ANNUAL REPORT OF THE POST AND TELEGRAPH DEPARTMENT FOR THE YEAR 1929-30.

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APPENDIX.

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DETAILED INDEX.

1930.

NEW ZEALAND

POST AND TELEGRAPH DEPARTMENT

(REPORT OF THE) FOR THE YEAR 1929-30.

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

To His Excellency the Right Honourable Baron Bledisloe, P.C., G.C.M.G., K.B.E.

MAY IT PLEASE YOUR EXCELLENCY,—

I have the honour to submit to Your Excellency the report of the Post and Telegraph Department for the year ended 31st March, 1930.

RECEIPTS AND PAYMENTS.

The revenue collected during the year exceeded that for the previous year by £196,075. The sum received was £3,641,620, as compared with £3,445,545 for 1928-29.

The working-expenses amounted to £3,111,199, while an amount of £500,000 was invested for the purpose of renewal and replacement of existing assets, thus leaving a balance of receipts over payments of £30,421.

Interest on capital liability, which is included in the working-expenses, totalled £481,000, an increase of £53,000 on the amount paid for the previous year.

SAVINGS-BANK.

Although the withdrawals from the Post Office Savings-bank exceeded the deposits by £1,014,140, the respective figures being £29,575,994 and £28,561,854, the sum at the credit of depositors increased by over £750,000, the interest credited depositors amounting to £1,806,414. The total sum at the credit of depositors is now £49,436,491, the per capita average for the Dominion being approximately £33 4s.

STAFF.

I am pleased to report that excellent service continues to be rendered by the officers of the Department, and that there has been no diminution in the high standard of efficiency attained in previous years. This efficiency is due to the

meritorious services of officers generally under capable supervision and direction. The high standard of efficiency is reflected on the one hand in the remarkably few serious complaints that come under notice, considering the variety and magnitude of the work performed, and on the other hand by the numerous appreciative references that are made. The public generally are quick to criticize servants of the State but slow to express appreciation of any good work rendered, and for this reason the laudatory references which come to hand are all the more gratifying.

The earthquake which created such havoc and devastation in the north-western portion of the South Island in June last proved a very severe test for officers, and I take great pride in saying that in the dangerous and demoralizing conditions obtaining in the districts affected the staffs responded in splendid fashion and in manner worthy of the finest traditions of the Service. In the deplorable conditions that existed on the day of the earthquake, and the days of bleak wet weather that followed, no effort was spared to restore the Department's services to normal in the least possible time. The response of officers was all that could be desired.

Representations were made to Government during the year in support of the desire of officers, as expressed by their organization, for improved salary conditions, and no one regrets more than I do that the financial state of the country was such that Government could not go as far as they would like to have done to increase salaries. It must be remembered in dealing with such requests that one body of public servants cannot, in the absence of very different conditions of work, be accorded preferential treatment, and that any increase given in the case of Post and Telegraph workers must also be given in the case of public servants generally. To have met the requests which were made and to have applied the increases to the whole of the Public Service would, it is estimated, have involved an additional cost for salaries of approximately £1,000,000 a year, a prospective increase in expenditure which could not possibly be faced. It was clear, however, that some relief had to be accorded to the large group of officers at the head of the Seventh Class in the Clerical Division, and arrangements were made by which 217 qualified and efficient officers from this group were advanced from £295 per annum to the next class at a salary of £320 per annum. Government also directed that an inquiry be instituted into the rates of pay of officers of the General Division and as a result of this inquiry Government have decided on a new salary schedule for this Division, to operate from the 1st April, 1930. The new schedule will provide for officers receiving when they reach manhood a salary more in keeping with that estate.

The regrading of the Service, which is required by law to be undertaken every five years, was carried out during the year. In addition to the bettering of the salary and status of the 217 officers referred to previously, 241 positions were regraded and 182 new positions were created above the rank and file of the Clerical and the General Divisions.

It is the Department's policy to appoint to the permanent staff, rather than to retain in a temporary capacity, any employees whose services are likely to be required permanently and who are eligible for permanent appointment. Owing to the great growth in telephone development it has been difficult during the last few years to arrive at a proper basis for making such appointments, but, following an extensive review of the position, arrangements have been made for 139 workers on the casual construction-and-maintenance staff of the Department to be given permanent status from the 1st April, 1930. In addition, ninety female employees on the temporary staff were appointed to the permanent staff during the year.

POSTAL CONGRESS.

At the International Postal Union Congress held in London in May–June last, the Dominion was represented by Mr. G. McNamara, the Secretary of the Department. So far as New Zealand is concerned, perhaps the most important

happening at the Congress was the signing by the New Zealand delegate of the Air Mail Convention, which lays down rules for the international exchange of air-mail correspondence. In addition, important changes were made by Congress in the method of taking statistics for payment of the charges incurred in the transit of mail-matter between the various countries, and a system was formulated to enable a simplified service for the exchange of "small packets" to be set up at the discretion of the countries concerned.

A report of the proceedings of the Congress appears at page 23.

COMMERCIAL BRANCH.

A further step in the application of business methods to State enterprise has been taken by the establishment of a Commercial Branch of the Department, the functions of which will be to foster and extend cordial relations between the Department and the public, and to promote a more extensive use of the telephone in all capacities in which it will prove of value to the user. The new system was not inaugurated until March, but the results already achieved are very encouraging. The activities of the officers of the branch are being limited at first to Auckland, Christchurch, and Wellington, but, as the branch becomes established, it is the intention to extend its activities to other centres and to other phases of the Department's business.

CASH-ON-DELIVERY SYSTEM OF EXCHANGE OF PARCELS.

Convinced that the cash-on-delivery system for the exchange of post parcels between Great Britain and New Zealand provided overseas exporters with an unfair advantage over New Zealand traders, in that the Post Office was responsible under the system for collecting the charges on the goods before effecting delivery, Government soon after assuming office issued instructions for the system to be terminated at the earliest possible date. As a result, the scheme was abolished as from the 31st October, 1929. The agreement in the matter between the two countries required twelve months' notice of termination to be given; but shorter notice was accepted. The system, which was introduced on the 1st January, 1920, expanded remarkably. For the year 1921 the number of parcels received was 425, of a value of £1,974; for the year 1929 the number received was 47,412, of a value of £159,509.

"CHARITY" STAMP.

Government decided during the year to adopt in New Zealand the "charity" stamp system of appealing to the public generally at the Christmas season for contributions towards deserving objects, a form of appeal which gives an opportunity to all persons to make a small contribution to charity. The stamp of the first issue bore the effigy of a New Zealand nurse; it had a postage value of 1d. and a charity value of 1d. Notwithstanding that it was not possible to arrange for the appeal to be launched until rather late in the year, a sum of approximately £5,000 was realized from the effort. The "charity" portion of this amount has been paid to a special account to be administered by the Health Department in accordance with the provisions of section 34 of the Finance Act, 1929.

The "charity" stamp scheme was inaugurated in Denmark in 1904. Other countries have since adopted the scheme. In every case this method of raising funds for charitable purposes has proved a success. It is expected that in New Zealand, where the scheme is proposed to be continued each successive year, sales will, as elsewhere, show an increased return.

OVERSEAS MAILS.

It was recognized by Government when they assumed office that there was good ground for the complaint emanating from the South Island of the lack of direct shipping-facilities between the South Island and Australia, and action was

taken to invite tenders for a Bluff – Melbourne service to provide for an improved connection with regular sailings. Only one offer was received—from the Union Steam Ship Company—and after negotiations arrangements were completed during the year for the performance by the company of a Bluff–Melbourne mail, passenger, and freight service, the steamers "Manuka" and "Maheno" to maintain the service with sailings at alternating intervals of nine and twelve days. Owing, however, to the wreck of the "Manuka" at Long Point, on the coast between Bluff and Dunedin, shortly after taking up her contract running, and because of the inability of the contractors to make another suitable vessel available, the service is being performed by the "Maheno" for one year only from the 29th January, 1930, at intervals of twenty-one days, following the route Melbourne – Bluff – Dunedin – Lyttelton – Wellington inward, and Wellington – Bluff direct, Melbourne outward.

As the time of expiration of the existing service draws near, the whole question of the South Island – Australia connection will be carefully reviewed, with a full appreciation of the importance of the matter to the South Island.

The contract services between Auckland and Vancouver and between Wellington and San Francisco, and the non-contract services between Auckland – Wellington and Sydney, have been performed with pleasing punctuality throughout the year, providing the regular communication that is so necessary to the business community with the countries overseas with which the great bulk of our trade is transacted.

The contracts for the Vancouver and San Francisco services, which expired on the 31st March, are being renewed for a further period of twelve months.

INLAND MAIL-SERVICES.

Except for the interference caused by the earthquake, inland mail-services were conducted without serious interruption.

The earthquake destroyed completely or partially many of the roads in the Nelson and Westport Postal Districts, and in some instances new arrangements required to be made for the transport of mails to and from the affected areas. One of the most important mail-services in New Zealand—the road motor service between Nelson and the West Coast—was diverted via Maruia at greatly increased cost owing to the road between Murchison and Inangahua Junction being rendered impassable. Karamea, which depended on a thrice-weekly overland service from Westport by a road which was also rendered impassable, has been provided for by a twice-weekly sea service at an increased subsidy of £865 per annum.

Owing to the great damage to the roads concerned, some time is expected to elapse before these services will be resumed over the old routes.

CABLES AND WIRELESS MERGER.

The Imperial and International Communications Co., Ltd., assumed the operation of the beam wireless services in England, the Imperial Atlantic cables, and the systems of the Pacific Cable Board, the Eastern Extension, Australasia, and China Telegraph Co., and the Western Telegraph Co. on the 29th September, 1929. This was a new page in the history of Empire communications, and can be regarded as a big step in the unification of Imperial communication. The company has assumed great responsibilities as an Imperial public-utility company, working with the Governments of the Empire, and supervised by an Advisory Committee representing Great Britain and the overseas dominions and colonies. It is felt that the company will appreciate its role as a servant of the public and of the Empire, and will spare no pains to serve the interests of cable-users and to bind even closer the links which keep the various parts of the Empire in intimate communication.

The Dominion is represented on the Advisory Committee by Mr. M. B. Esson, formerly Second Assistant Secretary of the Department, whose long and valuable

experience of telegraph and cable matters should prove of great value to the councils of the Committee. Already there are ample indications that the interests of the Dominion are being closely watched and that Mr. Esson is devoting keen attention to matters pertaining to Empire communications.

MACHINE-PRINTING TELEGRAPHS.

Until recently the only system of machine-printing telegraphy used commercially in this country was the Murray multiplex system linking up the main centres. An important departure has now been made by the introduction of systems of the start-stop type generically known as teleprinters. A few typical circuits have been equipped with such apparatus with a view to determining the extent to which its more general introduction would be justified on the grounds of traffic and staff economies. Teleprinters are suitable for installation between centres where the traffic cannot be dealt with economically by hand Morse operation, but where the volume of traffic is not sufficient to warrant the introduction of the more costly multiplex system. The speed of the teleprinters in use is sixty-six words per minute, and simultaneous transmission in each direction at this speed is possible, the line thus carrying a maximum of 132 words per minute. With the multiplex system four channels, each operating at forty words per minute, are available in each direction, the line thus carrying a maximum of 320 words per minute.

CARRIER-CURRENT TELEPHONY.

The extension of the carrier-current telephone system, to which reference was made in last year's report, has resulted in a very considerable improvement in the facilities offered to the public for long-distance telephone communication. A number of additional carrier channels has been installed, including a single channel system operated over the Cook Strait continuously-loaded telephone-cable. This has enabled an additional outlet to be provided between the two Islands at a relatively small cost.

The effect of the installation of the additional carrier systems has been to extend considerably the range of toll communication generally, to relieve the congestion of traffic between certain large centres, and to increase substantially the efficiency of the long-distance toll networks. Practically all the principal centres in New Zealand, from Dunedin in the south to Auckland in the north, are now in telephonic communication at all hours of the day and night. On Sundays and holidays, and after the usual busy hours on week-days, the range is extended as far south as Invercargill, and includes a number of centres which, telephonically, are too remote from the main arterial routes to be given a full intercommunication service during the whole of the twenty-four hours. The system of long-distance communication will be further extended during the next twelve months so that the remaining principal centres will be brought into the full benefits of the continuous long-distance service. It is also proposed to install carrier-current equipment at a number of other important centres in order to establish improved and increased facilities where the traffic has proved sufficient to warrant the expenditure involved in the provision of this apparatus.

To mark the opening of the carrier-current toll sections between Auckland and Wellington, and between Wellington and Christchurch, and at the same time to demonstrate the potentialities of these latest developments in the field of long-distance telephone communications, a unique telephonic conference was held on the 5th September last. This was presided over by the Postmaster-General at Wellington, and included gatherings at Auckland, Wellington, Christchurch, and Dunedin, comprising the Mayors and the presidents of the Chambers of Commerce of the four centres, together with representatives of the press. Over the special telephonic network extending from Auckland to Dunedin, and including Wellington and Christchurch as intermediate stations, the Postmaster-General briefly addressed the gatherings simultaneously, stressing the benefits to be derived from the new installations and outlining the programme of future extensions. Following the Postmaster-General's speech the various members of the Conference responded, and exchanged congratulatory remarks.

INCREASE IN TOLL CALLS.

The outstanding feature of telephone business was the increased use of the telephone for toll purposes. The total number of calls exceeded 11,000,000, representing an increase on the previous year's traffic of over 7 per cent. The toll revenue amounted to £482,571, an increase of approximately 9 per cent. While this greater use of the toll lines was stimulated to some extent by greater commercial activity and by the more extensive use of the telephone in the social life of the community, probably the largest contributing factors were the increased speed of service, the improved quality of speech, and the greatly extended range of service that has been provided during recent years. The toll revenue for the year exceeded the revenue derived from telegrams, the relative figures being—Toll, £482,571; telegrams, £405,604. Ten years ago the corresponding figures were—Toll, £211,911; telegrams, £392,310.

RADIO-TELEGRAPH AND TELEPHONE SERVICES.

An outstanding radio event has been the inauguration on the 30th April, 1930, of the public radio-telephone service between Great Britain and Australia. Since its introduction the service has been extensively availed of, proving that the charges—£2 a minute—which may appear high in comparison with those levied in respect of short inland service, are no obstacle where the prompt transaction of business and urgent social communications are concerned. Arrangements have been proceeding for the institution of a radio-telephone service between New Zealand and Australia, which will, in addition, furnish facilities for communication with the United Kingdom and other European countries. It is expected that the New Zealand–Australia service will be established shortly.

The New Zealand radio-stations continue to give excellent service, and radio communication generally in New Zealand is keeping well abreast of modern advances. The increased reliability of the short-wave radio-telegraph service between Wellington and the Pacific islands has enabled the high-power long-wave station at Awanui to be closed. A similar direct service between New Zealand and Rarotonga has been inaugurated (12th May, 1930). The value of radio communication in the event of the dislocation of land lines was exemplified during the recent earthquake period, and for some time radio provided the only reliable means of communication between certain affected areas and the outside world.

BROADCASTING.

The broadcasting service continues to be conducted satisfactorily by the Radio Broadcasting Co. of New Zealand, Ltd. The steady increase in the number of receiving licenses issued indicates that the public generally appreciate the service, which has been considerably extended during the past year. On the 31st March, 1930, the number of receiving licenses totalled 53,407, as compared with 44,609 on the 31st March, 1929.

A feature of the service has been the increasing recourse to the toll lines of the Department for the purpose of relaying important national and sporting events. It is also satisfactory to record that the Broadcasting Co. is alive to the potentialities of rebroadcasting transmissions from the stations of other countries whenever technical circumstances permit.

While the programmes at the various stations are at all times open to criticism from listeners, it is obvious that the company makes a genuine endeavour to meet the varied viewpoints in this respect, and, in general, to intersperse the matter transmitted so as to provide satisfying fare for all tastes.

TELEPHONE-EXCHANGE SERVICES.

The Christchurch Telephone Exchange was converted to automatic working at midnight on the 14th September, 1929. The cut-over, a work of great magnitude and intricacy, constituted the most important telephone-exchange event of the year, and was accomplished without hitch, an undertaking which reflects much credit on the engineers and mechanicians concerned.

The development in telephone-exchange service during the year constituted a record, the number of new connections (main stations) being 12,781. The increased demand manifested is very gratifying, and indicates that the public appreciates the efforts the Department has made to improve local telephone service and to make available the benefits of long-distance communication.

In an expanding telephone system it is an axiom that to maintain telephone-exchange rentals at the same level is actually to reduce them or to render service at a lower rate. The result of growth in the number of telephones connected to an exchange is that the telephone-user receives more valuable and extensive service for the same rental. A 10-per-cent. increase in the number of telephones in a local exchange area means that a subscriber may at the same price talk to 10 per cent. more people. Unlike many other business undertakings, where increased production or turnover means a decreasing cost of production per unit, or a proportionately decreasing overhead cost, the telephone business is one in which the factor of growth and the resulting complication cause the cost of giving local service to increase almost in direct proportion to the increase in the extent of the service. This may seem paradoxical, but when it is considered that increases in service in large areas necessitate the acquisition of land, the provision of buildings to house satellite or branch exchanges, the installation of separate exchange equipment, the installing of junction apparatus at all exchanges in the area, the laying of special cables between the exchanges, as well as the establishing of separate maintenance or operating staffs, it will be realized that the problem of maintaining existing rentals in the face of extending service is a very real one. It is only by studying the constant advances in the telephone art, and developing improvements in operating and maintenance methods, that continually increasing service in local areas can be furnished without increases in rentals.

WORK PERFORMED FOR OTHER DEPARTMENTS.

Departmental officers act in many and varied ways as the representatives of other Departments, particularly in the smaller centres, but it is in collecting moneys due to Departments and in making payments on their behalf to members of the public that the Department principally assists other Departments. The total sum handled in the transactions of the Post Office for the year under review was £206,000,000.

In connection with the work of motor-registration, which has been undertaken by the Department since the inception of the present system of Dominion registration of vehicles, a new activity has been allotted the Department, the duty of collecting the premiums due under the provisions of the system of third-party insurance made compulsory for owners by the passing of the Motor-vehicles (Third-party Risks) Act of 1928. The work of collecting the premiums, which was undertaken for the first time in connection with the relicensing of motor-vehicles for the year commenced on the 1st June, 1929, is proceeding without hitch and to the entire satisfaction of the interested parties.

BUILDINGS.

The erection of five post-office buildings was completed during the year, and additions and alterations were made to some eighteen existing buildings. Several large buildings, as well as additions, &c., of a major character, are under construction.

The earthquake of June destroyed the chief post-office building at Westport, a two-story brick structure, and also caused extensive damage to a number of the Department's buildings. The necessary repairs involved the expenditure of approximately £4,000. The greater portion of this amount was expended in the demolition of the ruins of the Westport Chief Post-office building; and the repairing and strengthening of the clock-towers on the Greymouth and Nelson Chief Post-office buildings. The preparation of the plans of a new chief post-office building for Westport are sufficiently well advanced to anticipate an early commencement of this work.

At Napier the erection of the new chief post-office building has been completed (July, 1930).

The proposed new chief post-office building at Dunedin will probably be commenced during the financial year 1930–31. The construction of the foundations for the building (arranged for by a separate contract) is almost completed.

The construction of new post-office buildings at Courtenay Place (Wellington), Palmerston (South), Upper Symonds Street (Auckland), and Waitara has been commenced.

Tenders are shortly to be invited for the erection of post-office buildings at High Street (Christchurch), Taumarunui, and Westport.

AUXILIARY POSTMEN.

As a means of effecting a necessary improvement in the time of delivery of correspondence in the business portions of Christchurch and Wellington, and at the same time of providing employment for a number of partially disabled returned soldiers who, owing to war injuries or sickness, are fit only for light duties, auxiliary postmen have been appointed in the cities mentioned to assist the postmen on their deliveries. A further number of returned soldiers has also been provided for in Auckland in the same way.

POSTMASTER-GENERALSHIP.

The office of Postmaster-General and Minister of Telegraphs was held by the Right Hon. Sir Joseph Ward from the 18th December, 1929, to the 28th May, 1930, and, in part, this Report is a record also of his administration.

Sir Joseph Ward filled the office for the following periods: 4th February, 1891, to 16th June, 1896; 21st December, 1899, to 28th March, 1912; 12th August, 1915, to 21st August, 1919; 18th December, 1929, to 28th May, 1930.

His death, following closely on his relinquishment of office, was deeply deplored in the Service.

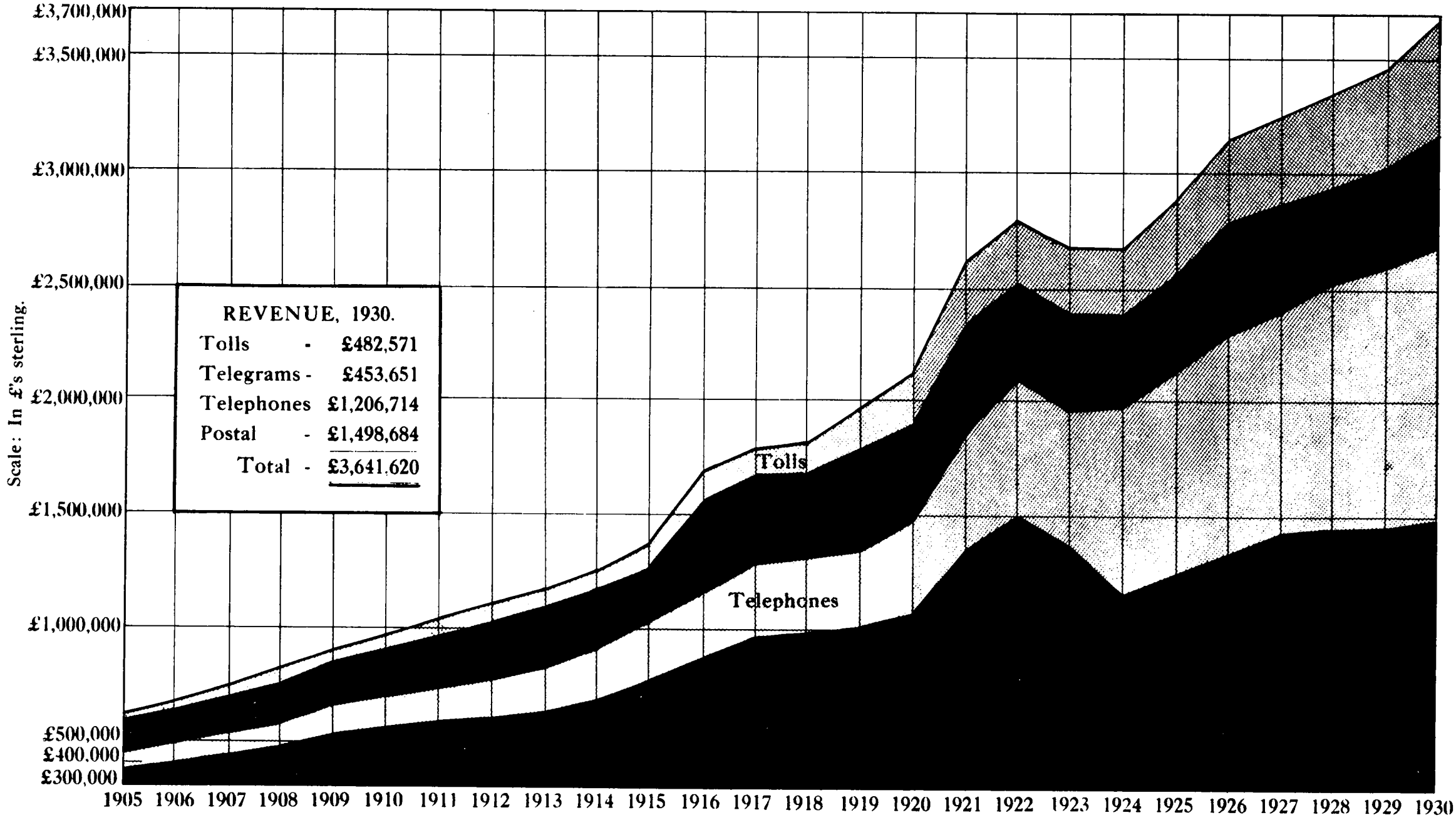
DETAILED REPORT

A detailed report of the operations of the Department for the year will be found in the statements and tables which follow.

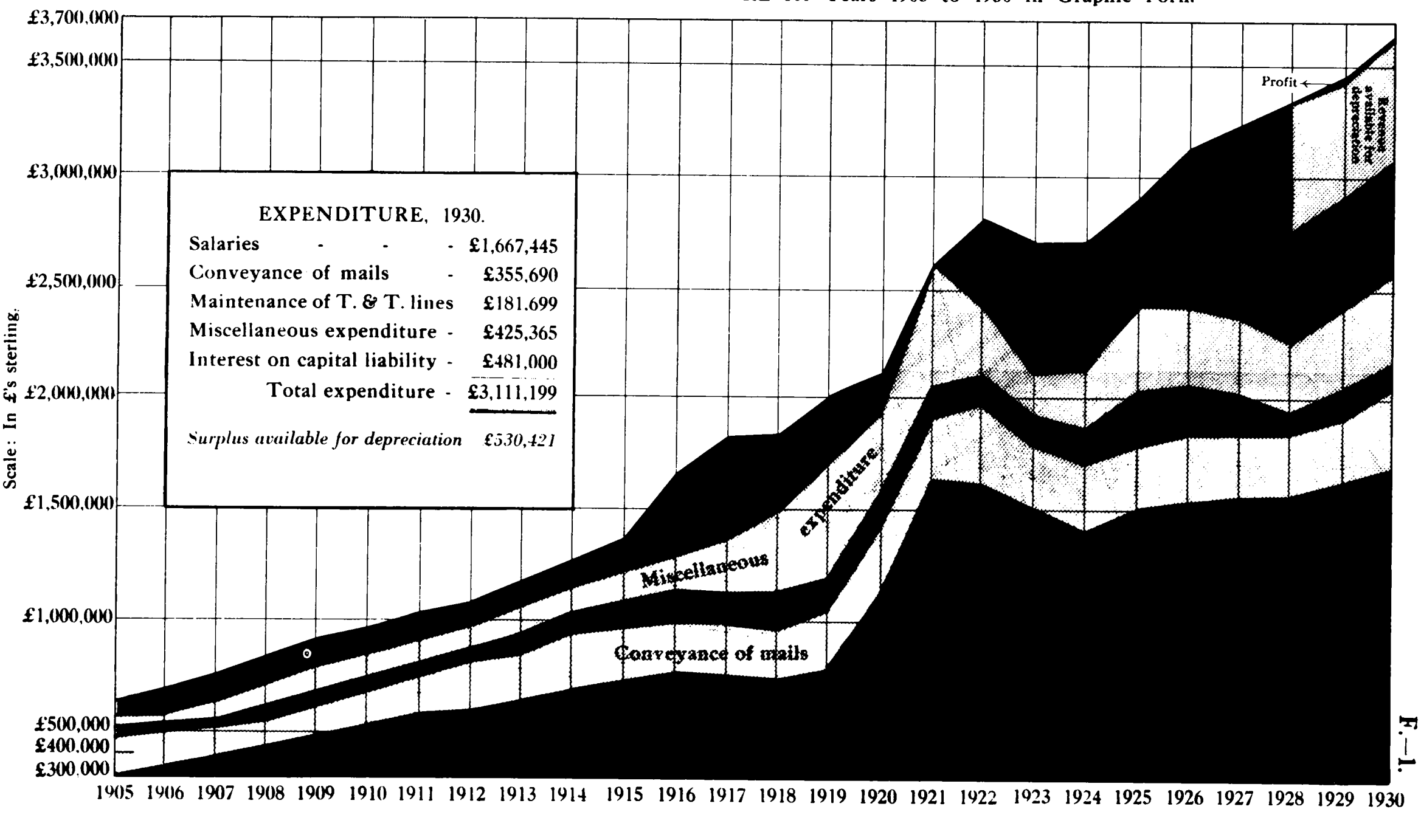
I have the honour to be,
Your Excellency's most obedient servant.
JAS. B. DONALD.

General Post Office, Wellington.
14th August, 1930.

POST AND TELEGRAPH REVENUE for Years 1905 to 1930 in Graphic Form.



POST AND TELEGRAPH EXPENDITURE for Years 1905 to 1930 in Graphic Form



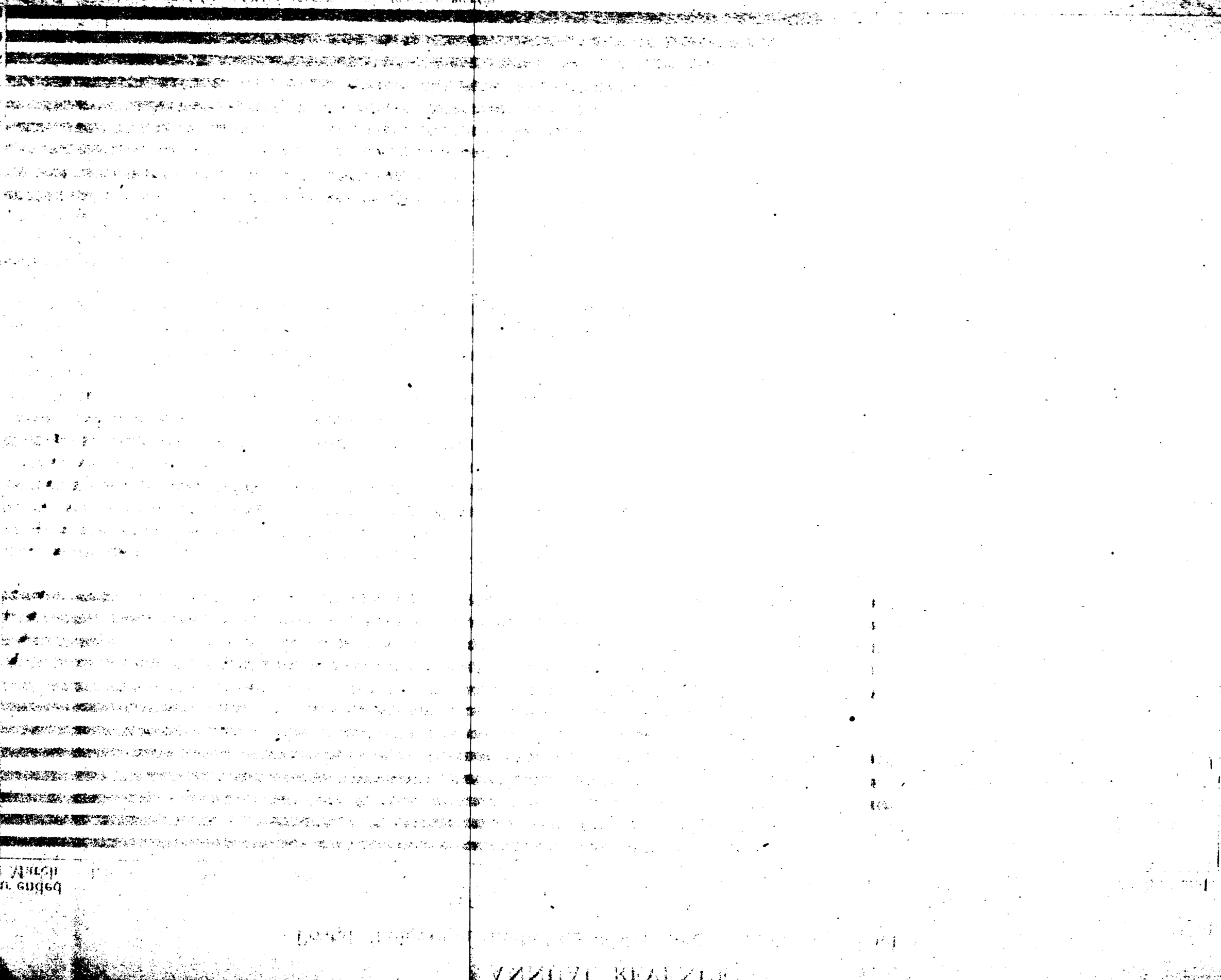
F.—1.

ANNUAL REVENUE.

Postal, Telegraph (including Tolls), and Telephone Branches.

For twelve years ended 31st March, 1930.

**Telephone rental received for a period approximately fourteen months.*



STATEMENT OF FINANCIAL OPERATIONS AND BUSINESS OF THE DEPARTMENT FOR THE YEAR ENDED 31st MARCH, 1930.

RECEIPTS AND PAYMENTS.

The receipts and payments of the Department for the financial year 1929–30 are shown in the following account :—

Receipts.	£ s. d.	£ s. d.	*Payments.*	£ s. d.	£ s. d.
To Balance forward ..	.. ..	22,477 8 0½	By Salaries ..	1,668,363 7 10	
Postages ..	1,169,281 10 6		Conveyance of ocean mails ..	90,082 14 9	
Money-order and postal-note commission	51,984 0 3		Conveyance of inland mails ..	148,439 19 6	
Private box and bag rents and rural-delivery fees	50,824 5 9		Conveyance of mails by rail ..	117,167 18 7	
Miscellaneous receipts ..	274,640 18 2		Maintenance of telegraph and telephone lines	111,698 11 2	
Paid telegrams	405,604 6 11		Renewals and replacements ..	70,000 0 0	
Paid tolls ..	482,570 17 2½		Motor services and workshops ..	83,473 0 0	
Telephone-exchange rentals	1,206,713 12 5		Miscellaneous ..	340,973 9 9	
		3,641,619 11 2½	Interest on capital liability ..	481,000 0 0	
					3,111,199 1 7
			Renewal and replacement of Assets Fund (investment) ..	.. ..	500,000 0 0
			Balance carried down ..	.. ..	52,897 17 8
		£3,664,096 19 3			£3,664,096 19 3
	£ s. d.				
To Balance brought down	52,897 17 8				

The total cash value of the transactions of the Department, inclusive of the above, amounted to approximately £206,000,000 for the year.

RECEIPTS AND PAYMENTS FOR THE YEARS 1881–82, 1891–92, 1901–02, 1911–12, 1921–22, AND FOLLOWING YEARS.

Year.	Receipts.	Payments.	Balance of Receipts over Payments.	Excess of Payments over Receipts.
	£	£	£	£
1881–1882	234,529	233,291	1,238	..
1891–1892	320,058	268,343	51,715	..
1901–1902	488,573	465,756	22,817	..
1911–1912	1,087,710	988,911	98,799	..
1921–1922	2,811,535	2,451,571	359,964	..
1922–1923	2,687,768	2,114,994	572,774	..
1923–1924	2,688,954	2,120,584	568,370	..
1924–1925	2,889,450	2,416,257	473,193	..
1925–1926	3,100,396	2,409,556	690,840	..
1926–1927	3,220,666	2,346,274	874,392	..
1927–1928	3,329,511	2,299,571	1,029,940	..
1928–1929	3,445,545	2,921,736*	523,809	..
1929–1930	3,641,620	3,611,199†	30,421	..

* Includes payment of interest on capital liability, which was previously paid out of Consolidated Fund. † Includes investment "Renewal and Replacement of Assets Fund."

STAFF.

COMPARATIVE RETURN OF PERSONS EMPLOYED IN THE POST AND TELEGRAPH DEPARTMENT.

The total number of persons employed on the 1st April, 1929 and 1930, was as under :—

	1st April, 1929.	1st April, 1930.
Permanent Staff—		
Administrative Division	4	4
Clerical and Engineering Divisions	3,453	3,485
General Division	5,091	5,456
	8,548	8,945
Temporary staff	159	76
Casual staff	1,104	698
	9,811	9,719
Non-permanent staff—		
Country Postmasters and Telephonists	1,825	1,786
Postmasters who are Railway officers	91	86
Total staff	11,727	11,591

During the year 90 female employees on the temporary staff were appointed to the permanent staff, and on the 1st April, 1930, in order to bring the construction and maintenance staff up to its authorized strength, 139 casual employees are to be given permanent status.

HEALTH OF PERMANENT STAFF.

The following table gives the average absence of officers on sick-leave this year as compared with last :—

	Number on Staff.	Average Absence per Sick Officer.	Average Absence for each Officer employed.
Year ended 31st March, 1930—			
Men	8,198	9·62	4·98
Women	747	16·05	10·10
Year ended 31st March, 1929—			
Men	7,816	10·09	4·61
Women	732	15·38	9·50

It has to be recorded with regret that twenty-six officers died during the year, seven of them being officers with over twenty years of service. Two died as a result of accidents while on duty, and one as a result of exposure while engaged on line-reconstruction work in the earthquake area. The first accident occurred on the 24th December, 1929, when Master H. A. Vercoe, Message-boy, Helensville, lost his life as a result of injuries received by striking his head against a stationary wagon when he was riding a bicycle. A strong head-wind and a heavy rain-shower were contributing factors, and it is believed that the lad had his head bent over his machine and failed to observe the wagon in his way. The second accident occurred at Kaponga on the 5th March, 1930, when Mr. L. Allan, a Line Foreman stationed at Hawera, met his death by falling from a telegraph-pole on which he was working. The fall was the result of his receiving an electric shock from a high-tension wire. An inquest was held, the Coroner finding that death was accidental and that no blame was attachable to any one. The Department spares no effort to guard against accidents of this kind, but, unfortunately, precautionary measures were of no avail on this occasion.

Mr. D. O'Sullivan, an Overseer in the Engineering Branch, met his death under unusual and sad circumstances in July last. He was sent to Westport with a party to restore telegraph and telephone communication interrupted as the result of the earthquake. He did very fine work indeed in the face of great difficulties and dangers. He worked in the worst portions of the district and took up tasks that would have daunted most men. Unfortunately the weather was most inclement, and as a result of exposure and overstrain Mr. O'Sullivan was laid aside by influenza and bronchitis, from which he failed to rally. There is no doubt that self-sacrificing service in the Department's interests and devotion to duty lost to the Department one of its best officers.

The Department's sympathy is extended to the relatives and friends of the deceased officers.

PAYMENTS TO DEPENDANTS OF DECEASED OFFICERS.

The Department does not allow its interest in the dependants of officers to cease on the breadwinner's death. It is provided that when an officer dies in the Service a monetary payment equivalent to the leave due on retirement shall be granted to the widow or dependent children of such officer, according to the officer's length of service. Such payments are made as promptly as possible. They prove a welcome relief in many cases, and have often provided sufficient ready funds to the relatives to tide them over a trying period. In addition, compassionate allowances are paid to the widows of officers who die in the Service. The payments are based on the service of the officer at death. These payments have been found to be much appreciated benefits, and to meet a want that has been pressing in the more necessitous cases. The loss of the head of the household has frequently reduced families to straitened circumstances, and the measure of relief afforded by the Department provides at least for all immediate needs. The payments

mentioned, it should be explained, are in addition to the benefits that accrue to widows and children by reason of the deceased officers being contributors to the Public Service Superannuation Fund. It is also the Department's endeavour always to place in departmental employment, where possible, the widows of deceased officers. Four widows of officers were placed during the year.

Personal.

Mr. G. McNamara, Secretary of the Department, returned from the Universal Postal Union Congress at London on the 9th September, 1929, and resumed charge of the Department almost immediately.

Mr. M. B. Esson, Second Assistant Secretary, ceased duty in the Department on the 24th August, 1929, and left the Dominion a few days later for London to take up duty as New Zealand's representative on the Imperial Communications Advisory Committee. Mr. Esson was succeeded as Second Assistant Secretary by Mr. W. J. Gow, Chief Postmaster, Auckland.

The vacancy at Auckland consequent on Mr. Gow's appointment was filled by the promotion of Mr. H. P. Donald, Chief Postmaster, Christchurch, Mr. Donald in turn being succeeded by Mr. F. J. Shanks, Inspector, General Post Office.

Mr. R. H. Boyd, Chief Postmaster, Wellington, retired on the 22nd November, 1929, after completing almost forty years' service. He was succeeded by Mr. J. M. McLean, Chief Postmaster, Wanganui. Mr. Boyd's retirement was necessitated by ill health, and his death occurred soon after his relinquishing official duties. Mr. Boyd was a valued officer, who did not spare himself in the Department's interest. His early demise is much to be regretted.

Reclassification.

The classification list of officers was issued on the 22nd November, 1929, after the regrading and classification of positions were completed as required by the regulations. The work of classifying a permanent staff of nearly nine thousand officers is a work of magnitude, importance, and responsibility, and to satisfactorily review the whole of the positions above the rank and file in both the Clerical and General Divisions, and to determine where the creation of new positions was warranted, required many weeks of careful investigation. As a result of the review 140 positions in the Clerical Division and 101 positions in the General Division were regraded, and 127 new positions were created in the Clerical Division and 55 in the General Division. Not only was the general revaluation of positions undertaken, but the opportunity was availed of to advance 217 qualified and experienced officers from the maximum salary of Class VII of the Clerical Division to the first step (£320 per annum) of Class VI. This has relieved to some extent the congestion at the top of the rank-and-file class of the Clerical Division, and enabled a more adequate salary to be paid to a number of efficient officers. Taking the position as a whole, considerable relief has been afforded to the staff by way of opening to officers a greater number of executive positions. Promotion is by merit alone, and on this basis it was possible to improve the salary condition of 640 deserving officers.

General Division Salary Schedule.

It may not be out of place here to forecast what has been authorized with a view to effecting a general improvement during the coming financial year in the salary scale of the General Division.

A new salary schedule for male officers of the General Division has been gazetted, and will operate from the 1st April, 1930. Under the new schedule, message-boys (who were previously employed at a fixed rate of £57 per annum) will commence at a salary of £52 per annum and proceed to £65 per annum after twelve months' service. In this way, it is hoped to bring about a more equitable position by lowering the commencing salary of message-boys by £5 a year and increasing the salary in the second year. As the message-boy class is the Department's main recruiting-ground, the bettering of the salaries in the second year of service should encourage lads to greater effort in the matter of their own advancement. This, together with an endeavour by the Department to promote boys from the message-boy class within two years of their joining the Department, should prove a means of attracting a good type of lad to the Service. It should also prove a means of holding the lads' interests while awaiting promotion, and while being educated (through the Department's correspondence classes and in technical schools) and trained for a higher class of work.

In the past the commencing salary for employees such as postmen, exchange clerks, messengers, and linemen was £70 per annum. Provision is made in the new schedule for the commencing salary to be increased to £75 a year, rising to a maximum of £240 per annum by six annual increments—the first four of £15 each, the fifth of £55, and a final one of £50. The first five years' service is regarded as the apprenticeship and the sixth year as the improver's stage. An officer commencing at £75 per annum will ordinarily reach the maximum of his class after six years' service. The new schedule provides also for certain skilled workmen to proceed automatically to a maximum salary of £265 per annum.

The view has been taken, in compiling the new schedule, that, as a General Division officer reaches his maximum output at an earlier stage than does the Clerical Division officer, the officer is entitled to higher remuneration for his services in earlier manhood—that is, when he has reached his full capacity. This capacity in the ordinary course he carries in his particular line for many years, and with it goes the maximum salary. An adult wage has been provided after six years' training as a junior and improver. By this method officers in the General Division will reach the maximum salary (£240 per annum) at ages varying from twenty-one to twenty-three years. The operation of the new schedule may give rise to complications when promoting qualified officers from the General Division to the Clerical Division, but a fair adjustment of salary will obviate any anomalies arising.

Annual Report Form.

A new system of annual reporting on officers was brought into use during the year. The new form of personal report was designed with a view to obtaining a more uniform standard. Descriptive words and phrases replaced the system of marking by numbers. The simplicity of the new form is one of its greatest advantages; it can be prepared quickly as well as efficiently. No doubt modification and slight alteration will have to be introduced when the result of the new system is known, as the form at the present stage is more or less of an experiment and constitutes almost wholly a departure from the practice of many years.

APPEAL BOARD.

The Post and Telegraph Appeal Board, under the chairmanship of Mr. E. C. Cutten, the senior Stipendiary Magistrate at Auckland, sat on two occasions during the year. Six hundred and fifty-five appeals, lodged by 314 officers, were heard. Twenty officers were successful in winning their appeals. The remaining appeals were disallowed or were withdrawn.

The large increase in the appeals for the year is attributable to the quinquennial regrading of the Service. The greater number of the appeals dealt with were those arising from promotions as a result of reclassification, while a number were classification appeals lodged by officers in an endeavour to establish a higher grading for the positions held by them.

Sittings of the Board were held in Auckland, Wanganui, Palmerston North, Napier, Wellington, Christchurch, Timaru, and Dunedin. This proved an economical measure in minimizing expense and reducing the length of absence of officers from their stations. Travelling as it did, the Board was in many cases given the advantage of having within easy call many of the controlling officers who, by their knowledge, were able to explain in evidence some of the more obscure points and generally bring about enlightenment that would otherwise have been more difficult to obtain. The work of the Board, owing to the volume, was of a more strenuous and exacting nature than is usual, but it was handled expeditiously and a careful hearing was accorded each case.

It has been suggested that some change in the working and constitution of the Board should be made, but at the moment it cannot be seen that a change is either necessary or expedient. The Board, as at present constituted, has borne the test of time and meets all the requirements of the Service in the best way. Being judicial in effect and free from any administrative functions, the Board is set in the best possible position. Service representation together with departmental representation and an independent Chairman—a Magistrate—are not easily improved upon.

SUGGESTIONS BOARD.

The Department encourages officers to make suggestions for improving the working of the Department. The response is most gratifying. The number of suggestions received during the year was 425, and, in the case of seventeen of these, awards totalling £56 10s. were made. In every case officers are commended or thanked for the interest displayed, and informed by communications addressed to them personally of the decision arrived at on the suggestion. In the case of suggestions which are declined reasons are given when this seems necessary.

DEPARTMENTAL CORRESPONDENCE SCHOOL.

No fewer than 1,411 officers enrolled during the year in the Departmental Correspondence School, as compared with 1,280 last year. Before an officer can progress far in the Service he is required to furnish evidence of his efficiency by passing a departmental examination, and at a later stage an examination aimed at testing an officer's suitability for promotion to a controlling position requires to be passed. The school provides tuition by correspondence for officers in the subjects which they are required to take in their examinations. Twenty-one separate instructional courses are available to officers. The staff of the school comprises an instructor and twelve assistants. The cost in salaries of the staff is considerable, while the fees charged for tuition are nominal—10s. to £2 2s., according to the nature of the tuition desired—but the Department is convinced that the cost is more than counterbalanced by the increased efficiency of officers generally.

EXAMINATIONS.

The number of officers who entered for departmental efficiency examinations held during the year was 2,328. The candidates who were either wholly or partially successful numbered 1,146.

ESTABLISHMENT OF COMMERCIAL BRANCH.

An important step in the history of the Department has been taken during the year by the setting up of a Commercial Branch. At the outset the activities of the new branch are being directed principally to establishing personal contact with existing and prospective telephone-exchange subscribers, the objects being to ensure that telephone-users obtain the class of service most suited to their individual requirements, and to promote a healthy and well-balanced development of the service. In the past the Department's activities have been largely conducted upon the "order-taking" system. Under the new scheme this method will be supplemented by a specialized system of salesmanship. When it is remembered that during the last five years the capital value of telephone-exchange plant and equipment has increased from £5,097,939 to approximately £7,912,000, and that during last year working-expenses, depreciation, and interest on capital value amounted to approximately £1,190,000, it will be realized that the continuance of this important service as a self-supporting unit of the Department is dependent very largely upon the application of progressive and businesslike methods.

In connection with telephone-exchange service it is essential from an economic standpoint that any well-ordered developmental plan shall make reasonable provision for an increase in the number of subscribers in the various areas served, and that such provision shall be in keeping with the normal anticipated development of particular localities. For example, in reticulating for telephonic purposes a newly-developed residential area, it is necessary to provide sufficient cable accommodation to enable service to be given not only to those persons from whom applications are actually in hand, but also those from whom applications may be anticipated within a reasonable period of time. In formulating developmental plans, therefore, a careful examination is made of all relevant data concerning the area to be cabled, as well as other similar localities, in order that the estimated future requirements over a given period may be assessed as accurately as possible, and provision for expansion made accordingly. Thus in every newly telephoned area there is usually a margin of circuits for future growth, in respect of which provision must be made in the matter of interest, depreciation, and maintenance charges notwithstanding that the circuits are not in use. In these areas in particular it will be the duty of the business agents to seek out prospective subscribers, with a view to bringing into use—and thus making revenue-producing as early as possible—such of these lines as might otherwise remain idle. Similar action will be taken in other areas in which the originally estimated telephonic development has not been maintained. In the case, also, of a subscriber relinquishing his service, efforts will be made to ensure as far as possible that the equipment thus thrown idle is again brought into use at the earliest possible date. By these means it is hoped to reduce to a minimum the amount of non-revenue-earning equipment, and thus maintain the financial position of the Telephone Branch.

Having been established only towards the close of the financial year, there has been as yet little opportunity of determining the extent to which the Department and the community in general will benefit by the operations of the new branch. The results to date, however, are most encouraging, and augur well for the ultimate success of the new venture.

Although, as already stated, the activities of the new branch are at present being directed principally to the development of telephone-exchange business, it is the intention, as circumstances permit, to extend the activities of the branch to other features of the Department's operations. For the present the business agents—termed " Business Managers "—are operating only at Auckland, Christchurch, and Wellington.

Coincident with the establishment of the new branch, arrangements have been made for the introduction of a system under which new as well as existing subscribers may, if they so desire, pay their telephone rental monthly in advance, instead of half-yearly in advance. Under this system subscribers who elect to pay monthly will receive in each month a combined rental and toll account. The effect of this will be that in these cases the due date of payment of rental and toll fees will coincide, the rental being paid one month in advance with the preceding month's toll fees. This innovation, it is considered, will be greatly appreciated, and will place telephone service more easily within the means of many hundreds of people to whom the former stipulation in regard to half-yearly payments was somewhat inconvenient. Further innovations are contemplated with a view to increasing the popularity and usefulness of the telephone as a means of communication, and enabling subscribers generally to obtain the greatest possible benefit from their telephone installations.

EARTHQUAKE, JUNE, 1929.

At 10.17 a.m. on the 17th June, 1929, one of the most severe and prolonged earthquakes in the history of New Zealand took place. The shock was felt extensively in both the North and South Islands, but the centre of the disturbance was near Murchison, in the South Island, and the area bounded approximately by Murchison, Westport, and Karamea was most affected.

As a result of the earthquake the Department's outside telegraph and telephone plant, principally pole-lines and underground cables, sustained considerable damage, but, fortunately, inside equipment, such as telephone-exchange switchboards and telegraph instruments, was not seriously affected. Many departmental buildings were also damaged, the Westport building to such an extent that it had to be vacated and, later, demolished. The tower of the building collapsed, fortunately after the premises had been abandoned by officers, and the other portion was very badly cracked. There was also most serious interruption of mail-services, caused principally by landslides, the important mail-service route Nelson – West Coast being totally interrupted by huge slips on the Murchison – Inangahua Junction section of the road, and to a lesser extent on the Inangahua Junction – Westport section, and the Westport–Karamea service by slips of great magnitude on the road between those places. In some cases lengths of up to two miles of road, and telegraph and telephone lines, with the supporting poles, were carried away, while in other cases sections of line and road were completely buried by huge landslides. In additional instances the earth was carried away from the poles, leaving them suspended in mid-air from the wires they were intended to support, and making great gaps in the road. The earthquake fault-line crossed the Murchison–Lyell Road, and at the point where it crossed caused the road to be thrown up approximately 14 ft. above its old level. Lesser effects, in the shape of poles being thrown out of alignment, and wires being broken, stretched, or twisted into a tangled mass were common. In one case a line of poles erected near the roadside was thrown over at such an angle as to prevent the passage of traffic along the road. Interruptions of some kind occurred to almost every line and road within the territory mentioned, dislocating all the usual outlets by road, telegraph, and telephone from the affected areas. Some idea of the damage sustained by roads and pole-lines is given in the photographs published in this report.

Telephone-exchange service at Westport, Nelson, and Blenheim, and at most of the intervening exchanges, was either completely interrupted or seriously disorganized, owing to contacts or breakages in the overhead lines or by fractures in underground cables. Interruptions were also experienced on the Christchurch–Blenheim main line and various other lines in the northern section of the South Island.

The damage caused by the earthquake was intensified and the work of restoration seriously hampered by the heavy rain which fell for some days following the main shock and by the small shocks which continued for many days.

The first news of the effect of the disaster on Westport was received by radio from the s.s. "Trewyn" via Radio-Auckland about an hour after the occurrence. It indicated that the town was badly shaken, that the majority of the residents had vacated their homes, and that the lighting and water-supply services were interrupted. Steps were at once taken to arrange for urgent telegrams to be exchanged with the town via Radio-Awarua and Radio-Wellington and the ships in the harbour (the s.s. "Kaitoke" and the s.s. "Trewyn").

About 4 p.m. on the day of the upheaval Christchurch regained communication by telegraph with Greymouth. The position in that district, although serious enough, was not so bad as at Westport. Both the Greymouth and Hokitika Post-office buildings were severely shaken, but remained habitable. The same applied to the Nelson Chief Post-office building. Minor damage to other buildings was also reported in the Greymouth and Nelson districts.

The first news from Murchison was received after 8 p.m., having been despatched by messenger to Glenhope and thence by telegraph to Nelson. It indicated that the position in the Murchison district was serious indeed. Slips containing thousands of tons of earth had occurred, eliminating roads and lines and blocking rivers. The damming of the rivers caused serious apprehension because of the possibility of floods, the rivers affected having their sea outlet at Westport. The post-office was very badly shaken, and was rendered uninhabitable, as were most of the residences in the township.

Immediately news of Westport's plight was received arrangements were made for an emergency restoration party, consisting of engineering officers, linemen, cable-jointers, and mechanicians, to be despatched from Wellington. Fortunately, a vessel was leaving Wellington for Westport on the morning following the earthquake, and at some inconvenience the ship's complement willingly found accommodation for the restoration party, together with their supplies, consisting of sufficient material and equipment to install a complete telegraph-office and telephone exchange at Westport in case that should be necessary, and, in addition, cable and jointing materials, miscellaneous line plant and internal equipment, and short-wave radio apparatus.

The Westport staff had on the day of the earthquake transferred their operations to the old Drill Hall. Later, the old post-office building, occupied by the Public Works Department, was made available, and on the arrival of the emergency party on the 19th June no time was lost in transferring the telegraph and telephone apparatus to this building. Fortunately, the exchange apparatus was little damaged. By 2.30 p.m. on the day of the party's arrival Morse communication with Greymouth had been effected, and on the same evening radio communication was established with Radio-Wellington. By the 23rd June a number of the more important telephone connections at Westport had been reinstated, and on the 25th idem the telephone-exchange system was completely restored.

Two wireless operators from Christchurch arrived at Westport by aeroplane about midday on the 18th, and assisted in manning the "Kaitoke," which observed a continuous service during the period of stress. On this day the ships put to sea because of the fear that the Buller River would flood, but the "Kaitoke" remained off the port and continued to maintain communication between Westport and the outside world, a launch being the means of communicating with the shore. On the same day one of the two aeroplanes returned to Christchurch with a letter-mail and telegrams. Reliable communication between Christchurch and Greymouth was re-established, and Westport regained touch by telegraph with Granity, Millerton, and Denniston.

On the 19th Christchurch managed to secure a shaky telegraph-line to Westport, and on the same date Nelson was able to regain Murchison by telegraph. Karamea still remained isolated pending an opportunity for sending to that place by aeroplane a wireless operator and a low-power radio transmitter that had been constructed by the emergency party at Westport. On the 20th a party from the settlement managed to come overland to Westport, and they reported the conditions to be very bad. A difficulty now appeared at Blenheim, water finding its way into the underground cable-ducts and causing the disconnection of a large number of subscribers. Communication was not completely restored for two or three days.

On the 21st the money-order and savings-bank branch of the Westport office was reopened, the telephone exchange then being the only branch that remained interrupted.

For some time the limited facilities outlined carried the whole of the traffic from the district, but the early provision of improved radio apparatus at Westport and the installation of similar equipment at Greymouth relieved the risk of complete interruption of the service. Except for a few days immediately following the earthquake, it was not necessary, however, to use the radio apparatus at Greymouth.

Communication with Murchison by road was regained on the day following the earthquake, allowing the passage of mails. Communication beyond was impossible. Rail communication between Christchurch and the West Coast was also interrupted for a short time. For some weeks mails for Westport required to be transported on foot over the landslides in the lower Buller Gorge. By the 21st, however, a daily service was being maintained.

On the 24th, as a result of exceptionally heavy rain, communication between Murchison and Glenhope by road and telephone was again interrupted for some time, and on the 25th, as a result of a further slip in the lower Buller Gorge, Westport was once more cut off, restricting communication to wireless, outlets being maintained both from the departmental station and the "Kaitoke." Communication overland was restored about 5 p.m.

For some days the second aeroplane from Christchurch had been standing by at Westport awaiting a favourable opportunity to proceed to Karamea, which was still isolated, with a wireless operator and equipment. An endeavour was made to arrange for carrier-pigeons to be sent to

Karamea by sea, and arrangements for the loan of birds had actually been made with the kind co-operation of the Nelson Homing Pigeon Society, when it was learned that a boat was not available for the trip. The weather was deplorable, culminating on the night of the 27th in a cyclone, which damaged the aeroplane so seriously that its replacement was necessary. The relief aeroplane, in turn delayed by the weather, did not arrive at Westport until the 1st July, when it took off immediately for Karamea with the operator and equipment. The same evening Westport was in two-way communication with Karamea by wireless, and the position of Karamea so far as communication with the outside world was concerned was relieved. At this stage the Department succeeded in securing the services of the s.s. "Nile," of Greymouth, for the purpose of conveying mails and provisions to Karamea by sea, the ship making her first trip from Westport on the 2nd July. This service by sea is now maintained at regular twice-weekly intervals by contract service, the "Nile" having been replaced by the "Kotiti." On nearly all occasions since the beginning of March, 1930, it has been necessary, owing to the silting of the Karamea bar, for the ship engaged in the service to land and load mails and cargo at Little Wanganui, making it necessary for the Department to arrange connecting mail-services at this place.

On the 5th July a dam caused by the earthquake burst in the Mokihinui River, causing Seddonville to be flooded. A good deal of damage was done to departmental lines, and the post-office building was flooded and left full of mud. Communication was soon restored, but for a time the telephone was operated from the local hotel.

The Nelson – West Coast (Reefton and Westport) mail-service — one of the most important services in the Dominion—was terminated at Murchison from the 17th June until the 15th July, when it was resumed by the alternative route from Murchison to Reefton via Maruia, a route which also had been much interrupted by slips. This deviation added considerably to the mileage of the service, especially in the carriage of mails for Westport and district, and was arranged at greatly increased cost to the Department. During the suspension of the service mails were forwarded to the West Coast via Christchurch and by sea from Wellington as opportunity offered. It is not expected that communication by road between Murchison and Inangahua Junction will be restored for some months, so that the deviated service will continue to operate for some time to come.

Owing to the devastation caused by the earthquake in June, the Sullivan's Bridge – Ariki – Paenga service was abolished. Due to the same cause, it was necessary to modify or rearrange several other services.

As may well be imagined, the work of promptly repairing the damaged telegraph and telephone lines was one of considerable magnitude, and one that entailed severe hardship on the Department's officers concerned. As many workers as possible were transferred to the locality, and wherever practicable the work of restoration was immediately commenced. Owing to the extent of the damage to the country between Murchison and Inangahua Junction, it was not possible to begin the restoration of the Nelson – West Coast service until August. These services were, therefore, conducted over alternative routes. Early in October two circuits were completed between these points, providing one telephone and one telegraph outlet. It was not until the 11th March, 1930, that the position was restored to normal. As extensive roadwork has still to be carried out on this section, it was necessary for deviations to be made through bush and an improvised service provided. On account of the difficulties of access and transport, it will probably be at least a year before the lines on the route are restored on a permanent basis.

With the exception of the Murchison–Inangahua line and a few short lines serving small toll stations, the only major work now remaining on a temporary basis is the Westport–Karamea line, the restoration of which will be undertaken when the road is completed and transport becomes practicable. On this route temporary communication by telephone was restored on the 18th December, but the wireless installations at Karamea and Westport are being retained for emergency use.

In repairing the damage done by the earthquake and, to a lesser extent, in recompensing officers for the long hours of duty worked in many cases, considerable expenditure was incurred by the Department. The cost to date of repairing telegraph and telephone plant has amounted to approximately £3,600, and it is estimated that a further sum of about £1,500 will still require to be spent to fully restore the services. The cost of repairing departmental buildings, &c., was about £4,000, and a further large sum will be required to rebuild at Westport. In addition, the cost of special mail-services, some of which are still being maintained, involved considerable increased expenditure.

A feature of the happening was the extent to which broadcasting assisted in tracing various people and in keeping communities otherwise isolated in touch with outside happenings. The service rendered was a most valuable one.

The Relief Committee set up in Westport by Government was allowed the privilege of free telegraphic facilities. Parcels of clothing for the relief of sufferers were also accepted free by the Department when addressed to relief organizations, and parcels of books for the Seddonville Library, which was ruined by the flood of the 5th July, were also transmitted free.

It is difficult to refer in adequate terms to the excellent service ungrudgingly rendered by officers in the affected zone in carrying on the work of the Department and in restoring communication in the face of the extraordinary and frequently dangerous conditions prevailing. Fortunately, no officer of the Department lost his life as a direct result of the earthquake; the experiences of themselves and their families were sufficiently terrifying without that. Conditions following the main shock were aggravated, especially for women and children, by the facts that shocks, some of them severe, continued for days, and that the weather conditions for a week were deplorable, at times approaching the cyclonic. Bereft of the means of providing fires in many cases, and with winter weather of the very worst description, the working-conditions for the staff, particularly for the officers engaged on the reconstruction of lines, were, for the first week at least, of the most trying kind. Officers worked during the day and far into the night, notwithstanding the fact that the homes and families of many

of them were more or less demoralized during their absence. These remarks apply particularly to officers resident in the affected areas of Westport, Murchison, and Karamea; but officers transferred to the districts to assist in the work of restoration were no less actuated by a desire to do their very best in the trying and dangerous conditions. The best traditions of the Service were upheld by all officers concerned; and for the excellent manner in which they rose to the emergency the Department expressed its highest praise. It is a matter for deep regret that overwork and exposure resulted in the death of Overseer D. O'Sullivan (see page 10).

In such a period of stress many duties outside the ordinary sphere fall to the lot of the Department and its officers, and are sympathetically and readily undertaken without remuneration. At the same time, the Department usually receives assistance from persons outside its ranks, and this chronicle would not be complete if it made no reference to the assistance spontaneously given the Department on this occasion by various other Departments and their officers, by the Union Steam Ship Company (who so readily placed the wireless installation on the "Kaitoke" at the Department's disposal, and co-operated in other ways), by the Westport Borough Council and other local bodies, and by many residents of the affected area. The manner in which the whole community worked together for the common good was an outstanding feature of the disaster.

CHARITY STAMP.

Following the lead of certain other countries, the Department, in conjunction with the Health Department, launched an effort to reap from the spirit of goodwill which is existent generally during the Christmas season a substantial sum of money to be devoted to a charitable purpose. The effort took the form of the issue of a "charity" stamp having a postage value of 1d. and a charity value of 1d.

The stamp was placed on sale at all post-offices in the Dominion on the 11th December, 1929, and was withdrawn on the 28th February, 1930. The gross value of the sales amounted to approximately £5,000.

MECHANICAL APPLIANCES.

The introduction of modern accounting methods has not been overlooked by the Department. During the past two years the system of preparing toll accounts by mechanical process has been adopted, and is at present in operation at Auckland, Christchurch, Dunedin, Hamilton, Invercargill, Napier, Palmerston North, Wanganui, and Wellington.

Accounting typewriter machines have been installed at Auckland, Christchurch, Dunedin, Hamilton, Palmerston North, Wanganui, and Wellington for the preparation of periodical accounts.

The bookkeeping-machine has been introduced into the Stores Branch at Auckland, Christchurch, Dunedin, and Wellington for the purpose of posting to the stock-ledgers. One of these machines is also in use for posting to the ledgers in the Accountant's Branch of the General Post Office.

A Powers machine plant, consisting of two tabulators, one sorting-machine, and eight punches, is in operation in the Accountant's Branch of the Head Office. With this equipment the accounts for the engineering districts of Auckland, Christchurch, Dunedin, and Wellington are being prepared, including a complete set of job-costing statements for each district. In addition, the stock records for every stock station in New Zealand are being prepared by the machines, the posting to the ledgers from the statements prepared being undertaken at the four centres by the bookkeeping-machine.

The Powers machine system has proved to be a scientific and practical means of enabling the operations of accounting, control, and statistics, indispensable to the success of business, to be made rapidly and economically with a maximum of detail. Its installation has resulted in economy of staff and greater accuracy, and in information being available for immediate review; it also provides for additional information being available at any time it is required, a proceeding which is practically impossible with any other system. The annual saving by the introduction of these mechanical appliances is estimated at £12,500.

BURGLARY OF POST-OFFICE PREMISES.

There were few cases during the year of burglary of post-office premises, and in no case was there very much loss. The only offence calling for special comment was that at Brunnerton on the night of the 6th–7th November, when gelignite was used in an unsuccessful endeavour to force a safe. The offender was apprehended a little later in Dunedin, following on his unsuccessfully endeavouring to force the strongroom at Caversham, and was duly convicted and sentenced. He proved to be an experienced criminal.

BUILDINGS.

During the year, buildings were erected as follow:—

Post-office buildings—

Colville.	Mercer.	Northcote.
Cust.	New Lynn.	Shirley.

Garages—

Carterton.	Martinborough.	Raglan.
Cheviot.	Otahuhu.	Waiau.
Hokitika.	Otorohanga.	Woodville.

At Ohakune a garage and store, together with accommodation for "carrier current" telephone equipment has been provided.

Increased or improved accommodation for departmental purposes has been provided at the following places :—

Cromwell.
Dannevirke (accommodation for line staff).
Geraldine (store).
Hamilton (automatic telephone exchange).
Hastings (store, &c.).
Invercargill.
Kilbirnie (Wellington).
Kopaki.
Matakana.
Newmarket (Auckland), (workshops).
New Plymouth (telephone exchange and money-order branch).
Oturehua.
Palmerston North (garage, &c.).
Rotorua.
Roxburgh (garage).
Te Kuiti (garage).
Tokaanu.
Wairoa.
Waitomo Caves.
Waiuku (garage).
Wellesley Street (Auckland), (parcels branch).
Wellington (Public Service garage).
Wellington South.

The following works are in progress :—
Blenheim (garage and store).
Christchurch (alterations).
Courtenay Place (Wellington), (new post-office building).
Dunedin (foundations for new chief post-office building).
Greymouth (addition and alterations).
Kurow (new post-office building and separate residence for Postmaster).
Masterton (addition and alterations).
Napier (new chief post-office building).
Nelson (addition and alterations).
Newton (addition and alterations).
Whangarei (addition and alterations).

The ceremony of laying the foundation stone of the Napier building was performed by the Prime Minister (the Right Hon. Sir Joseph Ward) on the 9th May, 1929.

The erection of new buildings at the following places has been authorized :—

Dunedin.
Greymouth (garage and store).
High Street (Christchurch).
Hinds (residence for Postmaster).
Mount Albert (Auckland).
Palmerston (South).
Petone.
Taumarunui.
Te Anga.
Upper Symonds Street (Auckland).
Waitara.
Walton (garage, &c.).
Westport.

An addition to the Kaikohe post-office building has been authorized.

Land.

Areas of land were purchased for departmental purposes as follow :—
Birkenhead (central site for post-office building).
Dannevirke (site for store and garage).
Gisborne (site for store and garage).
Hastings (site for store and garage).
Rangiora (additional land for storage purposes).
Lower Hutt (site for automatic-telephone exchange).

Action is being taken to acquire sites for post-office buildings at Te Anga and Thornbury, and a more suitable site at Ruatoria.

Miscellaneous.

On the 6th March a fire which originated in an adjoining building destroyed the post-office building at Urenui. With the assistance given by the residents the Postmaster was able to save the whole of the departmental records and valuables. This enabled business to be continued almost immediately in temporary premises. The matter of erecting a new building is now under action.

At Dunsandel and Tariki the postal business was separated from the railway business. The cost of altering the railway-station premises to provide separate accommodation for the post-office was borne in each case by the Post and Telegraph Department.

During the year the heating installation in the General Post Office building was fitted with automatic oil-burners in place of the coke-furnaces, at considerable gain in efficiency.

Steel lockers, shelving, and private letter-boxes of New Zealand manufacture are now being provided in departmental buildings instead of wooden fittings. The use of steel will be extended to other classes of fittings as may be found desirable.

OVERSEAS MAILS.

Except that a mishap to the "Makura" made it necessary for that vessel to be replaced by the "Marama" for the trip commenced at Wellington on the 27th March, 1930, the contract mail-services between Auckland and Vancouver, and between Wellington and San Francisco, have been carried out without interruption by the R.M.M.S. "Aorangi" and R.M.S. "Niagara," and the R.M.S. "Makura" and R.M.S. "Tahiti" respectively.

The average times of transmission of mails during the year by the contract services, which provide for regular fortnightly sailings, were as follow: Auckland to London (via Vancouver), 31 days; London to Auckland (via Vancouver), 31·07 days; Wellington to London (via San Francisco), 29·07 days; London to Wellington (via San Francisco), 31 days.

The whole of the cost to Government of these services is now borne by the Post and Telegraph Department.

The contracts for the services which expired on the 31st March, 1929, were renewed for twelve months from the 1st April, 1929, and are to be further renewed for a period of twelve months from the 1st April, 1930.

A contract for twelve months for the performance of a service for the conveyance of mails, freight, and passengers between the South Island (Bluff) and Victoria (Melbourne) was established during the year, and since its inception on the 29th January, 1930, has been performed with regularity. The service provides for sailings at intervals of three weeks. At first a contract providing for two vessels to make trips at alternate intervals of nine and twelve days was proposed, but owing to the wreck of the "Manuka" at Long Point, on the coast between Bluff and Dunedin, shortly after taking up her contract running, the proposal could not be proceeded with. While the mails conveyed have not so far been very large, a useful purpose is served by the service.

The non-contract service continues to be maintained between New Zealand and Australia (Sydney) by steamers of the Union Steam Ship Co., leaving Auckland and Wellington alternately every second Friday. On the intervening Fridays a steamer of the Huddart-Parker Co. leaves Auckland and Wellington alternately, thus providing with the vessels of the Union Steam Ship Co. a regular weekly despatch to Sydney. In addition, despatches are arranged fortnightly on Tuesdays by the steamers engaged in the Vancouver and San Francisco services, and cargo-vessels are also made use of when they afford a suitable despatch.

The use of the Suez route is now availed of only for specially addressed letters.

The Panama and Cape Horn routes are used mainly for the despatch of specially addressed correspondence, second-class matter, and parcels, although, with the advent of fast steamers on the direct route to Great Britain via Panama, use of the Panama route was occasionally made during the year for the despatch of letter-mails. This service by fast steamer is irregular, however, and the sailing-times of the steamers, which are engaged principally in the cargo trade, are governed by weather and other conditions which affect loading.

INLAND MAIL-SERVICES.

Except for the dislocation of services in the Nelson and West Coast districts of the South Island, particulars of which are given in that portion of this report which deals with the earthquake of June, 1929, little difficulty was experienced in providing for the smooth running of inland mail-services during the year.

A night express train between Wellington and New Plymouth was inaugurated on the 16th March, 1930. It runs alternately three nights weekly from each end. It has improved mail communication between the Wellington, Wanganui, and New Plymouth Postal Districts.

On the 18th and 19th July serious floods on the Taieri Plains interrupted the rail service between Dunedin and Milton, and special arrangements had to be made for the conveyance of mails for offices south of Dunedin.

Owing to an extensive slip on the Central-Otago Railway line on the 27th July, mails required to be transhipped for a period of over a week.

In August, 1929, floods caused serious dislocation of mail-services in the Wairarapa district; and in February, 1930, floods in the Wellsford district caused interruption of the mail-transport services in that district.

A daily service for the conveyance of post parcels for Gisborne overland from Napier has been established; and a similar service to provide for Opotiki has been inaugurated between that town and the Taneatua Railway-station, the nearest rail point. Parcels for these places were previously conveyed by sea at irregular intervals.

RURAL DELIVERIES.

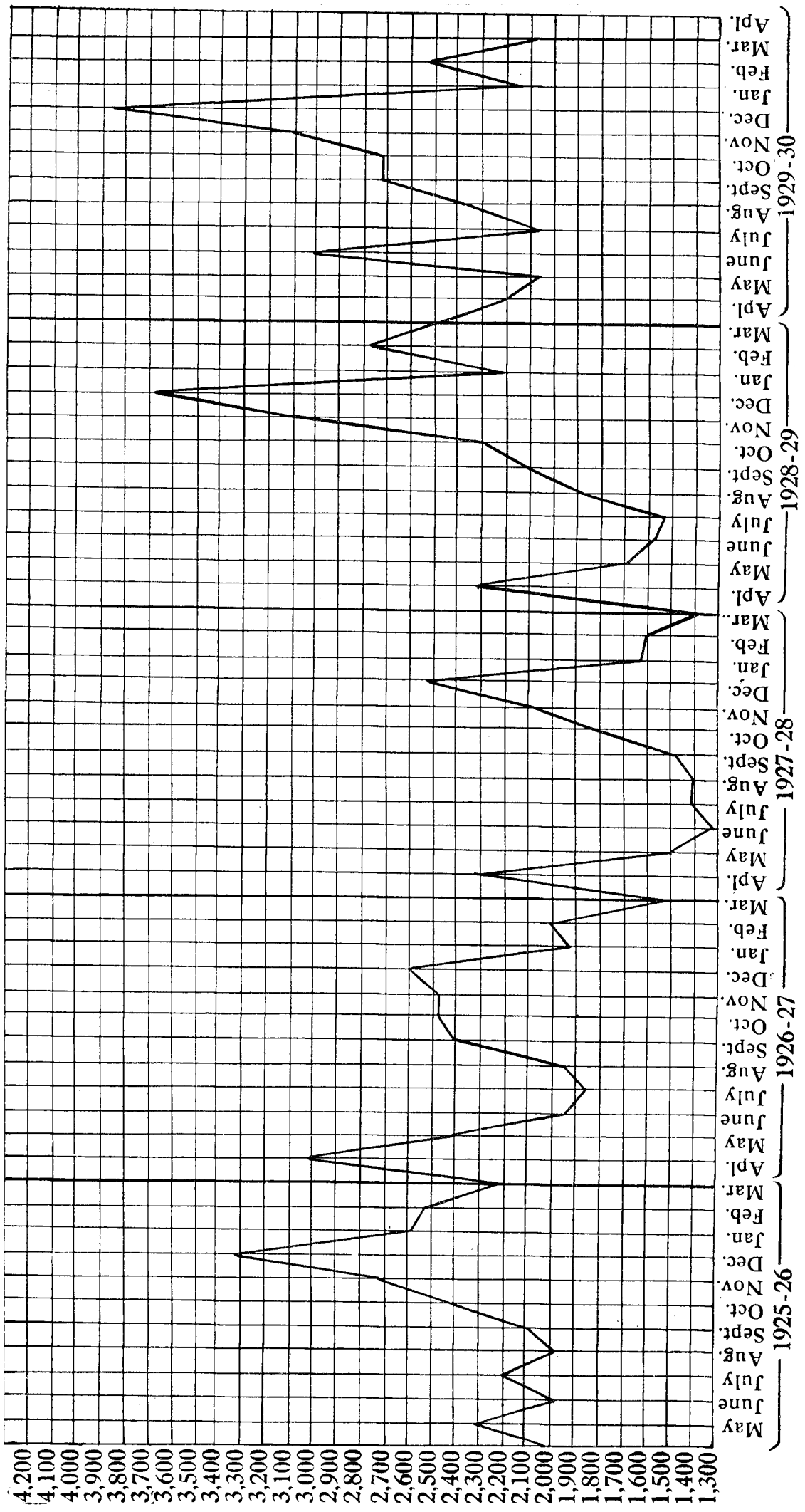
The increase in the number of rural box-holders during the year was 1,662. There are now 21,000 rural box-holders in the Dominion.

Wherever possible, daily services have been instituted; and where daily services have not been possible, owing to the sparsely populated nature of the districts and the high prospective cost, services of a lesser frequency have usually been arranged.

REGISTRATION OF MOTOR-VEHICLES.

During the year 20,802 cars, 5,745 commercial vehicles, and 4,300 cycles—a total of 30,847 vehicles—were registered. The number of vehicles registered during the month of December, 1929—namely, 2,744 cars, 639 commercial vehicles, and 478 cycles, a total of 3,861 vehicles—constituted a record, being the highest for any month since the present system of registration came into force.

On the 1st June, 1929, the registrations of 6,660 vehicles lapsed owing to the vehicles not having been relicensed during the two relicensing years immediately preceding.



Graph showing the Total Number of Motor-vehicles of all Classes registered monthly from April, 1925.

The following figures show the number of motor-vehicle registrations (including dormant registrations) as at the 31st March, 1930:—

North Island.		
Cars	94,376	
Commercial vehicles	22,668	
Cycles	22,686	
		139,730
South Island.		
Cars	53,714	
Commercial vehicles	10,477	
Cycles	15,681	
		79,872
Total		219,602

The above figures do not include vehicles for which 3,150 demonstration plates were issued to dealers during the year.

The number of registrations cancelled between the coming into operation of the Motor-vehicles Act, 1924, and the 31st March, 1930, is shown hereunder:—

North Island.		
Cars	5,616	
Commercial vehicles	2,484	
Cycles	4,965	
		13,065
South Island.		
Cars	3,273	
Commercial vehicles	1,132	
Cycles	3,867	
		8,272
Total		21,337

The total number of vehicles registered during the period 1st January, 1925, to 31st March, 1930, was 240,939.

The Precision Engineering Co., of Wellington, holds a contract for the manufacture of number-plates for vehicles for the three years ending on the 31st May, 1932. The plates to be supplied for use during the year ending on the 31st May, 1931, will have white numerals on a black background.

MOTOR-VEHICLES INSURANCE (THIRD-PARTY RISKS).

The Motor-vehicles Insurance (Third-party Risks) Act, 1928, which prescribes that Deputy Registrars (Postmasters) are to collect the appropriate premiums, came into operation with the re-licensing of motor-vehicles for the year which commenced on the 1st June, 1929. The premiums, which vary according to the class of vehicle, require to be paid before an owner can obtain the relicensing plates without which a vehicle may not lawfully be used on a public road or street. Forty-two insurance companies—practically the whole of the companies carrying on accident-insurance business in New Zealand—are underwriting insurance in terms of the Act. The owner of the vehicle must nominate one of these companies to insure him against liability to pay third-party personal-risk damages caused through the use of his motor-vehicle in the Dominion. These nominations are forwarded through the usual accounting channel to the General Post Office, where they are assembled and despatched to the various insurance companies, together with the premiums collected, less the Post Office commission of 6d. per transaction.

REFUND OF DUTY ON MOTOR-SPIRITS.

The Registrar of Motor-vehicles (the Secretary, Post and Telegraph Department) is authorized under the Motor-spirits Taxation Act, 1927, to arrange refunds of duty on motor-spirits consumed for purposes other than as fuel for motor-vehicles in respect of which annual license fees are payable under the Motor-vehicles Act, 1924. The requirements of the Act are now more generally known, and the system of arranging refunds is working smoothly.

The undermentioned figures show the number of claims dealt with and the amount of duty refunded during the year ended on the 31st December, 1929:—

	Number of Claims.	Amount refunded. £ s. d.
March quarter	5,698	16,645 11 5
June quarter	4,078	14,689 3 9
September quarter	4,748	14,670 16 2
December quarter	6,461	20,483 16 9
	20,985	£66,489 8 1

DEPARTMENTAL MOTOR-VEHICLES.

Owing to the greater suitability for departmental purposes of the closed type of car, it is now the practice when purchasing new cars to obtain closed cars instead of cars of the touring type.

The provision of a new garage at Dunedin has enabled the postal and engineering vehicles in that city to be accommodated in one building under the control of the Chief Postmaster. In Dunedin, as in the other main centres, the Post and Telegraph Department supplies vehicles for the use of all Government Departments, and the new system, providing as it does for single control instead of the previous dual control, is expected to result in more economical and efficient handling of the fleet as a whole.

Some two years ago an arrangement was made by which a qualified officer was specially detailed for the work of travelling the Dominion at suitable intervals to inspect departmental motor-vehicles. Many of the Department's vehicles engaged on line construction and maintenance work are far removed from a departmental workshops centre, and the system of inspection was introduced particularly to meet such cases. The results obtained have been quite satisfactory, and the arrangement has now been made a permanent one. The scheme provides for vehicles to be inspected twice yearly by the travelling officer. In addition to examining the vehicles, the Inspector instructs drivers, where necessary, in the matter of the care of the vehicles.

During the year 110 new vehicles were purchased, while 79 which had outlived their period of economic life were withdrawn from service. These vehicles, in accordance with the usual practice, were disposed of by auction.

As at the 31st March, 1930, the departmental motor-vehicle fleet comprised 123 cars; 471 lorries, trucks, and vans; and 22 cycles—a total of 616 vehicles. The mileage performed by, and the cost of repairs and replacements to, the entire fleet of departmental vehicles for the years 1926, 1927, 1928, and 1929 are shown in the following statement:—

Year.	Number of vehicles.	Mileage.	Cost of Repairs, &c.	Repair, &c., Cost per Mile.	Average Mileage per Vehicle.	Average Cost of Repairs, &c., per Vehicle.
			£	d.		£ d. d.
1926	530	3,295,560	19,810	1·442	6,218	37 7 6
1927	550	3,756,447	22,578	1·442	6,830	41 1 0
1928	580	4,138,275	24,251	1·406	7,135	41 16 2
1929	616	4,456,743	24,436	1·3159*	7,246	39 14 8

* A saving of 0·09d per mile, which represents a total saving over 1928 of £1,681.

Mileage shows an average annual increase of 387,061.

STORES BRANCH.

The following statement indicates the value of stores received and issued in the Auckland, Christchurch, Dunedin, and Wellington Storekeeping Districts during the year ended the 31st March, 1930, and the value of stocks held at that date. For the purpose of comparison the particulars for the previous year are shown also:—

	1929–30.			1928–29.		
	Receipts.*	Issues.*	Stock in hand, 31st March, 1930.	Receipts.*	Issues*	Stock in hand, 31st March, 1929.
	£	£	£	£	£	£
Auckland ..	234,302	232,618	102,565	229,089	254,924	100,882
Christchurch ..	164,972	154,976	93,820	151,933	143,869	83,824
Dunedin ..	93,209	87,718	46,542	82,805	101,751	41,051
Wellington ..	388,217	360,417	304,208	376,324	436,499	276,407
Dominion totals	880,700	835,729	547,135	840,151	937,043	502,164

* Excluding transfers within storekeeping districts.

PURCHASES.

The total value of stores purchased during the year was £533,967. Of this amount, £150,544 represented the cost of stores for supply from within the Dominion, while £383,423 represented the cost of stores for supply from overseas. The total value of stores purchased during the previous year was £484,218.

From the 1st April, 1929, Customs duty and primage were paid by the Department. The value of the purchases for the year ended 31st March, 1930, and of stock in hand at that date include duty and primage.

The total value of stores purchased by the Department under contracts arranged by the Stores Control Board was £34,453, including £29,290 for motor-spirit and motor lubricating-oils.

An amount of £7,887 was spent in the purchase of insulator-cups manufactured in the Dominion, and £16,072 in the purchase locally of 22,357 silver-pine poles. Rata and other New-Zealand-grown timber was obtained at a cost of £3,267 for cutting into telegraph arms, &c. Orders for twine of New Zealand manufacture amounted to £3,415.

Particulars of purchases arranged by the Post and Telegraph Department on account of other Departments under the Stores Control Board Regulations are set out hereunder. The figures for the previous year are shown also:—

Year ended	Requisitions.	Items.	Value of Items purchased.		Total.
			On Indent.	Locally.	
			£	£	£
31st March, 1930 ..	3,557	16,218	21,972	72,861	94,833
31st March, 1929 ..	3,499	14,097	20,305	81,851	102,156

The purchase was arranged during the year of 141 motor-vehicles for other Departments, and of 110 motor-vehicles for the Post and Telegraph Department. The figures for the previous year were 145 and 124 respectively.

Sale of Obsolete and Unserviceable Material.

A number of auction sales of obsolete and unserviceable material, including worn-out motor-vehicles from various Departments, was held during the year. The total value of property disposed of was £11,201. This sum includes the value of scrap lead, copper, and other metals sold by tender.

Marine Insurance Fund.

The value of stores from countries within the Empire and from the United States of America covered under the New Zealand Government Marine Insurance Fund was £287,143.

WORKSHOPS.

During the year the departmental workshops throughout the Dominion coped successfully with the upkeep of departmental equipment. Other Departments also availed themselves of the facilities afforded by the Post and Telegraph workshops for the servicing and repairing of motor-vehicles.

At the four chief centres the workshops handled a large volume of work, which is steadily increasing in both variety and extent; and. although manufacturing is mainly restricted to the Wellington workshops, bodies for new motor-chassis and public call-office cabinets are manufactured at Auckland, while at Christchurch and Dunedin the manufacture of public call-office cabinets is undertaken.

At Hamilton, Napier, Wanganui, and Palmerston North the Department has workshops which are equipped for undertaking repair work to motor-vehicles; while at Whangarei, Paeroa, Masterton, Gisborne, Greymouth, Timaru, and Invercargill the workshops are not so extensively equipped, with the result that only running repairs are executed, the major repair work being sent to the larger workshops.

In order to meet efficiently the growing requirements, arrangements have been made to lease for workshop purposes a building at Newmarket belonging to the Railway Department. This will enable the various sections of the workshops at Auckland, which are at present operating in various localities, to be accommodated in one building.

It was necessary to install additional plant of a more up-to-date character in several sections of the Wellington workshops, and this has resulted in increased efficiency. Among the more important manufactures at the Wellington workshops were office fittings and furniture for the new post-office building at Napier, and for the Nelson and Greymouth offices; public call-office cabinets, motor-vehicle bodies, rural-delivery boxes, telegraph- and telephone-line hardware and equipment, carrier-current accessories, parcel-post boxes, and wicker hampers. The whole of the Department's stock of hampers is now made in the Wellington workshops.

The total value of the work performed in the various workshops during the year amounted to £105,968, of which £9,072 represents the value of services rendered to other Departments.

POST AND TELEGRAPH ACT, 1928: REPEAL OF PART XII.

In terms of section 4 of the Pacific Cable Sale Authorization Act, 1929, Part XII of the Post and Telegraph Act, 1928, and the Fourth Schedule to that Act are deemed to be repealed as from the 20th September, 1929, from which date the sale of the Pacific cable undertaking to the Imperial and International Communications Co., Ltd., was completed.

TRANSFER OF NORTHERN PORTION OF COROMANDEL PENINSULA FROM AUCKLAND TO THAMES POSTAL DISTRICT.

The northern portion of the Coromandel Peninsula, of which the principal offices are Coromandel and Whitianga, was transferred from the Auckland to the Thames Postal District on the 1st August, 1929. The whole of the peninsula is now in the Thames District. The transfer followed on the provision of a first-class road between Coromandel and Thames and the inauguration of a daily mail-service.

POST OFFICE.

CASH-ON-DELIVERY PARCEL-POST.

The cash-on-delivery service for post parcels exchanged between Great Britain, Northern Ireland, the Irish Free State, and New Zealand, which was introduced on the 1st January, 1920, was, as a matter of Government policy, abolished on the 31st October, 1929.

POSTAL UNION CONGRESS, LONDON, 1929.

The ninth Postal Union Congress assembled in London on the 10th May, 1929. Although the Postal Union was founded over fifty-five years ago, this was the first occasion on which Congress had met in London.

Delegates and attachés in attendance at the Congress numbered 191. Altogether eighty-five administrations were represented. New Zealand was represented by the Secretary of the Department, Mr. G. McNamara.

The Congress was opened in the Royal Gallery of the House of Lords by His Royal Highness the Prince of Wales.

The first plenary sitting was held on the 13th May, in the building of the Civil Service Commission, in Burlington Gardens, and Brigadier-General F. H. Williamson, C.B., C.B.E., Director of Postal Services in Great Britain and principal British delegate to the Congress, was elected President. During the period that Congress was in session nine plenary sittings were held. In addition there were held twenty sittings of the First Committee (Convention), twelve sittings of the Second Committee (post parcels and insured articles), and five sittings of the Third Committee (money-order, postal transfers, cash-on-delivery, newspaper, and periodical subscriptions).

A sub-committee examined designs of a new reply coupon submitted by nineteen competitors. The sub-committee's recommendation that the design awarded first prize be accepted, with certain modifications, in place of the existing reply coupon was adopted. The new design of coupon will come into use on the 1st July, 1930. The minimum selling-price of the reply coupon was reduced from 40 centimes (4d.) to 37½ centimes (3¾d.).

No change was made in the postage-rates for letters, post-cards, commercial papers, printed papers, and samples as fixed by the Stockholm Congress in 1924, except that the extent to which Administrations are permitted to increase these rates was reduced from 60 to 50 per cent.

An International Air Mail Conference was held at The Hague in September, 1927, when certain conditions were laid down for the exchange of air mails. These conditions, with slight modifications, were incorporated in the Universal Postal Union Convention. From the viewpoint of the public the following are the more important points covered by the Air Mail Convention: Letters, post-cards, printed papers, commercial papers, samples, and money-orders may be forwarded by air mail. Postage and air-mail fees may be prepaid by means of ordinary postage-stamps or automatic stamping-machine impressions. Correspondence for despatch by air mail must have affixed to the top left-hand corner of the front of the cover a special blue label "By air mail." The registration system applies to correspondence for despatch by air mail. Air-mail correspondence will not be redirected by air mail unless the addressee has previously instructed the reforwarding office and has paid in advance to that office the air-mail charge for onward transmission.

The maximum air-mail charge was fixed at 25 gold centimes (2½d.) for each 20 grammes (⅝ oz.), for each 1,000 air kilometres travelled (621 miles). Air transit charges are settled on the basis of statistics taken during the seven days following the 14th June and the 14th November in each year.

An alteration of importance was made in respect of the method of taking statistics for calculating payments due to Administrations for the transit of correspondence. Under the system previously in force, each bag of mail-matter was weighed at the office of despatch as well as at the office of receipt. This was laborious, and Congress decided to introduce by way of trial an accounting arrangement based on the number of bags despatched. For statistical purposes the bags are divided into three categories—(1) of light bags, not exceeding 5 kilograms; (2) of medium bags, exceeding 5 kilograms but not exceeding 15 kilograms; and (3) of heavy bags, exceeding 15 kilograms but not exceeding 30 kilograms. For the purpose of calculating the rate, the average weights of bags of the three categories have been fixed at 4, 12, and 24 kilograms, respectively. The first statistics under the new scheme will be taken in October–November, 1933, and will apply to the years 1932, 1933, and 1934.

Congress made provision in the Convention for the introduction, at the discretion of the Administrations concerned, of a "small packet" service. The maximum weight for small packets is fixed at 2 lb., and the postage-rate adopted is 5d. for the first 6 oz. and 1½d. for each additional 2 oz. The maximum dimensions are 18 in., in any direction, or, if in the form of a roll, 30 in. by 4 in. The object of the "small packet" service is to provide a cheap means for the despatch with letter-mails of small articles of merchandise, souvenirs, &c., which may be liable to payment of Customs duty on

importation into the country of destination. Previously the transmission of articles having a saleable value was restricted to the letter or parcel-post.

Congress increased from 3 kilograms (6½ lb.) to 5 kilograms (11 lb.) the weight of literature printed in raised type for the use of the blind.

It is now provided that unregistered packets may not contain securities payable to bearer, platinum, gold, or silver, manufactured or not.

The sender by a suitable note on the address side of a postal article may forbid the redirection of the article.

Postage on printed papers may be prepaid by means of impressions of the printing-press or any other process authorized by the internal regulations of an Administration, provided the name of the office of posting and the legend "Postage paid" or some similar expression appear on the wrapper.

Congress decided that Administrations must recommend to the public to address postal packets parallel to the length of the article, and in such a way as to leave sufficient space for service notes or labels.

In the case of a packet forwarded at a reduced rate, the class to which it belongs should be indicated on the article.

In respect of articles enclosed in "window" envelopes, Congress decided that only the name and address of the addressee may appear in the panel, and that the contents of the envelope must be secured by folding in such a manner that the address cannot be partly or wholly concealed by the slipping of the enclosure. The address of articles enclosed in "window" envelopes must be very legibly indicated in ink or by means of the typewriter. Ink-pencil or ordinary pencil is not permitted to be used in addressing such missives.

The regulations regarding the forwarding by post of liquids, oils, and substances which easily liquefy previously provided for the enclosure of the liquids, &c., in glass bottles hermetically sealed. Congress decided on a modification, in that such liquids, &c., may now be enclosed in receptacles hermetically closed.

A cover is no longer required for articles in a single piece, such as a piece of wood, metal, &c., which it is not the custom of commerce to wrap.

In future, printed-papers postage prepaid by means of impressions of the printing-press or by other methods need not be date-stamped at the office of posting.

In the case of unclaimed correspondence it was decided that the reason for non-delivery is to be indicated in the French language on the back of postal packets, except in the case of post-cards and printed papers in the form of a card, when the cause of non-delivery may be indicated on the right-hand half of the address side.

A new provision makes it obligatory for an Administration to accept inquiries concerning articles posted in another Administration.

It is no longer necessary for an Administration to forward a blank letter-bill in the event of no correspondence being available for despatch, provided that it is the practice of the Administration concerned to number its letter-bills in an annual series.

Administrations must now be advised by telegraph in the event of mails showing evidence of pillage.

A committee of fourteen members was appointed by Congress to undertake the preparatory work and examination of proposals for the next Postal Union Congress, to be held in Cairo in the spring of 1934. Brigadier-General F. H. Williamson was again appointed Chairman of this Preparatory Committee, which will meet in Ottawa, Canada, in the summer or autumn of 1933.

The Congress concluded on the 28th June.

The Postal Union Convention of London comes into force on the 1st July, 1930.

EMPLOYMENT OF PARTIALLY-DISABLED RETURNED SOLDIERS AS PART-TIME POSTMEN.

The morning delivery of correspondence by postmen in the inner business portions of the cities of Christchurch and Wellington was expedited during the year by the employment in each city of four partially-disabled returned soldiers as part-time postmen. As a result, nine city deliveries have been relieved in Christchurch and eleven in Wellington, the gain in delivery-time of correspondence in some cases being as much as one and a half hours.

In the near future it is intended to put a similar scheme into operation in Auckland.

DECENTRALIZATION OF POSTMEN AT WELLINGTON.

The scheme of decentralization of postmen in Wellington, by which a number of postmen commence their walks from the Kilbirnie and Wellington South offices instead of from the Chief Post-office, appears to be meeting with success, and, as expected, has resulted in a considerable saving in expenditure. When the scheme has been in operation for twelve months it is intended to review its working, and to consider the question of extending the system to other centres.

DIRECT MAIL ADVERTISING.

In New Zealand direct mail advertising is being accorded an increasingly important part in the advertising programmes of business firms. The Department itself advertises by this method. It has had delivered by direct mail to business firms a folder extolling the benefits of direct mail advertising. Direct mail advertising has also been utilized to assist the telephone side of the Service, distributions having been made to householders throughout the Dominion of publicity matter pointing out to the

non-telephone subscriber the benefits of the telephone, and to the telephone subscriber the convenience of an extension telephone. As a direct result of such advertising, the revenue of the Telephone Branch has been augmented.

Practically all the publicity matter has been addressed to "The Householder," and this has removed all need for sorting in the circulation branch.

"HOUSEHOLDER" CIRCULAR SCHEME.

The "Householder" delivery scheme provides that circulars or other printed matter addressed merely "The Householder" may be postage prepaid in cash to the number of not less than 240 at the rate for each postal packet of ½d. for each 2 oz., or if 250,000 or more circulars from one sender are posted within twelve months, at the rate of ⅜d. for each 2 oz. or fraction thereof.

The scheme continues to be popular. The revenue from "Householder" circulars posted during the year was £9,759, and the number of the circulars dealt with was 4,916,948.

POST-MARKING MACHINE ADVERTISING.

Much use has been made of post-marking machines for advertising the telephone and toll services. In addition, the advertising-space in post-marking machines is rented from time to time by agricultural and pastoral associations, competitions societies, progressive leagues, &c., for advertising shows, competitions, or scenic resorts. For such advertising there is a scale of charges based on the number of letters that pass through the machines. The charges vary from £30 per annum in the case of the small offices to £87 in the case of the larger offices.

BLOTTING-PAD ADVERTISING.

The blotting-pads in use at the public desks at many post-offices are supplied without cost to the Post Office. Commercial and departmental advertisements are printed on the pads. It is found that the revenue derived from the commercial advertisements is more than sufficient to pay the cost of the pads. The advertisements are printed in two colours with water ink, which does not reduce the absorbent qualities of the blotting-paper.

STAMP-BOOKLETS.

The cost of production of the booklets of postage-stamps issued by the Post Office is paid for out of revenue received on account of the commercial advertisements which are printed on the leaves separating the stamps.

ADVERTISING-MATTER UNDELIVERED.

It is the experience in New Zealand that business people frequently do not realize that a fair proportion of advertising-matter postage prepaid ½d. is not delivered, and, in the absence of a request for return to the sender, is destroyed in the Post Office. A scheme has, therefore, been introduced under which the senders of large quantities of advertising-matter are asked at the time of posting whether, in the event of any of the matter being found to be undeliverable as addressed, they would like it to be delivered to the present occupier of the house to which it is addressed. If the reply is in the affirmative, advertising-matter for a person who has "gone away" is delivered to the present occupier of the address, and an additional postage rate is collected from the senders. Sometimes the desires of senders in the matter are ascertained when the advertising-matter reaches the Dead Letter Office. They are then told that they can either have the advertising-matter returned or have it reissued to "Occupiers." In either case an additional postage charge is made.

Business people are very appreciative of the new system, as it enables them, in the case of matter delivered to "Occupiers," to find a billet for each piece of advertising-matter, or, in the case of matter returned as undeliverable, to correct their mailing-lists. The system also has the effect of bringing to the Post Office revenue which otherwise would not be received.

INSPECTION.

During the year 1,741 visits of inspection to post-offices were paid by Inspectors.

ARTICLES DELIVERED.

The number of articles delivered in the Dominion, including those received from places overseas during the year 1929, compared with the number in 1928, was as under:—

	1929.	1928.	Increase Per Cent.	Decrease Per Cent.
Letters	159,977,587	154,922,174	3·26	..
Post-cards	5,244,459	5,402,400	..	2·92
Parcels	3,601,476	3,631,800	..	0·83
All other articles	105,759,874	106,376,061	..	0·58
Totals	274,583,396	270,332,435		

AVERAGE NUMBER OF LETTERS POSTED PER UNIT OF POPULATION.

1929, 101·6.

NUMBER OF POST-OFFICES IN DOMINION.

Small country post-offices continue to be replaced by rural deliveries. Offices opened during the year numbered 14, while offices closed numbered 52. The number of offices remaining open on the 31st March, 1930, was 1,859.

UNDELIVERABLE POSTAL PACKETS.

The following is a comparison of letters and other articles (including registered) dealt with as undeliverable during the year 1929, compared with those so dealt with during 1928:—

Year.	Returned direct to Senders from Chief Offices ("Special Request").	Returned direct to Senders from Dead Letter Office.	Returned to other Administrations from Chief Offices ("Special Request").	Returned to other Administrations from Dead Letter Office.	Destroyed (Senders unknown and Contents of no Value).	Total.
			Letters.			
1929..	333,576	288,474	57,527	32,678	31,506	743,761
1928..	283,921	280,645	64,781	34,000	29,692	693,039
			Registered Articles (included in above Totals).			
1929..	21,871	9,504	..	873	..	
1928..	11,785	9,639	..	961	..	..
			Other Articles.			
1929..	265,109	5,686	117,069	2,414	..	390,278
1928..	260,106	11,317	115,596	3,208	..	390,227

The proportion of undeliverable letters to the total number of letters delivered was 0·46 per cent. In 1928 the proportion was 0·45 per cent.

MISCELLANEOUS.

	1929.	1928.
Letters and letter-cards posted without addresses	12,048	13,888
Letters imperfectly or insufficiently addressed	23,122	23,972
Letters intercepted on account of libellous addresses	82	66
Newspapers received without addresses	5,752	8,016
Other articles received without addresses	4,629	5,099
Newspapers returned to publishers as undeliverable	44,854	42,949
Articles bearing previously used stamps..	80	80

During 1929 there were dealt with in the Dead Letter Office 5,080 packets (other than parcels) the contents of which gave little or no indication of the senders' names or addresses. In a large number of these cases special effort on the part of the Dead Letter Office was successful in tracing either the senders or the addressees. Two hundred and forty-four letters from overseas bearing insufficient or wrong addresses were specially dealt with, and in 228 cases correct delivery was effected.

An auction of unclaimed packets and parcels was held during the year, at which 149 bundles of miscellaneous articles were sold.

PROHIBITED POSTAL PACKETS.

During the year 3,210 letters addressed to persons or firms the transmission of correspondence for whom is prohibited under section 32 of the Post and Telegraph Act, 1928, were intercepted and forwarded to the Dead Letter Office. (In 1928 the number was 641.) The letters for the most part were addressed to agents of art unions or lotteries in other countries. Some were addressed to recognized quacks, while others were addressed to persons who deal in obscene books or pictures, or are engaged in fraudulent business.

MISSING POSTAL PACKETS.

During 1929, 6,472 inquiries for missing postal packets were received by the Department. In 3,639 cases, or considerably more than half the total number, the packets were traced or otherwise accounted for satisfactorily. The position regarding delay in delivery is as follows: Sender responsible for delay, 1,071; addressee responsible for delay, 1,249; Post Office responsible for delay, 376; no delay or responsibility not fixed, 943. In 2,833 cases it was not possible to determine the disposal of the packets. When compared with the total number of articles posted, this represents a loss of 0·00102 per cent.

REGISTER OF NEWSPAPERS AND MAGAZINES.

Twenty-two newspapers were registered for transmission by post, and sixteen were removed from the register. Fourteen magazines were registered, and one was removed from the register.

The number of registered newspapers on the 31st March, 1930, was 295, and the number of registered magazines 315.

CUSTOMS PARCELS.

The following table shows the declared value of goods received by parcel-post from places abroad and the Customs duty thereon; also the declared value of goods despatched by parcel-post to places abroad. The figures for the years 1929 and 1928 are shown in each case:—

	1929.			1928.		
	£	s.	d.	£	s.	d.
Declared value of received parcels ..	1,648,250	0	0	1,523,924	0	0
Customs duty	372,143	10	8	351,896	15	4
Declared value of forwarded parcels ..	115,580	0	0	91,651	0	0

POSTAL NOTES.

The postal-note service continues to be freely used. The number of postal notes issued was 240,651 more than the previous year, and the value increased by £65,822.

The sales for the year were 3,816,635 postal notes, of a total value of £1,123,446, as against 3,575,984, of a total value of £1,057,624, during the previous year.

The commission totalled £25,711 8s., an increase of £1,413 4s. 11d. on that for the previous year.

BRITISH POSTAL ORDERS.

British postal-order business again increased slightly, 157,777 orders, of a value of £88,057 15s. 4d., being sold, as against 155,680 orders, of a value of £87,046 9s. 11d., for the previous year. The number of orders paid was 34,687, of a value of £20,264, as against 33,652, of a value of £19,904, paid during the previous year.

MONEY-ORDERS.

The extent of the use of money-orders by the general public may be gauged by the fact that 835,358 orders, amounting to £5,187,553, were issued during the year, being an increase over the previous year of 27,473 in number and £210,031 in value.

The commission amounted to £25,673 8s. 2d., an increase of £789 11s. 8d.

SAVINGS-BANK.

The deposits amounted to £28,561,854 and the withdrawals to £29,575,994, as against £27,252,381 and £28,111,940 respectively for the previous year. The excess of withdrawals over deposits for the year was £1,014,140, as compared with £859,559 for the previous year. Notwithstanding the excess of withdrawals over deposits the total amount at credit of the Savings-bank Fund shows an increase of £792,274 over the previous year, the interest credited to depositors amounting to £1,806,414. The sum at the credit of the fund is now £49,436,491.

POST OFFICE INVESTMENT CERTIFICATES.

Post Office Investment Certificates provide a regular avenue of investment for people of small means who desire the slightly higher rate of interest offered by a fixed deposit.

The certificates are issued for one, two, and five years currency, respectively.

The total sales since 1st September, 1927, the date on which the new issue was first available, amount to £1,729,781, of which £638,669 was sold during the past financial year.

TELEGRAPH AND TOLL SERVICES.

INTERNATIONAL TELEGRAPH CONFERENCE, BRUSSELS, 1928: CODE LANGUAGE.

Following upon the decisions of the International Telegraph Conference held at Brussels in September, 1928, new regulations relating to the acceptance of international telegrams in code language came into force on the 1st October, 1929. Telegrams of which the text contains words in code language are divided into two categories, A and B. The former comprises telegrams of which the text contains code words of not more than ten letters, having at least one vowel if they comprise not more than five letters; at least two vowels if they comprise six, seven, or eight letters; and at least three vowels if they comprise nine or ten letters. Category B comprises messages which contain code words or not more than five letters, subject to no condition or restriction as to the method of formation of the words. Messages of category A are charged at the ordinary rate, while the charges for messages of category B are computed at two-thirds of the total cost of such messages at the full ordinary rate.

WESTPORT–KARAMEA RADIO SERVICE.

The radio service instituted between Westport and Karamea following the destruction of the telephone-line to Karamea during the earthquake of June, 1929 (see page 15 of this report), ceased on the 31st March, 1930. Thereafter traffic was handled by telephone. The radio sets are, however, being kept in position, and will be operated should necessity arise.

WEATHER TELEGRAMS FOR AVIATORS.

From the 26th July, 1929, the privilege of obtaining from Postmasters weather reports by means of prepaid weather telegrams was accorded aero clubs and aviators. The charge for such messages is at the uniform rate of 1s., including reply, the number of words in each message not to exceed twelve. If required, the messages may be made urgent at double the above rate.

VISITS OF FOREIGN WARSHIPS: TELEGRAPHIC FACILITIES.

The German cruiser "Emden" arrived in New Zealand on the 25th June, 1929. The privilege of sending, free of charge, inland telegrams from officers of the vessel and radio-telegrams from the Commander to or from the ship was extended during the period of the visit.

The French cruiser "Tourville" arrived on a visit to New Zealand on the 30th July, 1929. Similar privileges were extended to the Commander and officers of this vessel.

TELEGRAPH AND TELEPHONE OFFICES OPEN FOR BUSINESS.

During the year twenty-two offices were opened and sixty-two closed. The number of offices remaining open at the 31st March, 1930, was 2,098, classified as follows:—

Telephone-offices and toll stations combined	1,719
Morse telegraph-offices and toll stations combined	352*
Telephone-offices (no toll station)	6
Morse telegraph-offices (no toll station)	4
Toll station (no telephone-office)	9
Radio-telegraph stations (including coast stations, Auckland, Awarua, Chatham Islands, and Wellington)	8
	2,098

* Five converted from telephone to Morse, and three from Morse to telephone.

TELEGRAPH AND TOLL TRAFFIC.

The figures which follow show the position in regard to telegraph and telephone traffic. Fuller information is contained in Table 10.

TOTAL OF ALL CLASSES OF MESSAGES AND VALUE THEREOF.

——	1929–30.	1928–29.	Increase.	Increase per Cent.
Number	18,347,104	17,560,372	786,732	4·48
Value	£891,977*	£851,159	£40,818	4·795

* Includes £3,802 representing the value of franked Government telegrams and urgent marine telegrams.

SCHEDULE OF PAID TELEGRAMS, CABLE MESSAGES, AND TOLL COMMUNICATIONS.

	Number.	Value. £
Ordinary	5,694,886	491,423
Urgent	219,314	21,524
Press	580,867	80,528*
Letter	404,444	18,048
Toll communications	11,404,175	482,571
	18,303,686	1,094,094
Less net amount paid to other Administrations on cable and radio messages	..	205,919
Net total for paid messages of all codes, 1929–30	18,303,686	888,175
Net total for paid messages of all codes, 1928–29	17,516,343	847,461

* Includes £3,719 paid to other Administrations.

MACHINE-PRINTING TELEGRAPHS.

The multiplex machine-printing telegraph apparatus installed in the Dominion continues to give a highly satisfactory service. It is worthy of note that the major alterations in design that have been made in New Zealand to printing telegraph apparatus have aroused the interest of other Administrations operating similar equipment.

An important departure has been made during the year by the installation of teleprinter apparatus at Wellington and New Plymouth. This system, which is of British manufacture, is a printing telegraph system operated from a typewriter-keyboard providing a channel each way working at a speed of sixty-six words per minute. The system is working very satisfactorily. A somewhat similar system, developed by a different company, has been installed at Wellington and Palmerston North, and is operating between those two centres in a satisfactory manner. The operation of the equipment will be carefully observed in order to determine which type is the more suitable for adoption.

A circuit has been devised whereby one operator at Wellington can send simultaneously into the teleprinters at New Plymouth and Palmerston North, and into a Baudot printer on the multiplex set at Wanganui. This circuit is used for the transmission of press traffic to the three stations involved, and has been designed to facilitate staff economies.

CARRIER-CURRENT TELEPHONE SYSTEMS.

The carrier-current system of toll communication, which was introduced into New Zealand telephone practice in September, 1928, by the provision of two single-channel systems between Auckland and Hamilton, has been considerably extended during the year by the installation of systems between the following centres :—

Auckland–Hamilton	One additional single-channel system.
Auckland–Rotorua	One single-channel system.
Hamilton – Palmerston North	One three-channel system.
Palmerston North – Napier	One single-channel system.
Palmerston North – Hawera	,,
Wellington – Palmerston North	,,
Wellington–Seddon	,,
Seddon–Christchurch	,,

The Hamilton – Palmerston North three-channel system is being utilized for the time being to provide one high-grade direct telephone circuit between Wellington and Auckland, one between Wellington and Hamilton, and one between Palmerston North and Hamilton. The two first-named circuits are completed by the use of physical circuits between Wellington and Palmerston North, and between Hamilton and Auckland, as required.

It is anticipated that the time is not far distant when two exclusive circuits will be required to carry the traffic between Wellington and Auckland. It will be practicable to meet the demand for this additional circuit immediately it arises by a reallocation of the circuits derived from the Hamilton – Palmerston North system. The location of the terminal equipment associated with this system, at Hamilton and Palmerston North respectively, provides the most flexible and economical arrangement for the handling of telephone traffic between Auckland and Wellington on the one hand and between those cities and the intermediate districts on the other. When the traffic between Auckland and Wellington warrants the installation of a special three-channel system between the two cities it is confidently expected that the traffic from other North Island sources will have increased sufficiently to enable the Department to utilize fully the existing facilities provided by the Hamilton – Palmerston North carrier system.

The Wellington–Seddon single-channel system is operated on the four-wire principle over the Cook Strait continuously loaded telephone-cable. This cable is 46·658 nautical miles long, but in so far as the operation of the carrier system is concerned it is telephonically equivalent to 750 statute miles of open aerial line of the type at present in use for the main trunk circuit between Wellington and Auckland—viz., a line built up of conductors of No. 8 copper wire. By utilizing one of the physical circuits between Seddon and Blenheim the carrier system has provided an additional outlet between Wellington and Blenheim, and this outlet is practically a zero-loss circuit capable of furnishing the same speech-volume as would be obtained over the usual type of short-distance trunk circuit of about thirty miles in length.

The Seddon–Christchurch system was the first long-distance single-channel carrier telephone system to be installed in the Dominion. This system, in conjunction with one of the circuits in the Cook Strait four-core loaded cable, is utilized to provide a high-grade direct trunk circuit between Wellington and Christchurch. The traffic on this section continues to show a steady increase, and the Department is at present considering ways and means of obtaining additional telephone outlets across the Straits so that extra circuits may be provided between Wellington and Christchurch.

The system of long-distance communication will be further extended during the next twelve months so that the Gisborne, New Plymouth, and Invercargill districts will be brought into the full benefits of the continuous long-distance service. It is also proposed to install carrier-current equipment at a number of other important centres in order to establish improved and increased facilities where the traffic has proved sufficient to warrant the expenditure involved in the provision of this apparatus. With that object in view, orders have been placed for the supply of a number of additional carrier systems, which it is expected will arrive in the Dominion during the coming year.

TOLL SERVICE: IMPROVED METHODS OF OPERATION.

The system of direct dialling between exchanges, to which reference was made in last year's report, was extended during the year throughout the Wellington Engineering District. Equipment for the extension of this system to the other engineering districts is under order, and its installation will be proceeded with when the material is to hand. The ultimate aim of the Department is to enable the toll operators at all exchanges which can communicate direct with automatic exchanges to dial the subscribers at such exchanges direct.

Where there is a number of circuits connecting two exchanges, an improved method, known as "multiple dialling," has been developed. With the ordinary method of direct dialling, the controlling circuit is associated with the talking circuit from the time the call is dialled until the time the call is completed. By means of multiple dialling, it is possible to release the controlling circuit from association with the talking circuit immediately a connection between the subscribers is established. This enables the controlling circuit to be used for setting up successive calls on other talking circuits to the distant exchange, thus increasing the efficiency. Multiple dialling has been introduced between Palmerston North and Wellington, and between Eastbourne and Wellington; and, where the conditions are suitable, will be utilized in other cases involved in the general programme of direct-dialling extension.

A further innovation in direct dialling was the installation in the Wanganui Automatic Exchange of apparatus by means of which exchanges adjacent to Wanganui were enabled, without assistance from the Wanganui toll-operating staff, to pass calls to toll stations normally switched by Wanganui as intermediate station. In other words, provision has been made whereby certain exchanges may automatically, by the operation of a dial, gain connection to other toll lines terminating at Wanganui. They may then proceed to call the distant exchange or dial direct to a distant subscriber without any assistance from a Wanganui toll operator.

The combined line and recording method of operating (commonly known as the "C.L.R." method), the introduction of which was referred to in last year's report, is giving entire satisfaction on the lines in which it is in use. As opportunity offers, the use of this system will be extended throughout the Dominion.

RETURN OF TOLL-CALL DELAYS AND CANCELLATIONS.

In pursuance of the policy of affording telephone-users the most prompt and efficient service possible, special efforts are directed towards keeping at an absolute minimum the time elapsing between the application for a toll-call and the actual placing of the subscribers in communication. The following return of toll-calls throughout the Dominion held over a short period indicates the percentage of calls satisfied within stipulated delays after the application. It will be seen that the majority of calls are afforded within five minutes of application. Particulars of cancellations and the reasons are also given.

Calls.

	Full Rate.		Half Rate.	
	Number.	Percentage.	Number.	Percentage.
Calls connected with less than 5 minutes' delay	68,210	79·699	9,781	55·558
" " 10 "	10,042	11·733	2,695	15·308
" " 15 "	3,564	4·165	1,434	8·145
Calls connected with more than 15 minutes' delay	3,769	4·403	3,695	20·989
Totals	85,585	100·00	17,605	100·00

Cancellations.

	Number.	Percentage.
Line out of order	229	0·22
Unable to wait	385	0·37
Crossed call	192	0·18
Miscellaneous	254	0·24
Totals	1,060	1·01

Total number of calls during period, 103,190.

EXTENSION OF TOLL AND TELEGRAPH FACILITIES.

The steady demand for telephone facilities called for the prosecution of a vigorous programme in the extension of toll and telegraph networks throughout the Dominion during the year. A considerable number of lines was erected which either gave service to localities which had previously not enjoyed the convenience of the telephone, or provided relief where congestion was acute. Where existing facilities could not be augmented other than by the erection of additional circuits, rearrangements, replacements, and substitutions effected coincident with the erection of new circuits almost invariably resulted in the traffic-carrying capacity of the original speech-channels being increased and the speech efficiency considerably improved. The progress made during the year in extending the toll-line

system generally has been most satisfactory, and, in conjunction with the installation of carrier-current telephone systems (which has been fully dealt with elsewhere in this Report), has resulted in a considerable improvement in the range and standard of Dominion-wide toll service.

The cost of the year's operations in effecting improvements and extensions to the toll and telegraph facilities throughout the Dominion, including the installation of carrier-current telephone systems, was £114,243. In addition, an expenditure of £21,178 was involved in renewing or replacing plant and equipment which had become worn out, inadequate, or obsolete.

The various additions to and rearrangements of toll and telegraph circuits during the year are detailed hereunder:—

By the erection of a new metallic circuit between Auckland and Waiuku heavy delay on toll traffic between these two places was considerably relieved.

By the erection of two 200 lb. copper circuits between Kaitaia and Mangonui the special work designed to provide improved toll facilities for stations in the Mangonui and Hokianga Counties was completed.

Telephone facilities at Kerikeri were augmented by the rearrangement of circuits between Kaeo and Ohaeawai.

The efficiency of the Taupo–Tokaanu toll circuit was improved by the reconstruction of the circuit, and its traffic-carrying capacity increased by the conversion of the earth-working section to metallic-circuit working.

By the rearrangement of circuits between Ohaeawai and Kaikohe an additional telephone outlet was provided to carry toll traffic from stations between Whangarei and Kaikohe.

An additional metallic circuit was erected on the branch line connecting Wairakei with the Taupo–Oruanui telephone circuit, and at the same time the existing branch line was overhauled. As a result the delay on telegraph and toll traffic from Wairakei was considerably reduced.

The erection of a metallic circuit connecting Auckland, Te Kauwhata, and Huntly provided an additional outlet for toll work between Auckland and Huntly.

The north and south sections of the Wellington–Auckland main metallic circuit were terminated at Hamilton and Palmerston North respectively, and used as Hamilton–Auckland and Wellington–Palmerston North circuits respectively. The intermediate section provided for the superposing of the three-channel carrier system between Palmerston North and Hamilton. The immediate effect of this rearrangement was to relieve traffic-congestion in many directions, and to provide speedier and better communication.

A reconstruction of the line between Blenheim and Havelock was carried out, the existing metallic circuits being re-erected on the twist system, thus permitting an efficient phantom circuit to be brought into use. This rearrangement provided additional toll outlets for stations between Blenheim and Nelson.

Improved toll facilities were provided for intermediate stations by the erection between Waipukurau and Porangahau of a metallic circuit, replacing the existing earth-working circuit, which had become obsolete.

An additional metallic circuit was erected between Pahiatua and Palmerston North, and at the same time a phantom circuit was formed over the existing circuit. As a result traffic-congestion was considerably relieved between these two places.

By the erection of a new metallic circuit between The Chateau and National Park, direct outlets were provided to Taumarunui on the one hand and Ohakune on the other.

A considerable amount of reconstruction work was carried out in the Nelson District for the purpose of improving the stability and increasing the accommodation of pole-lines. At the same time many of the circuits were rearranged in order to increase their earning-power. The principal sections affected were Blenheim–Havelock, Nelson–Motueka, and Riwaka – Upper Takaka.

To relieve traffic-congestion an additional copper metallic circuit was erected between Seddon and Ward. This also resulted in the elimination of delays which occurred on the old through circuit carrying the Nelson–Blenheim–Christchurch traffic.

In order to provide adequate line accommodation to cope with the rapid increase in inter-Island toll traffic, it was necessary to erect an additional metallic circuit between Blenheim and Seddon. The erection of this circuit enabled a further outlet between these stations to be provided by means of a phantom circuit superimposed over the existing physical circuits.

The number of faults and also the maintenance costs on the Richmond–Mapua–Mahana section were greatly reduced by the deviation of one and a half miles of the line which previously crossed the water-channels near Mapua.

By the substitution of a physical circuit between Mount Somers and Mayfield for the existing phantom circuit, faults on the Mayfield–Springburn toll line were appreciably reduced.

The two toll circuits serving Woodlands and Invercargill were relieved of congestion by the extension of the existing Invercargill–Kennington telephone circuit to Woodlands.

Traffic congestion on the Invercargill–Thornbury–Riverton–Tuatapere circuit was eliminated by the erection of an additional metallic circuit between Invercargill and Riverton.

Other improvements to the plant and equipment used in connection with the toll and telegraph services include the following:—

The provision of a new test-board at Wairoa.

The installation of teleprinter apparatus for operation between New Plymouth and Wellington for the purpose of speeding up the telegraph traffic between the Taranaki district and Wellington.

The rewiring of several telegraph operating-rooms.

The installation at the Hamilton telegraph office of a 40-volt secondary battery for telegraph local batteries.

RECONSTRUCTION OF LINES.

The following table shows the sections of line reconstructed or partly reconstructed during the year :—

Section.	Miles of Pole-line reconstructed.	Miles of Wire replaced.
Auckland District—		
Dargaville–Kaihu	4	..
Hikurangi–Marua	..	4
Hunua–Ponga	2	2
Kaitaia–Peria	10½	10½
Kawakawa–Taumarere	2¼	4½
Kerikeri branch line	6	6
Kirikopuni–Dargaville	5	..
Mangonui–Oruru	4¼	..
Oakleigh–Mangapai	2	..
Paeroa–Netherton	1	..
Purerua branch line	..	5
Rawene–Opononi	15½	15½
Runciman–Waiuku	18	36
Rotorua – Te Puke	..	5
Rotorua–Waiotapu	17	34
Tahere – Bryn Avon	..	2½
Taupo–Tokaanu	35	35
Taupo–Wairakei	3½	7
Tauranga – Omanawa Falls	3	..
Waiotemarama–Omapere–Waimamaku	6	6
Waipu–Mangawai	3	8
Waipu–Mata	12	10
Waipu–Maungaturoto	2¼	9
Wayby – Te Arai	6	1
Warkworth–Wayby	6	12
Wellsford – Port Albert	4	4
Taumarunui–Okahukura	7	84
Te Awamutu – Wharepuhunga–Ngaroma	9½	19
Hamilton–Cambridge–Taupo	..	31
Hamilton–Orini–Taupiri	27	54
Huntly–Rotongaro–Waikokowai	6¾	13½
Horotiu – Te Kowhai	3¾	7½
Huntly – Te Kauwhata–Auckland	..	27½
Wellington District—		
Pahautanui–Paekakariki	11	..
Pongaroa–Akitio	4	..
Dannevirke–Norsewood	2¾	5½
Blenheim–Havelock	..	31
Nelson – Upper Moutere – Motueka	4¼	25½
Riwaka – Upper Takaka	2	43
Ruatoria–Tikitiki	6	..
Manutuke–Quarry	..	31
Feilding–Colyton	3	6
Feilding–Halcombe	7	..
Levin–Shannon	10	..
Waverley–Moeawatea	..	4
Canterbury District—		
Hornby–Weedons	5	110
Tai Tapu – Little River	21	63
Hokitika–Ruatapu	7¼	14½
Kaiapoi–Amberley	..	17½
Waikari–Hawarden	4¼	25½
Washdyke to 1 mile north	..	27
Winchester–Orari	4	76
Orari–Ashburton	..	620
Fairlie–Albury	1½	10½
Fairlie–Hermitage	5	12
Rakaia–Methven	12	48
Otago District—		
Kurow–Omarama	3¾	..
Palmerston–Ranfurly	17¼	55½
Omakau–Clyde	9½	28½
Queenstown–Arrowtown	10	22½
Queenstown–Kingston	3	..
Gore-Riversdale	3	..
Wyndham–Waimahaka	3½	..
Eastern Bush – Clifden–Blackmount	25½	..
Otautau–Drummond	3¾	7½

MAINTENANCE OF LINES.

Auckland Engineering District.—A severe gale on the night of the 18th June caused interruption to main lines throughout the Auckland Engineering District, the majority of the faults being south of Auckland. In the North Auckland section the east-coast wires were thrown out of action on the 26th June by a pole being blown down at Te Arai, while the central route was interrupted by a tree falling across the wires near Waikiekie, causing communication with Whangarei to be lost. The breakdown was soon repaired, and the accumulation of traffic for northern stations was rapidly overtaken. This gale also caused the dislocation of communication in the vicinity of Taupo, five poles being destroyed nineteen miles south of that station. Temporary repairs were effected, and traffic became normal within a few hours. Other gales of a less severe nature caused minor interruptions to traffic during the year.

Wellington Engineering District.—Heavy gales were experienced in December and January in the Wanganui–Taranaki section, but, while some damage was done between Awakino and Mahoenui, the lines in all other parts of the district stood up satisfactorily to the ordeal. In the Nelson section, during the first two or three months of the year, several line-interruptions were caused by blasting operations on the Whangamoa and Rai Hills, where a considerable amount of work was carried out on road-improvements. In March a bush-fire on the Takaka hills destroyed about twelve poles, resulting in two miles of line requiring attention. Other minor interruptions were experienced in the Wellington District, but, on the whole, the lines stood up well to the unusual stresses caused by heavy weather.

Canterbury Engineering District.—A large number of interruptions was experienced during the year, the most severe being the result of the earthquake on the 17th June. Very heavy damage was done to this Department's plant by the earthquake, the worst-affected part of this district being the Westport–Karamea area. The damage done by the earthquake has been fully dealt with in another section of this report. On the 18th July all south lines were interrupted south of Temuka, due to floods. Heavy thunderstorms in the Reefton locality on the 18th September caused the dislocation of traffic between Reefton and Westport, communication being maintained by radio. Several other heavy gales were experienced in various parts of the district, the year being a bad one from an interruption point of view. Every effort was made on all occasions to restore communication at the earliest possible moment.

Otago Engineering District.—Early on Saturday, the 29th June, a heavy snowstorm swept the Dunedin–Clinton main-line section, with the result that at 6 a.m. on the same day a total interruption was experienced on the main south toll and telegraph circuits, three and a half miles north of Balclutha. In addition, a number of simultaneous faults appeared on the Clinton–Balclutha section, together with interruptions on the Clinton–Waipahi main-line section, and a total break on the Clinton–Mataura Gorge section. Line parties were despatched at daylight when it was found that the damage was very extensive, and justified the immediate transfer of a line party then engaged at Owaka. Snow blizzards were experienced all day on the 29th June, and transport difficulties were increased on account of the heavy drifts thus formed. A small party from Dunedin reached the scene of the breakdown, three and a half miles north of Balclutha, at midday. The line here is heavily angled where it is built over an exposed ridge on a winding road, and it was found that a two-mile gap existed, extending southwards. Insulated wire was immediately run over the gap to re-establish communication. Over a large part of the two-mile break the poles were bent to the ground or twisted and displaced at all angles, the intervening spans of wire being destroyed. By Tuesday evening, the 2nd July, all the breaks were repaired temporarily and a complete main-line service was reinstated between Dunedin and Invercargill.

The same snowstorm, accompanied by a heavy south-west gale, also caused interruptions throughout the Invercargill section. Besides causing trouble on main lines, the storm brought down a large number of subscribers' lines at Balfour, Clinton, and Riversdale, and a smaller number at other exchanges. Temporary repairs were made as soon as the weather conditions permitted, and later on permanent repairs were effected.

General.—The exceptionally large number of heavy gales experienced during last winter provided a very severe test of the Department's telegraph and telephone lines. No line can be built to withstand the severest buffetings of nature or a load of tons of snow, and there must come a time in the height of the storm when the most stoutly built line has to succumb to the elements. That the cases in which complete dislocation occurred were comparatively few proves that the Department's standards of overhaul and maintenance are high and are fully justified. In almost every case of a breakdown communication was restored within a few hours, which speaks well for the loyalty and efficiency of the Department's construction and maintenance staffs, the whole resources of which are thrown into the breach in cases of emergency. The repair gangs are often called upon to face very severe climatic conditions, but their hazardous tasks are invariably carried out with a maximum of speed and efficiency and a minimum of delay.

The rapid increase in the mileage of bituminized and metalled roads throughout the Dominion has greatly assisted the Department in the maintenance of telegraph and telephone lines, and has largely assisted in the solving of transport difficulties. On the other hand, a considerable amount of expenditure has been involved in altering lines to conform with new alignments determined by road and rail construction.

The interruption of telegraph and toll communication caused as a result of the earthquake of June, 1929, is covered in the article concerning that happening which appears at pages 13–16 of this report.

POLES AND WIRE.

During the year 48 miles of pole-line and 520 miles of wire were erected for telegraph and telephone (toll) purposes, while 122 miles of pole-line and 338 miles of wire were dismantled, or, in localities where no longer required by the Department, sold to settlers for use as private telephone-lines.

The lengths of pole-line and wire in use for telegraph and telephone toll purposes on the 31st March, 1929 and 1930, respectively, were as follows:—

Pole-line and Wire.	Year ended 31st March, 1929.	Year ended 31st March, 1930.
Miles of pole-line	12,720*	12,646
Miles of wire	62,996*	63,178

* Revised figures.

The telegraph and telephone wire in use on the 31st March, 1930—viz., 63,178 miles—is classified as under:—

	Miles.
Used exclusively for telephone toll traffic	4,906
Used exclusively for telegraph traffic	9,403
Used simultaneously and (or) conjointly for telegraph and telephone toll traffic	48,869

The total length of wire that may be used for telephone toll traffic is 53,774 miles; the total length that may be used for the transmission of telegrams, 58,271 miles; and the length of telephone toll-lines over which telegrams may be transmitted by telephone, 23,176 miles. The total length of Morse circuit derived from the superimposing of telephone circuits is 11,809 miles, and the total length of additional telephone toll circuit improvised from the existing wire circuits by the use of subsidiary apparatus associated therewith (so-called phantom working) is 6,838 miles. In addition, 1,751 channel miles of telephone toll circuit have been obtained from the application of the carrier-current telephone system to telephone trunk lines.

NEW ZEALAND SUBMARINE CABLES.

Cook Strait Cables.

Breaks occurred in two of the Cook Strait single-core telegraph-cables in July, 1929, those affected being Nos. 1 and 2 Oteronga Bay – White Bay cables. The break in No. 1 cable was located at a point five and a half nautical miles from the Oteronga Bay cable-hut, while that in No. 2 cable was found to be eleven and a quarter nautical miles from the same spot. All other cables have remained in good working-condition during the year, and, as these, with the improved facilities now available, have proved adequate for the expeditious handling of the traffic, the repair of the broken cables has been deferred until such time as a third cable becomes interrupted.

An additional telephone circuit across Cook Strait was brought into service in December last by the operation of a four-wire single-channel carrier-current telephone system over the four-core continuously-loaded telephone-cable.

Investigations were commenced during the year with a view to determining whether the Cook Strait single-core unloaded cables would lend themselves to the application of carrier-current methods of telegraph working, and whether one or more of them could be utilized for the purpose of providing additional telephone outlets, which will be required in the near future between Wellington and Blenheim. These investigations have not yet been completed, but from the test data collected there is good reason to believe that it will be practicable to apply both the carrier-telegraph and carrier-telephone methods of operation to these cables.

Miscellaneous.

A fault in the Tory Channel single-core telephone-cable between Te Pangu and Te Uria-karapa was reported and repaired in October, 1929.

A four-pair multiple twin telephone-cable was laid across Onahau Bay in the vicinity of Te Mahia, Queen Charlotte Sound, in February, 1930.

A 26-pair telephone-cable (1,200 yards) was laid across Auckland Harbour in June, 1929, for the purpose of diverting and extending the existing 26-pair cable between Ponsonby and Northcote. This work was found to be necessary consequent upon the erection by the Harbour Board of a sea-wall to effect improvements to the harbour.

Approximately two miles and a half of 20-pair multiple twin telephone-cable (in two lengths) were laid across Auckland Harbour during the year for the purpose of providing additional toll facilities between Auckland and stations situated on the North Auckland peninsula. The trunk lines serving stations on the North Auckland peninsula were cut into these cables on the 4th March, 1930.

TELEGRAPH INSTRUMENTS AND BATTERIES.

The following table shows the class and number of telegraph instruments and batteries in use in telegraph-offices as at the 31st March, 1930:—

RETURN OF TELEGRAPH INSTRUMENT SETS AND BATTERIES AS AT THE 31ST MARCH, 1930.

Engineering District.	Telegraph Instrument Sets.												Primary Batteries.					
	Simplex.			Duplex.		Quadruplex.	Split Quadruplex Repeater	"A" Side relayed Duplex.	Forked Quadruplex.	Murray Multiplex Sets (Quadruple Duplex)	Concentrators.		Universal Battery Systems.	Storage Batteries other than those used for Universal Battery System Working.	Number of Cells.			
	Constant Current	Intermittent Current.	Central Battery Omnibus	Single Current	Double Current						Number.	Capacity.		Number of Cells.	Leclanche. No. 0.	Leclanche. No. 1.	Leclanche. No. 2.	Gordon Burnham.	Daniel.
Auckland	40	87	42	9	6	18	1	4	11	4	2	20	1	116	242	4,650	3,512	..	..
Wellington	35	169	27	9	24	15	6	3	10	10	2	20	2	537	125	8,922	4,344	437	40
Canterbury	34	85	..	5	9	6	4	1	..	3	2	20	1	6	240	3,252	1,793	13	..
Otago	37	78	..	1	3	5	1	1	..	1	1	10	..	47	291	4,171	1,065	..	..
Totals	146	419	69	24	42	44	12	9	21	18	7	70	4	706	898	20,995	10,714	450	40

CABLE SERVICES.

IMPERIAL AND INTERNATIONAL COMMUNICATIONS, LTD.: TAKING OVER OF COMMUNICATIONS SYSTEMS.

In terms of the agreement reached on the subject, the transfer to the Imperial and International Communications, Ltd., of the services of the Eastern and Associated Companies and the Marconi Wireless-telegraph Co., the Pacific Cable Board system, including the West Indian cable and wireless system worked by the Board, the Imperial and Trans-Atlantic cables, and the beam radio-electric stations which carry out the "Empiradio" services by wireless with Australia, Canada, India, and South Africa, was completed on the 30th September, 1929.

IMPERIAL COMMUNICATIONS ADVISORY COMMITTEE.

In accordance with the recommendations of the Imperial Wireless and Cable Conference, a committee has been set up to act in an advisory capacity in regard to telegraph communications. This body, which is styled "The Imperial Communications Advisory Committee," is concerned with the policy of the new Imperial and International Communications Co., and, in particular, is charged with the responsibility in regard to the institution of new services, the discontinuance of existing services, alterations in rates, and distribution of traffic between alternative routes. Fifty per cent. of all net revenue in excess of a sum fixed by agreement as a standard revenue accruing to the Imperial and International Communications Co. is to be devoted to a reduction of rates and such other purposes as the Advisory Committee may approve.

The following appointments to the Advisory Committee have been made: United Kingdom of Great Britain and Northern Ireland, Colonel Sir Courtauld Thomson, K.B.E., C.B.; Canada, Sir Campbell Stuart, K.B.E.; Commonwealth of Australia, Mr. Clive L. Baillieu, C.M.G., O.B.E.; New Zealand, Mr. M. B. Esson; Union of South Africa, Lieut.-Colonel E. A. Sturman, C.B.E.; Irish Free State, Mr. T. J. Kiernan; India, Sir Atul Chatterjee, K.C.I.E.; colonies and protectorates, Sir Edward Davson, Baronet.

DAILY LETTER-TELEGRAM SERVICE: EXTENSION TO SWITZERLAND, AUSTRIA, CZECHOSLOVAKIA, BELGIUM, LUXEMBURG, FRANCE, ALGERIA, AND TUNIS.

The daily letter-telegram service has been extended to the undermentioned countries at the following rates:—

From the 1st June, 1929, to Switzerland, at 9½d. per word, with a minimum charge of 15s. 10d. for twenty words.

From the 22nd July, 1929, to Austria, at 9d. per word, with a minimum charge of 15s. for twenty words.

From the 1st April, 1930, to Czechoslovakia, at 10½d. per word, with a minimum charge of 17s. 6d. for twenty words.

From the 1st March, 1930, to Belgium and Luxemburg, at 9d. per word, with a minimum charge of 15s. for twenty words.

From the 1st December, 1929, to France, Algeria, and Tunis, at 9½d. per word, with a minimum charge of 15s. 10d. for twenty words to France, and at 10½d. per word, with a minimum charge of 17s. 6d. for twenty words, to Algeria and Tunis.

WEEK-END LETTER-TELEGRAM SERVICE: EXTENSION TO SWITZERLAND, AUSTRIA, CZECHOSLOVAKIA, BELGIUM, AND LUXEMBURG.

The week-end letter-telegram service has been extended to the undermentioned countries at the following rates:—

From the 1st June, 1929, to Switzerland, at 8d. per word, with a minimum charge of 13s. 4d. for twenty words.

From the 14th August, 1929, to Austria, via Eastern London-Marconi, at 8d. per word, with a minimum charge of 13s. 4d. for twenty words.

From the 1st April, 1930, to Czechoslovakia, at 9d. per word, with a minimum charge of 15s. for twenty words.

From the 1st March, 1930, to Belgium and Luxemburg, at 7½d. per word, with a minimum charge of 12s. 6d. for twenty words.

CABLE TRAFFIC.

The number of cable messages, excluding Press, sent from New Zealand to international offices shows an increase of 7·22 per cent. on the number sent during 1928–29, and the number sent to Australian offices shows an increase of 1·73 per cent. Messages received from international offices increased by 4·39 per cent., and messages from Australia increased by 2·48 per cent.

The proportion of cable messages sent "via Pacific" was less than that sent by the same route during the previous year, the percentages being 63·49 and 66·5 respectively.

The following table shows the total number of cable messages, excluding press, forwarded by each route during each of the past five years; also the percentage of such traffic falling to each.

Pacific.			Eastern.		
Year.	Messages.	Percentage of Total.	Year.	Messages.	Percentage of Total.
1925–26	204,586	65	1925–26	110,146	35
1926–27	204,051	64·29	1926–27	113,355	35·71
1927–28	210,662	66·07	1927–28	108,167	33·93
1928–29	217,033	66·5	1928–29	109,308	33·5
1929–30	217,038	63·49	1929–30	124,799	36·51

Press messages numbering 5,685 were sent via Pacific and 2,621 via Eastern, compared with 5,102 and 2,381 respectively during 1928–29. The number received via Pacific was 5,869, and via Eastern 3,759, compared with 9,003 and 3,708 respectively during the previous year.

The following table shows the total number of each class of message, excluding press, dealt with during 1929–30, as compared with the number dealt with during 1928–29:—

	1929–30.		1928–29.	
	Forwarded.	Received.	Forwarded.	Received.
Full-rate international cable messages	95,348	82,920	90,114	83,701
*C.D.E. international cable messages	319	574	..	..
Deferred international cable messages	26,316	28,288	24,461	26,186
Daily letter-telegrams	38,105	30,486	35,215	27,353
Week-end telegrams	32,263	20,695	29,609	18,875
Australian cable messages	83,131	79,212	81,926	78,398
*Australian C.D.E. messages	113	43	..	..
Australian night-letter telegrams	66,242	64,840	65,016	62,199
Totals	341,837	307,058	326,341	296,712

* C.D.E. service established 1/10/29.

(For further statement of cable business see page 55.)

RADIO-TELEGRAPH AND TELEPHONE SERVICES.

OVERSEAS RADIO-TELEPHONY.

The commercial and social facilities arising from linkage of countries by means of radio-telephony are rapidly resulting in the extension of this means of communication in many parts of the world. New services are frequently being instituted between the older countries, and, realizing the benefit that such a service would bestow upon an isolated country such as New Zealand, the Department has conferred with the Australian Administration with a view to having the two countries connected by radio-telephone. It is expected that it will be possible to establish this service in the near future; and in the meantime arrangements are being made for the purchase of the requisite modulation equipment for installation at Wellington, to be used in conjunction with the recently installed short-wave transmitter.

For some considerable time tests were carried out daily between the radio-telephone stations at Rugby, England, and Sydney, Australia, the tests being the preliminary to the establishment of a radio-telephone service between the two countries. [The service was inaugurated on the 30th April, 1930.] Throughout the tests observations were carried out at Awarua Radio, and a large amount of data accumulated which will be of value in connection with the projected services between New Zealand and Australia and New Zealand and the United Kingdom.

It is being arranged that facilities will be available for switching the proposed New Zealand–Australian channel to the Australia–Great Britain link, thereby completing a radio-telephone channel between New Zealand and the United Kingdom.

RADIO-TELEGRAPH SERVICE BETWEEN NEW ZEALAND AND PACIFIC ISLANDS.

In last year's report reference was made to the contemplated improvement in the New Zealand–Pacific islands short-wave radio-telegraph service by the installation at Wellington Radio of a transmitter of a much higher power than that previously used. The transmitter referred to, which has

an output power of 1,000 watts, was installed in November last, and, in addition, new apparatus of an output power of 500 watts has been provided at Apia Radio (Samoa), which acts as the relaying-station for traffic passing between New Zealand and other Pacific islands.

As a consequence of these modernizations the service has been greatly improved in reliability, rendering unnecessary the continuance of the high-power long-wave apparatus at Awanui Radio as an emergency plant. As mentioned hereafter, Awanui Radio was closed on the 10th February, and the apparatus, buildings, and land are now in course of disposal.

It is now extremely rare for atmospheric or inductive disturbances to interfere appreciably with the regular exchange of messages on this route; consequently delay on traffic is reduced to a minimum, with an attendant saving of operating-time.

A short-wave transmitter similar to that installed at Apia Radio has recently been ordered for installation at Rarotonga. This will permit Rarotonga to communicate direct with Wellington, and on that account will enable the charges for messages passing between Rarotonga and New Zealand to be substantially reduced. Consideration is also being given to the extension of radio facilities to certain of the more distant islands of the Cook Group.

BYRD ANTARCTIC EXPEDITION: RADIO TRANSMISSION.

With a view to rendering every assistance to the Byrd Antarctic Expedition, permission was granted to establish a radio receiving-station at Dunedin, with the use of a Morse line from the Dunedin receiving-station to the high-power transmitter on board the "Eleanor Bolling" at Port Chalmers, this enabling the expedition to maintain direct communication with its base.

On the occasion of the return to New Zealand from the Antarctic of the expedition a special relay was arranged to enable Admiral Byrd to speak by means of radio with America. The conversation was arranged by the Radio Broadcasting Co. of New Zealand, Ltd., in conjunction with Amalgamated Wireless (Australasia), Ltd., Sydney, and the General Electric Co., New York, and took place at 12.30 a.m. (New Zealand summer time) on the 12th March, 1930. The speech was relayed from station 4YA, Dunedin, by land line, and submarine cable to Station 2YA, Wellington. The Wellington broadcast was picked up by the Amalgamated Wireless (Australasia) experimental station 2ME, Sydney, and transmitted to the General Electric Co.'s station 2ZAF, Schenectady, N.Y., U.S.A.; and the short-wave transmissions from this station were simultaneously received and broadcast in New Zealand, thus enabling a two-way conversation to take place. The transmissions were broadcast by the New Zealand stations and also in Australia and America, and arrangements were made to enable the speeches to be heard in the United Kingdom and on the Continent of Europe. The relay proved an immense success, and further demonstrated the world-wide value of radio communication.

AWANUI RADIO.

For some time past Awanui Radio has been maintained solely as a stand-by station—firstly, owing to the indifferent reception previously obtainable at Auckland Radio, and, secondly, as an emergency station for the New Zealand–Samoa service. On the institution of remote reception at Auckland, however, and the provision of higher-power apparatus in the overseas service conducted by Wellington Radio, the necessity for maintaining Awanui Radio ceased, and the station was closed on the 10th February, 1930. The closing will result in a considerable saving in annual charges.

AUCKLAND RADIO.

The radio service to ships in northern New Zealand waters has, since the closing of Awanui Radio, devolved solely upon this station.

As an emergency apparatus for use in the event of the impotence of the regular transmitter from failure of the city electric-power supply, a low-power battery-operated transmitter has been provided, and has already justified its existence.

The unattended remote receiving-station continues to provide a satisfactory standard of reception but, owing to the extension of electric-power reticulation, inductive interference has lately become troublesome. Experiments are therefore being conducted with a view to determining a more suitable location for the receiver.

WELLINGTON RADIO.

An additional short-wave transmitter rated at 3 kw. (1 kw. aerial) was installed at Wellington Radio in November last. This equipment is of modern design, and is now in regular use for the short-wave service between New Zealand and the Pacific islands. During the preliminary testing of the transmitter, reports were received from England indicating satisfactory reception during certain hours of the day. High-speed telegraphy tests have also been carried out with Sydney Radio, and speeds up to 100 words per minute were satisfactorily transmitted. The equipment is provided with remote-control apparatus, enabling the transmitter to be controlled from the receiving-station.

The receiving equipment has been removed to a new building some 200 yards from the transmitting-station. The removal of the receiving-station now enables the medium-wave service to ship stations and the Pacific island short-wave service to be carried out simultaneously.

In order to provide for remote control of the transmitter used for the ship service, additional switching-apparatus for automatic starting and stopping and control of wave-length has been installed at the main transmitting-station.

CHATHAM ISLANDS RADIO.

No additions or alterations have been carried out at this station, which has performed satisfactory service during the year. Chatham Islands Radio is engaged chiefly in the fixed service with Wellington Radio, but also works ship stations in the vicinity.

AWARUA RADIO.

The valve transmitter at Awarua Radio has been reconstructed, permitting the emission of increased power, and two new receivers have been added to the station equipment.

During the season communication was maintained regularly with the whaling-vessels in the Ross Sea, and also with the Byrd Expedition during its sojourn in the Antarctic.

The British official press news transmitted from Rugby (England) continues to be successfully received. Observations have also been made since August last on the experimental radio-telephone transmissions from Rugby to Sydney.

On the occasion of the earthquake of the 17th June Awarua Radio assisted materially in the disposal of telegrams for the West Coast, and handled a considerable amount of traffic from ships in Greymouth Harbour.

Efficient service was rendered by this station in the reception and distribution of the distress messages sent out by the s.s. " Manuka " on the night of 16th December last, when the vessel struck a reef during its voyage between Bluff and Dunedin and became a total wreck. Fortunately there was no loss of life.

APIA RADIO.

The Apia station is controlled by the External Affairs Department, for which the Post and Telegraph Department acts in a consultative capacity.

The removal and modernization of the station were completed on the 8th October, from which date the new station was opened for traffic. The station is now situated in the Apia Township, and occupies an area of approximately three acres. Messages for transmission are accepted both at the radio-station and at the local post-office. The transmitting equipment now consists of a 100-watt C.W.-I.C.W. set for medium-wave working, and a $1\frac{1}{2}$ kw. I.C.W. short-wave transmitter. A 5 kw. medium-wave spark set is held for emergency purposes. The aerial equipment comprises a 120 ft. steel mast with four-wire fan-type aerials.

In addition to being in a more convenient locality, it is anticipated that the removal of the station will result in a very considerable saving in annual charges.

A SOS call from the steamer " Norwich City " was received by this station at 1.50 a.m. on the 30th November. Atmospheric conditions were bad, and it was with difficulty that Apia Radio received the position of the vessel, which was ashore on Garden Island, in the Phœnix Group, 600 miles north of Apia. No vessels within 1,000 miles of the wrecked vessel could be raised, and it was decided to despatch to the wreck the s.s. " Trongate," which was loading at Apia. The " Trongate " made all speed to the wreck, and found the " Norwich City " to be a total loss. Eleven of the crew were drowned in trying to make shore after the vessel struck ; the remainder were rescued by the " Trongate." As far as is known, Apia Radio was the only station to receive the distress call, and the timely action taken by the staff of that station undoubtedly averted a much more serious loss of life.

RAROTONGA RADIO.

The Rarotonga station is controlled by the Cook Islands Department, for which the Post and Telegraph Department acts in a consultative capacity.

The station continues to function in an efficient manner, only routine maintenance having been necessary during the year.

A new short-wave transmitter, of an output power of 500 watts, is under order for this station, and when installed will permit direct communication with New Zealand. At present New Zealand traffic is transmitted through the Apia Station.

LOWER-POWER STATIONS.

The various low-power radio-stations in New Zealand and the Pacific islands have continued to give satisfactory service.

A new station was opened at Mauke, in the Cook Islands Group, on the 11th June, 1929, since when uninterrupted service has been given. The rate for messages from New Zealand is 1s. 3d. a word.

BROADCASTING.

On the 31st March, 1930, there was a total of 53,407 radio receiving licenses throughout the Dominion. Of this total, 21,968 licenses were held in the Wellington District, 17,201 in the Auckland District, 9,371 in Canterbury, and 4,867 in Otago. Included in the total are 215 licenses issued free to blind persons. The increase in the number of licenses is very gratifying, and the additional revenue is enabling the Radio Broadcasting Co. to extend their activities, to the advantage of licensees. That there is still room for further extension is admitted, and no doubt development in this connection may be expected.

Following on the addition to the usual programme of a dinner-music session at the Wellington station, this session has been instituted at the Auckland, Christchurch, and Dunedin stations.

Dunedin Station: A new studio has been provided at Station 4YA, Dunedin, and the silent night usually observed on Mondays at this station has been abolished, thus bringing it into line with the other stations in observing only one silent night during the week. The output power of the station has also been increased to approximately 500 watts.

The operating-frequency of station 2YA, Wellington, has been altered to 720 kilocycles (approximately 416·7 metres).

Increased use continues to be made of the Department's telephone-lines as an adjunct to the broadcasting service. A record length of circuit was brought into use on the 18th March, when the company's stations at Auckland, Wellington, Christchurch, and Dunedin, as well as the auxiliary station at New Plymouth and a privately-owned station at Invercargill, were connected by land line, submarine cable, and carrier-current channels, totalling approximately 1,247 miles in length. Lesser lengths of circuit are in almost daily demand, and the popularity of relays of this nature bears pleasing testimony to the efficiency of the lines made available. In view of the prejudicial effect on toll traffic, there will at times be a limit to the availability of telephone-lines for this purpose, but the departmental policy is to provide lines whenever practicable, especially for relays which may be classed as of a national or international character. In order to make the lines available, it is occasionally necessary to divert toll traffic to less-direct routes.

Seven low-power private broadcasting-stations were opened during the year, two being at Invercargill, two at Masterton, and one each at Napier, Eketahuna, and New Plymouth. In addition, private broadcasting-station 3ZC, Christchurch, was permitted to inaugurate a short-wave broadcasting session. The number of private broadcasting-stations is now twenty. The station opened at New Plymouth is operated by the North Taranaki Radio Society, which is assisted by the Radio Broadcasting Co. of New Zealand, Ltd. The plant and apparatus were supplied by the Radio Broadcasting Co., which also retains the services of the station operator.

The Department's radio inspection staff has continued its activities in the direction of localizing and, where possible, removing sources of disturbance to radio reception. Many and varied are the cases dealt with, among which may be mentioned the following: Faulty street-lamp connections, magnetic battery-chargers, tramway-rail bondings and signalling-apparatus, diathermy and X-ray equipment, high-tension transmission-lines, and telegraph and telephone equipment. With the co-operation of the owners of the lines or equipment concerned, considerable success has been achieved in clearing the ether of extraneous noises. In some localities, however, the removal of the trouble presents difficulties involving considerable labour and expenditure, particularly in regard to a certain type of power-line induction, but it is hoped that the disturbance will disappear in the latter case as improved fittings become available.

The Department has also been actively engaged in detecting persons operating radio receiving stations without licenses; and, during the year, the number of prosecutions totalled 277. The fines inflicted totalled £300.

BROADCASTING AND COPYRIGHT.

In terms of the Copyright (Temporary) Amendment Act, 1928, a claim was lodged by the Australasian Performing Right Association, Ltd., Sydney, for payment of damages for infringement of copyright in connection with the operation of the radio broadcasting service in New Zealand during the period covered by the Copyright (Temporary) Amendment Act, 1928—namely, the 1st October, 1927, to the 31st August, 1929, inclusive—and a Commission, in the person of Mr. Andrew Duncan Thomson, of Lower Hutt, Wellington, was appointed in accordance with the provisions of section 6 of the Act to hear and determine the claim, which was the only one received.

After hearing evidence, the Commission awarded to the applicant association payment at the rate of 6 per cent. of the proportion of radio receiving-station license fees paid or due to the Radio Broadcasting Co. of New Zealand, Ltd., in consideration of their operating the broadcasting service for the period in question. This percentage coincided with that fixed under the authority of section 5 of the Act to be withheld from the license fees accruing to the Broadcasting Co. for the purpose of meeting copyright claims during the period covered by the Act.

From the 1st September last the amount to be paid the Performing Right Association in respect of broadcasting copyright is the subject of arrangement between the association and the Radio Broadcasting Co.

REVISION OF RADIO REGULATIONS.

Arrangements are in train for the whole of the New Zealand Radio Regulations to be reviewed and consolidated in one volume. This is in consequence of the great development in recent years of radio-electric communication, and also having in view the amendments to the International Radio-telegraph Convention made by the Washington Conference of 1927, which became operative from the 1st January, 1929. The work is expected to be completed at an early date.

RADIO-DEALERS' LICENSES: INCREASE IN FEES.

From the 1st April, 1929, the fees for radio-dealers' licenses were increased, as mentioned in last year's report, to £15 for a Class I license, £7 10s. for a Class II license, and £2 for a Class III license. Prior to these increases the percentage of dealers' fees paid to the Radio Broadcasting Co. was 90; it is now reduced to 45.

AMATEUR TRANSMITTING- AND RECEIVING-STATION LICENSES: ANNUAL FEES.

On the 1st April, 1930, the regulation fee of £2 2s. in respect of amateur transmitting- and receiving-station licenses will be reduced to £1 10s.

ABOLITION OF FORM OF APPLICATION FOR RADIO LICENSE.

The form of application previously required before a receiving-station license or a radio-dealer's license was issued has been abolished. These licenses are now issued in response to oral applications.

TELEPHONE-EXCHANGE SERVICES.

TELEPHONE-EXCHANGE RENTAL PAYMENTS.

As mentioned on page 13 of this report, in the article dealing with the establishment of the Commercial Branch, it has been arranged to introduce a system by which telephone subscribers may pay their telephone rentals monthly in advance, instead of half-yearly as at present.

DEVELOPMENT OF TELEPHONE-EXCHANGE SYSTEMS.

Notwithstanding that the conditions were somewhat unfavourable for telephonic development, the local exchange systems continued to show the steady development which has been evident for some years past. The number of new connections (main stations) joined up during the year was 12,781, which is a record. Taking into consideration the telephones of all kinds relinquished as well as new telephone-stations connected, 9,087 additional telephones were put into service, making the total at the end of the year 157,023. If to this number is added the private-line telephones connected with toll stations and non-departmental exchanges (4,300) the number of telephones in service on the 31st March, 1930, was 161,323.

The number of private-line telephones connected with toll stations and non-departmental exchanges has declined from 4,814 on the 31st March, 1926, to 4,300 on the 31st March, 1930. This decrease is accounted for by the fact that a steadily increasing number of private-line owners has from year to year requested the replacement of privately-owned lines by metallic circuits owned and maintained by the Department and connected to exchanges operated by the Department. This change-over to the more efficient departmental systems has been accelerated by the rapid and extensive reticulation of high- and low-tension power lines making the operation of private telephone-lines impossible or unsatisfactory. Rural dwellers are evidently finding this course more economical than undertaking on their own account the erection and maintenance of new lines on the metallic-circuit principle. While this form of development is profitable in the long-run, the heavy initial costs incurred by the Department for a comparatively small number of subscribers preclude it being so for a number of years, until the capital cost has been fully amortized. The Department, however, regards any lag in this connection as a portion of its contribution towards the general development of rural communities and the fostering of closer settlement.

Coincident with the growing popularity of interphone apparatus, which provides a ready method of intercommunicating in business establishments, telephone-manufacturers have recently devoted much attention to improvements in the design of intercommunicating equipment. When replenishing the Department's stocks of interphone equipment, these improvements were taken advantage of and supplies were ordered of a new type of interphone set, in which the key-box and telephone are combined, and in which is incorporated also the hand-microphone feature. It is anticipated that the new type of set fitted with the hand-microphone will prove very popular with business houses, and will result in an increased demand for this type of apparatus, which some years ago was modified by the Department to serve the dual purpose of giving outside automatic-telephone-exchange service as well as the internal intercommunication for which it was originally designed.

Experience has shown that many telephone-users have a preference for telephone instruments with a hand-microphone. Until a short time ago the application of the hand-microphone was, for technical reasons, confined to magneto-exchange subscribers. Some two years ago, however, telephone-manufacturers in both Europe and America successfully incorporated the hand-microphone feature in their automatic-telephone sets. Evidence of the universal popularity of these combination sets is the fact that large numbers are being purchased and installed in the United Kingdom, America, and other telephone-manufacturing countries. With a view to making this latest telephone instrument available to telephone-users at automatic and common-battery exchanges in New Zealand, an order was recently placed for a supply of desk-type instruments fitted with hand-microphones. Although a small additional rental will be payable for the use of automatic hand-microphone telephones, it is anticipated that the general style and increased utility of these instruments will cause a large demand immediately they are available. Owing to the large

orders for other countries which the manufacturers of these telephones have to meet, delivery of the initial order will not be made in New Zealand before about December next.

The cost of the year's operations in extending telephone-exchange systems throughout the Dominion for the purpose of connecting new subscribers and making provision for future growth amounted to £670,381. The year's operations in this respect included the opening of new exchanges at Kerikeri and Mossburn; the installation at thirty-eight exchanges of additional switching equipment for 6,636 exclusive lines and 504 party lines; the establishment of seventy new public call offices (coin-in-the-slot telephones); the laying of 1,242 chains of underground ducts and 7,884 chains of underground cable containing 26,768 miles of wire; the erection of 2,837 chains of overhead cable containing 3,731 miles of wire; and the erection of 782 miles of pole-line and 7,837 miles of open aerial wire.

In addition, £49,041 was expended in renewing or replacing plant and equipment which had become worn out, inadequate, or obsolete.

EXTENSIONS TO CABLING AND SWITCHING SYSTEMS.

The table below shows the exchanges at which extensions to the cabling and switching systems were completed during the year, as well as particulars of the extensions made.

Name of Exchange.	Additions to Cabling Plant.				Additions to Switching Equipment.		
	Underground Ducts added.	Underground Cable added.	Overhead Cable added.	Cable Wire involved.	Exclusive Line Equipment.	Party-line Equipment.	
						Two-party.	Four-party.
Auckland Engineering District—	Chains.	Chains.	Chains.	Miles.	Units.	Units.	Units.
Auckland	624	842¾	58	3,503	..	..	..
Avondale	..	23¾	..	14¼	..	..	..
Cambridge	..	9	..	3¼	..	..	..
Clevedon	..	3	..	2	..	..	..
Coromandel	..	..	..	..	50	..	..
Hamilton	..	11	..	10	..	..	..
Henderson	..	56½	259	278	..	..	..
Huntly	..	8½	..	7¼	..	..	..
Kaeo	..	161	..	152½	..	..	..
Kakahi	..	10	..	6¼	..	..	..
Kaikohe	..	..	..	..	50	..	..
Katikati	..	..	..	..	50	..	..
Kohukohu	..	3½	..	0¾	..	..	..
Kumeu	..	..	8¼	5	..	..	..
Mamaku	..	17½	..	24	..	..	..
Mangere	..	53½	2¾	272¼	..	..	..
Manurewa	..	26	..	30	..	..	..
Matamata	..	433½	..	414¾	..	..	..
Matiere	..	16	..	10	..	..	..
Mercer	..	2¼	..	2¾	10	..	..
Mokauiti	..	4	..	2½	..	..	..
Morrinsville	..	9¼	..	17¼	..	..	..
Mount Eden	..	..	..	..	600	100	..
Ngaruawahia	..	5½	..	4¾	..	..	..
Onehunga	..	..	..	..	200	..	..
Otahuhu	..	2¼	..	5¾	..	..	..
Otorohanga	..	2⅛	..	1½	..	..	..
Paeroa	5	291½	..	507	100	..	..
Papakura	..	188¾	..	163¾	100	..	..
Patumahoe	..	87½	..	109½	..	..	..
Piopio	..	38	..	23¾	..	..	..
Ponsonby	..	..	..	..	240	100	..
Pukekohe	..	195¾	..	296¾	..	..	..
Putaruru	..	7	..	4¼	..	..	..
Raglan	..	2	..	1¼	..	..	..
Remuera	..	..	..	..	800	100	..
Rotorua	..	..	..	..	100	..	..
St. Heliers	..	28	130¾	198½	..	..	..
Taneatua	..	20½	..	15¾	..	..	..
Te Awamutu	..	..	..	..	50	..	..
Te Aroha	..	182¾	0½	228	..	..	..
Te Kauwhata	..	4	45	30½	..	..	..
Tirau	..	66	..	41¼	..	..	..
Tuakau	..	9⅓	..	17¾	..	..	..
Waharoa	..	7½	..	5	..	..	..
Waimamaku	..	1⅓	..	0¾	..	..	..
Waimana	..	37	..	24	20	..	..
Waimauku	..	25¾	..	31¾	..	..	..
Waiuku	..	30	..	40½	..	..	..
Warkworth	..	..	..	..	50	..	..
Whakapara	..	0¼	..	0¼	..	..	..
Whangarei	100	122¼	..	730¼	..	..	..

EXTENSIONS TO CABLING AND SWITCHING SYSTEMS—*continued.*

Name of Exchange.	Additions to Cabling Plant.				Additions to Switching Equipment.		
	Underground Ducts added.	Underground Cable added.	Overhead Cable added.	Cable Wire involved.	Exclusive Line Equipment.	Party-line Equipment.	
						Two-party.	Four-party.
Wellington Engineering District—	Chains.	Chains.	Chains.	Miles.	Units.	Units.	Units.
Blenheim	245	7¾	..	17¼	..	..	..
Carterton	..	4¾	13¼	16	..	..	..
Courtenay Place	..	..	..	..	1,200	100	..
Dannevirke	..	48½	79	255¾	..	..	..
Eastbourne	1	63¾	33½	359¾	..	..	..
Eketahuna	..	..	0½	0¼	..	..	..
Feilding	..	..	..	..	100	..	..
Gisborne	5½	167	200½	2,298½	150	..	..
Hastings	..	2	..	1¼	93	..	..
Havelock	..	33½	..	28½	..	..	..
Hawera	..	29	254	372½	..	..	..
Kaponga	..	0½	17½	11¼	..	..	..
Levin	..	0¾	39	49½	83	..	..
Lower Hutt	20	47¼	48¾	206½	..	..	..
Martinborough	..	8½	35½	27½	..	..	..
Marton	..	20	0½	34	..	..	..
Masterton	..	57¼	128	504½	..	..	..
Miramar	..	..	..	..	600	..	104
Motueka	..	11½	..	14½	..	..	..
Murchison	..	..	..	..	55	..	..
Napier	110¾	3	1¼	7	..	..	..
Nelson	..	65½	59¼	262¼	..	..	..
New Plymouth	47½	84½	236	1,144	..	..	..
Ohakune	..	9	..	5½	..	..	..
Opunake	..	2½	36½	61½	100	..	..
Ormondville	..	118¾	..	147½	..	..	..
Otaki	..	158¾	142¼	883¾	..	..	..
Pahiatua	..	57	40½	113½	..	..	..
Palmerston North	..	2¾	23¾	52	210	..	..
Paraparaumu	..	4¼	..	2¾	..	..	..
Picton	..	100*	..	10	..	..	..
Te Araroa	..	44	..	66¼	..	..	..
Tikitiki	..	7½	..	9½	..	..	..
Upper Hutt	..	36	..	22½	..	..	..
Urenui	..	..	3	2¼	..	..	..
Waipawa	..	..	46	28¾	..	..	..
Waipukurau	..	4½	26	52½	50	..	..
Wairoa	..	..	..	..	370	..	..
Wanganui	..	5	3½	8¼	200	..	..
Wellington Central	24	1,147	92¾	4,821	400	..	..
Woodville	..	2¼	..	1½	..	..	..
Canterbury Engineering District—							
Ashburton	..	153¼	..	210¼	100	..	..
Cheviot	..	29	..	18	..	..	..
Christchurch	..	194½	198	601	..	..	..
Culverden	..	..	..	..	50	..	..
Cust	..	7¾	37	52¼	20	..	..
Fairlie	..	97	..	71¼	..	..	..
Geraldine	..	121¼	12¼	143	..	..	..
Hororata	..	20	80¾	89	50	..	..
Kaikoura	..	101	..	100	..	..	..
Kirwee	..	6¾	..	4¼	..	..	..
Methven	..	6	..	3¾	..	..	..
Oxford	..	40½	..	35¾	..	..	..
Tai Tapu	..	..	..	..	20	..	..
Timaru	..	46¾	120¼	142½	180	..	..
Waimate	..	20½	17	59¾	..	..	..
Westport	..	3¼	..	26¼	30	..	..
Otago Engineering District—							
Alexandra	..	1½	..	3¾	..	..	..
Cromwell	..	2	..	3¾	..	..	..
Dunedin	..	320	98¼	2,548¾	..	..	..
Gore	76¾	257	..	685	..	..	..
Invercargill	..	757	54	5,799	..	..	..
Lumsden	..	..	..	..	25	..	..
Mataura	..	..	..	..	50	..	..
Milton	..	86½	..	76½	..	..	..
Mossburn	..	1	..	0½	..	..	..
Oamaru	..	143½	154	662¼	..	..	..
Oturehua	..	..	..	..	5	..	..
Outram	..	64½	..	22½	..	..	..
Owaka	..	1¾	..	1	..	..	..
Pembroke	..	1	..	0½	..	..	..
Riverton	..	..	..	..	75	..	..
Totals	1,259½	7,884¼	2,836½	30,498½	6,636	400	104

* Submarine.

EXTENSIONS NOT COMPLETED DURING YEAR.

In addition to the extensions enumerated in the foregoing table, a number of extensions to the switching and cabling portion of local telephone-exchange systems was commenced but not completed during the year. These are as follow:—

Wellesley Street Exchange: Extension of switching equipment by 3,000 exclusive lines and 100 two-party lines.
Takapuna Exchange: Extension of switching equipment by 200 individual lines.
Kaeo Exchange: Extension of cabling system.
Auckland Exchange: Extension of cabling system.
Mamaku Exchange: Extension of cabling system.
Ngatea Exchange: Extension of cabling system.
Paeroa Exchange: Extension of cabling system.
Taneatua Exchange: Extension of cabling system.
Tauranga Exchange: Extension of cabling system.
Te Aroha Exchange: Extension of cabling system.
Te Kopuru Exchange: Extension of cabling system.
Thames Exchange: Extension of cabling system.
Whangarei Exchange: Extension of cabling system.
Blenheim Exchange: Extension of cabling system.
Waipukurau Exchange: Extension of cabling system.
Waipawa Exchange: Extension of cabling system.
Wellington Exchange: Extension of cabling system.
Palmerston North Exchange: An extension of the toll switchboard by the installation of two additional operator's positions.
Christchurch Central Exchange: Extensions to switching equipment by 2,000 exclusive lines.
Cheviot Exchange: Extension of cabling system.
Kaiapoi Exchange: Extension of cabling system.
Timaru Exchange: Extension of cabling system.
Oamaru Exchange: Extension of switching equipment by 200 exclusive lines.
Dunedin Central Exchange: Extension of switching equipment by 1,000 exclusive lines.
Dunedin Exchange: Extension of cabling system.
Gore Exchange: Extension of cabling system.
Invercargill Exchange: Extension of cabling system.
Roslyn Exchange: Extension of switching equipment by 100 two-party lines.

OPEN-WIRE SYSTEMS RECONSTRUCTED.

In consequence of cabling operations, and in order to improve the system of overhead distribution, reconstruction of the open-wire systems was carried out at the undermentioned exchanges:—

Auckland Engineering District: Hamilton, Huntly, Matiere, Ohaupo, Orini, Otorohanga, Piopio, Taumarunui.
Wellington Engineering District: Gisborne, Havelock, Hawera, Marton, Wellington.
Canterbury Engineering District: Methven.

MISCELLANEOUS IMPROVEMENTS.

Other improvements to the telephone-exchange equipment during the year included the following:—

The installation of Leich frequency-converters at a number of exchanges in replacement of motor-generator sets and pole-changers for the purpose of improving the ringing facilities of those exchanges.
The installation at Te Awamutu of a new toll-board, together with lamp-controlled way-lines.
The installation at Piopio and Opunake of new main distributing-frames.
The installation of a new 1,400 A.H. 48-volt storage battery at Palmerston North Automatic Exchange.
The replacement of the switching equipment at Coromandel, Katikati, Mercer, Waimana, Featherston, Norsewood, Eketahuna, and Cust, by switchboards of either a more modern type or of a larger capacity.
The overhaul and replacement of plates of the storage battery at Blenheim.
The overhaul of the switchboard and installation of new jacks and plugs at the Nelson Exchange.
The installation of a new pole-changer at Manaia for exchange ringing.

PUBLIC CALL OFFICES (COIN-IN-THE-SLOT TELEPHONES).

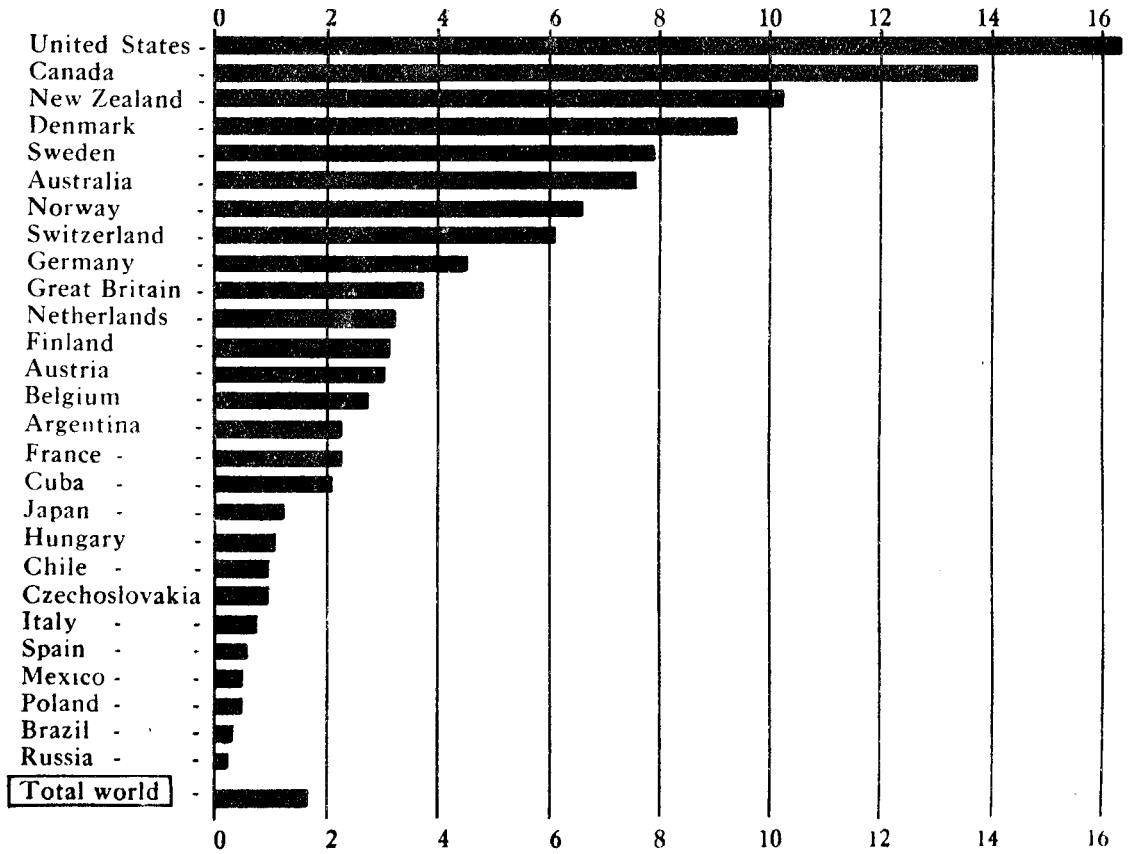
During the year seventy additional public call offices were provided, bringing the total number in use up to 679.

The facilities provided by the installation of public call offices continue to be availed of by the public to a very large extent.

WORLD TELEPHONE STATISTICS.

The official figures for world telephone development (compiled on 1st January, 1929) show that in the matter of telephone density the United States of America continues to lead the world, with 16·3 telephones per 100 of population; Canada is second, with 13·7 telephones; while New Zealand is third, with 10·2 telephones. The graph shown hereunder depicts the relationship of the three leading countries with other countries of the world.

GRAPH SHOWING THE NUMBER OF TELEPHONES PER 100 OF POPULATION IN THE COUNTRIES OF THE WORLD.



TELEPHONE STATISTICS.

The steady growth of the telephone system is exemplified in the following table, which shows annually since 1921 the number of exchanges, the total wire-mileage, the revenue, and the total number of telephone-stations, together with the number of telephones for each 1,000 of population of the Dominion:—

Year.	Number of Exchanges.	Miles of Wire.	Revenue.	Number of Telephone-stations.	
				Total.	Per 1,000 Population.
			£		
1921	296	192,027	533,535	88,439	69·80
1922	301	207,529	614,367	94,683	72·78
1923	320	229,882	595,967	107,036	80·78
1924	327	269,421	830,470	111,441	82·67
1925	340	331,453	867,218	120,097*	87·09
1926	341	402,433	980,281	130,186*	94·40
1927	342	440,253	995,071	137,307*	95·48
1928	344	463,356	1,057,177	144,552*	99·40
1929	351	495,470	1,135,795	152,541*	103·72
1930	349	513,096	1,206,714	161,323*	108·37

* Includes approximately 4,000 non-exchange stations.

The manner in which the exchanges are classified, the number of exchanges in each class, and the number of stations connected therewith on the 31st March, 1930, are shown in the following table :—

—	Class I. Exchanges or Networks observing Continuous Attendance and having more than 3,500 Paying Subscribers' Main Stations connected therewith.	Class II. Exchanges or Networks observing Continuous Attendance and having 1,001 to 3,500 Paying Subscribers' Main Stations connected therewith.	Class III. Exchanges or Networks observing Continuous Attendance and having 201 to 1,000 Paying Subscribers' Main Stations connected therewith.	Class IV. Exchanges or Networks where the Attendance is restricted.	Dominion Totals.
Subscribers' main stations ..	43,790	26,013	28,871	28,089	126,763
Toll and service stations ..	680	525	911	1,830	3,946
Public call offices	499	112	61	7	679
Extension stations—					
P.B.X.	8,699	1,957	636	101	11,393
Ordinary	7,583	3,589	2,099	971	14,242
Telephone-stations : Class totals..	61,251	32,196	32,578	30,998	157,023
Number of exchanges in each class	4	13	59	273	349
Percentage of new connections made with each class of exchange during the year	38	17	23	22	..

In addition to the stations shown in the preceding table there were 4,018 stations connected by private telephone-lines directly or indirectly with departmental toll stations, and 282 stations not connected in any way with the departmental system, making a grand total of 161,323 telephone-stations on the 31st March, 1930.

The following table shows the number of telephone-stations in each engineering district on the 31st March, 1929 and 1930, respectively, and the percentage of increase in each case :—

Engineering District.	Number of Telephone Stations on 31st March,						Percentage of Increase.
	1929.			1930.			
	Main Stations.	Extension Stations.	Total.	Main Stations.	Extension Stations.	Total.	
Auckland	37,631	6,046	43,677	40,089	7,148	47,237	8·1
Wellington	51,690	10,176	61,866	54,041	11,041	65,082	5·2
Canterbury	18,724	4,045	22,769	19,533	4,406	23,939	5·1
Otago	16,786	2,838	19,624	17,725	3,040	20,765	5·9
Totals ..	124,831	23,105	147,936	131,388	25,635	157,023	6·1

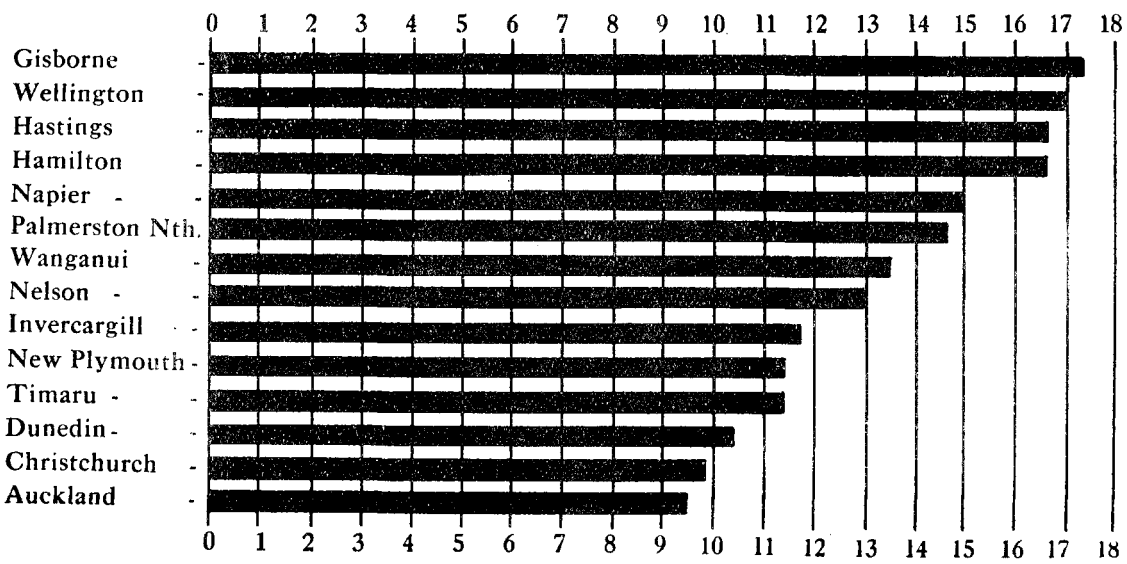
The number of telephone stations (main and extension) connected with each of the fourteen principal exchanges on the 31st March, 1930, was—Auckland, 20,413 ; Wellington, 19,505 ; Christchurch, 12,311 ; Dunedin, 8,367 ; Wanganui, 3,794 ; Palmerston North, 3,294 ; Hamilton, 3,126 ; Invercargill, 2,838 ; Napier, 2,767 ; Gisborne, 2,759 ; Hastings, 2,671 ; Timaru, 2,129 ; New Plymouth, 2,127 ; Masterton, 2,014.

The number of party and rural lines on the 31st March, 1930, was 10,515 to which were connected 42,708 main stations—an increase of 249 and 2,125 respectively on the figures for the previous year.

The following table shows, for each class of exchange, the respective percentages of business and residential stations, also the respective percentages of individual- and party-line stations, on the 31st March, 1930:—

Percentage of	Class I Exchanges.	Class II Exchanges.	Class III Exchanges.	Class IV Exchanges.	Dominion Percentages.
Business stations	37	32	28	20	29
Residential stations	63	68	72	80	71
	100	100	100	100	100
Individual-line stations ..	90	75	54	35	65
Party- and rural-line stations ..	10	25	46	65	35
	100	100	100	100	100

GRAPH SHOWING TELEPHONES PER 100 OF POPULATION IN THE CITIES AND PRINCIPAL TOWNS OF NEW ZEALAND, 31ST MARCH, 1929.



The length of various items of telephone-exchange plant in existence on the 31st March, 1929 and 1930, respectively, was as follows:—

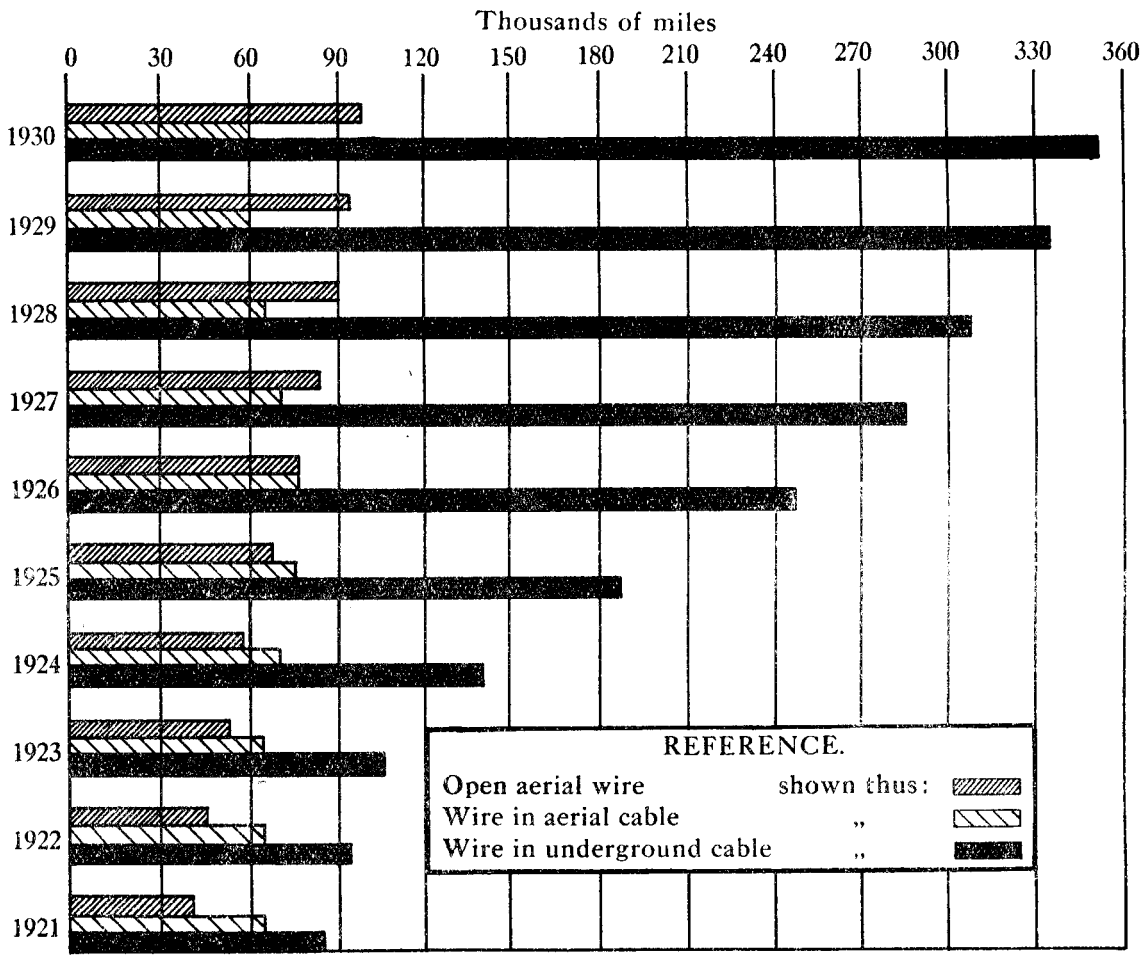
	Pole-line.	Single Duct Line.	Cable.		Wire.			
			Underground.	Aerial.	In Underground Cable.	In Aerial Cable.	Open Aerial.	Under all Headings.
	Miles.	Chains.	Chains.	Chains.	Miles.	Miles.	Miles.	Miles.
In existence on 31st March, 1929	13,658	38,003	78,286*	44,643*	333,103*	58,215*	95,693	487,011*
Erected during year	782	1,242	7,884	2,837	26,768	3,731	7,837	38,336
Dismantled during year	91	2	2,047	2,300	8,506	2,588	1,157	12,251
In existence on 31st March, 1930	14,349	39,243	84,123	45,180	351,365	59,358	102,373†	513,096

* Revised figures. † Includes 122 miles of earth-working circuit.

The percentages of the total wire-mileage in underground and aerial cables and open aerial wire respectively for the year ended 31st March, 1930, are as under :—

Telephone-exchange wire in underground cables	68 per cent.
Telephone-exchange wire in aerial cables	12 ,,
Telephone-exchange open aerial wire	20 ,,

GRAPH SHOWING THE VARIATION IN TOTAL LENGTH OF WIRE IN UNDERGROUND AND AERIAL CABLE, AND OPEN AERIAL WIRE, 1921–30.



AUTOMATIC-TELEPHONE EXCHANGES.

CHRISTCHURCH TELEPHONE EXCHANGE: CONVERSION TO AUTOMATIC OPERATION.

The principal event in the development of automatic-telephone exchanges in New Zealand during the year was the conversion of the Christchurch Telephone Exchange to automatic working. The cut-over was carried out at midnight on Saturday, the 14th September, 1929. The conversion was accomplished with a minimum of trouble, and no faults developed beyond those usually associated with an operation of this nature. Since the cut-over the equipment has been working satisfactorily and is meeting all the demands made upon it.

A large proportion of the apparatus at Christchurch is of the very latest and most improved type, the use of which will result in greater efficiency in operation and a minimum of maintenance. This is due to the fact that since the initial equipment for Christchurch was first engineered and ordered considerable development has taken place in automatic-telephone manufacture, and appreciable improvements have been made in the design of automatic equipment. Thus, while the telephone public of Christchurch had to wait somewhat longer than other large centres for their automatic telephones, they eventually received a system embodying the latest features.

The Central Automatic-telephone Exchange is situated in Hereford Street. The main switch-room occupies the second floor of the building, and measures 85 ft. by 55 ft. At the time of the cut-over the switch-room contained equipment for 6,800 individual (or one party) lines, one group of 100 four-party lines to serve 400 subscribers, and two groups of 100 two-party lines to serve 400 subscribers. On the first floor is situated the toll-room, which contains an up-to-date toll-board, with ten operators' positions, equipped for 180 toll-lines, in addition to 450 rural subscribers' stations which are beyond the range of automatic dialling and which in consequence will be operated manually for the present.

There is also contained in the toll-room one single-channel carrier terminal—one of the latest developments in long-distance telephony—and a two-position operators' desk for use in recording subscribers' requests for toll service. In addition, there is a two-position operators' desk for giving "time" and other information to subscribers. There is also installed in this room a supervisory desk from which the toll service is supervised by the officer in charge.

In the basement are situated the power and battery rooms. In the power-room are the main power-panels and the storage battery, which feed power to the whole of the automatic system. The power plant for charging the battery consists of a 29-horse-power 400-volt motor-generator capable of delivering current up to 300 amperes. In addition, an emergency power plant is provided, consisting of a generator similar to the main generator, but driven by a petrol-engine, instead of by an electric motor connected to the electric mains. The function of this set is to supply charging-current to the storage battery in the event of the failure of the city power-supply, and its provision ensures reliability and continuity in the operation of the exchange. The storage battery consists of two sets of twenty-five cells, having a rated capacity of 1,800 ampere-hours. The total weight of this battery is approximately 22 tons, and it contains 1,600 gallons of electrolyte. The function of this huge storage battery is to supply electric current at 48 volts to operate the automatic exchange apparatus and also to supply current to every subscriber's telephone for speaking purposes. Incidentally, it might be mentioned that this battery and the one at St. Albans replace a complement of approximately 25,000 primary batteries formerly used in subscribers' telephones.

Similar plant and equipment for 2,000 individual lines is installed at the St. Albans Exchange.

Some idea of the magnitude as well as the intricacy of the work involved in installing an automatic exchange without disturbing the existing service may be gleaned from the fact that the wiring and switch apparatus installed at the Central Exchange and at St. Albans necessitated the making of five and a half million soldered joints, the use of 5,950 condensers, 40,269 electro-magnetic relays, 12,816 motor-magnets, 3,974 timing-switches, and 4,647 selecting-machines. After the apparatus had been installed thousands of tests had to be made to ensure that each individual part performed its proper function. To make provision for the connection of but one subscriber to one other subscriber in the exchange involves the operation of approximately two hundred interrelated circuits, containing eleven condensers, forty-five electro-magnetic relays, ten timing-switches, six selecting-machines, fifteen motor-magnets, and 150 soldered connections.

As may be imagined, a considerable amount of equipment is necessary outside the exchange itself to provide telephone communication for a city the size of Christchurch. Over 11,000 new automatic telephones were installed and brought into use at the cut-over. In addition, approximately 600 magneto telephones were in use, making a total of 11,770 telephones. Of this number 8,060 were main telephones, 1,304 were connected with local intercommunicating systems (chiefly of the interphone type) in subscribers' premises, 2,298 were ordinary extension telephones in subscribers' premises, while 108 comprised the automatic coin-in-the-slot telephones in the public-call offices installed throughout the city and suburbs.

At the time of the cut-over there were 110 miles of single-duct line, in which was enclosed 153 miles of underground cable, containing 65,212 miles of wire. In addition, there were 91 miles of aerial cable, containing 9,017 miles of wire, and 13,237 miles of open wire. The total length of wire under all headings was 87,466 miles. The pole-lines used in connection with the aerial plant totalled over 2,300 miles in length, and comprised approximately 92,000 poles.

Over 18,000 new directories were distributed to subscribers at the cut-over, their weight in the aggregate being approximately 6½ tons.

In order to provide for the growth expected to follow the introduction of automatic methods at Christchurch, equipment for a further 2,000 lines has been provided and its installation put in hand since the cut-over. It is anticipated that the installation of this extension will be completed in a few months' time, when the Department will be in a position for some time to come to meet the demands for telephone service in Christchurch.

Miramar (Wellington) Automatic Exchange.

To meet the growth and to serve more economically subscribers in the Miramar and adjacent areas, an automatic-telephone exchange was established at Miramar in January, 1928, as a part of the Wellington metropolitan system. Equipment has been provided for 1,000 individual lines and 100 four-party lines. At first this exchange was operated as a satellite to the Wellington South Exchange, but on the 1st February, 1930, it was cut over to operate as a branch exchange working in conjunction with the central automatic exchange in Stout Street. At the time of the cut-over there were 400 subscribers connected to the Miramar Exchange, which number had increased by the 31st March to 1,084.

Hastings Exchange: Conversion to Automatic Working.

With the conversion of the Christchurch Exchange to full automatic working there was released 2,300 lines of Strowger automatic equipment previously used as an auxiliary to the manual system. It was decided that this equipment, after being reconditioned and overhauled, should be utilized

at Hastings to replace the manually-operated central-battery system. By the addition of equipment specially ordered, the equipment from Christchurch is being modified and modernized in order to provide an up-to-date type of service. The installation of this automatic equipment at Hastings is now being proceeded with. A Strowger automatic exchange is already in operation at Napier, and the installation of a similar exchange at Hastings will make it practicable to introduce between the two exchanges various innovations and auxiliary services which would otherwise be prohibitive on the score of cost. Economies in maintenance charges will also be effected. The central-battery manual equipment released from Hastings will be utilized to provide needed extensions to the existing central-battery switchboards at Invercargill and Timaru.

Proposed New Automatic Telephone Exchanges.

In accordance with the policy of converting the larger telephone exchanges to automatic working as renewals become necessary, specifications were prepared and quotations invited in August, 1928, for automatic switching equipment for the Marton and Whangarei Exchanges. Tenders were received in March, 1929, and, after due consideration from both economic and engineering aspects, orders were placed in July, 1929, for the required equipment. The equipment to be provided at each of the exchanges is as follows :—

——	Individual Lines.	Private Branch Exchange Lines.	Two-party Lines.	Rural Lines.
Marton	600	100	100	100
Whangarei	800	100	100	100

The apparatus for the Marton Exchange is due to arrive within the next few months, and upon receipt no time will be lost in installing it. It is anticipated that the delivery of the equipment for Whangarei will follow closely on that for Marton. With the new installations the two exchanges mentioned will possess up-to-date automatic telephone exchange systems of high grade, capable, with minor extension, of providing service for many years.

Tenders have been received for the installation of an automatic-telephone exchange at Gisborne. Action on the proposal is deferred, however, until further examination is made of the position.

Lower Hutt Telephone Exchange : Conversion to Automatic Working.

From time to time during recent years subscribers to the Lower Hutt Telephone Exchange have made representations urging the conversion of the exchange to automatic working, with provision for direct connection to subscribers in the Wellington area. It was definitely decided some time ago that an automatic exchange should be provided at Lower Hutt, but the requirements of the area were unusual, and the matter required a considerable amount of investigation. During the year a specification was prepared setting out the requirements and providing for two classes of service as follows :—

(*a*) Combined Service.—Connection to or from any subscriber in the Wellington area, as well as to or from any subscriber in the Lower Hutt area.

The number of lines to be provided under this heading is—

	Initial.	Ultimate.
Individual lines	1,000	2,000

(*b*) Local Service.—Connection to or from any subscriber in the Lower Hutt area but not to or from Wellington subscribers outside the Lower Hutt area except through the medium of the toll service.

The number of lines to be provided under this heading is—

	Initial.	Ultimate.
Individual lines	1,000	4,000
P.B.X. lines	100	100
Two-party lines	100	200

A tender for the equipment required at Lower Hutt was recently received, and, after due investigation, an order for it was placed. The date upon which delivery of the apparatus will be made is not yet certain.

Birkenhead Telephone Exchange: Proposed Replacement by Automatic System.

To provide the residents of Birkenhead and Northcote with automatic-telephone-exchange service it was decided during the year to connect the subscribers in the area to the Ponsonby Automatic Exchange by means of submarine cable crossing the harbour, and an order was placed for the supply of two lengths of 150-pair submarine telephone-cable for the purpose. This cable will enable up to 300 subscribers in the Birkenhead–Northcote area to be connected to the Ponsonby Automatic Exchange, which will give them access to the whole of the subscribers in the Auckland metropolitan area.

Shipment of the cable is promised for April, 1930. Upon delivery in New Zealand early arrangements will be made for the laying of the cable and for the Birkenhead–Northcote subscribers to be connected with the Ponsonby Exchange as indicated.

Conversion of Rural Lines to Automatic Working.

Numbers of subscribers to automatic exchanges in New Zealand are situated a considerable distance from the exchange centres, and hitherto have been beyond the range over which satisfactory automatic dialling could be accomplished. To overcome this a number of telephones have recently been adapted in the Department's workshops to allow dialling to be carried out over an increased range, and at the same time to enable subscribers on such rural party lines to be called from the exchange and to call each other by means of manual ringing. Now that such telephones are available a policy of converting rural lines to semi-automatic working has been decided upon. The first exchange to be affected is Napier, where semi-automatic telephones have been provided on a number of rural lines, together with the equipment necessary in the exchange, so enabling the rural subscribers to dial direct other subscribers connected to the Napier Exchange. Arrangements are being made for the rural lines at certain other exchanges to be fitted with semi-automatic telephones; and, as opportunity offers, the use of these telephones will be further extended.

Automatic Telephones in New Zealand.

With the conversion of the Christchurch Exchange to automatic working in September, 1929, approximately 50 per cent. of the telephones in New Zealand were of the dial type. In the United States the proportion of dial telephones to magneto telephones probably does not exceed 25 per cent. Thus, while the United States of America leads the world in the matter of telephone density, New Zealand has pride of place in regard to the percentage of dial telephones in use.

Some idea of the development that has taken place in automatic telephones in New Zealand may be gained from the fact that the proportion of dial telephones to the total number of telephones in use has risen from 17 per cent. in 1923 to 50 per cent. in 1929. The conversion of the other manual exchanges now contemplated will still further increase the number of automatic telephones in use.

Rural Automatic Exchanges.

A comparatively recent advance in automatic-telephone engineering, and one which is fast developing along suitable lines, is the introduction of unattended rural automatic-telephone exchanges capable of meeting a wide range of conditions. The objective is to apply the principles of machine switching to small country exchange systems of from fifty to one hundred lines, where the cost of continuous manually operated service would be prohibitive. The ideal equipment would be small and compact, and would not call for regular attendance for maintenance, this being effected by periodical visits. Progress along these lines has been somewhat slower than was anticipated, but in order to determine how far the available rural equipment is capable of meeting the telephone conditions of New Zealand an initial order has been placed for two typical installations. This equipment has not yet come to hand, but will, upon receipt, be tested out at suitable exchange centres with a view to determining whether it can adequately meet the somewhat unique telephone requirements of our rural communities.

Extensions to Existing Automatic-telephone Exchanges.

During the year extensions to the switching equipment of automatic exchanges have been carried out at Hamilton, Onehunga, Ponsonby, Mount Eden, Remuera, Wanganui, Palmerston North, and Courtenay Place. In all, provision was made for 4,340 additional subscribers. Good progress was also made at the four main centres with the installation of private branch exchanges of the automatic type.

Return showing the Equipment installed and the Equipment in Use at Automatic Exchanges on 31st March, 1930.

Name of Exchange or Branch Exchange.	Existing Capacity of Exchange Equipment installed.					Number of Units of Equipment in Use.					Number of Main Stations in Existence irrespective of the Number of Units of Equipment in Use.								Number of Extension Stations connected.		Total Number of Telephone Stations connected.	
	Automatic Lines.				Magneto Lines.	Automatic Lines.				Magneto Lines.	Automatic Stations.					Magneto Stations.	Totals.					
	One-party.	Two-party.	Four-party.	Multi-party.		One-party.	Two-party.	Four-party.	Multi-party.		One-party.	Two-party.	Three-party.	Four-party.	Multi-party.		Auto Stations.	Magneto Stations.	Auto.	Magneto.	Auto.	Magneto.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
Auckland Exchange Area—																						
Wellesley Street	7,200	..	100	..	..	6,254	..	97	..	..	6,224	100	90	188	..	..	6,602	..	4,531	..	11,133	..
Remuera	2,600	200	100	..	..	2,047	76	90	..	..	2,061	136	54	264	..	..	2,515	..	358	..	2,873	..
Mount Eden	2,800	100	100	..	..	2,492	42	88	..	..	2,492	108	105	164	..	..	2,869	..	230	..	3,099	..
Ponsonby..	1,800	100	100	..	..	1,421	..	89	..	..	1,422	44	108	120	..	..	1,694	..	157	..	1,851	..
Onehunga	600	..	..	..	..	453	..	..	..	..	452	2	..	..	..	..	454	..	62	..	516	..
Devonport	600	100	..	..	..	575	42	..	..	..	598	38	..	..	..	..	636	..	50	..	686	..
Takapuna	400	..	..	..	..	367	..	..	..	..	366	2	..	..	..	..	368	..	29	..	397	..
Christchurch Exchange Area—																						
Hereford Street	6,800	200	100	..	200	6,378	171	84	..	96	6,312	374	87	188	..	311	6,961	311	2,602	463	9,563	774
St. Albans	2,000	..	..	..	..	1,826	..	..	..	..	1,826	..	..	..	..	..	1,826	..	222	5	2,048	5
Dunedin Exchange Area—																						
Dowling Street	4,000	100	100	..	100	3,606	44	36	..	40	3,606	88	84	32	..	111	3,810	111	1,695	29	5,505	140
Roslyn	1,000	..	..	..	..	936	..	..	..	..	936	..	..	..	..	..	936	..	67	..	1,003	..
South Dunedin	1,800	100	..	..	..	1,599	42	..	..	..	1,599	84	..	..	..	..	1,683	..	118	..	1,801	..
Wellington Exchange Area—																						
Courtenay Place	5,000	200	100	..	..	3,857	74	24	..	..	3,866	162	15	12	..	..	4,055	..	1,203	..	5,258	..
Wellington South	2,000	100	100	..	..	1,716	59	43	..	..	1,720	164	45	4	..	..	1,933	..	176	..	2,109	..
Kelburn	1,600	..	100	..	..	1,411	..	59	..	..	1,420	76	30	8	..	..	1,534	..	114	..	1,648	..
Khandallah	200	100	100	..	..	192	93	79	..	..	279	64	69	120	..	..	532	..	18	..	550	..
Stout Street	7,400	100	..	..	..	4,354	45	92	..	..	4,366	112	72	180	..	..	4,730	..	3,786	308	8,516	308
Miramar	1,000	..	100	..	..	918	..	74	..	..	925	94	45	20	..	..	1,084	..	32	..	1,116	..
Single-office Exchanges—																						
Blenheim	800	..	100	..	50	759	43	26	..	29	759	86	36	56	..	129	937	129	142	8	1,079	137
Dannevirke	700	..	100	50	50	592	..	29	44	..	592	30	21	16	303	..	962	..	134	..	1,096	..
Hamilton	1,800	100	100	..	100	1,745	43	61	..	76	1,750	94	33	176	..	541	2,053	541	465	75	2,518	616
Hawera	900	..	100	50	..	779	..	51	26	1	779	42	21	92	186	9	1,120	9	179	2	1,299	11
Masterton	1,200	100	100	..	220	1,040	86	95	..	96	1,131	128	51	36	..	377	1,346	377	286	9	1,632	386
Napier	2,200	100	..	..	100	1,933	51	..	..	27	1,903	54	..	..	..	94	1,957	94	673	43	2,630	137
Oamaru	800	..	100	..	20	776	..	91	..	9	832	26	24	56	..	66	938	66	140	4	1,078	70
Palmerston North	2,400	..	100	..	110	2,305	..	98	..	40	2,319	56	57	148	..	187	2,580	187	546	2	3,126	189
Stratford	500	..	100	50	..	437	..	25	30	..	437	26	21	20	250	..	754	..	78	3	832	3
Wanganui	2,700	200	100	..	100	2,357	60	82	..	66	2,357	142	69	192	..	367	2,760	367	665	17	3,425	384
Totals	62,800	1,900	2,000	150	1,050	53,125	971	1,413	100	480	53,329	2,332	1,137	2,092	739	2,192	59,629	2,192	18,758	968	78,387	3,160

Columns 13, 14, and 15 include a number of stations which are served by other than standard two- and four-party equipment.

TELEPHONE-EXCHANGE ATTENDANCE: EXTENSION OF SUNDAY AND HOLIDAY ATTENDANCE AT SMALLER EXCHANGES.

By way of experiment to ascertain whether the Department would be warranted in permanently extending the hours, the attendance on Sundays and holidays at the Akaroa, Eastbourne, Helensville, Kaikoura, Ngaruawahia, Otaki, Queenstown, and Raglan Telephone Exchanges was extended, from the 23rd March, to run from 9 a.m. to noon and from 2 to 6 p.m. A similar extension was made at Picton, except that on Easter Monday an 8 a.m.–10 p.m. telephone-exchange service is proposed, the day being a regatta day. It is intended to continue the extended service for a period of five weeks, and then to review the question of Sunday hours of telephone-exchange attendance at such offices.

APPLICATION OF RESIDENTIAL TELEPHONE RATE TO PRIMARY PUBLIC SCHOOLS.

The telephone regulations have been altered to provide that primary public schools should be eligible for telephone-exchange connections at the residential rate. Previously such schools had been required to pay at business rates.

TELEPHONE-EXCHANGE SERVICE: AMPLIFYING TELEPHONES AND APPARATUS FOR USE BY PARTIALLY-DEAF SUBSCRIBERS.

Special amplifying telephones and apparatus for use by persons of imperfect hearing are now supplied by the Department. The charge for the apparatus is fixed at £1 for installing, and an annual rental of £3 in excess of the rental charge ordinarily applicable.

TELEPHONE DIRECTORIES: SALE IN SETS.

To meet the needs of the business community, and in sympathy with the increased use that is being made of telephone-lines for toll communications, particularly long-distance calls, it has been arranged to sell complete sets of telephone directories for the Dominion at a charge of 15s., free of postage. In addition, separate sets of directories for exchanges in the North Island and for exchanges in the South Island are now available to the public at a charge of 10s. and 5s. respectively.

INTRODUCTION OF IMPROVED FORM OF TELEPHONE DIRECTORY.

An improvement has been introduced in the form of the telephone directory issued to subscribers. Hitherto the publications have been in the form of single columns of listings upon each sheet. The form now adopted makes provision for two columns of subscribers' names upon each sheet. The new style directory, which is easier than the old style to refer to, has been very favourably received by subscribers. The new form has also lessened the cost of production, and is in keeping with the style of directory favoured by other countries.

GENERAL.

UTILIZATION OF NEW ZEALAND SOFT WOODS AS TELEGRAPH-POLES.

Owing to the scarcity of suitable New-Zealand-grown hardwoods, a very large percentage of the poles used by this Department is necessarily imported, chiefly from Australia. With a view to determining whether New Zealand soft woods can, by preservative treatment, be rendered suitable for use as poles, tests are now being carried out in collaboration with the State Forest Service. The tests will necessarily require to extend over a period sufficient to enable reliable information regarding the life of such timbers under various climatic and geological conditions to be obtained.

DEPARTMENTAL REPRESENTATION ON RADIO RESEARCH COMMITTEE AND STANDARDS LABORATORY ADVISORY COMMITTEE.

During the year a Radio Research Committee and a Standards Laboratory Advisory Committee have been set up by the Department of Scientific and Industrial Research. The Post and Telegraph Department is represented on the former Committee by Mr. A. Gibbs, Chief Telegraph Engineer, and on the latter Committee by Mr. J. R. Smith, Engineer-in-Charge of the departmental laboratory.

DEPARTMENTAL LABORATORY.

The larger and better-equipped premises provided last year for the departmental laboratory have enabled the work of this section to be performed more expeditiously and under more favourable conditions. The scope of the laboratory is being steadily extended and now covers a large variety of subjects.

All goods and material purchased or manufactured for the Engineering Branch of the Department are subject to laboratory tests before being released for use, and this has resulted in goods and material of only the highest quality being brought into use. The nature of the services provided by the Department requires that the risk of breakdown be kept at a minimum, and the freedom that it enjoys from such interruptions is largely due to the exhaustive tests of material and equipment undertaken at the Department's laboratory. The methods of line-construction, &c., are constantly being investigated, and every opportunity is taken to effect improvement in method and economy in first cost. A recent result of tests of various classes of wire for leading in to telephone subscribers' premises has led to the adoption of a new method, which will result in marked economy owing to the much longer life of the new wire proposed to be used over that previously in use.

During the year experiments have been conducted by the laboratory staff with high-speed radio transmitting and receiving apparatus and the use of machine-printing telegraph apparatus in connection therewith. It has been demonstrated that signals from the Baudot printing telegraph can be transmitted by radio just as effectively as by line telegraphy. Successful experiments have also been made in high-speed Morse radio communication with Australia. These experiments have a practical bearing upon emergency high-speed radio communication between the North and South Islands.

Some time was devoted by the radio section to such matters as the improved short-wave services between New Zealand and the Pacific islands, the establishment of short-wave communication at Wellington Radio, and the prospects of radio-telephone service with countries overseas.

In connection with the dislocation of services by the earthquake the laboratory was able to render considerable assistance in the provision at short notice of telegraph and telephone equipment to facilitate the restoration of services. In this connection effective use was made of temporary short-wave low-power radio transmitters to replace the regular means of communication.

In the telephone section further studies have been made of the system of multiple toll dialling between automatic exchanges, and the extension of such system to enable subscribers at a distant automatic exchange to be dialled through an intermediate exchange without the intervention of an operator at the latter exchange. Consideration has been given to such matters as improved types of internal intercommunication apparatus, hand-microphones for use with automatic telephones, and the conversion of manual exchanges to automatic operation.

APPENDIX.

CABLE BUSINESS.

The Dominion's outward International and Australian cable business, excluding press, for the years 1929–30 and 1928–29 was as follows:—

INTERNATIONAL.

	Number of Messages.	Value. £
1929–30	192,351	195,701
1928–29	179,399	188,851
Increase	12,952 = 7·22 per cent.	Increase 6,850 = 3·63 per cent.

AUSTRALIAN.

	Number of Messages.	Value. £
1929–30	149,486	31,701
1928–29	146,942	29,747
Increase	2,544 = 1·73 per cent.	Increase 1,954 = 6·57 per cent.

There was a total increase of 15,496 messages, and an increase in value of £8,804. Of the total revenue received on forwarded cable messages—viz., £227,402—£213,341 was paid to other Administrations, and £14,061 was retained by New Zealand.

RECEIVED CABLE MESSAGES.

The number of cable messages received in New Zealand during the years 1929–30 and 1928–29, exclusive of press, was as follows:—

	International.	Australian.
1929–30	162,963	144,095
1928–29	156,115	140,597
Increase	6,848 = 4·39 per cent.	Increase 3,498 = 2·48 per cent.

The total revenue earned by New Zealand on received cable messages during the year 1929–30 was £11,665, as compared with £11,224 for 1928–29.

RADIO-TELEGRAMS.

The radio-telegraph business transacted by the New Zealand coast stations during the years 1929–30 and 1928–29 was as follows:—

Year.	Forwarded.				Received.		
	Number of		Amount earned by New Zealand.	Total Value.	Number of		Amount earned by New Zealand.
	Messages.	Words.			Messages.	Words.	
			£	£			£
1929–30	13,921	164,821	2,932	5,531	24,282	272,335	4,526
1928–29	14,345	204,857	3,847	6,523	25,559	290,137	5,059
Decrease ..	424	40,036	915	992	1,277	17,802	533

Table No. 1.

TABLE SHOWING THE NUMBER AND AMOUNT OF MONEY-ORDERS ISSUED AND OF MONEY-ORDERS PAYABLE IN NEW ZEALAND SINCE THE YEAR 1863.

Issued in the Dominion.

Year.	Commission received.	Where payable.								Total.	
		In the Dominion.		United Kingdom.*		Australia and other British Possessions.		Foreign Countries.†			
		No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
	£		£		£		£		£		£
1863	1,057	2,201	9,614	4,740	21,944	4,645	24,145	..	..	11,586	55,703
1873	3,562	34,288	142,642	11,913	48,548	6,150	28,068	..	..	52,351	219,258
1883	9,023	132,232	402,559	26,211	91,634	14,113	46,940	..	..	172,556	541,133
1893	10,249	146,133	576,359	29,616	86,545	35,208	88,025	..	..	210,957	750,929
1903	15,882	273,535	1,108,067	63,309	157,790	59,468	150,368	..	..	396,312	1,416,225
1913	16,872	516,536	2,821,624	100,634	336,992	73,575	199,158	..	..	690,745	3,357,774
1923	28,357	545,605	3,849,423	54,461	223,143	68,044	284,778	16,869	32,815	684,979	4,390,159
1924	28,542	580,569	4,113,813	57,175	232,436	75,743	312,624	18,024	34,056	731,511	4,692,929
1925	28,843	610,972	4,406,461	64,777	259,439	72,519	278,050	18,421	33,280	766,689	4,977,230
1926	24,746	635,078	4,453,878	67,570	273,758	70,774	270,065	19,688	35,426	793,110	5,033,127
1927	24,775	639,889	4,416,182	69,764	276,747	73,021	265,752	20,807	36,409	803,481	4,995,090
1928	24,884	642,136	4,406,187	69,366	266,072	73,786	267,411	22,597	37,852	807,885	4,977,522
1929	25,673	664,049	4,609,226	70,540	274,672	76,230	263,929	24,539	39,726	835,358	5,187,553

Drawn on the Dominion.

Year.	Where issued.								Total.	
	In the Dominion.		United Kingdom.*		Australia and other British Possessions.		Foreign Countries.†			
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
		£		£		£		£		£
1863	2,067	9,169	415	1,824	558	3,078	..	..	3,040	14,071
1873	34,288	142,642	1,482	6,626	1,668	7,689	..	..	37,438	156,957
1883	132,232	402,559	3,725	15,553	5,697	23,300	..	..	141,654	441,411
1893	146,133	576,359	8,746	32,617	10,679	40,929	..	..	165,558	649,905
1903	273,535	1,108,067	13,035	49,181	17,777	68,340	..	..	304,347	1,225,589
1913	516,536	2,821,624	12,693	70,084	31,450	110,487	..	..	560,679	3,002,194
1923	545,605	3,849,423	11,042	63,313	26,042	123,703	1,813	8,669	584,502	4,045,108
1924	580,569	4,113,813	8,310	60,862	28,543	127,350	2,348	10,309	619,770	4,312,334
1925	610,972	4,406,461	9,857	69,098	27,318	119,073	2,140	8,391	650,287	4,603,023
1926	635,078	4,453,878	10,047	70,948	28,935	124,952	2,334	10,326	676,394	4,660,104
1927	639,889	4,416,182	11,646	80,015	32,791	136,763	2,428	9,301	686,804	4,642,261
1928	642,136	4,406,187	10,607	70,151	32,650	138,068	2,636	9,358	688,029	4,623,764
1929	664,049	4,609,226	10,953	68,273	32,973	129,798	2,923	10,875	710,898	4,818,172

* Includes foreign offices to year 1915. † In previous years included in United Kingdom and foreign offices.

Table No. 2.

TABLE SHOWING THE NUMBER AND VALUE OF POSTAL NOTES SOLD FROM 1ST JANUARY, 1886—THE DATE UPON WHICH POSTAL NOTES WERE FIRST ISSUED IN NEW ZEALAND—TO 31ST MARCH, 1930.

Year.	Number of Postal Notes sold.													Total.	
	At 1s.	At 1s. 6d.	At 2s.	At 2s. 6d.	At 3s.	At 5s.	At 7s. 6d.	At 10s.	At 12s. 6d.	At 15s.	At 17s. 6d.	At £1.	At £5.	Number.	Value.
															£
Quarter ended Mar. 31, 1886	3,019	2,046	..	1,012	..	2,039	969	2,379	695	992	425	2,866	..	16,442	6,910
1886-87	16,605	12,283	..	6,647	..	11,566	5,729	13,103	4,090	5,187	2,375	14,961	..	92,546	37,659
1887-88	22,467	17,167	..	9,162	..	15,553	7,671	17,487	5,278	6,940	2,952	17,578	..	122,255	47,729
1888-89	27,428	21,900	..	11,912	..	19,741	9,477	21,149	6,618	8,243	3,633	19,778	..	149,879	56,842
1889-90	32,754	25,387	..	14,478	..	23,550	10,894	24,011	7,809	9,386	4,158	22,596	..	175,023	65,484
1890-91	35,915	28,559	..	16,092	..	25,204	12,229	25,906	7,969	10,172	4,366	23,503	..	189,915	69,722
1891-92	42,416	33,722	..	19,383	..	29,550	14,019	30,132	9,058	11,611	4,953	25,839	..	220,683	79,326
1892-93	48,612	38,849	..	22,038	..	33,012	16,072	32,747	9,904	12,330	5,369	28,969	..	247,902	87,857
1893-94	56,761	44,706	..	25,461	..	37,771	18,096	37,687	11,016	13,800	6,156	33,935	..	285,389	101,002
1894-95	62,306	49,846	..	28,975	..	43,829	20,423	43,167	11,864	15,567	6,790	36,601	..	319,368	112,308
1895 96	68,454	56,185	..	32,801	..	49,204	22,802	47,787	13,601	17,191	7,020	33,390	1,192	349,627	123,368
1896-97	74,534	62,056	..	35,322	..	54,219	24,871	51,963	14,365	18,102	7,406	32,868	1,090	376,796	129,012
1897-98	81,958	69,981	..	38,617	..	60,843	26,968	55,748	15,463	19,477	7,904	32,179	728	409,866	134,378
1898-99	86,529	72,710	..	41,991	..	64,386	28,448	59,631	16,202	19,990	8,193	32,696	673	431,449	139,957
1899-1900	93,762	77,431	..	44,384	..	70,416	30,680	63,787	16,957	21,393	8,539	33,491	607	461,447	147,686
1900-1901	85,478	68,068	13,834	52,691	14,702	80,630	24,497	71,001	13,304	23,875	6,799	35,067	560	490,506	154,436
1901-1902	49,529	30,255	62,285	70,683	65,467	109,663	..	92,708	..	32,128	..	43,042	556	556,316	173,317
1902-1903	54,268	33,409	70,122	76,613	75,700	119,593	..	102,641	..	34,508	..	48,852	558	616,264	191,905
1903-1904	61,379	37,514	85,909	86,626	89,276	134,270	..	114,755	..	38,030	..	58,629	656	707,044	220,070
1904-1905	65,484	40,263	86,711	96,228	99,739	154,281	..	130,430	..	42,317	..	69,206	688	785,347	250,123
1905-1906	74,389	45,358	98,503	108,493	114,411	167,430	..	143,216	..	46,228	..	76,508	788	875,324	276,279
1906-1907	82,417	54,375	106,311	120,321	128,384	187,083	..	159,045	..	51,559	..	91,193	954	981,642	314,053
1907-1908	89,906	58,202	124,052	136,392	143,854	205,500	..	171,951	..	57,637	..	104,714	423	1,092,631	347,300
1908-1909	97,285	59,484	153,925	162,588	146,148	227,471	..	188,677	..	62,916	..	123,786	..	1,222,280	389,143
1909-1910	113,825	67,406	181,791	195,168	166,486	261,045	..	214,453	..	70,967	..	143,611	..	1,414,752	447,619
1910-1911	130,645	79,792	211,298	244,941	201,569	301,707	..	242,854	..	82,253	..	171,900	..	1,666,959	524,943
1911-1912	141,504	85,130	236,665	263,829	215,984	337,338	..	261,600	..	88,693	..	190,823	..	1,821,566	574,980
1912-1913	154,201	92,342	264,844	279,311	220,109	367,942	..	283,206	..	95,535	..	213,153	..	1,970,643	636,473
1913-1914	172,400	103,753	298,669	324,417	256,231	418,712	..	312,870	..	106,560	..	245,230	..	2,238,842	721,743
1914-1915	182,733	107,483	307,934	346,011	263,522	444,427	..	325,071	..	107,506	..	229,640	..	2,314,327	725,118
1915-1916	186,873	114,570	319,115	364,086	267,383	461,137	..	334,277	..	111,095	..	211,543	..	2,370,079	723,314
1916-1917	184,873	112,639	322,946	343,031	260,956	440,215	..	301,825	..	108,978	..	211,000	..	2,286,463	695,819
1917-1918	187,005	115,867	316,266	337,418	258,421	401,696	..	252,396	..	103,348	..	194,180	..	2,166,597	638,246
1918-1919	181,824	114,553	299,791	326,398	253,728	381,202	..	238,337	..	102,467	..	192,751	..	2,091,051	619,605
1919-1920	196,327	121,037	310,105	339,341	268,032	396,994	..	246,688	..	110,819	..	208,177	..	2,197,520	655,910
1920-1921	217,553	120,888	309,649	342,040	266,119	410,584	..	254,868	..	123,917	..	234,601	..	2,280,219	705,027
1921-1922	239,187	120,780	314,035	352,681	259,372	445,995	..	269,863	..	137,192	..	238,517	..	2,377,622	739,783
1922-1923	262,172	130,275	331,376	348,779	236,877	475,947	..	276,650	..	138,621	..	233,809	..	2,434,506	747,025
1923-1924	**285,065**	**145,277**	**366,241**	**385,307**	**247,915**	**528,178**	..	**299,987**	..	**151,288**	..	**243,519**	..	**2,652,777**	**804,343**
1924-1925	297,019	154,406	397,666	428,707	253,311	577,873	..	316,947	..	162,281	..	258,123	..	2,846,333	860,029
1925-1926	318,454	159,549	448,307	458,634	254,038	607,000	..	339,864	..	170,376	..	284,500	..	3,040,722	922,873
1926-1927	394,853	165,278	482,600	545,182	260,844	650,226	..	340,646	..	181,164	..	308,845	..	3,329,638	987,687
1927-1928	601,143	186,961	497,760	518,248	278,844	688,004	..	352,524	..	192,363	..	298,370	..	3,614,217	1,015,213
1928-1929	389,074	186,302	519,908	535,803	326,953	733,585	..	369,777	..	203,906	..	310,676	..	3,575,984	1,057,624
1929-1930	408,979	192,833	568,749	612,909	291,304	805,742	..	392,494	..	222,674	..	320,951	..	3,816,635	1,123,446

Table No. 3.

TABLE SHOWING THE NUMBER AND VALUE OF TRANSACTIONS AT MONEY-ORDER OFFICES DURING THE YEAR 1929, AND AT SAVINGS-BANK OFFICES DURING THE YEAR 1929-30.

Postal District.	Money-orders.					Savings-banks.				
	Issued.			Paid.		Number of New Accounts opened.	Deposits.		Number of Accounts closed.	Withdrawals.	
	Number.	Commission.	Amount.	Number.	Amount.		Number.	Amount.		Number.	Amount.
		£ s. d.	£ s. d.		£ s. d.			£ s. d.			£ s. d.
Auckland	144,628	4,752 13 9	827,450 2 8	197,587	1,189,777 13 4	15,549	274,907	4,727,153 3 4	13,391	242,535	4,954,793 19 10
Blenheim	9,628	282 17 0	52,861 7 6	4,831	35,706 4 5	1,018	16,468	291,187 1 5	736	14,336	303,443 16 3
Christchurch	73,893	2,373 18 6	455,745 3 7	75,829	631,891 11 5	11,542	272,596	4,548,758 13 6	7,803	230,511	4,661,989 17 3
Dunedin	67,937	2,072 17 0	379,543 5 9	62,544	410,462 7 6	6,104	118,453	2,027,726 4 10	5,122	93,328	2,211,495 4 5
Gisborne	20,587	661 15 0	128,200 3 1	10,289	83,709 1 3	2,452	38,870	644,820 7 9	1,717	30,768	671,057 7 10
Greymouth	21,823	646 12 3	120,626 9 1	9,961	59,336 16 11	1,560	20,354	343,889 3 9	1,045	13,019	341,944 6 8
Hamilton	83,746	2,376 18 2	507,031 6 9	40,313	254,819 4 7	9,515	101,714	1,677,465 17 8	6,727	68,384	1,665,715 17 9
Invercargill	36,259	1,062 5 9	191,005 0 11	24,741	145,295 17 3	2,803	39,905	643,694 5 5	2,253	32,116	731,906 1 10
Napier	38,983	1,208 5 3	248,649 14 9	25,521	211,823 15 3	4,847	76,629	1,380,722 19 11	3,746	62,471	1,445,933 9 3
Nelson	19,417	614 1 0	118,137 15 4	13,069	94,954 13 8	1,981	31,367	528,648 9 0	1,326	23,147	517,045 19 1
New Plymouth	36,843	1,085 0 9	228,975 4 2	23,470	181,943 2 1	5,426	61,595	1,236,162 16 1	4,539	46,910	1,327,859 15 8
Oamaru	11,983	326 6 0	102,790 0 8	5,111	36,177 12 6	1,183	17,601	346,483 19 8	848	15,352	367,440 12 4
Palmerston North	43,083	1,146 0 0	289,008 16 6	28,594	185,517 10 0	5,662	89,183	1,565,733 7 9	3,865	67,137	1,585,805 6 8
Thames	31,536	913 1 0	185,675 10 9	13,247	89,094 9 7	3,209	35,467	589,910 19 4	2,281	20,821	575,801 1 10
Timaru	21,763	595 0 0	240,835 17 5	11,264	78,670 1 4	2,636	43,325	866,789 12 7	1,797	35,947	939,497 5 8
Wanganui	40,620	1,095 11 3	246,854 17 11	23,340	146,516 11 0	3,773	64,911	1,042,447 14 4	3,386	51,395	1,151,268 6 10
Wellington	114,120	3,826 0 9	745,311 14 7	135,927	937,424 7 3	17,373	382,775	5,887,150 15 2	12,051	285,326	5,907,312 17 3
Westport	15,296	448 4 3	77,481 8 0	4,733	28,226 3 3	937	11,361	172,973 12 5	555	5,979	170,482 2 3
Western Samoa	1,990	101 15 3	20,882 3 2	269	2,493 1 8	223	1,982	28,734 0 9	236	1,665	34,027 16 3
Rarotonga	1,223	84 5 3	20,487 0 7	411	12,028 14 9	139	997	11,401 0 2	47	966	11,172 11 11
Grand totals, 1930 ..	835,358	25,673 8 2	5,187,553 3 2	711,051	4,815,868 19 0	97,932	1,700,460	28,561,854 4 10	73,471	1,342,113	29,575,993 16 10

Table No. 4.

POST OFFICE SAVINGS-BANK.—GENERAL STATEMENT.

TABLE SHOWING THE BUSINESS OF THE POST OFFICE SAVINGS-BANK IN THE VARIOUS POSTAL DISTRICTS OF NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1930.

Postal Districts.	Number of Branches of the Post Office Savings-bank Open at the close of the Period.	Number of Deposits received during the Period.	Total Amount of Deposits received during the Period.	Average Amount of each Deposit received during the Period.	Number of With-drawals during the Period.	Total Amount of Withdrawals during the Period.	Average Amount of each Withdrawal during the Period.	Excess of Deposits over Withdrawals during the Period.	Excess of Withdrawals over Deposits during the Period.	Interest for the Period.	Number of Accounts opened during the Period.	Number of Accounts closed during the Period.	Number of Accounts remaining Open at Close of the Period.	Total Amount standing to the Credit of all Open Accounts, inclusive of Interest to the Close of the Period.	Average Amount standing to the Credit of each Open Account at Close of the Period.
			£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.				£ s. d.	£ s. d.
Auckland	184	274,907	4,727,153 3 4	17 3 11	242,535	4,954,793 19 10	20 8 7	..	227,640 16 6	288,256 9 7	15,549	13,391	144,137	7,943,572 0 1	55 2 2
Blenheim	16	16,468	291,187 1 5	17 13 8	14,336	303,443 16 3	21 3 4	..	12,256 14 10	22,852 6 3	1,018	736	11,186	610,995 12 7	54 12 5
Christchurch ..	73	272,596	4,548,758 13 6	16 13 9	230,511	4,661,989 17 3	20 4 6	..	113,231 3 9	292,645 16 4	11,542	7,803	127,127	7,978,030 17 7	62 15 1
Dunedin	79	118,453	2,027,726 4 10	17 2 4	93,328	2,211,495 4 5	23 13 11	..	183,768 19 7	164,698 4 10	6,104	5,122	73,902	4,378,488 3 5	59 5 0
Gisborne	26	38,870	644,820 7 9	16 11 9	30,768	671,057 7 10	21 16 2	..	26,237 0 1	42,059 18 2	2,452	1,717	22,042	1,140,429 3 6	51 14 9
Greymouth ..	24	20,354	343,889 3 9	16 17 11	13,019	341,944 6 8	26 5 4	1,944 17 1	..	30,284 12 9	1,560	1,045	13,993	826,409 1 4	59 1 1
Hamilton	90	101,714	1,677,465 17 8	16 9 10	68,384	1,665,715 17 9	24 7 2	11,749 19 11	..	88,738 16 4	9,515	6,727	44,266	2,489,547 18 8	56 4 10
Invercargill ..	38	39,905	643,694 5 5	16 2 7	32,116	731,906 1 10	22 15 10	..	88,211 16 5	63,698 8 7	2,803	2,253	30,745	1,691,069 13 3	55 0 1
Napier	41	76,629	1,380,722 19 11	18 0 4	62,471	1,445,933 9 3	23 2 11	..	65,210 9 4	84,112 0 7	4,847	3,746	40,983	2,305,198 19 10	56 5 0
Nelson	32	31,367	528,648 9 0	16 17 1	23,147	517,045 19 1	22 6 9	11,602 9 11	..	39,061 15 0	1,981	1,326	18,136	1,068,000 12 6	58 17 9
New Plymouth ..	37	61,595	1,236,162 16 1	20 1 5	46,910	1,327,859 15 8	28 6 1	..	91,696 19 7	68,771 3 4	5,426	4,539	32,237	1,907,801 5 3	59 3 7
Oamaru	12	17,601	346,483 19 8	19 13 9	15,352	367,440 12 4	23 18 8	..	20,956 12 8	25,046 6 3	1,183	848	10,337	676,011 10 11	65 8 0
Palmerston North ..	41	89,183	1,565,733 7 9	17 11 1	67,137	1,585,805 6 8	23 12 5	..	20,071 18 11	90,301 17 4	5,662	3,865	35,564	2,508,654 0 5	70 10 10
Thames	43	35,467	589,910 19 4	16 12 8	20,821	575,801 1 10	27 13 0	14,109 17 6	..	40,184 5 3	3,209	2,281	24,580	1,121,793 19 2	45 12 9
Timaru	18	43,325	866,789 12 7	20 0 1	35,947	939,497 5 8	26 2 9	..	72,707 13 1	63,219 7 10	2,636	1,797	24,627	1,691,244 2 7	68 13 6
Wanganui	41	64,911	1,042,447 14 4	16 1 2	51,395	1,151,268 6 10	22 8 0	..	108,820 12 6	70,745 5 9	3,773	3,386	37,301	1,911,190 6 2	51 4 9
Wellington	61	382,775	5,887,150 15 2	15 7 7	285,326	5,907,312 17 3	20 14 1	..	20,162 2 1	314,888 7 2	17,373	12,051	152,080	8,725,052 0 5	57 7 5
Westport	19	11,361	172,973 12 5	15 4 6	5,979	170,482 2 3	28 10 3	2,491 10 2	..	14,312 12 3	937	555	7,009	394,839 5 6	56 6 8
Western Samoa ..	2	1,982	28,734 0 9	14 10 0	1,665	34,027 16 3	20 8 9	..	5,293 15 6	1,666 9 4	223	236	1,438	44,519 19 3	30 19 2
Rarotonga	5	997	11,401 0 2	11 8 9	966	11,172 11 11	11 11 4	228 8 3	..	869 17 2	139	47	1,067	23,642 16 2	22 3 2
Totals for year ended 31st March, 1930	882	1,700,460	28,561,854 4 10	16 15 11	1,342,113	29,575,993 16 10	22 0 9	..	1,014,139 12 0	1,806,414 0 1	97,932	73,471	852,757	49,436,491 8 7	57 19 5

Table No. 5.

POST OFFICE SAVINGS-BANK.—GENERAL STATEMENT.

TABLE SHOWING THE BUSINESS OF THE POST OFFICE SAVINGS-BANK IN NEW ZEALAND, BY TEN-YEAR PERIODS, FROM 1868 TO THE 31ST DECEMBER, 1918, AND YEARLY PERIODS THEREAFTER TO THE YEAR ENDED 31ST MARCH, 1930.

Year.	Number of Branches of the Post Office Savings-bank Open at the Close of the Year.	Number of Deposits received during the Year.	Total Amount of Deposits received during the Year.	Average Amount of each Deposit received during the Year.	Number of With-drawals during the Year.	Total Amount of Withdrawals during the Year.	Average Amount of each With-drawal during the Year.	Excess of Deposits over Withdrawals during the Year.	Excess of Withdrawals over Deposits during the Year.	Interest for the Year.	Number of Accounts opened during the Year.	Number of Accounts closed during the Year.	Number of Accounts remaining Open at Close of the Year.	Total Amount standing to the Credit of all Open Accounts, inclusive of Interest to the Close of the Year.	Average Amount standing to the Credit of each Open Account at Close of the Year
			£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.				£ s. d.	£ s. d.
Year ended 31st Mar., 1930	882	1,700,460	28,561,854 4 10	16 15 11	1,342,113	29,575,993 16 10	22 0 9	..	1,014,139 12 0	1,806,414 0 1	97,932	73,471	852,757	49,436,491 8 7	57 19 5
Year ended 31st Mar., 1929	879	1,618,656	27,252,381 9 0	16 16 9	1,285,256	28,111,940 16 9	21 17 6	..	859,559 7 9	1,745,050 5 4	93,111	69,540	828,296	48,644,217 0 6	58 14 7
Year ended 31st Mar., 1928	870	1,570,493	27,611,066 5 1	17 11 7	1,274,906	30,584,997 14 4	23 19 10	..	2,973,931 9 3	1,747,155 13 9	93,331	72,433	804,725	47,758,726 2 11	59 6 11
Year ended 31st Mar., 1927	875	1,509,909	29,456,383 2 7	19 10 2	1,224,764	30,149,628 17 3	24 12 4	..	693,245 14 8	1,767,426 2 8	97,713	72,041	783,827	48,985,501 18 5	62 9 11
Year ended 31st Mar., 1926	870	1,446,530	31,833,621 9 5	22 0 1	1,197,985	32,602,505 17 2	27 4 3	..	768,884 7 9	1,731,577 17 2	104,447	81,440	758,155	47,911,321 10 5	63 3 11
Year ended 31st Mar., 1925	855	1,371,009	29,582,897 2 9	21 11 7	1,108,291	30,413,609 3 11	27 8 10	..	830,712 1 2	1,680,919 10 10	95,595	70,604	735,148	46,948,628 1 0	63 17 3
Year ended 31st Mar., 1924	846	1,261,141	29,598,372 4 8	23 9 4	1,075,037	29,510,320 19 6	27 9 0	88,051 5 2	..	1,649,976 4 8	92,465	73,098	710,157	46,098,420 11 4	64 18 3
Year ended 31st Mar., 1923	840	1,175,104	26,682,426 11 4	22 14 2	1,081,300	27,769,262 16 3	25 13 8	..	1,086,836 4 11	1,605,525 1 10	78,490	66,630	690,790	44,360,393 1 6	64 4 4
Year ended 31st Mar., 1922	831	1,227,591	29,125,997 10 0	23 14 6	1,119,662	30,236,231 6 5	27 0 0	..	1,110,233 16 5	1,599,907 2 0	89,859	75,748	678,930	43,841,704 4 7	64 11 6
*Fifteen months ended 31st March, 1921	819	1,664,206	44,302,852 5 4	26 12 5	1,458,008	41,162,486 9 10	28 4 8	3,140,365 15 6	..	1,818,534 5 2	152,930	118,894	664,819	43,352,030 19 0	65 4 2
Totals for 1919 ..	794	1,289,161	29,758,448 9 7	23 1 8	994,247	25,962,378 2 6	26 2 3	3,796,070 7 1	..	1,178,935 6 6	118,109	77,531	630,783	38,393,130 18 4	60 17 4
„ 1918 ..	786	1,213,353	18,101,104 18 1	14 18 4	727,729	14,938,841 10 0	20 10 7	3,162,263 8 1	..	1,059,471 17 8	76,869	53,015	590,205	33,418,125 4 9	56 12 5
„ 1908 ..	593	706,101	9,674,075 4 0	13 14 0	484,672	9,417,820 10 3	19 8 8	256,254 13 9	..	379,808 6 7	80,133	57,829	342,077	12,159,293 18 1	35 10 11
„ 1898 ..	409	281,749	3,279,611 7 5	11 12 10	196,764	3,194,893 16 7	16 4 9	84,717 10 10	..	128,128 16 6	37,265	26,628	169,968	4,957,771 5 5	29 3 5
„ 1888 ..	290	145,355	1,544,747 7 11	10 12 6	96,204	1,387,471 1 10	14 8 5	157,276 6 1	..	78,080 6 0	21,307	16,543	84,488	2,048,441 10 9	24 4 10
„ 1878 ..	147	69,908	762,084 12 0	10 18 0	42,746	742,053 14 3	17 7 2	20,030 17 9	..	31,664 12 9	13,005	9,634	32,132	819,071 8 2	25 9 9
„ 1868 ..	55	13,014	194,535 11 6	14 18 11	6,365	107,094 17 3	16 16 6	87,440 14 3	..	4,880 7 3	3,282	1,186	4,252	163,518 15 7	38 9 1
†Totals from 1st Feb. to 31st Dec., 1867	46	6,977	96,372 7 10	13 16 3	1,919	26,415 18 9	13 15 3	69,956 9 1	..	1,241 5 0	2,520	364	2,156	71,197 14 1	33 0 5

* Termination of Savings-bank year altered from 31st December to 31st March, with effect from 31st March, 1921.

† The Post Office Savings-bank was established in the Dominion in February, 1867.

Table No. 6.

TABLE SHOWING THE ESTIMATED NUMBER OF LETTERS AND LETTER-CARDS, POST-CARDS, BOOK-PACKETS, NEWSPAPERS, AND PARCELS POSTED AND DELIVERED IN THE SEVERAL POSTAL DISTRICTS OF NEW ZEALAND DURING THE YEAR ENDED THE 31ST DECEMBER, 1929.

Postal District.	Posted in the Dominion.					Delivered in the Dominion.					Total posted and delivered in the Dominion.				
	Letters and Letter-cards.	Post-cards.	Books, &c.	Newspapers.	Parcels.	Letters and Letter-cards.	Post-cards.	Books, &c.	Newspapers.	Parcels.	Letters and Letter-cards.	Post-cards.	Books, &c.	News-papers.	Parcels.
Auckland ..	31,215,702	980,642	20,354,244	5,475,088	904,293	34,602,230	998,634	16,901,157	4,713,267	637,208	65,817,932	1,979,276	37,255,401	10,188,355	1,541,501
Blenheim ..	1,914,572	46,059	510,399	272,974	18,187	1,948,505	47,736	668,603	505,362	67,678	3,863,077	93,795	1,179,002	778,336	85,865
Christchurch ..	18,129,671	735,176	11,910,128	1,562,858	437,125	19,953,791	924,469	10,151,752	3,037,424	352,573	38,083,462	1,659,645	22,061,880	4,600,282	789,698
Dunedin ..	12,436,510	499,798	7,594,204	1,860,930	311,298	11,885,146	459,095	6,802,991	1,924,169	306,462	24,321,656	958,893	14,397,195	3,785,099	617,760
Gisborne ..	3,248,244	41,041	1,027,596	661,264	43,485	3,438,396	71,851	1,914,224	1,197,573	118,560	6,686,640	112,892	2,941,820	1,858,837	162,045
Greymouth ..	1,786,673	38,506	531,077	284,167	33,241	2,145,689	58,877	751,556	514,878	82,121	3,932,362	97,383	1,282,633	799,045	115,362
Hamilton ..	9,842,309	351,910	2,728,703	1,024,065	93,882	10,373,987	422,838	5,075,642	2,006,875	297,037	20,216,296	774,748	7,804,345	3,030,940	390,919
Invercargill ..	6,800,568	157,339	3,342,571	688,108	78,767	6,640,283	199,927	3,393,559	1,136,876	151,996	13,440,851	357,266	6,736,130	1,824,984	230,763
Napier ..	7,056,393	105,820	2,900,656	805,905	82,576	7,690,657	188,604	3,788,603	1,554,748	187,863	14,747,050	294,424	6,689,259	2,360,653	270,439
Nelson ..	2,630,775	94,003	842,013	245,957	50,622	2,841,644	95,654	1,201,421	616,213	120,978	5,472,419	189,657	2,043,434	862,170	171,600
New Plymouth	4,965,586	132,600	2,255,940	703,388	64,493	5,702,216	172,120	3,176,316	1,131,000	166,803	10,667,802	304,720	5,432,256	1,834,388	231,296
Oamaru ..	1,502,724	57,811	578,556	162,539	18,317	1,731,288	96,551	1,021,306	380,887	47,346	3,234,012	154,362	1,599,862	543,426	65,663
Palmerston N.	6,471,221	124,852	2,911,662	705,912	82,940	8,246,940	284,375	5,113,511	1,310,712	185,731	14,718,161	409,227	8,025,173	2,016,624	268,671
Thames ..	3,183,560	68,016	1,045,103	576,102	36,777	3,872,349	185,458	2,240,485	805,142	129,896	7,055,909	253,474	3,285,588	1,381,244	166,673
Timaru ..	3,443,127	92,222	1,206,696	423,161	39,767	3,836,430	135,733	1,863,628	611,728	91,754	7,279,557	227,955	3,070,324	1,034,889	131,521
Wanganui ..	5,917,555	136,435	2,594,775	806,699	83,538	5,450,042	140,296	3,003,845	1,091,467	180,765	11,367,597	276,731	5,598,620	1,898,166	264,303
Wellington ..	27,710,226	481,651	16,831,323	5,186,224	882,059	28,204,563	729,229	11,221,268	4,109,248	423,202	55,914,789	1,210,880	28,052,591	9,295,472	1,305,261
Westport ..	795,860	10,751	103,824	126,763	15,184	1,206,101	30,836	391,235	310,141	47,645	2,001,961	41,587	495,059	436,904	62,829
Cook Islands ..	42,232	984	1,784	776	2,088	47,352	664	6,760	10,736	2,720	89,584	1,648	8,544	11,512	4,808
Western Samoa	91,008	2,856	2,880	17,700	912	159,978	1,512	4,122	99,444	3,138	250,986	4,368	7,002	117,144	4,050
Totals, 1929	149,184,516	4,158,472	79,274,134	21,590,580	3,279,551	159,977,587	5,244,459	78,691,984	27,067,890	3,601,476	309,162,103	9,402,931	157,966,118	48,658,470	6,881,027
Totals, 1928	143,626,190	4,048,068	75,767,635	20,626,107	3,349,285	154,922,174	5,402,400	78,744,974	27,631,087	3,631,800	298,548,364	9,450,468	154,512,609	48,257,194	6,981,085

Table No. 7.

REGISTERED ARTICLES.

The number of registered articles dealt with in 1929 compared with the number in 1890, 1910, and 1928, was as follows:—

	1890.	1910.	1928.	1929.
From places beyond the Dominion ..	26,374	132,493	388,700	374,700
Registered in the Dominion	169,321	993,675	2,202,600	2,210,000
Totals	195,695	1,126,168	2,591,300	2,584,700

Table No. 8.

PARCEL-POST.

The following shows the number of parcels posted during the years 1890, 1900, 1910, 1920, 1928, and 1929:—

—	1890.	1900.	1910.	1920.	1928.	1929.
Number ..	121,292	199,413	1,190,711	3,144,635	3,349,285	3,279,551

The following table shows the number and weight of parcels exchanged with other countries during the years 1928 and 1929:—

Places.	Received.				Despatched.			
	1928.		1929.		1928.		1929.	
	Number.	Weight.	Number.	Weight.	Number.	Weight.	Number.	Weight.
		lb.		lb.		lb.		lb.
Great Britain and Ireland and foreign countries via London	204,214	1,797,145	207,740	1,807,448	27,350	118,590	27,779	130,510
United States of America and possessions	64,612	419,854	65,787	425,580	4,789	19,806	4,736	19,147
Canada	11,549	86,920	15,338	151,223	1,805	5,844	2,005	6,603
New South Wales	32,814	126,223	38,484	155,013	12,027	39,192	12,244	39,754
Victoria	18,125	82,917	18,191	80,954	5,599	18,677	5,631	18,049
Queensland	1,338	2,696	1,482	2,989	1,289	4,019	1,239	3,684
South Australia	948	2,674	919	2,578	884	3,073	807	2,578
Tasmania	465	1,634	459	1,231	730	2,067	703	2,001
Western Australia ..	608	1,453	732	2,059	798	2,628	846	2,269
Union of South Africa ..	1,119	2,793	1,089	2,368	583	1,664	566	2,050
Egypt	263	1,719	307	2,051	70	487	72	439
Aden	391	2,759	1,487	10,714	..	..	..	..
India	4,667	36,164	4,591	34,350	1,094	5,982	1,121	6,537
Ceylon	482	2,266	505	2,315	124	505	135	435
Straits Settlements ..	531	1,463	689	1,941	417	1,880	466	2,159
Hong Kong	1,727	12,353	2,170	16,723	467	2,538	614	3,166
Fiji	1,041	2,293	954	2,071	2,177	7,241	2,241	7,248
Tonga	86	315	79	288	1,587	8,297	1,486	7,801
Tahiti	77	671	183	1,549	240	1,278	242	1,521
Norfolk Island	90	258	65	157	544	1,753	639	2,092
Uruguay	..	..	..	..	45	200	68	311
Others	..	..	..	..	13	42	9	30
Totals	345,147	2,584,570	361,251	2,703,602	62,632	245,763	63,649	258,384

Table No. 9.

COMPARATIVE TABLE SHOWING THE DEVELOPMENT IN THE TELEGRAPH, TOLL, AND TELEPHONE-EXCHANGE SERVICES DURING THE TEN-YEAR PERIODS ENDED 30TH JUNE, 1866 AND 1876, THE 31ST DECEMBER, 1886, THE 31ST MARCH, 1896, 1906, 1916; AND THE PAST FIVE YEARS.

Year.	Telegraph and Toll.			Number of Telegrams and Toll Messages forwarded during the Year.							Revenue in respect of Telegraph, Toll, and Telephone-exchange Services.									
				Telegrams.							Telegraph.									
	Number of Miles of Pole-line.	Number of Miles of Wire.	Number of Offices opened.	Ordinary.	Urgent.	Press.	Letter-telegrams.	Government.	Total Number of Telegrams.	Total Number of Toll Messages.	Ordinary.	Urgent.	Press.	Letter-telegrams.	Government.	Miscellaneous Telegraph Revenue.	Total Telegraph Revenue.	Toll Revenue.	Telephone Exchange Revenue.	Total Telegraph, Toll, and Telephone-exchange Revenue.
											£	£	£	£	£	£	£	£	£	£
30th June, 1866	699	1,390	13	*24,761	..	..	..	2,476	27,237	..	*5,562	..	..	..	483	..	6,045	..	..	6,045
,, 1876	3,154	7,247	142	*890,382	..	..	..	160,704	1,051,086	..	*62,716	..	..	..	16,154	..	78,870	..	..	78,870
31st Dec., 1886	4,546	11,178	412	*†1,583,717	..	..	..	252,549	1,836,266	..	*†88,385	..	..	..	27,281	..	115,666	..	‡18,254	133,920
31st Mar., 1896	6,245½	15,764¼	743	†1,553,232	59,038	198,108	..	224,579	2,034,957	89,254	†73,160	7,510	9,508	..	25,844	4,889	120,911	2,110	25,934	148,955
,, 1906	8,355	25,116	1,312	3,995,998	211,571	379,185	..	289,135	4,875,889	764,330	133,204	12,807	18,095	..	24,168	3,895	192,169	16,368	89,542	298,079
,, 1916	13,684	48,052	2,413	6,062,131	299,823	383,155	..	127,841	6,872,950	3,963,801	223,843	22,770	27,557	..	9,085	163,488	446,743	111,969	287,547	846,259
,, 1926	13,052	59,791	2,221	6,043,563	317,021	488,487	317,484	58,460	7,225,015	8,976,859	310,039	32,385	67,481	14,738	4,992	17,158	446,793	358,037	980,283	1,785,113
,, 1927	13,158	61,732	2,199	5,725,008	279,957	555,638	426,816	55,790	7,043,209	9,329,017	291,316	28,658	76,770	19,133	4,607	36,220	456,704	372,612	995,071	1,824,387
,, 1928	12,771	62,602	2,165	5,541,205	240,540	589,896	418,213	44,510	6,834,364	9,733,150	283,493	24,682	77,876	18,661	3,614	30,802	439,128	397,234	1,057,177	1,893,539
,, 1929	12,720	62,995	2,139	5,646,947	234,102	577,327	402,517	44,029	6,904,922	10,655,450	289,807	22,722	74,141	17,895	3,698	35,353	443,616	442,896	1,135,795	2,022,307
,, 1930	12,646	63,177	2,099	5,694,886	219,314	580,867	404,444	43,418	6,942,929	11,404,175	289,223	21,524	76,809	18,048	3,802	48,047	457,453	482,571	1,206,714	2,146,738

Includes private, Press, and Provincial Government messages. † Includes "delayed" telegrams. ‡ Includes miscellaneous telegraph revenue.

NOTE.—Inland Telegram Tariff: Prior to the 1st September, 1869, inland telegrams were charged for on a mileage basis. From that date a uniform rate was fixed of 2s. 6d. for ten words and 6d. for each additional five words. From the 1st April, 1870, the minimum charge was reduced to 1s. From the 1st November, 1873, the rate was further reduced to 1s. for ten words and 1d. for each additional word, address and signature, hitherto charged for, being free up to ten words. From the 1st July, 1877, there was introduced the "urgent" code, at double the ordinary rate. From the 1st July, 1878, a "delayed" system was introduced, the rate being fixed at 6d. for ten words, exclusive of address and signature up to ten words, and ½d. for each additional word. From the 1st February, 1892, the number of words allowed for the minimum charge in each case was increased to twelve, with free address and signature up to six words. From the 15th August, 1892, the ordinary rate was fixed at 1s. for eighteen words, including address and signature. From the 1st June, 1896, the rate was fixed at 6d. for twelve words, including address and signature, and 1d. for each additional word; and "delayed" telegrams were abolished. From the 1st November, 1906, the charge for additional words was reduced to ½d. each. From the 23rd September, 1915, the ordinary rate was increased from 6d. to 8d. for twelve words ("urgent" 1s. 2d.); and on the 1st August, 1920, it was further increased to 1s. for twelve words and 1d. for each additional word; ("urgent" 2s., and 2d. for each additional word); Sundays and holidays, double rates. From the 1st November, 1920, there was introduced a system of letter-telegrams, to be delivered by post on the morning following the day of presentation. The rate (since altered) was 1s. 6d. for thirty-six words and ½d. for each additional word. From the 1st February, 1923, the rate for ordinary telegrams was reduced to 9d. for twelve words, the charge for each additional word remaining at 1d. ("urgent" 1s. 6d., and 2d. for each additional word). From the same date the letter-telegram rate was reduced to 9d. for twenty-seven words and 1d. for each additional three words.

Table No. 10.

TABLE SHOWING THE NUMBER FORWARDED AND THE REVENUE DERIVED FROM TOLL CALLS AND PAID TELEGRAMS OF ALL CODES AND THE VALUE OF FRANKED GOVERNMENT TELEGRAMS IN THE UNDERMENTIONED POSTAL DISTRICTS DURING THE TWELVE MONTHS ENDED 31ST MARCH, 1930

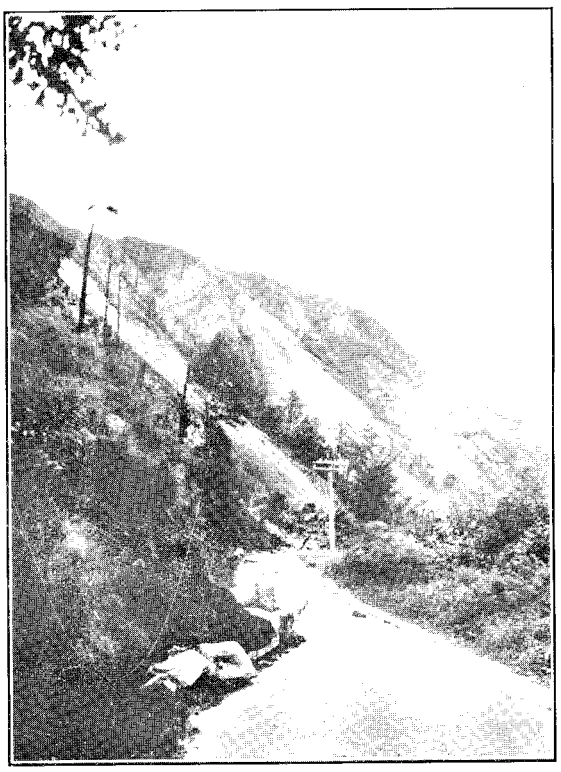
Postal District	Revenue derived from Paid Telegrams of all Codes and Toll Calls.	Value of franked Government Telegrams.	Total Value of Telegrams of all Codes and Toll Calls.	Number of Paid Telegrams and Toll Calls.	Number of franked Government Telegrams.	Total Number of Telegrams of all Codes and Toll Calls.
	£	£	£			
Auckland	142,710	410	143,120	3,007,998	4,615	3,012,613
Blenheim	14,028	132	14,160	289,573	1,689	291,262
Christchurch	96,324	526	96,850	1,844,106	6,741	1,850,847
Dunedin	66,103	319	66,422	1,323,364	3,555	1,326,919
Gisborne	28,054	68	28,122	511,071	918	511,989
Greymouth	17,941	47	17,988	317,675	646	318,321
Hamilton	70,371	8	70,379	1,632,335	68	1,632,403
Invercargill	39,675	65	39,740	930,266	867	931,133
Napier	49,547	68	49,615	1,121,507	891	1,122,398
Nelson	19,093	186	19,279	404,587	2,508	407,095
New Plymouth	40,336	71	40,407	916,536	925	917,461
Oamaru	12,243	33	12,276	208,384	440	208,824
Palmerston North ..	51,978	29	52,007	1,154,815	323	1,155,138
Thames	26,180	4	26,184	645,250	40	645,290
Timaru	27,860	104	27,964	553,288	1,399	554,687
Wanganui	39,555	83	39,638	782,886	1,077	783,963
Wellington	138,287	1,534	139,821	2,500,024	15,193	2,515,217
Westport	7,890	115	8,005	160,021	1,523	161,544
Totals, 1929–30 ..	888,175	3,802	891,977	18,303,686	43,418	18,347,104
Totals, 1928–29 ..	847,461	3,698	851,159	17,516,343	44,029	17,560,372

Approximate Cost of Paper.—Preparation, not given; printing 1,180 copies (including graphs and illustrations), £130.

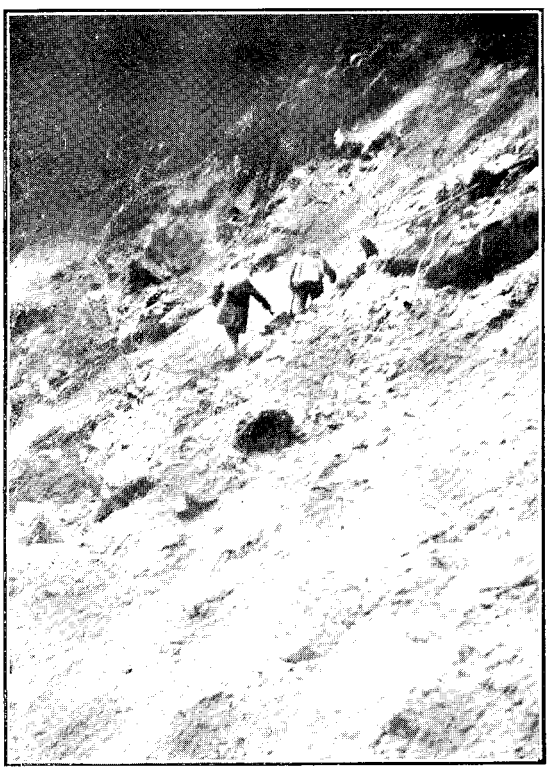
By Authority: W. A. G. SKINNER, Government Printer, Wellington.—1930.

Price 2s.]

PHOTOGRAPHS TYPICAL OF THE DESTRUCTION CAUSED BY THE EARTHQUAKE OF 17TH JUNE, 1929.



1. One of the Numerous Landslides which carried away and buried Long Lengths of Toll and Telegraph Line in Buller Gorge.

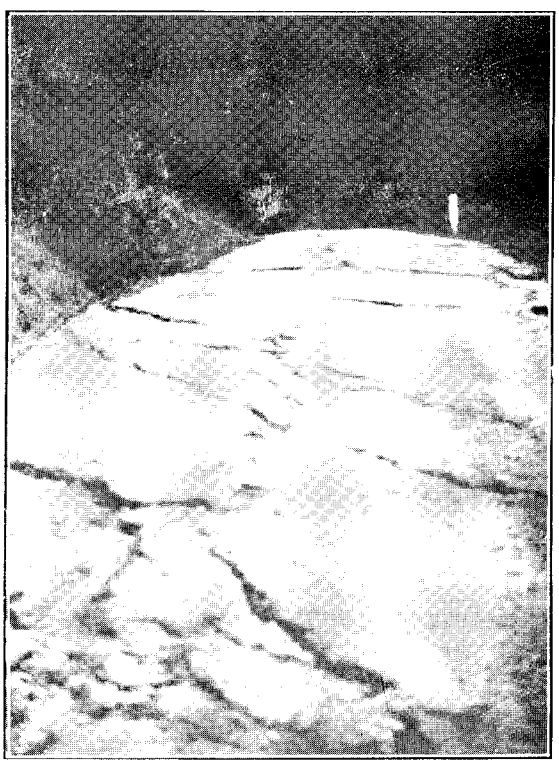


2. Landslide in Buller Gorge.

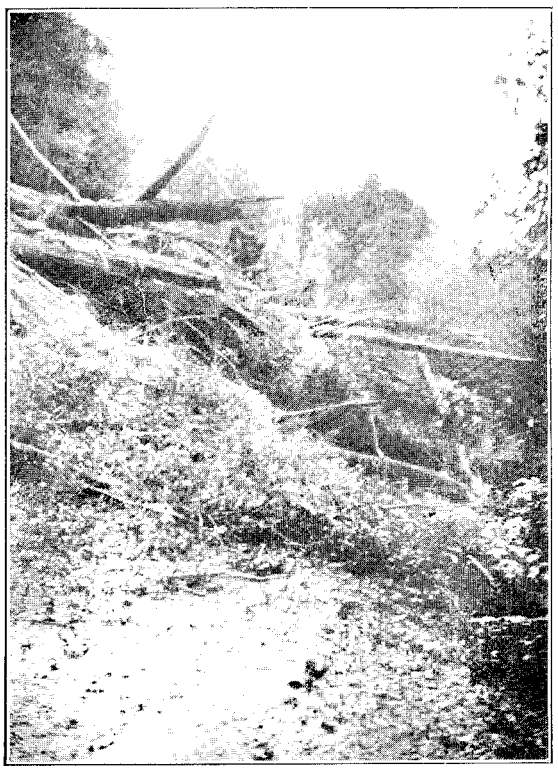
Typical of what happened along the route of the Department's toll and telegraph lines in this and other areas.

3. "Upthrow" of Road (13 ft. 5 in.) where crossed by Earthquake Fault-line near White's Creek, Buller Gorge.

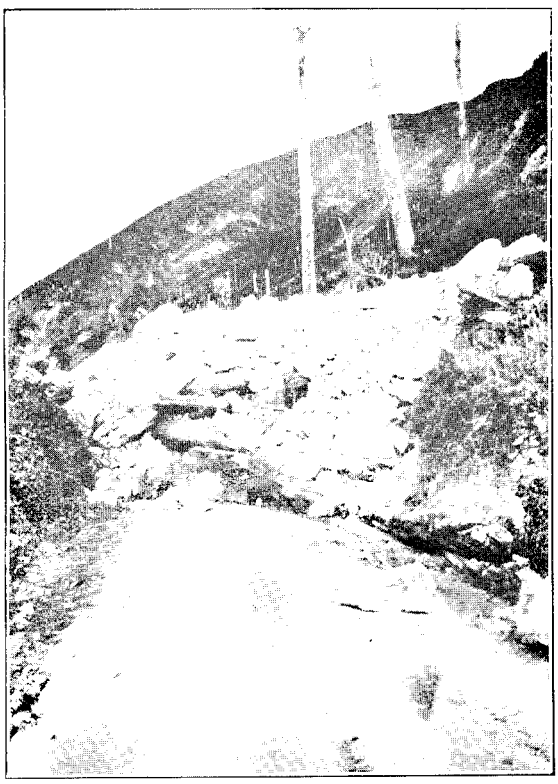
The upper figure is standing on road-surface which prior to earthquake was on level with surface of road on which second figure is standing.



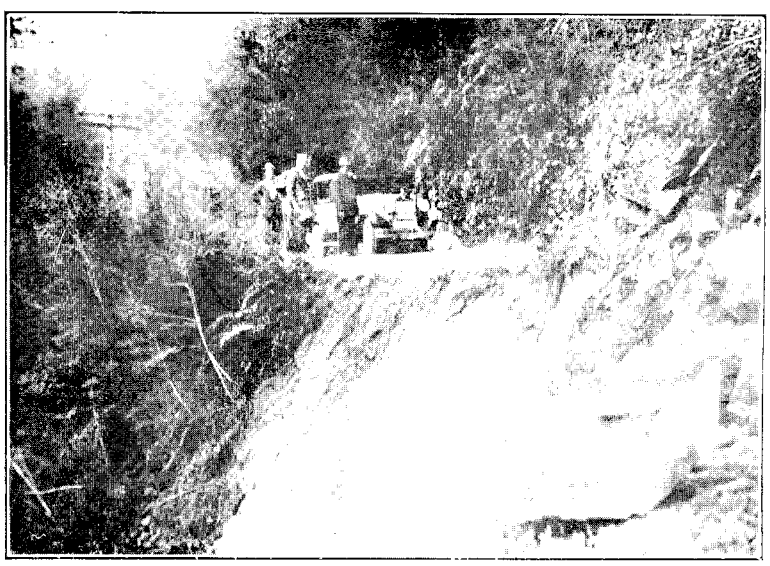
4. Fissures and Pressure-ridges on Buller Gorge Route.



5. Landslide across Road and Line near South Side of Sullivan's Bridge, Buller Gorge.



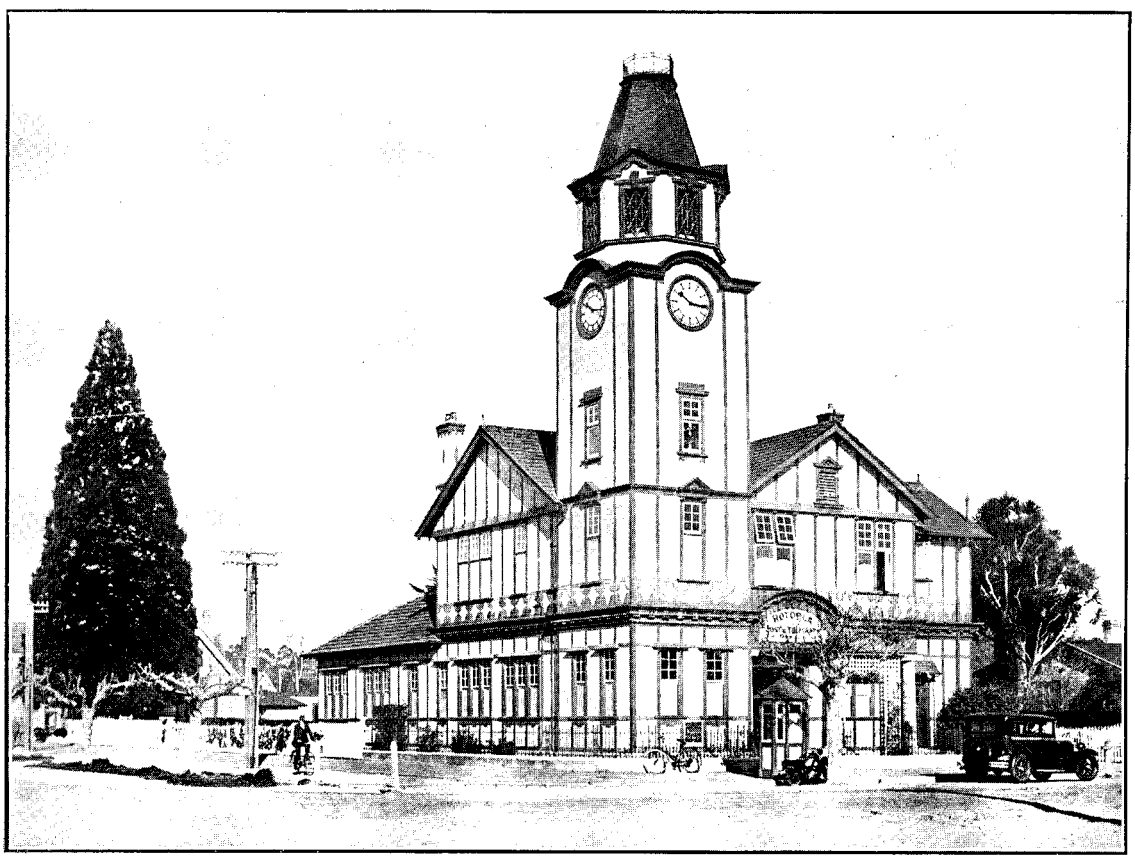
6. A "Granite Shoot" over Road near Dublin Terrace, in Buller Gorge.



7. Disaster narrowly averted: An Abandoned Car South of Newton Flat, Buller Gorge.

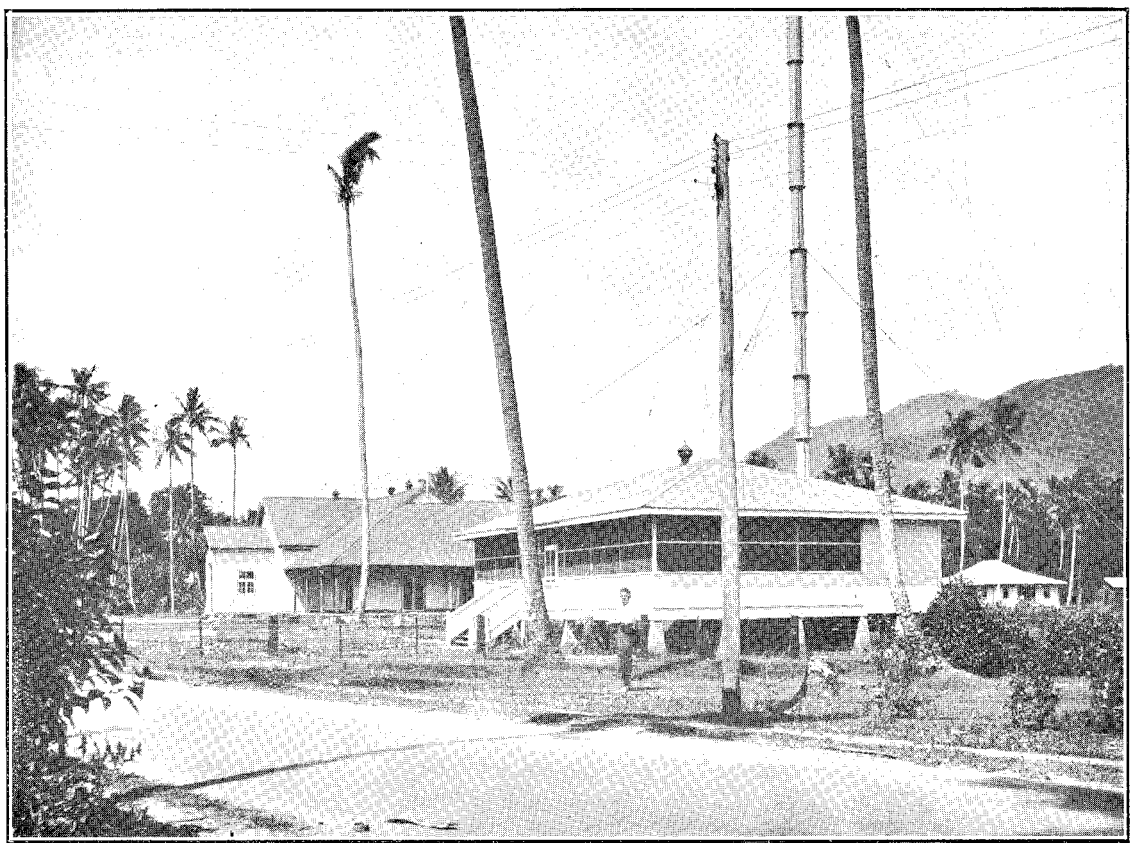
8. The "Road" South of Newton Flat, Buller Gorge, after Earthquake.

Prior to earthquake Department's toll and telegraph lines stood here.

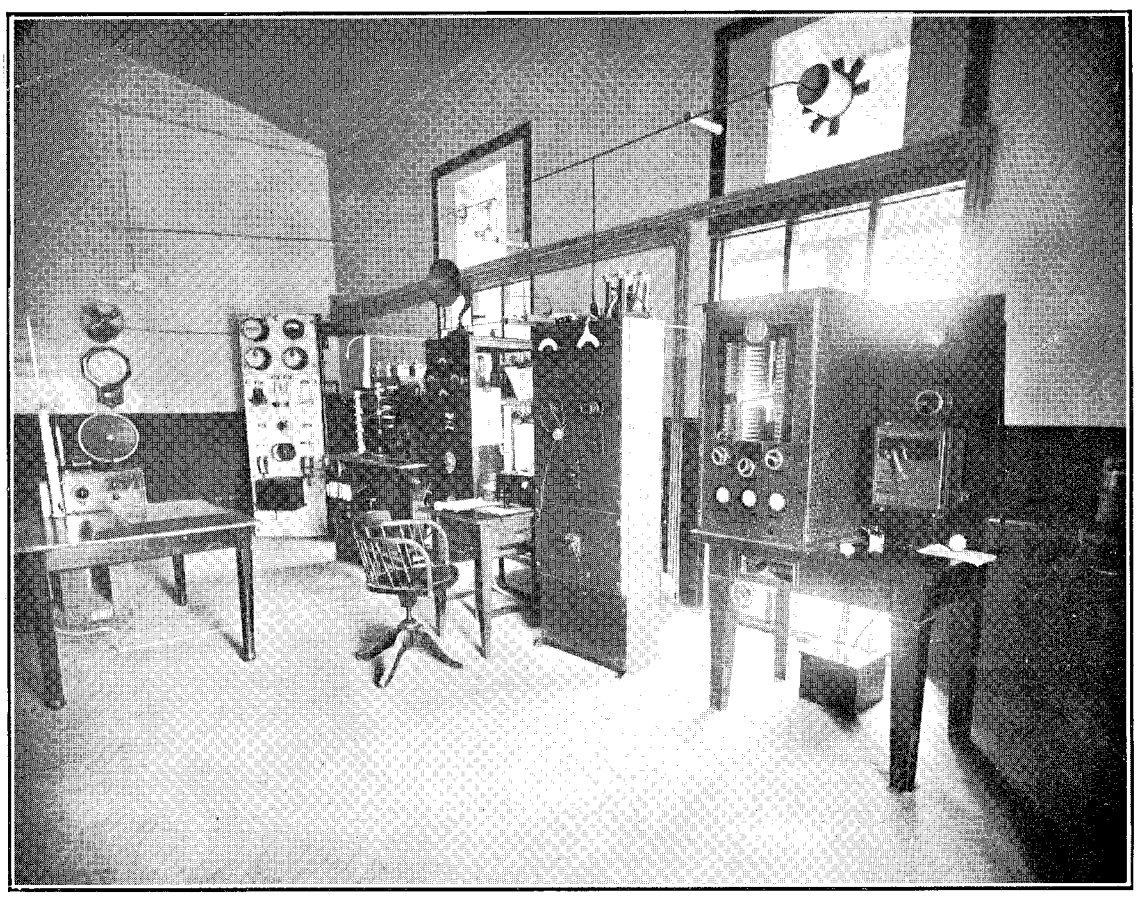


Rotorua Post-office Building, showing recent Additions.

APIA RADIO, SAMOA (NEW SITUATION).



THE RADIO-STATION (LEFT), WITH SUPERINTENDENT'S RESIDENCE (CENTRE).



THE OPERATING-ROOM, SHOWING NEW EQUIPMENT.