnished good data upon which to proceed in this matter.

The supply of the poles is being furnished under contract by Messrs. Belcher and Fairweather, of Kaiapoi. They have not hitherto progressed as rapidly as I could have wished, but I feel bound to make allowances for them, in consideration of the great loss to which they were subjected by the February floods, not only through the loss of poles from the different landing places along the coast at which they had been deposited, preparatory to being carted along the line, but also through the wreck of one of the vessels chartered by them. This loss unavoidedly crippled their operations for some time. I am happy to say, that notwithstanding these delays, the reconstructed line is nearly finished from Woodend to Cheviot Hills, and every effort is being made to hasten the completion of the remainder.

The reconstruction is being carried on under the supervision of Mr. Walter Blake, who had previously re-surveyed the line. It was found inexpedient to attempt the re-erection by contract, owing in a great measure to the work being complicated and rendered difficult by the necessity for keeping telegraphic communication uninterrupted during the whole process of re-erection.

West Coast Line.

The telegraph from Christchurch to Hokitika and Greymouth was taken over by this Department on the first January last. The line branches from the Southern Trunk Line at the Selwyn railway station, whence it proceeds by way of the Kowai and the West Coast Road to Arthur's Pass and Hokitika; from Hokitika the line is continued to Greymouth. The distances are as follows:—

From Christchurch to Bealey	.. ..	87 miles.
From Bealey to Hokitika	.. ..	63 „
From Hokitika to Greymouth	.. ..	26 „

The present value of the line between Christchurch and the boundary of the Province of Canterbury is to be determined by arbitration, and paid to the Canterbury Government.

The receipts from this West Coast telegraph are larger in proportion to the expenditure than upon any other line in the Colony; its purchase is a very profitable transaction for the Department.

Greymouth and Westport Line.

This line is a continuation of that from Christchurch to Greymouth, and is being erected at the instance of the Provincial Government of Nelson, which has guaranteed the payment of six (6) per cent. interest on the total cost of construction, as well as any deficiency which may hereafter exist between the receipts of this line and the actual cost of working and maintaining it.

Owing to the peculiar and difficult character of the country through which this line has to be carried—over a considerable portion of which a bridle track only exists—and to the excessive outlay which would have been involved in the delivery of totara poles, it has been deemed expedient to make use of the best of the timber through which the line passes. The clearing of the bush and supply of poles is being performed by contract, but the erection is being effected by day labour under the supervision of Mr. Alexander Aitken, with the assistance of an experienced Lineman. The line was carefully surveyed in the first instance by Mr. Aitken.

In Appendix A will be found the relative cost of each of the sections above described now finished. The cost of surveying and inspection may appear at first glance excessive, but the

advantages that have been purchased by this expenditure, viz., the selection of the best obtainable lines laid off with as few angles as possible, and the execution of the whole work of construction under the closest supervision so as to avoid defects which would hereafter, through inferior work, lead to accidents and expenses, are so great, that I am confident the money laid out for these purposes has been well spent.

Had this course not been adopted, there can be no doubt, that owing to the difficulties which have to be encountered in the construction of Telegraph lines through those parts of the Colony where the extensions are now in progress—difficulties arising chiefly from the absence of roads, the inaccessible character of the country, and also from a variety of contingencies which no human foresight could provide against—the works above alluded to would not have been in their present satisfactory state of progress.

At your request I have furnished in Appendix B a complete statement of the cost of the Main Trunk Line in the Middle Island; this statement gives the expenditure incurred in the erection of the different portions of this line, as also the cost of the Cook Straits Cable.

The cost per mile of the lines that have been recently erected will, on examination, compare very favourably on the score of economy with those erected on the Middle Island, especially when the superior quality of timber now used is taken into consideration.

Maintenance and Repairs of Lines.

In order to supply a complete statement of the cost of maintenance, I have divided the line off into sections, and on reference to Appendix C it will be seen upon which sections of the line through the Middle Island, the outlay for maintenance has been chiefly incurred. The heavy floods which occurred in August, 1867, and in the month of February last, added considerably to the cost of maintaining the Telegraph between the Waitaki River and Nelson. The amount set down under the head of material, for the section between Waitaki and Christchurch, has apparently made that section costly as regards its total maintenance; the greater portion of this material, however, still remains unused, and considerable expense was incurred in the alteration of the wires in and about Christchurch, when the West Coast Line was taken over. The greatest outlay without any permanent advantage, was, I consider, on the section between Christchurch and Blenheim, as the repairs which we were forced to make in order to restore communication, will, in a few months, be rendered useless by the reconstruction of the line; the rotten state of the poles, the insecure manner in which the rivers on this section were spanned, and the exposed and rugged character of part of the country through which the line runs, caused this section to suffer more than any other. After its reconstruction, however, it will be one of the least expensive to maintain, as every care is being taken to ensure the stability and durability of the new work.

One of the chief sources of expense upon the section between Blenheim and Nelson, the greater part of which runs through birch forest, has been the constant falling of dead trees across the wires; this has now to a certain extent been remedied by removing from its vicinity any trees that would be likely, in falling, to come in contact with the line. I may add that the chain wide which was originally cleared of bush along this line has not been found sufficient owing to the great height of the standing timber. The poles on this section have in many places been renewed, and I do not anticipate that any very great expenditure for repairs will be required for some time to come.

The remaining portions of the line, viz., between the Bluff and the Waitaki, and Christchurch and Greymouth, require no special remark, as the expense attendant on repairs has not been greater than must be expected under ordinary circumstances. Before leaving this part of my report, I would respectfully suggest that another Inspector be appointed to act in conjunction with Mr. Bird; there can be no doubt that the rapidity with which extensive repairs were executed in February last were mainly owing to the energetic measures taken by that gentleman and Mr. Walter Blake, who happened to be in a position to render assistance at one of the places where it was most required. The Electrician to this Department, in the report on his recent inspection of the lines and stations in the Middle Island, speaks very favourably of the class of men who are engaged in performing the duties of Linemen. I may add that it has been found advisable to provide each Lineman with a horse, instead of giving them, as formerly, an allowance of ten shillings per diem when out on line duty; and from the experience of the last four months, I have every reason to be satisfied with the change, both on the score of economy and the greater certainty and expedition with which repairs are effected.

Complaints of Errors, Delays, Etc.

The registered number of complaints made by the public during the year, is eleven; they may be classified as follows:—

Three telegrams reported as not received.
Five late delivered.
Three with errors in the wording.

Each of these complaints was strictly investigated, and the offender punished by a severe fine or otherwise.

The above number of complaints must be considered very small when taking into consideration that the number of telegrams transmitted during the same period amounts to over 98,000.

The arrangements made, by your direction, for establishing a Learners' Gallery in Wellington, for the instruction of cadets in some of the main principles of telegraphy and the routine of office duty, will, in a measure, lessen causes of complaint. This Gallery has been placed under the charge of Mr. C. V. de Sauty, whose experience and attainments as an Electrician especially qualify him for this important duty. The success that has hitherto attended his operations is very satisfactory, and their continuance will, as the Department increases, be the means of opening up to the sons of New Zealand settlers a source of profitable and honorable employment in the public service, and make New Zealand no longer dependant upon neighbouring Colonies for a supply of competent telegraphists. The plan, also adopted by your direction, of teaching the officers of this Department, where practicable, the several duties connected with the daily routine of a Post Office, has proved a means of affording much accommodation to the public, and a source of considerable saving in the maintenance of Telegraph Stations. By this arrangement the expense of a Telegraph and Post Office, where a combination of offices is found practicable, is borne jointly by the Telegraph and Postal Departments.

The stations that have been organized on this footing during the year are Bluff, Featherston, Greytown, Castle Point, and Waipukurau; and it is intended, as soon as the line between Greymouth and Westport is completed, to establish the offices at Charleston and Brighton on the same terms.

Financial.

In addition to the returns furnished in former reports (see Appendices D., E., F., and G.,) I have added a Table (Appendix H.) showing the total number of telegrams forwarded from, the total value of business, the total cash receipts, and the cost of maintenance, of each station.

On reference to the return in the report of last year of the number of telegrams transmitted during the year 1866-67, (70,952) it will be seen that the number (98,485) transmitted during 1867-8, after deducting 7,912 transmitted by the offices of the West Coast Line (which were not included in last year's return) shows an increase of 19,621, being rather better than 25 per cent.; and the actual cash receipts compared in the same manner show an increase of £1,189 17s. 8d.

The total cash receipts of the Telegraph Department from all sources is £11,652 3s. 7d., and the total value of business done, including guarantees and other receipts, is £18,324 3s. 10d., which, after deducting the cost of maintenance of stations and lines (£14,896 5s. 1d.), leaves a balance to the credit of the Department of £3,427 18s. 9d. (See Appendix I.)

The interruption resulting from the extensive damage done to the lines in the months of August and February have lessened the cash receipts this year by at least £1000, and added fully £1,500 to the cost of maintenance. These losses, however, are not likely to occur again, as one of the principal causes of them, viz., the rotten condition of a part of the line, has been, to a certain extent, and will ere long be entirely, removed.

I think on the whole, that, considering the generally depressed state of the Colony during the period to which this report refers, the progress of this Department in a financial point of view may be considered satisfactory.

In Appendix M. I have given in detail the value of telegrams sent by each Department of the General Government; on reference to this table it will be seen that by far the greatest amount of work of this description is entailed by the Shipping Reports. There is no doubt that the Department actually loses by the publishing of shipping telegrams more than twice the value set down for them in the Table, as each shipping notice now published deprives the Department of several messages each of greater length than the notice as now given.

As the business of this Department increases the saving of time effected by the way in which these reports are now forwarded from the various stations will, without doubt, be of great advantage, and it would be well if other Departments of the Government were to make it their study to be more concise in their communication by wire.

Present Rates of Charges, etc.

At your request I have attached to my report, in Appendix K. a return showing the charges for the transmission of telegrams in the Colonies of New South Wales and Victoria; and, in order to afford a comparison with those of our own tariff, I have shewn the charges in force in New Zealand for similar distances.

You will observe that the charges made in New Zealand are in every instance much lower than those in the Colonies above mentioned; this is one argument in addition to many others which might be adduced for not attempting to lower the present tariff until the actual cash receipts more than cover the working expenses.

There can be no doubt that the plan now adopted by you of requiring guarantees against loss to the Department from persons wishing to have Telegraph Stations opened in those districts where the extent of population would not otherwise justify such a course being taken, as well as

the substantial manner in which the lines are now being constructed, will tend to bring about a change from the present moderate tariff to a still lower one.

The arrangements recently made by your instructions for the reception of Telegraphic Messages at all Post Offices in populous districts to which telegraphic communication at present does not reach, has already added considerably to the revenue, and will do so to a greater extent when the information of the facilities thus afforded for the use of the telegraph becomes more widely distributed. There can be no doubt that the plan is a great boon to outlying districts.

By the assistance of the Inspector of Post Offices, I am able to furnish you in Appendix L. with a comparative statement of the number of telegrams, and of the number of letters within each Province for the last year: I have included a similar statement comparing the proportion of telegrams to letters despatched in Great Britain, Belgium, Switzerland, and New Zealand; my authority is a report recently published by Mr. Scudamore, of the General Post Office. It will be observed on reference to the Appendix in question, that the Provinces of Marlborough and Southland make use of the telegraph to a greater extent in proportion to the number of letters despatched than any of the others. I attribute this, in a great measure, to the want of more frequent postal communication between those Provinces and other parts of the Colony. It will also be seen that New Zealand compares favourably, from a telegraphic point of view, with the United Kingdom, Belgium, and Switzerland.

Before concluding my Report, I would beg to bear my testimony to the able and zealous manner in which, as a rule, the several officers of this Department have performed their duties. I desire especially to mention that many of the recent improvements in the discipline of the various offices, and the working of the lines have been mainly owing to the suggestions furnished to me from time to time by Mr. C. V. de Sauty, whose long and varied experience in the art of telegraphy render his services in the position he now holds of Electrican to this Department, of very great value, and from whom a report on the condition of his branch of the Department is attached to this report.

I have, &c.,
C. Lemon,
General Manager.

To the Hon. the Telegraph Commissioner,
Wellington.

Wellington, 3rd July, 1868.

Sir,—

I have the honor to submit to you the following Report on the electrical condition of the lines of Telegraph in New Zealand (excepting those in Auckland), on the working of the same, and on the present electrical condition of the Cook Straits Submarine Cable.

The lines visited by me, and to some extent inspected, were:—Bluff–Invercargill; Balclutha–Dunedin; Port Chalmers–Dunedin; Christchurch–Dunedin; Christchurch–Greymouth; and Christchurch–Nelson, *viâ* Blenheim.

All the stations in the Middle Island were visited and thoroughly inspected by me during the months of December, January, and February last.

The insulation of such of the lines as I have tested is in a very satisfactory condition, even in wet weather; and from the results obtained on those lines a good general idea of the condition of the remainder may be formed. The insulators in use consist of baked earthenware caps, cemented on to vulcanite covered bolts, by which they are attached to the arms; they are known as "Varley's Insulators," and are used on all the lines visited by me, excepting on the West Coast line from Christchurch to Greymouth, and on the short line from Dunedin to Port Chalmers. On these latter lines "Siemens'" galvanized iron-capped white porcelain insulators are fitted. Both these descriptions of insulators are exceedingly well fitted for the purpose intended. If any preference can be given, it should be in favour of the former, when more than one wire is attached to the same pole; the latter are, however, more suitable on lines of a single wire. The insulation of the lines will be improved when the new "leading in wires" are fitted to the several stations requiring renewal; as, owing to the effect of change of temperature, friction, and alternating moisture and dryness, the gutta-percha-covered wires—at present chiefly used—have become deteriorated and porous, admitting moisture to the conductor and causing a leakage or loss of current at each place so deteriorated. On the new lines recently constructed, and in course of construction, and on the re-erection of the Woodend and Blenheim section, longer arms than those hitherto used are being fitted, which alteration, taken together with the strict supervision under which the construction and renewals of the lines are now effected, will, it is hoped, remove one of the principal causes of interruption, viz., "contact," or very materially diminish it. An improvement will also be found on those lines, resulting from the soldering of all joints. On the White's Bay and Nelson line all faulty or doubtful joints have been re-made or otherwise improved.

The principal part of the business of the new stations about to be opened on the West Coast, it is anticipated, will be with Nelson. I would therefore suggest that the new (third) wire, now being erected between Woodend and Blenheim, be carried on to White's Bay, and there connected to the No. 1 Nelson wire, by which means Nelson will acquire permanent direct communication with Christchurch.

I would suggest that the portion of the line between the City of Wellington and Featherston, which leaves the road and runs through the bush on the Rimutaka Range, be removed and erected along the coach road, for the purpose of allowing rapid inspection and repair when necessary,—a seriously difficult matter as the line runs at present.

The Linemen have been recently supplied with a code of rules and regulations for their guidance, which will facilitate their operations when engaged on repairs. I avail myself of this opportunity of testifying to the zeal and general desire, on the part of the staff of Linemen, to acquit themselves well of the important, arduous, and often dangerous duties assigned to them. As a body, I do not think any telegraph system has the service of a superior staff.

I must also notice the services of the District Inspector, Mr. Bird, whose section comprises some of the roughest and most difficult country in the Middle Island. The energy and perseverance evinced by Mr. Bird in surmounting many difficulties and interruptions in his endeavours to re-open communication, in times of flood and storm, are deserving of much praise.

With regard to the working of the lines generally, some alterations have recently been made. The most important of these is the abandonment of the system of "translation" at Wellington, Christchurch, and Dunedin. The business is subjected to less delay than formerly obtained. This change was carried out in consequence of the following remarks made on the subject in my Report of the 8th of April. Among other suggestions for the improvement of working, I recommended—

"That the system of 'translation' be superseded. During the last three weeks it has been suspended on the Government Buildings line as an experiment, and Mr. Mason reports that the work is got off much more rapidly now than by translation. The Telegraphists and Officers in Charge are universally in favour of the system of translation being superseded, and I am not aware of any single point in favour of retaining it. There can be no doubt that considerable time is lost in consequence of the necessity for reducing the speed of working so as to ensure good signals. This reduction of speed is necessary by reason of the number of circuits thrown into play, and the antagonism of as many springs. In translating between Government Buildings and Greymouth, for example, no less than nine independent circuits are made, nine electro-magnets are excited, nine springs to be overcome, and ten batteries thrown into play. In any one of these thirty-seven elements a very trifling fault will throw the whole thing out. The only argument in favour of 'translation' over 'transmission' is the greater accuracy *assumed* to be obtained by it, but that accuracy is purchased at the expense of speed. It is very rarely that the lines are in such order as to allow of rapid translation taking place. The delay is very serious, amounting, in some cases, to several hours,—for when an operator at a station has a message to send to another station to which he cannot work direct, he has to wait until perhaps three or four lines are cleared before he can send it. The "Varley" instruments are not suited for translation,—the electro-magnets being too long, take a comparatively long time to acquire and lose magnetism. Time is also lost in getting all the instruments necessary for the translation into adjustment on starting. Telegraphists not making due allowance for the increased number of circuits and magnets in use, start off at as rapid a speed as if they were working to a station direct, and at a short distance; in consequence, it is very rarely that within a reasonable time of the circuits being all prepared for translation that the messages can be commenced. If it is considered desirable for the sake of accuracy, to work direct, and without transmission,—the distance between any two stations in the Colony being so small, no difficulty can be experienced in doing so, although some little time will be sacrificed, but much less time would be lost than obtains at present. In conclusion, as to the matter of "translation," I would observe that it is an old-fashioned and obsolete system that has been superseded all over the world (not excepting even Germany). I know of no country but this where it is in existence, and here, the lines being of such limited lengths, it is not at all needful on account of lengthy circuits. It has been, even on long lengths of submarine cable, done away with in favour of direct working. If no other reasons were shewn for superseding it, a glance at the complicated connections in stations would suffice to condemn the plan."

On the 22nd May, "translation" was suspended at Wellington, Christchurch, and Dunedin, leaving it in force at White's Bay and Hokitika. At the former place it was retained, not as a necessity or an advantage, but simply as a precautionary measure to allay any fears, that might arise, of danger to the cable by reason of the larger amount of battery power necessary to work through direct from Wellington to Christchurch,—not that any damage could result from using any amount of battery power on two of the cable wires—(the third is not in use)—but it was thought advisable, in case of any damage occurring to the cable from lightning, that the cause of such damage might not (in the minds of those unacquainted with electrical phenomena) be erroneously set down as an effect of the larger working battery power.

At the latter place it was retained, as the reasons above given for superseding the system do not apply in their full force to the Hokitika line,—none but Siemens' Embossing Morse instruments being in operation at Hokitika and Greymouth.

The recent purchase of better constructed instruments (made by Messrs. Siemens Brothers) than those formerly in operation, and the approaching arrival of more of the same description, will further improve the working.

Some slight alterations have been introduced in the manner of fitting up new stations with regard to the placing and connecting up of the batteries. This will have the effect of shortening

or removing entirely delays caused by bad connections in the batteries and connecting wires, and it will be desirable to arrange the batteries and instruments in a similar manner at all other stations.

The connecting wires and fittings at the whole of the stations south of Selwyn, with the exception of the Bluff, require overhauling and renewing. Upon carrying out this renewal, those stations can be fitted up upon one uniform system.

Short circuiting switches have been supplied to all the new North Stations, and will also be supplied to all new stations upon opening, and to all old stations upon renewal of fittings. These switches have been introduced for the purpose of economising battery power, as by their use local batteries are only in operation during the reception of messages, and by their use the resistance of the line is considerably reduced (on the Christchurch–White's Bay line for instance, the reduction of the resistance would amount to one half).

Further precautions against damage by lightning, have been taken, by providing additional lightning protectors, putting two on each wire at all new stations, and I would suggest this being done at all the old stations, particularly on all lines radiating from White's Bay; within the last nine months no less than three lightning protectors have been destroyed by heavy discharges of atmospheric electricity, one at Invercargill, one at the Bluff, and one at Greymouth, at the latter place the same discharge damaged other instruments, and suspended communication; the fine wire coils of the relay and galvanometer were fused.

When the stations are supplied with new "earths" of copper sheet to replace those that are faulty, and the alterations alluded to above are all carried out, and when the whole of the stations are supplied with improved galvanometers (now being done by withdrawing the old instruments to Wellington where they are rewound with longer lengths of wire, and have the magnetized needles lightened, and are then returned to the stations), further improvement in the working will result.

A very great reduction of battery power has been made since my inspection of the lines in the Middle Island. The total reduction amounted to five hundred and twenty four cells, being considerably more than one-fifth of the whole number of cells then in use. The advantages of this and further reductions to be made when practicable, are—

1. Economy in consumption of zinc and sulphate of copper.
2. Less number of connecting screws (always a source of annoyance and trouble).
3. Economy of space, and
4. The diminished liability of interruptions from faulty cells, and bad connections between them.

In addition to the saving of expense and the other advantages obtained, the number of cells at all the stations on each circuit were *equalised*, an important point in the well working of a line.

The electrical condition of the Cook Straits Submarine Cable, is not so satisfactory as I could wish. The No. 2 wire which has never been in such perfect condition as the other two, is now falling considerably in insulation, as the following Table of the whole of the tests made by myself will show.

Date.	No. 1 Wire.	No. 2 Wire.	No. 3 Wire.
1867.—September 1	473	71	554
„ 30	634	102	634
October 14	547	179	620
November 1	598	32·6	667
„ 14	574	10·6	643
December 2	608	10·5	709
1868.—June 7	930	5·5	1,094

The three columns of figures represent "Megohms," or Millions of Ohmads (British Association units of resistance) per nautical mile, after two minutes electrification. The larger the number of Megohms per nautical mile the better the insulation. It will be seen by the above list that the No. 3 wire has always tested much higher than the other two, the No. 1 wire testing next best. The insulation of the Nos. 1 and 3 wires is in a highly satisfactory condition, while that of No. 2 is faulty. It must not be overlooked, however, that its insulation, even at that low figure, is above the insulation of an equal length of land wire on a wet day, consequently affecting its capability for working to but a slight extent.

The proportion or per centage of a given current passing through the No. 2 wire by the conductor is ninety-six, while four per cent. only is lost by the faulty insulation.

As the No. 2 wire is not particularly needed for business, and it being one of the properties of electric currents to diminish the resistance and so increase the loss or leakage on an indifferently insulated submarine wire, I deemed it prudent to advise its withdrawal from use with the view to preserve it as long as possible. It was, in November last, disconnected, and has not been in operation since. It may, whenever the increase of business calls for increased means of carrying it, be again made use of, should it not in the meanwhile deteriorate to an alarming extent; but I would most strongly advise that on no account be the cable disturbed, or attempts made to make good the present defects in the No. 2 wire.

The establishment of a learners' gallery at Wellington, in obedience to the instructions of the Honorable the Telegraph Commissioner, has been attended (although in operation but a short time) with satisfactory results, so far as the instruction of cadets in the routine of

transmitting and receiving messages. With regard to that part of my duties relating to the instructions of officers and cadets in the technical details of practical telegraphy, I am not so sanguine of success. Any intelligent youth of fair education can, in a few weeks, become a tolerably expert operator: but to acquire a really useful knowledge of technical details demands, in addition to a slight knowledge of the principles of electricity and magnetism, an actual propensity or liking for the subject. Even after many years' experience as operators, and with the opportunities of observation open to them of acquiring an useful amount of practical skill and knowledge, the per centage of officers in the Department so improving themselves is unfortunately exceedingly small.

The number of miles of telegraph in operation is 1,183.

The number of miles of wire is 2,223.

The number of instruments in operation is fifty.

The number of cells (battery) in operation is 2,090.

Appended to this is a map of the two Islands, showing the course of the telegraph, and a plan showing the circuits and instruments, while below is given a list of stations now open—their calls, number of instruments, and batteries at each station.

LIST OF STATIONS.

Name.	Call.	Instruments.	No. Cells.	Name.	Call.	Instruments.	No. Cells.
Balclutha	Bl.	1	70	Kaikoura	Kk.	1	60
Bealey	By.	1	30	Lyttelton	Ln.	1	20
Blenheim	Bm.	1	50	Napier	Na.	1	40
Bluff	B.	2	70	Nelson	Nn.	2	60
Castle Point	C.P.	1	40	Oamaru	Ou.	1	70
Cheviot	Ct.	1	50	Picton	Pn.	1	50
Christchurch	Ch.	6	300	Port Chalmers	P.C.	1	20
Dunedin	Dn.	5	190	Selwyn	Sw.	2	70
Featherston	Fn.	1	40	Tokomairiro	Ti.	1	70
Government Buildings	G.B.	1	10	Timaru	Tu.	1	70
Greymouth	Gm.	1	30	Waikouaiti	Wk.	1	70
Greytown	Gn.	1	40	Waipukerau	W.	1	40
Havelock	Lk.	1	50	Wellington	Wn.	3	80
Hokitika	Hk.	2	75	White's Bay	W.B.	6	205
Invercargill	In.	1	70			50	2,090
Kaiapoi	Ki.	1	50				

I have, &c.,

C. V. DE SAUTY,
Electrician.

To Charles Lemon, Esq.,
General Manager, Telegraph Department.
Wellington, New Zealand.

Appendix A.

RETURN showing Additional Telegraph Lines erected during the Financial Year ending 30th June, 1868, and the Cost of the same.

Locality.	Number of Miles of Line erected.	Cost of Survey.	Cost of Poles.	Cost of Clearing Bush.	Value of Wire, Arms, Insulators, &c.	Amount Paid for Erection.	Cost of Inspection and Supervision.	Total Cost of Line.	Cost per Mile.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wellington to Masterton	59¾	...	...	264 4 6	839 4 4	1,969 13 9	387 12 6	3,460 15 1	57 18 4*a*
Masterton to Castle Point	35¾	...	...	22 15 1	388 18 6	1,101 13 1	165 16 0	1,679 2 8	46 19 6*a*
Castle Point to Porongahau (from the Tenui Junction) ...	53	236 17 0	2,362 10 0	176 9 4	722 18 6	755 10 0	113 9 10	4,367 14 8	82 8 2
Porongahau to Napier	68	250 13 6	2,459 15 6	74 0 0	918 9 8	831 12 0	170 4 8	4,704 15 4	69 3 9
	216½	487 10 6	4,822 5 6	537 8 11	2,869 11 0	4,658 8 10	837 3 0	14,212 7 9	65 12 11*b*

a Supply of poles included in erection. *b* Average cost per mile.

Appendix B.

RETURN showing the Total Cost of the Lines of Telegraph throughout New Zealand, belonging to the General Government (exclusive of the Auckland, and Canterbury West Coast Lines,) and the Cook Strait Cable.

Locality.	Length of Section in miles.	Cost of Clearing Bush.	Total cost of Poles for Section including Delivery.	Cost of Wire, Arms, Insulators, &c., including Cartage.	Cost of Erection.	Total Cost of Section.	Cost per Mile.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Bluff to Invercargill ...	19	...	...	...	812 15 6	812 15 6	42 15 6*a*
Invercargill to Mataura ...	32	...	1,199 0 0	739 1 4	469 11 0	2,407 12 4	75 4 9
Mataura to Waitaki ...	189	...	8,353 18 0	3,034 7 9	1,720 13 3	13,108 19 0	69 7 0
Waitaki to Hurunui ...	218	...	6,554 8 8	3,427 13 6	3,760 19 0	13,743 1 2	63 0 7*b*
Hurunui to Nelson ...	241	1,229 3 3	5,213 14 0	3,953 3 4	3,661 6 0	14,057 6 7	58 6 0*c*
White's Bay Line ...	7	...	...	...	503 12 6	503 12 6	71 18 11*d*
Port Chalmers Line ...	8	...	...	...	800 0 0	800 0 0	100 0 0*e*
Total Middle Island ...	714	1,229 3 3	21,321 0 8	11,154 5 11	11,728 17 3	45,433 7 1	63 12 7*f*
Lyall's Bay to Wellington ...	4	...	123 5 0	104 6 0	57 15 0	285 6 0	71 6 0
Wellington to Masterton ...	59¾	264 4 6	...	839 4 4	2,357 6 3	3,460 15 1	57 18 4*g*
Masterton to Castle Point ...	35¾	22 15 1	...	388 18 6	1,267 9 1	1,679 2 8	46 19 6*g*
Castle Point to Porongahau	53	176 9 4	2,362 10 0	722 18 6	1,105 16 10	4,367 14 8	82 8 2*h*
Porongahau to Napier ...	68	74 0 0	2,459 15 6	918 9 8	1,252 10 2	4,704 15 4	69 3 9*h*
Total Northern Island	220½	537 8 11	4,945 10 6	2,973 17 0	6,040 17 4	14,497 13 9	65 14 10*i*
Total Middle Island ...	714	1,229 3 3	21,321 0 8	11,154 5 11	11,728 17 3	45,433 7 1	63 12 7
	934½	1,766 12 2	26,266 11 2	14,128 2 11	17,769 14 7	59,931 0 10	64 2 6*k*
Cook Straits Cable ...	...	...	...	...	26,508 0 0	...	...
Freight from London ...	...	...	...	...	2,500 0 0	...	...
Expenses of Laying ...	...	...	...	...	856 0 0	...	...
						29,864 0 0	...
Total Expenditure (exclusive of re-construction Blenheim and Woodend Line) ...	...	...	...	...	...	89,795 0 10	...

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* Average cost per mile, Middle Island. *g* Supply of poles and supervision included in cost of erection. *h* Survey and supervision included in cost of erection. *i* Average cost per mile, Northern Island. *k* Average cost per mile.

Appendix C.

RETURN showing the Cost of Maintenance of Telegraph Lines for the Financial Year ending 30th June, 1868.

Locality.	Number of Miles.	Salaries of Linemen.	Travelling Expenses.	Extra Labour.	Cost of Material used for Repairs.	Total Cost of Maintenance.	Cost per Mile.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Bluff to Balclutha ...	114	121 15 8	129 12 0	14 7 6	33 15 0	299 10 2	2 12 6½
Balclutha to Waitaki ...	152	130 4 4	243 5 10	56 6 0	86 3 7	515 19 9	3 7 10½
Waitaki to Christchurch ...	148	470 16 8	336 4 9	254 15 5	458 1 3	1,519 18 1	10 5 4¾
Christchurch to Blenheim ...	208	269 8 1	675 6 6	388 18 6	132 6 5	1,465 19 6	7 0 11
Blenheim to Nelson, including White's Bay Line ...	92	242 3 4	223 13 8	428 14 0	223 7 1	1,117 18 1	12 3 0¼
Christchurch to Greymouth, from 1st January, 6 months	176	156 5 0	239 8 8	8 4 6	83 3 6	487 1 8	2 15 4
	890	1,390 13 1	1,846 11 5	1,151 5 11	1,016 16 10	5,406 7 3	6 1 6*

* Total cost per mile, £6 1s. 6d.

Appendix D.

RETURN of Ordinary Telegrams for the Financial Year ending 30th June, 1868. E.—No. 5.

	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Totals.	
	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.
Wellington ...	343	64 5 0	183	27 10 5	409	75 19 1	489	91 5 5	291	44 19 3	483	88 6 3	489	91 12 9	243	45 6 5	535	99 5 7	555	102 11 5	505	87 0 5	506	89 19 0	5,031	908 1 0
Blenheim ...	134	13 12 9	139	14 17 5	170	19 0 8	200	22 16 10	176	20 3 7	170	17 14 2	207	23 12 11	179	17 14 0	244	27 10 2	207	22 7 6	214	25 11 9	180	20 3 4	2,220	245 5 1
Picton ...	97	8 14 11	98	9 7 7	117	12 3 9	114	12 1 3	106	10 6 6	113	11 8 6	97	9 10 5	109	9 4 4	128	13 16 5	108	10 14 2	137	12 15 7	117	10 10 11	1,341	130 14 4
Havelock ...	71	6 7 5	82	8 2 3	64	6 10 7	52	5 3 1	52	5 0 9	59	6 4 7	65	6 5 3	33	2 18 9	79	7 6 11	55	5 13 5	60	5 15 5	68	6 9 4	740	71 17 9
Nelson ...	297	45 7 4	189	27 18 7	344	55 16 10	344	52 1 2	303	45 10 11	338	56 10 2	324	62 15 3	170	30 14 7	386	77 8 11	370	74 8 2	312	59 4 3	359	64 7 3	3,736	652 3 5
Kaikoura ...	39	5 11 7	24	3 4 8	55	7 14 0	55	7 7 7	37	4 16 3	62	9 13 0	63	11 2 2	25	3 11 4	53	7 9 8	41	6 3 11	42	5 9 10	41	5 4 4	537	77 8 4
Cheviot ...	31	6 1 8	19	4 12 8	19	3 14 0	36	8 16 3	26	7 6 5	38	8 11 3	59	13 0 11	30	5 16 7	46	10 11 1	60	19 13 8	48	13 14 5	31	7 8 7	443	109 7 6
Kaiapoi ...	122	9 11 5	89	6 7 10	113	8 10 9	89	6 5 7	87	6 3 5	109	9 7 10	95	7 10 2	115	8 4 2	106	10 9 11	145	13 15 11	116	12 4 3	109	10 12 4	1,295	109 3 7
Christchurch ...	932	127 17 2	737	98 5 7	1,039	164 2 6	1,026	154 6 3	913	140 17 11	1,063	168 9 5	783	128 1 7	592	84 1 8	936	159 13 2	1,060	174 0 1	907	158 15 11	899	119 5 8	10,887	1,677 16 11
Heathcote ...	13	0 15 7	24	1 17 8	22	2 8 1	19	2 0 2	9	0 13 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	87	7 14 10
Lyttelton ...	388	32 15 5	357	32 6 11	365	32 17 3	382	33 19 9	349	30 9 3	357	28 7 4	379	39 1 2	287	24 3 10	412	40 5 10	402	42 8 2	421	36 15 1	418	39 10 4	4,577	413 0 4
Timaru ...	165	24 6 11	170	24 5 1	251	41 6 11	254	43 16 7	190	26 7 11	216	34 17 7	222	34 5 7	128	20 12 7	316	49 16 3	282	39 17 5	323	47 1 6	249	32 16 3	2,766	419 10 7
Oamaru ...	236	27 18 11	271	31 19 6	293	34 0 0	305	34 17 8	282	30 10 0	306	34 6 4	287	32 13 11	200	23 10 5	398	51 15 7	401	52 4 9	385	43 4 4	383	46 1 1	3,747	443 2 6
Waikouaiti ...	45	5 10 5	55	6 12 11	43	4 10 5	34	3 9 11	80	11 4 0	61	5 18 5	51	5 14 11	80	9 3 10	78	7 15 9	57	6 3 7	52	5 7 4	52	5 12 4	688	77 3 10
Dunedin ...	1,076	159 10 2	876	110 0 5	1,221	178 11 2	1,242	175 4 6	1,193	171 14 11	1,379	190 7 8	1,299	214 13 10	904	128 18 0	1,615	274 7 3	1,401	215 12 0	1,413	225 16 4	1,441	212 8 8	15,060	2,257 4 11
Port Chalmers ...	135	11 1 3	158	11 13 8	126	10 2 9	178	13 0 8	137	9 17 5	157	10 11 8	179	12 1 3	126	9 10 0	153	13 2 9	177	14 15 6	173	12 13 1	193	13 12 0	1,892	142 2 0
Tokomairiro ...	194	23 7 10	163	17 17 3	200	21 6 7	226	23 4 10	208	18 1 1	288	29 4 1	229	22 17 10	277	25 8 7	259	23 9 6	292	25 18 11	312	27 9 5	293	25 1 11	2,941	283 7 10
Balclutha ...	66	6 13 8	52	5 10 11	62	5 17 9	55	6 4 3	61	6 6 4	90	9 4 8	109	9 15 4	118	11 12 4	90	9 15 4	81	9 17 9	90	9 9 4	80	10 4 9	954	100 12 5
Invercargill ...	158	24 1 11	132	18 3 11	157	22 10 3	204	31 0 7	213	32 6 0	205	28 13 6	230	41 0 2	199	25 13 9	275	39 17 9	230	33 3 2	218	37 2 1	232	37 14 4	2,443	371 7 5
Bluff ...	95	9 2 3	94	10 9 7	107	11 9 3	91	8 11 5	97	11 3 7	110	13 18 3	125	14 11 11	92	13 14 7	165	21 4 11	115	12 2 9	122	18 8 10	85	11 9 4	1,298	156 6 8
Government Offices	47	13 2 6	23	4 2 11	87	22 15 6	48	10 11 3	5	0 17 7	7	0 16 7	7	1 10 2	6	1 0 8	11	2 0 2	3	0 10 9	8	1 2 9	17	3 16 8	269	62 7 6
Selwyn ...	...	...	...	...	...	...	...	...	...	...	1	0 1 3	8	0 19 11	5	0 14 1	6	0 12 7	13	1 6 4	12	1 12 10	7	0 19 1	52	6 6 1
White's Bay ...	...	...	...	...	...	...	...	...	...	...	8	0 14 3	3	0 8 7	3	0 7 5	4	0 8 4	4	0 8 0	1	0 4 2	5	1 1 2	28	3 11 11
Hokitika ...	...	...	...	...	...	...	...	...	...	...	...	...	528	121 3 11	416	88 18 4	593	156 6 4	544	153 16 5	560	138 1 10	458	108 10 3	3,099	766 17 1
Greymouth ...	...	...	...	...	...	...	...	...	...	...	...	...	361	60 2 10	257	34 13 2	369	81 14 9	244	51 14 9	298	52 9 6	329	55 19 6	1,858	336 14 6
Bealey ...	...	...	...	...	...	...	...	...	...	...	...	...	14	1 11 4	15	2 0 0	11	1 4 0	11	1 19 10	7	0 15 0	8	1 14 9	66	9 4 11
Featherston ...	...	...	...	...	...	...	...	...	...	...	...	...	28	3 6 9	16	1 17 10	22	2 7 7	22	2 5 5	9	0 17 5	16	1 4 0	113	11 19 0
Greytown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23	2 9 7	45	4 15 4	49	5 7 7	117	12 12 6
Castle Point ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	1 0 4	19	3 2 0	15	2 1 2	41	6 3 6
Waipukurau ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	164	24 8 7	164	24 8 7
Napier ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	127	15 16 3	127	15 16 3
Total ...	4,684	625 16 1	3,935	475 7 9	5,264	741 8 1	5,443	746 5 0	4,815	634 16 5	5,620	763 6 9	6,241	969 10 10	4,625	629 11 3	7,290	1,189 16 6	6,960	1,097 3 8	6,809	1,047 0 0	6,931	989 10 9	68,617	9,909 13 1

Appendix E.

RETURN of Press Telegrams for the Financial Year ending 30th June, 1868.

	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Totals.	
	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.
Wellington ...	109	35 17 7	20	6 4 9	98	38 8 3	85	22 9 2	33	8 1 9	46	10 13 10	59	13 5 8	17	3 7 6	62	18 5 2	69	22 4 0	62	17 2 9	75	27 3 10	735	223 4 3
Blenheim ...	...	...	...	...	2	0 5 2	...	...	...	...	...	...	...	...	2	0 10 6	...	...	...	...	...	...	1	0 1 9	5	0 17 5
Picton ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Havelock ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nelson ...	...	...	2	0 16 8	14	4 9 5	2	0 4 0	3	3 2 4	1	0 4 1	2	0 9 9	5	1 7 10	16	7 5 9	7	1 14 10	8	10 2 10	4	1 4 10	64	31 2 4
Kaikoura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cheviot ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kaiapoi ...	3	0 5 6	2	0 5 0	1	0 2 0	4	0 8 6	...	...	...	...	2	0 3 0	3	0 10 6	...	...	2	0 2 6	4	0 6 0	8	0 14 0	29	2 17 0
Christchurch ...	23	3 15 3	8	1 10 8	13	1 15 3	5	1 12 8	3	0 10 0	1	0 0 9	13	3 0 11	7	1 12 0	30	8 3 2	10	1 15 11	6	1 6 4	3	0 15 8	122	25 18 7
Heathcote ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lyttelton ...	11	0 5 6	19	1 12 2	16	0 10 6	22	1 0 9	19	0 10 0	22	0 12 0	21	0 12 0	24	0 13 0	31	0 19 0	23	0 11 6	52	1 16 3	53	3 1 2	313	12 3 10
Timaru ...	...	...	6	1 6 6	7	1 9 4	1	0 3 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	1 10 0	21	4 9 2
Oamaru ...	...	...	4	1 19 1	...	...	...	...	6	1 16 2	...	...	...	...	...	...	1	0 2 11	...	...	...	...	1	0 6 5	12	4 4 7
Waikouaiti ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	0 14 7	2	0 4 1	...	...	...	...	...	...	4	0 18 8
Dunedin ...	27	7 13 7	12	2 11 8	37	13 10 2	37	10 6 11	22	5 8 10	34	8 12 3	41	18 15 0	19	5 2 0	51	16 19 8	54	15 19 8	64	20 18 0	45	21 11 7	443	147 9 4
Port Chalmers ...	13	1 2 6	5	0 6 0	7	0 9 0	4	0 4 6	7	0 12 6	2	0 7 6	13	1 1 6	10	0 11 6	6	0 5 6	5	0 7 0	6	0 15 6	2	0 3 6	80	6 6 6
Tokomairiro ...	8	0 18 8	5	0 11 1	5	1 9 9	1	0 8 2	6	0 17 6	3	0 9 11	12	1 9 9	7	0 16 11	1	0 1 9	4	0 10 6	6	0 14 7	10	1 2 9	68	9 11 9
Balclutha ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	0 14 0	3	0 19 10	6	1 13 10
Invercargill ...	...	...	...	...	...	...	...	...	...	...	...	...	3	3 4 8	2	0 4 8	...	...	1	0 17 4	1	0 2 0	5	4 4 8	12	8 13 4
Bluff ...	...	...	...	...	...	...	...	...	1	0 5 4	2	2 10 0	6	1 10 0	...	...	7	5 1 0	6	4 3 2	8	5 1 8	...	...	30	18 11 2
Government Offices	15	7 8 7	6	3 6 0	9	2 8 3	...	...	...	...	...	...	1	0 2 9	...	...	...	...	...	...	...	...	...	...	31	13 5 7
Selwyn ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
White's Bay ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hokitika ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	2 14 6	17	9 4 0	25	9 14 4	26	12 10 3	3	0 13 6	74	34 16 7
Greymouth ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	0 3 6	1	0 1 6	2	0 1 6	2	0 4 6	3	1 10 0	11	2 1 0
Bealey ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Featherston ...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 5 3	...	...	2	0 8 2	...	...	...	...	...	...	3	0 13 5
Greytown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	0 17 6	4	3 7 8	3	0 7 7	10	4 12 9
Castle Point ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Waipukurau ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	0 7 7	2	0 7 7
Napier ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	209	57 7 2	89	20 9 7	209	64 17 1	161	36 18 0	100	21 4 5	111	23 10 4	174	44 0 3	104	18 9 0	227	67 1 8	211	58 19 9	252	75 2 4	228	65 18 8	2,075	553 18 3

E.—No. 5.

Appendix F.

RETURN of Provincial Government Telegrams for the Financial Year ending 30th June, 1868.

	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Totals.	
	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.
Wellington ...	2	0 13 9	...	...	1	0 2 6	5	1 4 3	...	...	...	...	6	1 10 7	4	1 4 2	3	0 18 9	2	0 18 6	3	0 10 5	6	1 14 9	32	8 17 8
Blenheim ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	0 15 2	6	0 15 2
Picton ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 2 4	1	0 2 4
Havelock ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 2 5	...	...	...	...	1	0 2 9	2	0 5 2
Nelson ...	1	0 7 9	5	1 12 9	9	1 14 7	8	2 17 11	4	0 19 8	3	0 9 3	1	0 1 8	10	2 12 8	14	4 6 9	19	9 5 2	1	0 5 0	7	2 9 8	82	27 2 10
Kaikoura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cheviot ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kaiapoi ...	1	0 0 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 0 10
Christchurch ...	34	8 6 9	29	4 16 3	32	10 10 9	38	8 2 5	45	7 0 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	178	38 17 0
Heathcote ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lyttelton ...	12	1 13 6	16	1 17 9	4	0 10 1	17	2 1 8	26	2 19 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	75	9 2 1
Timaru ...	21	3 17 4	11	2 19 10	17	5 1 2	16	2 18 0	24	3 10 2	...	...	...	...	...	...	...	...	...	...	...	...	2	0 7 3	91	18 13 9
Oamaru ...	1	0 1 9	10	1 7 2	1	0 3 5	5	0 11 2	3	0 10 11	...	...	...	...	7	1 3 9	3	0 5 11	3	0 7 2	4	0 11 1	9	2 3 6	46	7 5 10
Waikouaiti ...	4	0 17 1	7	1 5 8	8	1 4 4	7	1 6 9	2	0 4 8	...	...	...	...	3	1 7 3	...	...	3	0 4 10	2	0 5 4	1	0 14 9	37	7 10 8
Dunedin ...	43	15 2 6	39	6 18 10	51	20 1 4	53	12 5 0	60	12 5 0	...	...	...	...	78	13 12 3	42	7 4 6	47	18 7 10	61	13 14 5	55	16 17 10	529	136 9 6
Port Chalmers ...	10	1 2 6	7	0 15 3	9	1 0 1	8	0 14 1	4	0 9 2	...	...	...	...	13	1 12 10	10	0 14 11	15	1 16 1	16	1 13 5	5	0 13 8	97	10 12 0
Tokomairiro ...	25	2 17 1	20	4 12 4	14	2 15 0	18	5 15 9	51	11 12 2	...	...	...	...	30	6 14 10	14	2 6 4	16	2 15 10	29	5 10 1	23	3 13 5	240	48 12 10
Balclutha ...	2	0 4 9	...	...	...	...	2	0 8 11	...	...	...	...	...	...	...	...	...	...	2	0 9 10	7	1 16 6	...	...	13	3 0 0
Invercargill ...	11	2 18 9	1	0 0 11	12	6 14 1	12	3 12 5	16	3 16 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	52	17 2 9
Bluff ...	2	0 3 10	4	0 8 5	2	0 4 9	4	0 10 7	5	0 11 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	1 18 10
Government Offices	7	2 11 0	5	1 17 0	16	10 17 10	7	2 10 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35	17 16 8
Selwyn ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
White's Bay ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hokitika ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Greymouth ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 11 8	1	0 11 8
Bealey ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Featherston ...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 7 9	2	0 4 10	1	0 8 0	1	0 0 10	...	...	5	1 1 5	8	1 5 6
Greytown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	0 6 6	3	0 14 5	2	0 4 7	8	1 5 6
Castle Point ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 14 9	1	0 14 9
Waipukurau ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Napier ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	176	40 19 2	154	28 12 2	176	60 19 11	200	44 19 9	240	43 19 6	3	0 9 3	8	2 0 0	147	28 12 7	88	16 7 7	111	34 12 7	126	25 0 8	120	31 6 1	1,549	357 19 3

Appendix G.

RETURN of General Government Telegrams for the Financial Year ending 30th June, 1868.

	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Totals.	
	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.	No. of Telegrams.	Amount.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.
Wellington ...	418	77 3 4	163	25 11 7	361	60 6 3	442	86 2 5	80	39 17 11	398	69 5 5	461	96 9 5	214	43 8 4	481	129 16 6	378	104 6 1	357	89 17 3	362	82 10 2	4,115	904 14 8
Blenheim ...	24	7 13 10	13	2 15 11	17	3 8 8	14	3 16 2	11	2 6 4	18	3 11 6	30	6 14 4	25	4 3 10	46	7 18 11	24	3 17 9	25	5 2 10	20	2 19 3	267	54 9 4
Picton ...	80	11 3 6	33	3 12 11	92	11 10 4	76	9 2 9	47	7 4 10	104	11 15 3	95	15 4 1	42	5 19 11	104	15 5 11	100	15 11 8	99	13 13 3	99	15 14 4	971	135 18 9
Havelock ...	2	0 9 7	...	...	1	0 11 6	2	0 7 2	...	...	...	...	9	2 5 3	7	1 12 3	5	0 14 11	11	1 12 11	3	0 9 5	4	0 11 11	44	8 14 11
Nelson ...	249	36 15 10	163	23 6 1	259	41 19 1	193	27 15 11	110	22 15 0	188	27 19 9	376	63 16 9	152	26 6 4	244	55 1 11	277	54 18 0	193	43 9 1	220	40 10 8	2,624	464 14 5
Kaikoura ...	5	1 17 2	2	0 17 6	...	...	...	...	4	1 9 11	18	5 6 6	7	1 4 3	4	1 3 2	4	0 17 2	...	...	...	...	...	...	44	12 15 8
Cheviot ...	4	1 12 9	3	1 1 7	...	...	3	0 19 4	3	2 13 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13	6 7 6
Kaiapoi ...	...	...	...	...	1	0 8 2	...	...	1	0 1 6	...	...	...	...	...	...	...	...	4	1 5 1	2	0 15 8	2	1 0 1	10	3 10 6
Christchurch ...	78	23 10 7	27	6 16 3	65	21 0 9	134	53 19 4	114	42 16 10	104	37 9 7	88	33 10 11	64	27 16 4	169	109 2 0	177	79 18 4	112	37 8 4	73	30 15 3	1,205	504 4 6
Heathcote ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lyttelton ...	289	31 14 7	188	21 2 2	302	32 18 6	361	41 1 10	286	30 12 11	376	40 4 2	310	34 11 4	276	31 9 2	409	43 13 6	366	43 12 7	447	51 7 0	410	42 9 0	4,020	444 16 9
Timaru ...	16	3 17 10	15	4 11 3	21	4 2 9	22	2 13 3	14	1 19 3	48	15 1 1	36	8 7 9	22	5 7 3	29	7 3 9	44	18 0 2	31	7 0 9	22	3 15 7	320	82 0 8
Oamaru ...	6	1 14 1	3	0 6 7	4	1 0 0	4	0 11 6	...	...	...	...	9	2 4 0	7	1 6 8	6	1 0 10	8	1 10 6	3	0 10 0	6	3 1 3	56	13 5 5
Waikouaiti ...	7	2 7 4	4	0 17 5	4	1 7 9	1	0 6 8	3	0 14 1	...	...	1	0 4 3	2	0 6 5	3	0 9 1	4	0 13 11	...	...	5	1 0 1	34	8 7 0
Dunedin ...	100	50 16 2	43	15 17 3	63	24 3 9	59	24 19 11	49	17 0 9	81	34 4 8	100	43 18 10	34	14 4 7	86	49 3 2	100	39 13 6	132	63 4 9	128	60 14 11	975	438 2 3
Port Chalmers ...	328	50 2 11	249	27 12 10	390	50 11 3	335	40 11 4	319	38 4 7	336	45 13 1	452	67 14 6	273	37 14 9	456	77 16 8	427	73 0 8	470	75 15 3	430	66 15 9	4,465	651 13 7
Tokomairiro ...	40	8 1 0	20	3 5 3	18	5 11 0	4	1 10 6	15	3 17 10	23	5 19 2	17	4 17 2	13	1 10 7	12	1 18 11	11	3 3 2	10	1 6 11	20	3 17 4	203	44 18 10
Balclutha ...	5	1 8 9	3	0 9 4	11	4 18 5	9	4 1 8	2	2 9 4	4	1 4 7	9	2 18 6	4	1 10 1	10	2 6 5	7	2 10 6	14	11 5 8	...	...	78	35 3 3
Invercargill ...	23	9 3 4	5	0 10 0	7	1 17 4	13	4 5 9	17	7 18 10	13	6 4 2	29	12 11 7	19	10 18 9	23	8 7 7	26	10 14 5	29	11 6 8	16	5 17 5	220	89 15 10
Bluff ...	159	19 6 6	112	11 8 3	122	18 4 1	131	16 9 11	132	16 4 9	107	15 10 4	155	27 15 2	83	12 17 1	220	37 13 3	158	25 18 3	247	40 1 7	156	26 9 11	1,782	267 19 1
Government Offices	140	71 19 8	46	16 19 11	105	44 18 11	129	66 2 8	96	44 0 10	146	75 18 7	215	164 6 9	89	56 2 5	173	127 7 10	235	154 14 0	233	136 11 0	229	138 14 7	1,836	1,097 17 2
Selwyn ...	...	...	...	...	...	...	...	...	...	...	...	...	3	2 0 3	1	0 3 3	12	9 17 7	10	5 14 3	1	0 6 6	1	0 2 2	28	18 4 0
White's Bay ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hokitika ...	...	...	...	...	...	...	...	...	...	...	...	...	505	250 3 5	381	157 7 1	525	280 5 3	418	193 7 4	315	146 0 1	263	124 13 7	2,407	1,151 16 9
Greymouth ...	...	...	...	...	...	...	...	...	...	...	...	...	98	43 19 0	88	29 19 11	86	39 3 10	72	30 9 1	58	25 15 0	70	29 11 1	472	198 17 11
Bealey ...	...	...	...	...	...	...	...	...	...	...	...	...	2	3 18 0	17	20 15 6	...	...	...	...	5	3 8 11	...	...	24	28 2 5
Featherston ...	...	...	...	...	...	...	...	...	...	...	...	...	7	1 6 10	1	0 2 2	2	0 14 1	8	1 3 2	3	0 9 11	4	0 13 0	25	4 9 2
Greytown ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 3 7	...	...	...	...	1	0 3 7
Castle Point ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	0 6 5	3	0 9 11	...	...	5	0 16 4
Waipukurau ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Napier ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	1,973	410 18 9	1,092	167 2 1	1,843	328 18 6	1,932	384 18 1	1,303	282 9 4	1,964	395 7 10	3,014	890 2 4	1,818	492 5 10	3,105	1,005 19 1	2,868	866 5 4	2,792	765 15 9	2,540	681 17 4	26,244	6,672 0 3

Appendix H.

RETURN for the FINANCIAL YEAR ended 30TH JUNE, 1868, of the CASH REVENUE derived from PRIVATE, PRESS, and PROVINCIAL GOVERNMENT MESSAGES, and of the Value of GENERAL GOVERNMENT MESSAGES; the Number of MESSAGES transmitted by each Station, and the WORKING EXPENSES of each Station.

NAME OF STATION.	Total Cash Revenue derived from Private, Press, and Provincial Government Messages.	Value of General Government Messages.	Total Value of Messages of all codes.	Total Number of Private, Press, and Provincial Government Messages.	Total Number of General Government Messages.	Total Number of Messages of all codes.	Amount paid for Salaries.	Contingencies.	Total Cost of Maintenance of each Station.	REMARKS.
	£ s. d.	£ s. d.	£ s. d.				£ s. d.	£ s. d.	£ s. d.	
Head Office	...	...	...	...	...	...	2,120 14 9	357 9 7	2,478 4 4	
Wellington	1,140 2 11	704 14 8	2,044 17 7	5,798	4,115	9,913	1,029 2 9	99 2 10	1,128 5 7	
Government Buildings ...	93 9 9	1,097 17 2	1,191 6 11	335	1,836	2,171	104 18 6	7 9 0	112 7 6	
Blenheim	246 17 8	54 9 4	301 7 0	2,231	267	2,498	183 6 8	21 12 7	204 19 3	
Picton	130 16 8	135 18 9	266 15 5	1,342	971	2,313	111 16 5	10 19 0	122 15 5	
Havelock	72 2 11	8 14 11	80 17 10	742	44	786	72 18 4	4 0 6	76 18 10	
Nelson	710 8 7	464 14 5	1,175 3 0	3,882	2,624	6,506	331 18 6	27 2 1	359 0 7	
Kaikoura	77 8 4	12 15 8	90 4 0	537	44	581	91 13 4	12 16 6	104 9 10	
Cheviot	109 7 6	6 7 6	115 15 0	443	13	456	102 8 5	47 2 4	149 10 9	Guaranteed.
Kaiapoi	112 1 5	3 10 6	115 11 11	1,325	10	1,335	79 13 4	4 13 0	84 6 4	
Christchurch	1,742 12 6	504 4 6	2,246 17 0	11,187	1,205	12,392	933 9 4	292 18 6	1,226 7 10	
Heathcote	7 14 10	...	7 14 10	87	...	87	8 6 8	...	8 6 8	
Lyttelton	434 6 3	444 16 9	879 3 0	4,965	4,020	8,985	320 17 4	40 12 5	361 9 9	
Timaru	442 13 6	82 0 8	524 14 2	2,878	320	3,198	97 16 10	4 13 5	102 10 3	
Oamaru	454 12 6	13 5 5	467 18 4	3,805	56	3,861	172 12 8	10 12 9	183 5 5	
Waikouaiti	85 13 2	8 7 0	94 0 2	729	34	763	73 6 8	10 6 6	83 13 2	
Dunedin	2,541 3 9	438 2 3	2,979 6 0	16,032	975	17,007	855 19 5	38 5 7	894 5 0	
Port Chalmers	159 0 6	651 13 7	810 14 1	2,069	4,465	6,534	137 10 0	10 15 0	148 5 0	
Tokomairiro	341 12 0	44 18 10	386 10 10	3,249	203	3,452	159 3 5	13 1 0	172 4 5	Subsidy £75 Otago Provincial Government.
Balclutha	105 6 3	35 3 3	140 9 6	973	78	1,051	83 6 8	50 11 3	133 17 11	
Invercargill	397 3 6	89 15 10	486 19 4	2,507	220	2,727	183 6 8	9 10 9	192 17 5	
Bluff	176 16 8	267 19 1	444 15 9	1,345	1,782	3,127	227 1 8	49 0 0	276 1 8	
Selwyn	6 6 1	18 4 0	24 10 1	52	28	80	64 11 8	31 13 0	96 4 8	Guaranteed.
White's Bay	3 11 11	...	3 11 11	28	...	28	263 1 4	23 13 4	286 14 8	
Hokitika	801 13 8	1,151 16 9	1,953 10 5	3,173	2,407	5,580	135 8 4	5 6 6	140 14 10	
Greymouth	339 7 2	198 17 11	538 5 1	1,870	472	2,342	104 3 4	8 16 9	113 0 1	
Bealey	9 4 11	28 2 5	37 7 4	66	24	90	83 6 8	4 5 3	87 11 11	
Featherston	13 13 10	4 9 2	18 3 0	121	25	146	60 10 11	11 2 0	71 12 11	Guaranteed.
Greytown	18 10 9	0 3 7	18 14 4	135	1	136	22 19 6	7 16 0	30 15 6	Guaranteed.
Castle Point	6 18 3	0 16 4	7 14 7	42	5	47	23 15 0	18 11 10	42 6 10	
Waipukurau	24 16 2	...	24 16 2	166	...	166	...	10 7 6	10 7 6	Guaranteed.
Napier	15 16 3	...	15 16 3	127	...	127	...	6 6 0	6 6 0	
	10,821 10 7	6,672 0 3	17,493 10 10	72,241	26,244	98,485	8,239 5 1	1,250 12 9	9,489 17 10	

Appendix I.

DEBTOR AND CREDITOR STATEMENT.

Dr.	£ s. d.	£ s. d.	Cr.	£ s. d.	£ s. d.
To Total cost of Maintenance of Stations	9,489 17 10		By Cash Receipts as under,—		
			Ordinary, Press, and Provincial Telegrams ...	10,821 10 7	
To Total cost of Maintenance of Lines	5,406 7 3		Subscriptions from the Press	588 6 8	
			Other Receipts, Tariff Sales, &c.	41 3 9	
		14,896 5 1	Subsidy from Otago Province for Tokomairiro Station for ½ year ending 31 Dec., 1867	37 10 0	
			Amounts due as under,—		
			Subsidy from Otago Province for Tokomairiro Station for ½ year ending 30 June, 1868	37 10 0	
			Do. from Wellington Province for the Featherston Station for ½ year ending 30 June, £75, less value of business done, £18 3s. ...	56 17 0	
			Do. do. for Greytown Station for ¼ year ending 30 June, £37 10s., less value of business done, £18 14s. 4d. ...	18 15 8	
			Do. from Canterbury Province for Selwyn Station for ½ year ending 30 June, £75, less value of business done, £24 10s 1d. ...	50 9 11	
Balance (Credit of Department)		3,427 18 9	Total Cash Revenue ...	...	11,652 3 7
			Gen. Government Telegrams	...	6,672 0 3
		£18,324 3 10			£18,324 3 10

Appendix K.

COMPARATIVE TABLE showing the RATES Charged for Messages on the VICTORIAN, NEW SOUTH WALES, and NEW ZEALAND LINES OF TELEGRAPH, distance for distance.

VICTORIA.					NEW ZEALAND.				
From	To	No. of Miles.	First 10 Words.	Per Word.	From	To	No. of Miles.	First 10 Words.	Per Word.
			s. d.	d.				s. d.	d.
Melbourne ...	Ararat ...	150	3 0	2	Christchurch	Oamaru ...	164	1 8	2
Ditto ...	Ballarat ...	96¼	2 6	2	Invercargill ...	Balclutha ...	94	1 3	1½
Ditto ...	Belvoir ...	205	3 0	2	Dunedin ...	Christchurch	244	2 1	2⅓
Ditto ...	Sandridge ...	3	1 0	1	Christchurch	Lyttelton ...	8	0 10	1

NEW SOUTH WALES.					NEW ZEALAND.				
			s. d.	d.				s. d.	d.
Sydney ...	Albany ...	380	4 0	3	Nelson ...	Timaru ...	392	2 6	3
Ditto ...	Euston ...	613	5 0	3	Invercargill ...	Picton ...	622	2 11	3½

In New South Wales, offices close at 6 p.m.; Head Office open till 9 p.m. Messages sent after 6 p.m. charged fifty per cent. extra. Offices closed on Sundays.

In Victoria, offices open from 8·30 a.m. till 8 p.m., except Sundays, when they are closed all day.

In New Zealand, offices in chief towns open from 8 a.m. till 8 p.m. on week days, and on Sundays from 10 a.m. till 10·30 a.m. and from 5 p.m. till 5·30 p.m.

Appendix L.

STATEMENT showing the Number of INTERPROVINCIAL LETTERS DESPATCHED during the Postal Year ending 31st DECEMBER, 1867; the Number of TELEGRAMS forwarded from each PROVINCE for the Year ending 30th JUNE, 1868; the proportion the TELEGRAMS bear to every hundred LETTERS; and the proportion of LETTERS and TELEGRAMS despatched in the UNITED KINGDOM, BELGIUM, SWITZERLAND, and NEW ZEALAND.

STATION.	No. of Letters.	No. of Telegrams.	Proportion of Telegrams sent for every 100 Letters.
Wellington	289,058	12,313	4·41
Marlborough	47,215	6,206	13·14
Nelson	143,374	6,962	4·85
Canterbury and Westland	801,774	42,101	5·25
Otago	575,948	32,668	5·66
Southland	81,209	5,384	7·20

Total number of Letters 1,938,578

„ „ Telegrams 106,104

Proportion of Telegrams to every one hundred Letters ... ... 5·47

In the United Kingdom 1 Telegram sent for every 121 Letters.

In Belgium 1 „ „ 37 „

In Switzerland 1 „ „ 69 „

In New Zealand 1 „ „ 20 „

Appendix M.

RETURN showing the CASH VALUE of SHIPPING TELEGRAMS, and the AMOUNTS actually CHARGEABLE to each DEPARTMENT of the GENERAL GOVERNMENT for TELEGRAMS transmitted during the Financial Year ending 30th JUNE, 1868.

——	JULY.	AUGUST.	SEPTEMBER.	OCTOBER.	NOVEMBER.	DECEMBER.	JANUARY.	FEBRUARY.	MARCH.	APRIL.	MAY.	JUNE.	TOTALS.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Colonial Secretary	13 14 5	1 0 3	16 12 0	36 4 2	39 17 7	31 15 7	71 17 2	29 11 10	148 10 3	130 6 8	64 7 8	129 10 11	713 8 6
Postal	61 16 0	20 5 10	34 12 5	58 16 4	36 8 11	45 14 3	166 11 4	80 15 0	184 15 7	67 14 5	96 14 1	53 10 5	907 14 7
Treasury	40 16 1	6 5 1	15 7 3	23 12 4	19 4 3	64 2 1	93 11 1	45 6 9	78 17 6	105 17 8	111 13 4	83 15 2	688 8 7
Customs	7 2 9	7 6 5	15 0 10	33 2 6	10 14 10	17 6 11	71 7 3	42 15 9	73 9 4	51 14 10	52 13 2	30 18 11	413 13 6
Judicial	5 14 1	8 11 9	8 1 2	14 11 5	17 14 9	11 9 8	72 17 5	43 10 11	77 12 11	63 10 9	50 9 11	36 11 6	410 16 3
Crown Lands	0 16 2	2 6 2	1 15 7	2 3 6	4 4 5	0 13 5	4 8 11	2 1 4	5 19 8	3 8 7	8 9 10	15 2 11	51 10 6
Stamps	4 18 2	0 12 2	5 0 11	1 13 0	2 14 6	1 15 1	0 19 0	0 7 9	1 3 9	6 1 8	1 11 9	1 8 6	28 6 3
Native	3 1 6	0 16 4	0 18 7	0 7 4	2 14 9	4 5 10	10 17 8	3 17 4	2 18 0	10 0 4	28 1 3	10 4 1	78 3 0
Gold Fields	36 6 10	8 6 10	8 14 9	2 13 6	...	1 13 7	10 3 4	7 10 10	5 0 0	...	...	...	80 9 8
Defence	1 6 3	...	3 7 9	9 4 1	4 5 1	6 7 9	12 13 1	3 7 1	11 14 1	65 0 2	30 11 8	21 18 11	169 15 11
Marine	0 7 1	0 7 1	3 4 8	4 8 11	6 16 3	16 19 11	14 13 1	8 9 3	40 1 7	25 0 11	8 9 6	24 9 6	153 7 9
Printer	...	0 3 10	...	...	...	...	...	...	...	...	0 18 7	0 3 9	1 6 2
Registrar	...	...	...	2 11 9	4 16 4	7 0 2	11 5 10	7 15 6	17 10 10	8 4 7	5 8 1	11 15 1	76 8 2
Auditor	...	...	...	0 8 9	...	...	...	...	...	...	...	...	0 8 9
Public Works	...	...	...	...	...	...	11 4 6	14 9 9	3 3 5	3 2 7	4 10 10	8 14 5	45 5 6
Telegraph	60 19 11	16 8 1	38 16 8	24 11 1	18 19 5	23 19 0	19 17 11	9 2 3	14 2 1	9 1 1	4 1 1	3 9 7	243 8 2
Shipping Reports	173 19 6	94 12 3	177 5 11	170 9 5	113 18 3	162 4 7	317 14 9	193 4 6	341 0 1	317 1 1	297 15 0	250 3 8	2,609 9 0
TOTALS	410 18 9	167 2 1	328 18 6	384 18 1	282 9 4	395 7 10	890 2 4	492 5 10	1,005 19 1	866 5 4	765 15 9	681 17 4	6,672 0 3

MAP

Shewing the lines of

TELEGRAPH

Throughout New Zealand

BELONGING TO THE

GENERAL GOVERNMENT

Westport
Charleston
Brighton
Greymouth
Hokitika
Nelson
Havelock
Picton
Whites Bay
Blenheim
Cable
C. Campbell
Kaikora
Kaikora Peninsula
Cheriot
Pegasus Bay
Bealey
Kaiapoi
Christchurch.
Selwyn
Lyttleton
Rakaia R.
Temaru
Waitaki R.
Queenstown
Cromwell
Clyde
Alexandra
Roxburgh
Dunedin.
Port Chalmers
Lawrence
Tokomairiro
Balclutha
Molyneux R.
Invercargill
The Bluff
FOVEAUX STRAIT
Damaru
Waikouaiti

Note.

Line of Telegraph
Telegraph Stations
Line in course of construction

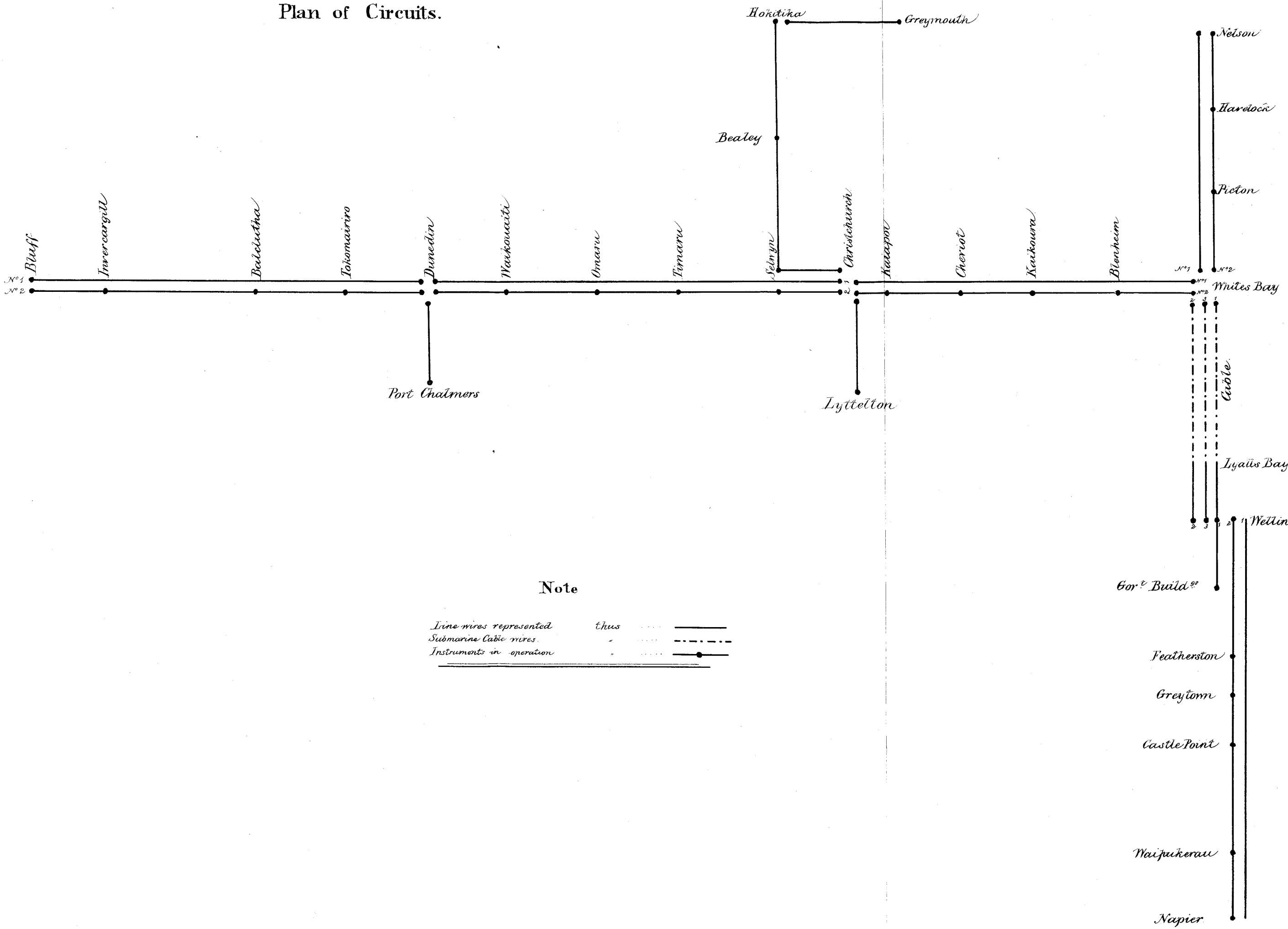
Auckland
Onehunga
Manukau
Waikato R
Thames
Gulf
Mercer
Ngaruawahia
Hamilton
Ohaeo
Cambridge
Alexandria
Kihikihi
Tauranga
Maketu
Opotiki
East Cape
Poverty Bay
Taupo Lake
HAWKES BAY
Napier
Waipukerau
C. Turnagain.
Castle Point.
Greytown
Featherston.
Wellington
COOKS STRAITS
Nelson
Havelock
Picton
Whites Bay
Cable

Note

Proposed line via Lake Taupo thus
" " East Cape "

New Zealand Telegraph

Plan of Circuits.



Note

Line wires represented thus .....
Submarine Cable wires " .....
Instruments in operation " .....