

SESSION II.
1921.
NEW ZEALAND.

DEPARTMENT OF INTERNAL AFFAIRS

(ANNUAL REPORT OF THE) FOR THE YEAR ENDED 31st MARCH, 1921.

Laid on the Table of the House of Representatives by Leave.

SIR,—

Department of Internal Affairs, Wellington, 2nd September, 1921.

I have the honour to submit herewith the annual report of the Department for the year ended 31st March, 1921.

I have, &c.,

J. HISLOP, Under-Secretary.

The Hon. W. Downie Stewart, Minister of Internal Affairs, Wellington.

REPORT.

WORK OF THE YEAR.

VISIT OF HIS ROYAL HIGHNESS THE PRINCE OF WALES.

H.R.H. THE PRINCE OF WALES arrived at Auckland on the 24th April by the H.M.S. "Renown," and, after visiting the various cities and most of the principal boroughs and other localities throughout the Dominion, departed from Lyttelton on the 21st May.

The general arrangements in connection with the visit of His Royal Highness were entrusted to this Department. Every praise is due the Railways, Police, Defence, Education, and Post and Telegraph Departments, and all local bodies in those districts visited by the Prince, for the valuable services rendered by them throughout the tour.

LOCAL GOVERNMENT.

In my last report I made reference to the activity on the part of local bodies, and the reawakening in local government after the war. The past year has proved this even more so, and several important changes in local-governing areas and activities have been effected.

A pleasing feature of the whole question of local government is the evidence which has been brought before the Department of the ever-increasing interest displayed in local-governing affairs by electors and ratepayers.

Counties.

The question of county control is becoming more and more complex, and there has been an increasing desire for the splitting-up of existing counties and the formation of new counties. The policy of the Government is, however, opposed to this unless it is clearly shown that there is a necessity for a new county, and if this is not shown the Department opposes all Bills introduced for the purpose of forming new counties. The invariable practice is to set up a Commission to inquire into the matter, and consider it on the recommendations of such Commission. Sooner or later, in conjunction with the whole question of local government, the formation of larger counties with increased powers will have to be considered.

Bills were introduced for the constitution of two new counties, proposed to be called "Mount Hutt County" and "Akarana County," and in each case the Bill was held over by the Local Bills Committee at the instigation of this Department. A Commission was set up in each case, and as the report of the Commission on the Mount Hutt case was adverse the Bill was dropped. The report of the Akarana Commission had not been received at the close of the year.

An important move was made in connection with the counties in the Waikato and King-country districts. In consequence of power taken in section 91 of the Reserves and other Lands Disposal and Public Bodies Empowering Act, 1920, a Commission was set up to inquire into the question of an adjustment of boundaries between several counties in those districts, and whether the Counties Act should be brought into force in East and West Taupo Counties, and whether the road districts in the latter county should be continued or abolished. The same Commission is inquiring into the proposed formation of a new county in the vicinity of Cambridge. The Commission had not reported on any of these matters at the close of the year, but it is hoped that as a result of its inquiries a satisfactory adjustment of the boundaries of the various counties concerned will be made.

A step was made to have the Counties Act brought into force in the Marlborough County, and the road districts therein abolished, and petitions providing for this were circulated throughout the county by those interested in the proposal. No finality has yet been reached. Opinion in the district is very divided as to what form of local government should be established; and whilst the Department is generally in favour of the county form of local government, and does not approve of road districts except in special cases, it is not desirous of interfering in any way, and the matter is being left to the discretion of the ratepayers.

The boundaries between the Waikohu and Uawa, Waitotara and Patea, Weber and Patangata, Whangarei and Hobson Counties were altered, and the boundaries of Eden, Levels, Manawatu, Raglan, Rangitikei, Waikato, and Waipa Counties were redefined. Certain areas added to the Wairarapa South and Waitotara Counties were declared to form part of certain ridings thereof.

In consequence of the constitution of the new counties of Hauraki Plains, Inglewood, and Mata-kaoa, the necessary action was taken to divide these counties into ridings, fix representation, and make arrangements for the first election.

Power was taken in the Counties Act to enable the Governor-General to include islands within an adjacent county, on petition of the County Council or of not less than two-thirds of the ratepayers.

The Taranaki County Council passed a by-law in 1919 under the authority of an Order in Council issued under the Counties Amendment Act, 1915, providing for the licensing of vehicles using that county's roads. The passing of this by-law resulted in strenuous opposition by the adjoining local bodies, and a Commission was appointed to inquire into the question of whether the county should be permitted to enforce it. The Commission reported adversely, and an Order in Council was issued revoking the authority under which the by-law was made.

The Counties Act, 1908, and its various amendments were consolidated, and several new provisions of considerable importance to County Councils were included in this measure.

The Bay of Islands, Hauraki Plains, and Inglewood Counties adopted the system of rating on the unimproved value.

Several County Councils passed special orders altering the boundaries of ridings and adjusting representation.

Certain ridings in the Otamatea County were altered so as to bring such ridings into conformity with section 20 of the Counties Act, 1908.

Boroughs.

At the commencement of the present year there was a slightly less number of boroughs in the Dominion than at the corresponding period of the previous year. This, however, does not indicate a retrograde step, but is due to the fact that several of the smaller boroughs adjoining cities amalgamated with their larger neighbour. It is now more and more realized in all branches of local-government activities that a multiplicity of local authorities is not desirable, and where an area can be shown to be more effectively and economically administered by a larger body which possesses better means of administration, then there is little argument for the continuance of the former district.

Amalgamation has taken place principally in the cities, and this all points to the fact that sooner or later the question of the formation of metropolitan areas for the four cities will have to be considered. In the City of Wellington, for example, no less than three adjoining boroughs have amalgamated with the city, whilst others are now discussing the matter. The needs of cities have of late grown, altogether apart from those of other boroughs, and are so peculiarly individual that it is becoming more and more evident, with their continual growth, that some provision must be made for their requirements in the future. The whole question will require to be carefully thought out; and if the principal cities take the matter up it is possible, with the precedents contained in such places as Sydney and Melbourne, to work out a scheme which should suit the requirements of each city. A good indication of the manner in which the needs of the city differ from those of the smaller boroughs is contained in the number of local Acts which have been passed during recent years dealing specifically with the cities.

The Municipal Corporations Act, 1908, and amendments, were consolidated, and, in addition, new provisions were included giving Borough Councils several additional powers. One important new provision empowers Borough Councils to engage in such trading undertakings as are authorized by the Governor-General in Council, but so far no applications have been received for authority to take advantage of this provision.

The boundaries of the City of Auckland and the boroughs of Carterton, Feilding, Marton, Masterton, Sumner, and Timaru were altered, and the usual notices redefining the boundaries of these

boroughs were subsequently issued. A petition praying for an alteration of boundaries of the Borough of Hastings was not granted. The boundaries of the boroughs of Devonport, Ngaruawahia, and Takapuna were also redefined.

The boroughs of Morrinsville, Ngaruawahia, and Otaki were constituted, and petitions presented for the constitution of Avondale and Raetihi Boroughs are still under consideration.

The Borough of Miramar was united with the City of Wellington, the Borough of Spreydon with the City of Christchurch, and the Town District of Hampstead with the Borough of Ashburton.

The alteration of boundaries of the City of Auckland involved the abolition of Point Chevalier Road District, a poll of ratepayers being first taken on the proposal. The Borough of Masterton, at the same time as it was altered, was divided into wards, and arrangements were made for the preparation of a district electors roll for each ward. Provision was made for the Ngaruawahia Borough Council to take over the assets and liabilities of the old Ngaruawahia Town Board, and for certain adjustments consequent upon the constitution of this borough, there being no specific provision in the Municipal Corporations Act authorizing this. Provision was subsequently made in this Act to meet such cases. The Dunedin City Council and the Green Island Borough Council reduced the number of members of their respective Councils. The Westport Borough Council adopted the system of proportional representation. The Ngaruawahia Borough Council adopted the system of rating on the unimproved value.

Irregularities in connection with the alteration of boundaries of the City of Auckland and the abolition of the Point Chevalier Road District, in the polls taken on the proposals to constitute the boroughs of Morrinsville and Otaki, and in the district electors roll and supplementary district electors roll of the Borough of Hamilton were validated.

In many cases irregularities such as this could be obviated if the local authorities concerned consulted this office before proceeding with the matter in hand. The Department is always ready to give advice as to the procedure to be adopted in connection with the alteration of local-governing areas and with other matters arising out of the administration of local government.

Town Districts.

The Cobden and Tahunanui Town Districts were constituted, and the necessary arrangements made for holding the first election and first meeting of each Board. The boundaries of the Manurewa Town District were altered; a petition was presented for the alteration of boundaries of the Manaia Town District; and the Tahunanui Town District was declared not to form part of the County of Waimea.

The Hampstead Town District was amalgamated with the Borough of Ashburton. The Have-lock North, Mangapapa, and Taradale Town Districts adopted the system of rating on the unimproved value. Legislation was provided authorizing the extension of the Manurewa Town District beyond the statutory two-square-miles limit.

Owing to the serious financial position of the Huntly Town Board a Commission was appointed to recommend a manner in which this Board could be assisted. As a result of this Commission's report the Board was given legislative authority to convert its overdraft into a permanent loan, and its rating-powers were increased beyond the limits provided in the Town Boards Act.

An adjustment of assets and liabilities was made between the Cobden Town Board and the Grey County Council as a result of the constitution of the Cobden Town District. It was subsequently found that the Town Board had no authority under which it could borrow money to meet the obligations imposed on it under the adjustment, and you have approved of a general provision being made in the Town Boards Act.

The consolidation of the Municipal Corporations Act and amendments considerably affected Town Boards, inasmuch as a large portion of this Act is incorporated in the Town Boards Act. An important amendment provides that all amendments to those provisions in the Municipal Corporations Act which form also part of the Town Boards Act shall apply to Town Boards. Previously this was not the case. The Town Boards Act, however, is very obsolete, and it is recognized that it requires considerable remodelling. You have already approved of it being consolidated and amended, and this matter is now under consideration.

It is very difficult to decide just where to draw the distinction between town districts and Borough Councils. The object of the Town Boards Act is to provide a means of local government for settlements which spring up in a county and become too congested for county control and yet not sufficiently large to be formed into a borough. These districts remain a part of the county until they obtain a population of 500, when there is power to declare them to cease to form part of the county. Town Boards possess a large percentage of the powers possessed by Borough Councils, but it is difficult to decide whether or not the majority of these provisions are of much value, inasmuch as a town district has neither the population nor the finance to engage in any works or undertakings on a large scale.

I propose to submit later for your consideration suggestions as to the legislation which should apply to Town Boards, but meanwhile have to state that I cannot help feeling that the present method of applying portions of the Municipal Corporations Act is undesirable, as each local body should have as far as possible all its governing-powers contained in the one Act.

A further matter is whether provision should not be made that a town district should be automatically declared a borough when it acquires the necessary population, in the same way as it can be at present declared not to be part of the county.

Road Districts.

As a result of special legislation passed enabling road districts to be formed in Waiheke Island, which is not included in any county, two road districts, Orapiu and Ostend, were formed in that island, and the necessary arrangements made for the election of a Board for each district. A petition presented for the constitution of a road district at Taupo, in the East Taupo County, was held over pending the report of the Commission which was appointed to inquire into various matters affecting the counties in that district and surrounding districts. The Moa Road District, which formed part of the Taranaki County and carried on fairly extensive operations, went out of existence and became a part of the new Inglewood County. The Point Chevalier Road District was included in the City of Auckland, and a poll taken on a proposal to include the West Tamaki Road District in that city was defeated. The boundaries of the Marua Road District were altered, the Newcastle Road District was merged in the County of Waipa, and the Kirikiriroa Road District was merged in the County of Waikato.

The question of Road Board control has now reached the stage when it must be carefully considered whether or not the system should be abolished. Road Boards are rapidly dying out and becoming merged in their respective counties. The system has served a very good purpose, but it has now, I think, except in certain special cases, fulfilled its object, and generally speaking it can safely be said that the continuation of road districts simply perpetuates an obsolete form of local government which tends towards parochialism, and provides a duplication of control which is not in the best interests of either counties or ratepayers. Statistics taken for some years past show an annual decrease in the number of road districts, there being only 82 in existence at the close of the year 1920, as compared with 231 at the close of the year 1900. The question depends very largely upon effective county control, but I venture to suggest that the continuance of road districts is in some cases simply serving the purpose of retarding the general progress of the county in which such districts are situated.

Power was given in the Counties Act, 1920, to County Councils to merge road districts in the county in cases where the total capital value of all road districts in the county is less than two-fifths of the total capital value of the whole of the county; and, whilst this provision did not take effect until after the end of the year, I think it is only right to state that so far advantage has been taken of this provision by certain County Councils, and several road districts have been merged under this authority.

River Districts.

The Kaituna and Palmerston North River Districts were constituted, and arrangements made for the first election and first meeting of the Board. The Palmerston North River District was subdivided. The boundaries of the Kahutara and Waikato River Districts were altered, and an alteration of boundaries of the Poverty Bay River District was under consideration at the close of the year. A petition presented for the alteration of boundaries of the Mangawara River District was not granted. Certain of the powers of a Drainage Board were conferred on the Mangawara River Board, but, despite this, there still exist several drainage districts in the Mangawara River District. The question of whether this is desirable has recently been engaging the attention of the Department. A petition presented for the amalgamation of the Lower Wairau and Spring Creek River Districts was not granted, as a much larger scheme of amalgamation seemed desirable. The proceedings in connection with a rate levied by the Makarewa-Hedgehope River District were validated. The Geraldine County Council was declared to be the River Board of the South Orari and Upper Orari River Districts. Members were appointed to the Boards of several river districts.

The constitution of the Palmerston North River District involved the abolition of the Palmerston North-Kairanga River District, and this culminated action commenced by the Department several years ago, involving the appointment of several Commissions of inquiry.

The control of the Wairau River and its tributaries was again brought under notice, and petitions were presented from the river and drainage districts praying for the amalgamation of these districts and the formation of one united district. Whilst the completion of matters connected with this does not come within the present year, it is perhaps not out of place to mention here that one united district has now been formed, called the "Wairau River District," controlling the whole of the Wairau River. This also is important, inasmuch as it completes matters which were commenced several years ago, and were only temporarily suspended when the Wairau River Bill, introduced in 1917, was dropped.

With the object of controlling the Rangitata River, the Geraldine County Council was given special authority in the Reserves and Other Lands Disposal and Public Bodies Empowering Act, 1920, to exercise the powers of a River Board within its county.

The Taieri River Trust District was constituted by means of the Taieri River Improvement Act, 1920, and action immediately taken to appoint a returning officer and make arrangements for the first election of the trust.

Land-drainage Districts.

The Raupare, Waitomo Valley, and Wakapuaka Drainage Districts were constituted. The Pukekohe Drainage District was abolished. The boundaries of the Makerua and Woodlands Drainage Districts were altered. The boundaries of the Dunedin Drainage and Sewerage District were altered. Trustees were appointed for several districts. Arrangements were made for the first election and the first meeting of the Kimihia, Waipa, and Whakaronga Drainage Districts, and for each new district, with the exception of the Raupare Drainage District. In this case, despite persistent demands by the Department to obtain information enabling the arrangements to be made, no infor-

mation was forthcoming, and the matter was finally dropped. It is perhaps not out of place to mention as a result of this that very often, in the case of some of the smaller districts, it would be preferable if the County Council in which the area is situated were to exercise its powers of drainage. Whilst in some cases a small district may be justifiable, yet at the same time there is strong argument against it, and very often a County Council with the machinery and a staff at its disposal could more effectively carry out the necessary drainage-works than a small Drainage Board with a lack of sufficient funds.

The Mangapiko Stream and tributaries is controlled by four Drainage Boards, and as a result of representations made to the Department a Commission was set up to determine whether or not these districts should be united and the control of the stream be placed under one district. As a result of the report of this Commission it was decided not to unite the districts, but a further Commission was set up to inquire as to the advisability of vesting the exclusive control of the stream in one of the present drainage districts, and the proportion which should be paid by each district towards the control thereof. This matter is still under consideration.

A petition was received praying for the exclusion of certain lands from the Waiatarua Drainage District. It was ascertained that a portion of such lands was also included in the Auckland City, and legislation was passed providing for the automatic exclusion from a drainage district of any area which is included in a borough, and for an adjustment of assets and liabilities to be made thereon. A Commission was set up to inquire as to whether the remaining portion should be excluded from the drainage district, and this matter is still under consideration.

Balance-sheets of Local Bodies.

A large number of local bodies were granted exemption from the statutory mode of publication of their balance-sheets, and an alternative mode prescribed. This practice provided a considerable saving to those local bodies which took advantage of it. Since the close of the year a general provision was inserted in the regulations issued under the Counties Act allowing County Councils to adopt this mode of publication without application to this Department, and it is proposed to insert a similar provision in the regulations under the Municipal Corporations Act.

By-laws of Local Bodies.

The by-laws of thirteen County Councils were approved by the Governor-General under section 107, Counties Act, 1908. The by-laws of twelve local bodies were confirmed by the Minister under the By-laws Act, 1910. The by-laws of four Road Boards and of four Fire Boards were gazetted under their respective Acts. Irregularities in a special order made by the Dargaville Borough Council making by-laws were validated.

Public Bodies' Leases Act.

The Timaru Borough Council and the Cook County Council were declared leasing authorities under the Public Bodies' Leases Act.

Legislation.

I have already referred to two important local-government measures—viz., the consolidation of the Municipal Corporations Act and the Counties Act. In addition to these an amendment was passed to the Land Drainage Act. A large number of clauses were, as usual, inserted in the Reserves and other Lands Disposal and Public Bodies Empowering Act. Several local Acts were passed bearing on matters dealt with by this Department.

Since the termination of the war the demand for legislation has greatly increased, and there is now a considerable volume of matter in the Department ready for legislation as soon as the opportunity presents itself. You have already approved of the preparation of several measures, including various consolidations.

PASSPORTS AND PERMITS.

The regulations in respect to passports and permits have been provided for in the War Regulations Continuance Act, 1920.

By an arrangement with the Government of the Commonwealth of Australia, which came into operation on the 22nd October, 1920, the restrictions in respect to British-born subjects travelling between Australia and New Zealand were relaxed, and such persons may now travel on intercolonial vessels without being in possession of a passport or permit. The removal of restrictions upon British-born subjects travelling to Australia has relieved the permit section of a large amount of non-revenue-producing work, and the staffs at Wellington, Auckland, Christchurch, and Dunedin have been reduced accordingly. Passports are necessary to facilitate travel to any other part of the world, excepting British possessions in the Pacific Ocean, and 4,313 passports were issued during the year. British passports, unless otherwise endorsed, are valid for travel anywhere within the British Empire without the name of the part of the Empire concerned being specifically endorsed thereon, but do not exempt the holder from compliance with the immigration regulations in force in the various parts of the Empire.

NATURALIZATION AND NATIONALITY.

In accordance with the provisions of the Aliens Act, 1908, 209 letters of naturalization were issued, and nine certificates or letters of naturalization were accepted and registered in the Dominion of New Zealand.

Naturalization is not being granted to subjects of countries recently at war with Great Britain unless such persons or their immediate relatives have served with His Majesty's Forces.

A number of inquiries concerning nationality have been received, and it may be of interest to quote Part I of the British Nationality and Status of Aliens Act, 1914, as amended by the Act of 1918 :—

PART I.—NATURAL-BORN BRITISH SUBJECTS.

1. (1.) The following persons shall be deemed to be natural-born British subjects, namely :—

- (a.) Any person born within His Majesty's dominions and allegiance ; and
- (b.) Any person born out of His Majesty's dominions whose father was a British subject at the time of that person's birth, and either was born within His Majesty's allegiance or was a person to whom a certificate of naturalization had been granted, or had become a British subject by reason of any annexation of territory, or was at the time of that person's birth in the service of the Crown ; and
- (c.) Any person born on board a British ship, whether in foreign territorial waters or not :

Provided that the child of a British subject, whether that child was born before or after the passing of this Act, shall be deemed to have been born within His Majesty's allegiance if born in a place where by treaty, capitulation, grant, usage, sufferance, or other lawful means His Majesty exercises jurisdiction over British subjects.

(2.) A person born on board a foreign ship shall not be deemed to be a British subject by reason only that the ship was in British territorial waters at the time of his birth.

(3.) Nothing in this section shall, except as otherwise expressly provided, affect the status of any person born before the commencement of this Act.

(4.) The certificate of a Secretary of State that a person was at any date in the service of the Crown shall, for the purposes of this section, be conclusive.

Revocation of Naturalization.

The provisions of the amending Act of 1920 in respect to the surrender of revoked letters of naturalization have been given effect, with satisfactory results. In one instance the document was withheld, but was later secured after a prosecution had been sustained.

CONSULS.

The German and Austrian Consulates, closed as a result of the war, have not yet been reopened. During the year a Vice-Consulate for Denmark was opened at Palmerston North. The only Swiss Consulate in New Zealand (at Auckland) has been closed, and the interests of Switzerland administered by the Consul at Melbourne.

MOTOR REGULATION ACT, 1908.

The provisions of Part II of the Motor Regulation Act, 1908, were adopted by eight local bodies during the year. The distinguishing letters assigned to registering authorities are in relation to the name of the local body concerned, and distinguishing numbers have not been assigned in excess of 10,000. Owing to the difficulty of reading the number of a fast-travelling vehicle with five numbers it has been decided to limit the number to four, and a registering authority that has almost reached the 10,000 mark has been granted permission to continue use of the same letters with numbers 1A to 999A. The whole of the letters of the alphabet can be used in a similar manner, and thus provide for approximately 26,000 additional numbers.

LAND AGENTS ACT.

There were 1,446 licenses and three transfers granted during the year, as against 1,236 licenses and one transfer during the previous year. A Land Agents Bill, which will remedy several defects that have been discovered in the administration of this Act, is now under preparation.

LICENSE TO DISPOSE OF WORKS OF ART, ETC., BY LOTTERY.

A large number of applications for licenses to dispose of works of art, &c., by lottery, as provided for by section 42 of the Gaming Act, 1908, have been dealt with, and in the majority of cases the application has been granted. Licenses are issued subject to conditions, which, in general, are as follows :—

(1.) No articles other than those mentioned in the permit are to be raffled, or anything in substitution thereof.

(2.) Prior to the date of the drawing a certificate to the effect that every ticket sold is represented in the drawing must be furnished to the police by the promoters of the art union.

(3.) The result of the drawing must, within one week of the date of drawing, be advertised in the newspaper or newspapers circulating in the town or district in which the raffle is held.

(4.) No boy under the age of fourteen or girl under the age of sixteen shall be allowed to sell or offer for sale tickets in any street, hotel, shop, office, factory, boardinghouse, place of entertainment, or any gathering of the public, or in any public place ; but this condition does not apply to any such boy or girl residing in such hotel or boardinghouse in respect of sales therein respectively.

During the year three prosecutions have been made for breaches of condition No. 1 as referred to above. In each case a conviction was recorded.

BOXING ASSOCIATIONS.

A permit to hold a boxing contest may be issued by the Inspector of Police for the district in which it is to be held, provided that the club or association has been approved for that purpose by the Governor-General in Council. Associations applying for approval are required to lodge two copies of their rules, together with two copies of the rules under which it is proposed that boxing contests shall be held. Since the conclusion of the war eleven associations have been granted approval.

FIRE BRIGADES ACT.

Thirty-five Boards have been constituted under the provisions of the Fire Brigades Act, 1908.

In addition to statutory duties the Assistant Fire Inspector has during the year visited 1,080 Government buildings and given practical instruction in the proper maintenance and use of fire

appliances. There is conclusive evidence that these inspections have been the direct means of saving a number of fires, particularly in the case of school-buildings.

The United Fire Brigades Association at its last conference decided to establish a depot for the supply of fire plant and appliances to the various fire brigades throughout the Dominion. It has been represented that this arrangement will lead to standardization, with a consequent higher efficiency. In response to a request received the Government has agreed to place the advice of the Department's experts at the disposal of the association, and to assist in the procurement of equipment which is not manufactured in the Dominion.

WAR FUNDS ACT, 1915.

The policy of the consolidation of patriotic funds has been carefully conducted, with a result that 204 separate funds operating in the Dominion have been closed during the last twelve months, thus leaving at the 31st March 211 active accounts. The total funds held by the remaining societies amount to slightly in excess of one and a quarter millions.

Owing to the revoking and cancelling of permits for collections or receiving or raising of moneys for war funds (*vide Gazette* No. 28, of the 6th March, 1919) the establishment of further war funds has been considered undesirable; but, in view of the urgent necessity to afford relief to children in the devastated area of Central Europe, Government authorized the raising of funds by a general appeal and placed the services of the War Funds and the High Commissioner's offices at the disposal of persons and societies, &c., who were charitably inclined. As a result thereof over £50,000 was handled and transmitted free of cost.

In response to an appeal from the British Legation, Peking, to assist famine-stricken Chinese the machinery of the Department was made available, and a sum of over £1,200 was transmitted free of charge.

SOLDIERS' AND HISTORICAL GRAVES.

The index of the old soldiers' and historical graves, embodying all the information collected since 1911, denotes that there are 954 veterans' and sixty-five historical graves. There are forty-six monuments of historical interest; and in many old burial-grounds the graves of veterans of the Maori wars are unmarked, and approximately thirty small monuments still require to be erected.

Shortly after the signing of the armistice the N.Z.E.F. War Graves Committee, as advisory body to the Government, was appointed to consider the policy of the Imperial War Graves Commission as applicable to the graves of members of the New Zealand Expeditionary Force who died in New Zealand. The Committee's recommendations were approved by Cabinet, and the treatment of graves in New Zealand will be carried out on lines similar to that being done by the Imperial War Graves Commission in Belgium, France, Egypt, and the United Kingdom. "War graves" are deemed to be—(1) Graves of soldiers who died while still serving; (2) graves of members of the New Zealand Expeditionary Force dying within twelve months from the date of discharge, and whose deaths were due to disabilities contracted in or aggravated by war service; (3) those who die as the result of a war disability after having been continuously under treatment since discharge from the New Zealand Expeditionary Force. In addition to these graves the Government will undertake similar work at Samoa, Niue Islands, at ports of call *en route* to and from the overseas bases, and on the graves of all soldiers and sailors of the Allied Forces coming within the meaning of the conditions laid down. The design of the headstone selected is the same as that erected on overseas graves, but the material is to be New Zealand granite in place of Portland stone. The headstones are to be 2 ft. 6 in. in height, 1 ft. 3 in. in width, and 3 in. in thickness, on which will be cut a cross bearing the New Zealand emblem (the fern-leaf), the letters "N.Z.E.F.," and the soldier's regimental number, rank, name (in full), unit, and date of death. In all cemeteries in which there are not less than fifty war graves two memorials, the "Cross of Sacrifice" and the "Altar of Duty," will be erected. In memory of those of our men who were buried at sea from transports and hospital ships voyaging between New Zealand and the overseas bases, monuments are to be erected at Auckland, Wellington, Christchurch, and Dunedin, bearing the names of the men from the respective districts.

The total deaths of returned soldiers and details in the training-camps in the Dominion is approximately two thousand, but it is anticipated that the number of war graves will not exceed one thousand six hundred.

In the meantime temporary crosses are being placed over war graves, and to date graves have been temporarily marked in this manner in the following cemeteries: Waikumete, Waikaraka, Purewa, O'Neill's Point (Auckland), Hamilton, Cambridge, Te Aroha, Rotorua, Palmerston North, and Karori—a total of three hundred and fifty.

Arrangements have also been made to keep all the graves tidy, pending the completion of permanent work.

WAR MEMORIALS.

Subsequent to the termination of the war the question of granting financial assistance in connection with the erection of war memorials was considered by the Government, and it was decided not to subsidize collections of this nature, it being deemed that such moneys should be raised locally. The powers and authorities of local bodies were accordingly extended under section 15 of the Finance Act, 1919, to include the provision and maintenance of approved war memorials as therein defined. This legislation also provided for the erection of a memorial on any road or street under the control of the local body concerned.

During a visit to Great Britain Mr. Hurst Seager, of Christchurch, interested himself in war-memorial designs, and, having collected a number of illustrations representing the best work which had been produced by British artists, he very kindly presented these to the Government. Many of the exhibits are photographs which Mr. Seager was enabled to take in the Royal Academy Exhibition through the courtesy of the artists and the Royal Academy authorities. The designs reached Wellington in June, 1920, and immediately thereafter were exhibited at Wellington, Auckland, Christchurch, and Dunedin. A selection of thirty-eight of the designs considered to be most suitable

and likely to be within the range of the finances of the committees throughout the Dominion was made, and photographic copies thereof sent to local bodies and memorial committees throughout the Dominion, where they were on exhibition for periods varying from three to seven days. Many letters of appreciation have been received from local bodies and committees, which go to show that the designs have served a useful purpose. The designs reflect great credit on the taste and judgment of Mr. Seager.

MANUSCRIPTS PRESENTED BY SIR GEORGE GREY.

Amongst the public gifts made by Sir George Grey to South Africa when he left that colony was a number of books, letters, and manuscripts referring to New Zealand. In like manner his gift to Auckland City contains a good deal of literature relating to South Africa. On several occasions the New Zealand Government has communicated with the Government of the Union of South Africa regarding an exchange, and in September last the Prime Minister of the Union of South Africa, Cape Town, was asked if he could kindly see his way to introduce legislation to enable the trustees of the South African Public Library, Cape Town, to enter into negotiations with the Auckland Public Library for the exchange. A reply has now been received from the Right Hon. J. C. Smuts, enclosing a copy of an Act passed by the Legislature of the Union of South Africa vesting the Grey Collection in South Africa in the trustees of the South African Public Library, Cape Town, and empowering the trustees to exchange the books and manuscripts relating to the Maoris of New Zealand and to Polynesia for the books and manuscripts relating to South Africa or its people in the Grey Collection in the Auckland Public Library. In forwarding the Act Mr. Smuts states that he is in entire agreement with the New Zealand Government that it is highly desirable these exchanges should take place.

The Auckland City Council has been supplied with a copy of the South African Act, and it is hoped that the necessary arrangements will be made at an early date.

ANIMALS PROTECTION ACT.

Acclimatization Districts.

The boundaries of the Marlborough and North Canterbury Acclimatization Districts were defined, and the Waitaki Acclimatization Society deposited amended rules.

Shooting Season.

Open game seasons were declared in every acclimatization district. Following the usual practice, licenses to sell game were not issued. It was again possible to declare short open seasons for the taking or killing of paradise duck in certain southern acclimatization districts.

Deer.

Open seasons for deer-stalking were, as usual, provided for in the various acclimatization districts in which these animals exist, and from reports received some good heads were taken. It becomes more evident each year that a comprehensive system of deer-culling will have to be carried out.

Tuatara Lizards.

Good work is being done by the keepers on island sanctuaries in destroying cats, hawks, and goats.

Opossums.

During the session of 1920 an Animals Protection Amendment Act was passed making provision to declare an open season for the taking or killing of opossums; and early in the new year a conference was held, consisting of representatives of acclimatization societies, Government Departments, the fruitgrowers' association, skin-dealers, and others, including Professor Kirk, of Victoria College, Wellington, the object being to draw up regulations which would meet all the varying conditions affected. It was found necessary, among other things, to authorize the destruction of opossums at any time in any registered orchard or any certain orchard areas. It was also suggested that there should be a royalty payable of 1s. on every opossum-skin, and that provision be made to enable the Governor-General to fix the proportion of fees, fines, and royalties payable to acclimatization societies. Very great interest is being taken in the matter throughout the Dominion, more especially in those districts in which opossums are plentiful; and it is believed that a fair amount of revenue will be received, and that possibly a considerable industry may eventually be developed.

It was decided that as the matter was in its infancy it would not be desirable to have an open season at present for a lengthy period, and it was decided that the season should be limited this year to the month of June.

Wapiti and Moose.

On the 3rd March, 1905, ten wapiti (three males and seven females) were liberated at the head of George's Sound, while on the 9th April, 1910, ten moose (four bulls and six cows) were liberated at the head of Dusky Sound. Considerable interest has been taken in the liberations, and to ascertain whether they had become acclimatized it was decided to send the Conservator on an expedition of inquiry. In the absence of a steamer service the journey from Bluff to the sounds was undertaken in a small sailing-craft. On arrival at the locality where the wapiti were liberated several landings were made, and on the western end of Lake Katherine a fine wapiti hind was seen, while at this and other places numerous tracks and footprints were discovered. In the vicinity of Supper Cove—this being the spot where the moose were liberated—many landings were made, and, although none of the animals were actually sighted in the dense bush, there was abundant evidence of their presence. It was observed that the bark had been eaten off trees to a height of 12ft., and clear-cut hoof-marks were seen which measured 6½ in. wide by 5 in. long. With a view to obtaining further information on the subject it has been decided to make an investigation on the eastern side of the mountain-chain in Fiordland during the coming season.

Inland Fisheries.

The netting of trout in Lake Rotorua between the years 1914 and 1917 for the purpose of reducing their number and restoring them to their normal condition was so effective that no netting has been necessary for the last two seasons. Similar operations commenced on Lake Taupo have had to be abandoned for the time being owing to the high cost of labour and the difficulty in transporting the fish to market.

The arrangement whereby tourists and others at Taupo may have their catches cured at a cost of 10s. per dozen fish is again in operation this season. From present indications the number of fish so treated will exceed twelve hundred.

Hatchery.

During the season 880,000 ova and 491,000 fry were distributed. The ova and fry were disposed of to various acclimatization societies and to the Governments of New South Wales and Fiji.

With the object of improving the fish in the lakes a consignment of 250,000 rainbow-trout ova, from Lake Hawea, was hatched and liberated. It is proposed to obtain a further consignment during the coming season.

CINEMATOGRAPH-FILM CENSORSHIP.

For some time past films have been classified into "adult" and "universal" films, but, unfortunately, full information regarding this is not always advertised by the proprietors of picture-theatres. "A" certificates—i.e., certificates recommending the picture as being more suitable for adults than for children—were issued in 105 cases. As from the 1st May, 1921, any film or portion thereof in which thieving, robbery, murder, or suicide is made the feature of such film shall not be passed for exhibition; but this does not apply to classical works.

Several complaints in respect to posters and other advertising-matter have been received. In each case the matter complained of was found to be a breach of good taste and calculated to have a pernicious effect on certain types of mind, but no effective legal remedy is open. The question of legislation prohibiting the display of any such matter is receiving attention.

During the year 3,146 films, amounting to 4,920,000 ft., were examined, and fees amounting to £1,584 received. Approval was refused in thirty-eight cases, while 240 films were approved only after excisions had been made to the satisfaction of the Censor. No appeals were made against the Censor's decision.

TURNBULL LIBRARY.

The library was formally opened on the 28th June, 1920, in the presence of a number of prominent citizens. Rules for admission to and use of the library have been drawn up, and found to meet the requirements of those interested. The hours of admission have been fixed at from 10 a.m. to 4 p.m., Monday to Friday inclusive, and from 7 p.m. to 9 p.m. on Monday and Thursday.

The report of the Advisory Director and Librarian gives details of valuable donations received during the year, and it is gratifying to record the liberality displayed.

NEW ZEALAND HISTORY SECTION.

The "History of the Wars in New Zealand," embracing the three decades of the Dominion's pioneering period, is now being completed by Mr. James Cowan, and it is expected that the first volume will be published early next year. The author's research work throughout the Dominion has resulted in the collection of a very large amount of original material which otherwise would have been lost; and the exploration of battle-grounds and other historical places has been fruitful in topographical notes and in field sketches and photographs to illustrate the work.

MAORI ANTIQUITIES ACT, 1908.

Under the provisions of this Act the Governor-General may acquire on behalf of New Zealand such Maori antiquities as he deems expedient. "Maori antiquities" include Maori relics, articles manufactured with ancient Maori tools and according to Maori methods, and all other articles or things of historical or scientific value or interest and relating to New Zealand.

The late Major Broun, who was for many years the sole authority on Coleoptera (beetles) in New Zealand, bequeathed his collection of over two thousand type specimens to the British Museum, to be held for reference by students. The question of the export of the collection is at present the subject of correspondence with the British Museum.

RACE MEETINGS ACT, 1909.

The Race Meetings Act, 1909, which does not apply to horse-racing conducted under the authority and control of a racing club authorized to use the totalizator, provides that no horse-racing shall take place except under the authority and control of a racing club holding a license under this Act.

While 117 licenses were issued for the racing-year 1911–12, only fifty-five were issued for the racing-year ending 31st July, 1921.

STAFF.

The relieving staff of this Department, which was instituted by the Public Service Commissioner prior to the outbreak of the war, for the purpose of furnishing a staff of officers who would be available for emergency work in all Departments as occasion required, was found to be of great value during the period of the war. During the year a gradual process of transfer to Departments has taken place, and the relieving staff is now down to a bare minimum. All vacancies in the General Division of the Department have been filled by the appointment of returned soldiers.

It is with pleasure I acknowledge the loyal and efficient services of the executive officers and members of the staff during the past year.

I have, &c.,

J. HISLOP, Under-Secretary.

APPENDIX.

I REPORT OF THE GOVERNMENT STATISTICIAN.

Census and Statistics Office, Wellington, 20th May, 1921.

SINCE my return to New Zealand in August last after attending the conference of Statisticians of the British Empire I have devoted my energies principally towards effecting alterations and improvements in certain branches of statistics, enabling New Zealand to do her part towards the attainment of uniformity throughout the Empire, one of the principal purposes of the conference.

MIGRATION STATISTICS.

Hitherto our migration statistics have been compiled from monthly statements of arrivals and departures supplied by Collectors of Customs throughout the Dominion, and, while accurate, were far from informative, in that they disclosed merely the sexes of migrants, the country whither bound or whence arriving, the port of arrival or departure, and, in the case of arrivals, the country of birth. In co-operation with the Comptroller of Customs I have now arranged, as from the 1st April, 1921, for an individual form to be filled in for each arrival and departure, containing very full particulars from which important statistics can be compiled. Under the new scheme it will, for instance, be possible to differentiate, as regards arrivals, between permanent additions to the country's population, persons visiting the Dominion for business or pleasure, and New-Zealanders returning from abroad. The ages, civil condition, occupations, &c., of arrivals and departures can similarly be placed on record; and the scheme generally will be a most useful addition to our social statistics, and conform to the general scheme recommended at the conference for uniformity in these statistics throughout the Empire.

CENSUS OF 1921.

The census-taking is now complete, having been carried through very successfully with the co-operation of the Post and Telegraph Department, the machinery of which was again largely utilized, as in 1916, for the enumeration-work. Owing to high labour and other costs the census collection will be found to have been much more costly on this occasion than in 1916, a state of affairs which is, of course, inevitable. It is anticipated, however, that, with the utilization of mechanical appliances in accordance with the Government's instructions, a considerable saving in the cost of tabulation will be effected. An officer was sent to New York some months ago to gain a full knowledge and experience of the machines to be used, which are now on the water *en route* to the Dominion.

PUBLICATIONS.

Among the publications principally affected by the recent shortage of paper were the "New Zealand Official Year-book" and other publications under my control. The greatly reduced circulation and size of the Year-book (3,500 copies of 400 pages, as compared with the former 6,000 copies of 1,000 pages) have served to accentuate the fact that from one cause or another—shortage of staff and lack of paper, principally—recent issues of this, the principal of all Government publications, are, with the exception of the 1919 volume, below the standard of, say, 1914 and 1915. The Hon. the Minister of Internal Affairs has now instructed that in its next issue the Year-book is to be restored to its former size and circulation, and has authorized a policy which will result in the permanent improvement of the volume as a full and authoritative book of reference on all branches of the Dominion's activities and all aspects of her social and economic characteristics and progress.

REGISTRATION OF ALIENS

The Dominion Register of Aliens shows the total number registered as 9,021, against 8,581 for last year. Of the total number registered 3,008 were born in China, while 706 are British-born but have lost their British status by virtue of naturalization, marriage, &c.

MALCOLM FRASER, Government Statistician.

The Under-Secretary, Department of Internal Affairs, Wellington.

II. REPORT OF THE REGISTRAR-GENERAL.

Registrar-General's Office, Wellington, 14th June, 1921.

I give hereunder a statement of the business transacted by this Department during the last five years:—

Year.	Birth Entries.	Death Entries.	Marriage Notices received and Certificates issued.	Marriages solemnized.	Marriages by Registrars (included in previous column).
1916	28,509	10,596	8,450	8,231	1,729
1917	28,239	10,528	6,687	6,464	1,589
1918	25,860	16,364	6,464	6,227	1,437
1919	24,483	10,808	9,988	9,519	1,801
1920	31,464	12,150	12,608	12,245	2,143

The figures for 1920 include *all* transactions under the Marriage and Registration Acts, such as correcting entries, adoption entries, legitimations, still-births, and marriages of Maoris under the Marriage Act, not previously included.

I also give a statement showing the number of marriages of Natives solemnized during the same period under the Native Land Act, and the number of Maori registrations effected under the regulations relating to the registration of births and deaths of Maoris :—

Year.	Maori Births.	Maori Deaths.	Maori Marriages.
1916	1,020	761	197
1917	1,235	729	205
1918	1,171	1,937	193
1919	995	1,194	185
1920	1,001	859	198
			(approximate)

In addition to the business referred to above, the registration of medical practitioners, dentists, and officiating ministers is undertaken by this Department.

The following tables show the additions to and removals from the medical and dentists' registers during the last five years :—

Medical Register.

—	1916.	1917.	1918.	1919.	1920.
Number on register on 1st January	948	962	969	985	1,015
Number added during year by registration	37	27	30	48	71*
Number added during year by restoration	5	1	3	3	5
Number removed during year on evidence of death ..	10	21	17	20	25
Number removed during year by direction of Medical Board—					
Letter not delivered and returned to Registrar-General	18	..	..	1	..
Number removed during year by direction of Supreme Court	..	..	..	..	2
Number on register on 31st December	962	969	985	1,015	1,064

* Includes 36 with New Zealand qualifications.

Dentists' Register.

—	1916.	1917.	1918.	1919.	1920.
Number on register on 1st January	767	764	759	753	751
Number added during year by registration	3	1	..	5	1
Number removed during year on evidence of death ..	6	6	6	7	5
Number on register on 31st December	764	759	753	751	747

On the 31st December last there were 1,695 ministers on the list of officiating ministers under the Marriage Act having authority to solemnize marriages in New Zealand, as follows : Church of the Province of New Zealand, commonly called the Church of England, 453 ; Presbyterian Church of New Zealand, 381 ; Roman Catholic Church, 275 ; Methodist Church of New Zealand, 243 ; Congregational Independents, 31 ; Baptists, 64 ; Church of Christ, 31 ; Salvation Army, 117 ; other denominations, 100.

The number of searches made and certificates issued last year by the Head Office was as follows : For Pensions Department, 6,390 (including 2,994 for war-pension purposes) ; for National Provident Fund, 8,898 ; for Labour Department, 1,458 ; for Education Department, 912 ; other searches (for public, &c.), 2,323 ; certificates issued, 6,671 : total searches, &c., 26,652.

The revenue for the last five financial years was as follows : 1916–17, £13,684 ; 1917–18, £12,450 ; 1918–19, £12,811 ; 1919–20, £18,439 ; 1920–21, £19,569.

Searches for other Departments of the Service are made free of charge. If these were paid for, the revenue of this Department would be augmented by over £1,000 a year.

The expenditure for the last five years was—1916–17, £9,175 ; 1917–18, £9,176 ; 1918–19, £11,020 ; 1919–20, £14,348 ; 1920–21, £17,801.

W. W. Cook, Registrar-General.

The Under-Secretary, Department of Internal Affairs, Wellington.

III. REPORT OF THE DOMINION ANALYST AND CHIEF INSPECTOR OF EXPLOSIVES.

LABORATORY REPORT.

Dominion Laboratory, Wellington, 14th June, 1921.

During the year various Government Departments forwarded samples as follows:—

Customs	289	Public Health— <i>continued</i> .	
Defence Forces	10	Dunedin	24
Explosives branch	264	Napier	238
Justice (Police)	12	Wanganui	47
Mines—		Wellington	2,064
Geological Survey	114	Public Works	51
Head Office	56	Railways	11
Engineers and Inspectors	115	Other Departments	21
Prospectors	276	Public bodies and Crown Commissioners	34
Post and Telegraph	105	Research (Laboratory)	29
Public Health—		Miscellaneous	44
Auckland	21		
Christchurch	66	Total	3,891

The total is 300 higher than for the preceding year.

CUSTOMS.

The work for the Customs Department shows a decided increase, and some of the samples were very complex, involving the separate determination of many constituents. As the reports are for official use only, no comment can here be made.

DEFENCE.

Apart from the examination of cordite and exploders by the explosives branch of the Laboratory the work for this Department consisted of a few analyses of milk, water, and liquor.

JUSTICE.

Only twelve samples were received from the police during the year. Seven of these were in connection with an attempted poisoning case, when strychnine was found in condensed milk, and arsenic in a joint of mutton. Among the others was a counterfeit Australian florin, composed of 85 per cent. of tin and 15 per cent. of antimony.

MINES.

From the Geological Survey there were received twenty coals; twenty-three rocks, for complete analysis; seven limestones; sixteen clays, including an interesting series from Southland collected by Professor J. Park; two samples of graphite from Pakawau, Collingwood (both, unfortunately, of low grade); copper-ore from Puramahoi, Takaka; ironsand from one or two localities; and some manganese-ore of very good quality from Whangarei. A greensand overlying the marl at Burnside contained 4.3 per cent. of phosphoric anhydride.

The Head Office contributed six samples of coal from various fields; two of shale; an assortment of minerals, chiefly ores of iron, mercury, and lead; and forty-five parcels for assay for gold and silver. Some mine-dusts were examined and numerous analyses of mine-air made for the Inspecting Engineer and his staff.

Prospectors' samples included chrome-iron ore from Croisilles, containing 53.5 per cent. of chromic oxide, and alum shale from the foreshore, Raglan. Good gold-bearing stone was received from Arrowtown and Bannockburn.

POST OFFICE.

The samples examined came principally from the engineering and stores branches. They comprised beeswax, electrolyte for accumulators, house-line, ink, jointer's metal, lubricating-oil, shellac, solder, sulphuric acid. Several hydrometers were carefully standardized. Two commercial preparations were analysed to determine whether any risk would be involved in their transmission by post.

PUBLIC HEALTH.

Foods and drugs in great variety were examined for the Department of Public Health. The list comprises boiled mutton, brandy, butter, calves-foot jelly, Carlsbad salts, cheese, citric acid, cocoa, coffee, coffee-essence, condensed milk, cornflour, cordials, cream, cream of tartar, custard-powder, dried figs, dripping, egg noodles, egg-powder, Epsom salts, essence of lemon, extract nucis vomicæ, extract of vanilla, flour, fruit butters, fruit mincemeat, fruitena, granose biscuits, ground ginger, herrings in tomato-sauce, ice-cream, icing-sugar, ices, jam, jelly-crystals, Kruschen salts, lard, lime-water, margarine, milks, mustard, oatmeal, olive-oil, pork and beans, potted meats, powered cinnamon, preserved pears, rennet, Rotorua salts, salad-oil, sausages, semolina, sodium bicarbonate, sugar (for poison), tomato-sauce, tincture of hyocyamus, tincture of iodine, white pepper, water (for poison), vinegar, Zanol food-colours, Zanol food-flavours.

The necessity for rigid inspection is shown by the results. Of sixty-two samples of butter, six contained excess of water.

The cordials received were not satisfactory, on the whole. Two were artificially coloured, one contained preservative, one was deficient in strength, one contained tartaric acid. In one or two instances the labelling was not in accordance with the regulations.

Boric acid was found in two lots of cream. One brand of jelly-crystals had been prepared from very inferior gelatine. Several samples of cream of tartar contained comparatively large amounts of lead, ranging from 0.6 to 0.8 grains per pound. Some of the food-colours examined were not colours permitted by regulation. Two lime-waters contained chlorides, indicating insufficient washing of the lime, or the use of ordinary tap water instead of distilled. One sample was only half the required strength.

A considerable amount of mislabelling of perfectly sound food products was noted during the year. Custard-powders frequently had the word "cream" or "egg" prominently on the label, although they contained no trace of either. Vinegars deriving only one-fifth of their acidity from malt were labelled, notwithstanding, "Malt Vinegar." Boric acid was frequently detected in butter which did not have the required notification on the wrapper. In one case a condensed milk was branded in large letters "Evaporated Cream." The pork in a pound tin of "pork and beans" did not usually amount to more than one-third of an ounce. Other instances might be given of similar labelling deliberately intended to mislead the consumers.

Milk.

There were 2,064 samples of milk examined which had been taken under the Sale of Food and Drugs Act. With the exception of one or two check samples, they all came from Wellington City and Province, and Hawke's Bay, Taranaki, Marlborough, Nelson, and Westland Provinces.

Wellington City.—The City Corporation inspector must again be credited with all but a small percentage of the 1,665 samples taken in the city. Of these, ten were watered, five had been partly skimmed, ten contained an undue proportion of dirt, nine were decidedly stale, four were slightly deficient in fat, and six others slightly below the standard in non-fatty solids. The highest amount of added water detected was 20 per cent., in two samples, while the worst case of skimming represented the removal of 40 per cent. of fat from a milk of standard quality.

The results for other localities are summarized in the following table, from which it is apparent that milk-adulteration is still a common practice in some country districts :—

Locality.	Samples received.	Seriously skimmed.	Watered.	Slightly below Standard.	Locality.	Samples received.	Seriously skimmed.	Watered.	Slightly below Standard.
Blenheim ..	12	..	..	..	Napier.. ..	97	2	4	4
Carterton ..	5	..	..	..	Nelson.. ..	21	..	5	2
Dannevirke ..	14	..	3	1	Otaki	1	..	1	..
Denniston ..	4	..	..	..	Palmerston North	17	..	3	1
Eltham	1	..	..	..	Petone.. ..	12	..	..	..
Featherston ..	1	..	..	..	Shannon	1	..	..	..
Feilding	5	..	..	..	Stratford	3	..	1	1
Foxton	2	..	..	..	Taihape	3	..	..	..
Gisborne	63	1	2	1	Taranaki Hospital	22	..	3	..
Greytown	6	..	..	..	District				
Hastings	31	..	2	2	Wairoa (H.B.) ..	3	..	..	..
Hawera	23	..	3	..	Waipawa	7	1	..	1
Hutt (Lower) ..	12	..	1	..	Waipiro Bay	2	..	..	..
Hutt (Upper) ..	6	1	2	..	Wanganui	23	..	4	..
Johnsonville ..	1	..	..	..	Westport	1	..	..	..
Khandallah ..	3	..	..	..		
Levin	1	..	..	..	Totals, 1920	409	5	34	13
Marton	2	..	..	..		
Masterton	4	..	..	..	Totals, 1919	234	..	14	8

Plunket Nurse.—There has been a decided increase in the number of analyses made for Plunket nurses, who appreciate highly the assistance thus given. Fifty-three samples were received during the year.

PUBLIC WORKS.

The work carried out for this Department included the examination of some waters that had caused corrosion of pipes, and the analyses of rocks from various strata at the proposed Arapuni Dam site. An investigation was also required as to the cause of the rapid deterioration of some Muntz-metal sheathing after only a few months' use. This developed into an extensive research, the results of which will be published in the *Journal of the Society of Chemical Industry*.

As a result of this investigation it now appears possible to ascertain beforehand with some degree of certainty whether a given sample of Muntz metal will corrode rapidly or not, and an examination of all sheathing prior to use should result in considerable saving in the upkeep and repairs of structures built on Muntz-metal sheathed piles.

OTHER DEPARTMENTS.

Some coals and boiler-waters were analysed for the Railway Department. Several samples relating to kauri-gum and gum-bearing peats were examined for the Kauri-gum Commissioner. A few mineral waters were reported on for the Department of Tourist and Health Resorts. In addition the chemical knowledge of the officers of the Laboratory has been at the disposal of all Government Departments when required, and several Departments have made use of it on numerous occasions during the year.

RESEARCH.

Clay.—Work has been quietly continued on New Zealand clays, and by combining firing-tests with chemical analyses a large amount of valuable information is being steadily accumulated.

The best clays received were a light-coloured highly refractory clay resulting from the decomposition of rhyolite, Whangarei; a porcelain clay from Tadmor, Nelson; and clay with excellent moulding properties, yielding bricks and tiles of smooth exterior and pleasing appearance, from Mangawhero Stream, Otorohanga.

Quite a number were suited for the manufacture of ordinary bricks, if burned between certain limits of temperature. Several exhibited defects, as excessive shrinkage, development of cracks, swelling in the furnace, and ready fusibility.

Specimens of all samples received, and small bricks and tiles made from them, are kept in the laboratory, and may be inspected by any one who desires information on our clay resources. The work so far is of a preliminary nature only, and is capable of great extension. Grading and blending of the clays are subjects that remain practically untouched.

Muntz Metal.—This has been referred to under the heading “Public Works.”

New Process for the Recovery of Mercury.—At the request of the Mines Department an investigation was undertaken into the recovery of mercury from Puhipuhi cinnabar-ore. An alternative to furnace treatment was desired, and a process was therefore proposed consisting of concentration of the ore by oil flotation, solution of the concentrates in sodium sulphide and caustic soda (Thornhill's solution), and the recovery of the mercury by electrolysis. Mr. A. H. V. Morgan, Director of the Waihi School of Mines, rendered valuable assistance in determining suitable conditions for oil flotation. The process has not been advanced beyond the laboratory stage.

ACCOMMODATION.

The number of workers at present employed, and the increasing variety of the work, make further accommodation imperative if reasonable efficiency is to be maintained. It is also very desirable from the standpoint of health. At the present time much urgent and useful work, including research, cannot be undertaken owing to the lack of room to accommodate the requisite apparatus and staff.

STAFF.

All the members of the staff have taken a deep interest in their duties, and have loyally co-operated throughout the year in the work of the Laboratory.

REPORT ON THE ADMINISTRATION OF THE EXPLOSIVE AND DANGEROUS GOODS ACT, 1908,
FROM 1ST JULY, 1920, TO 30TH JUNE, 1921.

Amended Regulations.—The following amendments have been made to the regulations during the year :—

Amendment No. 6—definition of “gelignite”: During the war it was impossible for the explosive-manufacturers to obtain potassium salts, and the definition of “gelignite” was amended by the British Home Office to permit the replacement of potassium nitrate by the corresponding sodium salt. The latter is highly hygroscopic, and the explosive in which it was used gave much less satisfactory results in New Zealand than the potassium-nitrate gelignite. There are two factors contributing to this result. The climate of the country is, on the whole, decidedly moist—particularly in the mining districts—and, owing both to the distance of New Zealand from the manufacturing countries and also the peculiar difficulties of internal transport, it is necessary to hold large stocks of explosives in the country, and for considerable periods. Now that supplies of potassium nitrate are again obtainable it is considered that the two kinds of gelignite should be distinguished from one another, and the amending regulation provides that the name “gelignite” shall be used only in respect of an explosive containing potassium nitrate.

Amendment No. 7—conveyance of explosives in coastal boats: It was found that explosives were being carried by sea under conditions that were very unsatisfactory, and the regulation provides that before receipt of explosives a Surveyor of Ships shall examine the vessel to see that the provisions made for handling and stowage of explosives are satisfactory.

Amendment No. 8—conveyance of explosives in motor vehicles: In some districts horse-drawn vehicles have been almost entirely replaced by motors, and to meet these conditions the amendment provides that not exceeding 100 lb. of explosives may be conveyed in any type of motor vehicle, while for the carriage of larger quantities a vehicle of special construction is required to be used. The construction prescribed is that approved by the British Home Office as the result of the war-time experience in the conveyance of explosives.

Amendment No. 9—scale of fees for licenses: An examination of the accounts of the branch disclosed the fact that for the financial year ended 31st March, 1921, the receipts amounted to less than one-third of the expenditure. The fees charged for licenses are the same as in 1914, when the regulations under the Act came into force, and the charges for the storage of explosives in Government magazines have not been altered since 1907. In 1914 the scale of fees was estimated to provide sufficient revenue to pay the greater part of the cost of administering the Act, but the greatly increased cost of salaries, travelling, labour, and maintenance of buildings and plant due to the war has resulted in the unsatisfactory position shown. While it is recognized that the expenditure incurred in the preservation of public safety—which is the object of the work of the branch—is to some extent a legitimate charge against the public funds, it is considered that the explosives trade should pay a greater percentage of the cost of its own control. The Government accordingly decided to increase

the fees to an extent estimated to produce a revenue amounting to at least two-thirds of the expenditure. In order that the increased burden shall be evenly spread over the trade, and shall not press unduly on the small dealer, the amended scale provides that the additional revenue will be derived mainly from the importation license, the fee for which has been increased from 5s. to £1 per ton. This represents an additional charge of 4½d. on each 50 lb. package of explosives. The only other increase is in the license fees for private magazines to store quantities of explosives exceeding 5 tons, and will affect only a few of the wholesale merchants.

Staff.—The staff remains the same as on the date of the last annual report. Owing to there being insufficient accommodation in the Laboratory the branch has been removed to temporary premises in an adjacent building. The officer in charge has been appointed Deputy Chief Inspector.

Importation.—Licenses were issued for the importation of the following explosives during the year: Gelignite, 1,077,200 lb.; gelignite-dynamite, 50,000 lb.; blasting-gelignite, 40,000 lb.; quarry monobel, 30,000 lb.; ligdynite, 56,400 lb.; A2 monobel, 256,500 lb.; monobel No. 1, 60,000 lb.; Viking powder, 28,150 lb.; stomonal No. 1, 10,000 lb.; bobbinit, 6,500 lb.; blasting-powder (grain and pellets), 416,001 lb.; sporting-powder, 16,767 lb.; total, 2,047,518 lb. Detonators, 1,939,000; fog-signals and fireworks, 1,898 packages.

These figures show a considerable increase over those for the previous year, but this is accounted for by the fact that the latter were abnormally low and the stock of explosives in the country was greatly depleted. This state of things continued during the early portion of the past year, but recent importations have established a reserve supply of explosives, which, while not quite up to pre-war standard, gives reasonable security against shortage.

Manufacture.—The only factories licensed for the manufacture of explosives were the fireworks-factory of Mr. H. F. Bickerton, at Wainoni Park, Christchurch, and the Colonial Ammunition Company's small-arms ammunition factory at Mount Eden, Auckland.

Storage.—The total number of magazines licensed for the year was 227, being an increase of fifty-nine on the previous year. Of these licenses eighty-nine were for quantities up to 300 lb., seventy-four were for quantities between 300 lb. and 2,000 lb., and sixty-four for quantities over 2,000 lb.

Public Magazines.—There are still three Government magazines available for public use—viz., at Wellington, Greymouth, and Dunedin. The question of establishing Government magazines at Auckland and at the Bluff will come up for consideration during the coming year. The magazine accounts for the financial year show that after making an allowance for depreciation of buildings and plant, but not for interest on capital expenditure, there has been a loss on the year's working for the three magazines of about £30. The past year has, however, been abnormal, since there was a shortage of explosives during the greater part of the year, and on several occasions the magazines were practically empty. In addition to the Government magazines the local authorities at Paeroa and New Plymouth maintain magazines for public use.

Licensed Premises.—During the year 640 licenses were issued in respect of premises licensed to sell explosives. This is an increase of thirty-three on the previous year.

Accidents.—The only accident in connection with the storage or transport of explosives which has come under the notice of the Department was an explosion which occurred at Te Puke. In this case a boy was carrying about 5 lb. of blasting-powder from the magazine to the shop. The boy was so severely burned that he died shortly afterwards, and it appears from a statement made to his father that some matches in his pocket were ignited by friction against a bunch of keys, and that these set fire to the powder, which he had placed on the ground while tipping out the contents of his pocket. The boy was only fifteen years and three months of age, and the Department is taking legal proceedings against the firm concerned for breach of the regulation which requires that a person under the age of sixteen years shall not be employed in any magazine except under supervision.

Conveyance.—The number of licenses issued during the year was 299, being a decrease of seven on the previous year.

Legal Proceedings.—During the year it was found necessary to take proceedings against a number of persons for breaches of the Act. The following table gives details of these prosecutions:—

Place.	Offence.	Fine.
Geraldine ..	Storing 275 lb. of explosives in an unauthorized place—to wit, in a storeroom	£5 and costs.
Ashburton ..	Storing 300 lb. of explosives in an unauthorized place—to wit, in a shed used for the storage of petroleum abutting on street	£10 and costs.
Oamaru ..	Storing 425 lb. of explosives in an unauthorized place—to wit, in a storeroom on corner of two streets	£25 and costs.
Kaupokonui ..	Storing 313 lb. of explosives and 3,000 detonators in an unlicensed magazine	£10 and costs.
Balclutha ..	Storing 385 lb. of explosives in an unauthorized place—to wit, a room in rear of shop premises	£10 and costs.
Takapau ..	Storing 165 lb. of explosives in an unauthorized place—to wit, in a bulk store	£4 2s. 6d.* and costs.

* 6d. per pound on explosives stored illegally.

I would again note that it is the policy of the Department not to take action except where gross breaches of the regulations have been committed by persons who have been warned regarding an offence, or where a practice is self-evidently dangerous. In all such cases a substantial penalty is asked for.

Condemned Explosives.—The following explosives have been condemned during the year for the reasons given: Electric detonators, 144,000 (insensitive flash composition); electric detonators, 3,500 (perished insulation); dynamite, 15 lb. (exudation); powder 10 lb., Viking powder 20 lb., quarry monobel 5 lb., gelignite 37 lb., sabulite 300 lb. (moisture-absorption).

Inspection and Testing.—Owing to the amount of work involved in the preparation of the Explosive and Dangerous Goods Amendment Act and regulations it has not been possible to do as much inspection-work as was anticipated in our last report. All districts in the South Island have been inspected during the year, but in the North Island the inspection has not been completed. A considerable amount of new ground has, however, been covered, and with the exception of the northern part of Poverty Bay every district has been inspected within the last eighteen months. As in past years, shipments of explosives arriving in New Zealand have been physically examined and tested for stability, and occasional tests made on explosives stored in Government and private magazines. The usual heat, silver-vessel, and moisture tests have also been made on military explosives for the Defence Department.

EXPLOSIVE AND DANGEROUS GOODS AMENDMENT ACT, 1920.

As forecasted in the last annual report, this Act provides for the issue of licenses and general administration by local authorities, but with the provision that where the local authority neglects or refuses to administer the Act it shall be administered by the Department.

In order to secure uniformity of administration it is provided that local-authority inspectors shall, for technical purposes, be under the control of the Chief Inspector, and the departmental Inspectors will in the course of their ordinary inspections throughout New Zealand visit premises licensed by local authorities in company with the local officer, and will advise the latter as to the interpretation of the regulations, and assist him in other ways.

Experience in other countries has shown that it is impracticable to include in the statute all the necessary details of a technical Act such as this, and the Act provides that most of the technical provisions shall be prescribed by Order in Council. Regulations were accordingly drafted in December, 1920, and were then submitted to a committee formed by the oil-importing companies, and the Department continued negotiations with this committee both by letter and interview until the regulations were finally gazetted at the end of April, 1921.

The months of January and February of the present year were spent by the officer in charge of the branch in visiting local authorities throughout New Zealand to discuss the provisions of the proposed regulations with the local officers who would administer the Act. The amended draft regulations were then printed, and copies were sent to ninety-five of the larger local authorities, to the committee representing the oil companies, to the Council of Fire Underwriters as representing the insurance companies, to the Wellington Automobile Club as representing the private-car owners, and to the Motor-garage Proprietors' Association as representing the garage trade. In each case the covering letter asked for comments on the regulations, and stated that these would be considered prior to the regulations being gazetted.

As a result of the representations made in the ensuing correspondence, and also of the deputation representing various interests which met the Hon. the Minister of Internal Affairs on the 14th April, a considerable number of amendments were made; and an undertaking was given that the regulations would not be enforced with respect to wholesale stores during the present year, and that in all cases reasonable time would be given to bring the premises into compliance with the Act.

The following are the principal provisions of the regulations:—

Exemptions.—No license is required for the storage of any quantity of benzine not exceeding $8\frac{1}{2}$ gallons kept for private use if stored within a borough or town district, or 58 gallons if stored outside these areas. (This does not include the benzine stored in tanks of motor-cars, which is completely exempted under all circumstances.) Provision is made, however, that local authorities may make by-laws under which licenses may be issued for the storage of larger quantities of benzine either without fee or a nominal fee, and thus continue the practice at present in force in some boroughs.

It is considered that any quantity of benzine exceeding $8\frac{1}{2}$ gallons stored under the conditions usually existing in private garages in town and suburban areas—where the garage and surrounding dwellings are wooden buildings—constitutes a serious fire risk. The issue of a license necessitates the inspection and approval of the premises, and is therefore the most convenient method of ensuring that satisfactory conditions are observed when larger quantities than $8\frac{1}{2}$ gallons are stored. Practically all the local authorities which have made by-laws on the subject under the powers of the Explosive and Dangerous Goods Act, 1908, have followed section 27 of that Act and prescribed an exemption of either 8 or 10 gallons. When the draft regulations were discussed with the local-authority officers the opinion almost universally expressed was that the exemption limit of $8\frac{1}{2}$ gallons (one case) should be continued.

Storage.—The regulations provide that in all cases the building shall be efficiently ventilated in order to prevent the formation, in case of leakage, of explosive or inflammable mixtures of petroleum-vapour and air. They also provide that provision must be made, either by isolating the store, by excavation, or by the erection of a sill across the doorway, to prevent the outflow from the storage place, in sufficient quantities to cause damage to surrounding buildings, of oil in case of leakage, or of burning-oil in case of fire. The "well" required will be not more than 9 in. deep in the case of a retail store or 3 ft. in the case of a wholesale depot. The storage building is required to be externally unflammable, and preferably constructed of brick, stone, or concrete. The use of a wooden-frame building covered with galvanized iron is permitted, but this type of store is required to be situated much farther from a dwelling or other protected building than a brick depot. The regulations will not prohibit the storage of reasonable quantities of benzine in a motor-garage of suitable construction or situated well away from dwellings, &c.

Where benzine is used as a solvent for trade purposes a considerable hazard is caused by the exposure of the benzine to the air, and the consequent formation of dangerous gases. The regulations

provide that benzine shall not be exposed to the air except under approved conditions contained in the license. A license is required for all premises where more than 3 gallons of benzine are kept for use in such work.

Conveyance.—These regulations refer mostly to the conveyance of dangerous goods in town areas, and are intended to be enforced where benzine, &c., is handled in large quantities, and where, as at ports of import, it is found necessary to convey leaky packages of dangerous goods. Provision is made that vehicles loaded with dangerous goods shall not be allowed to remain stationary during meal-hours or while waiting shipment, except at "parking-places" approved by the local inspector.

Marking.—These regulations provide that every package containing dangerous goods shall have attached a label which is separate from any advertising-matter, and is of definite size, colour, and shape. The object is to familiarize the public with a distinctive "dangerous goods" label which will be recognized at once, irrespective of the size and shape of the package, and even though defaced to some extent. The wording prescribed contains a concise statement of the particular dangers of the goods and the precautions to be observed in handling.

J. S. MACLAURIN.

The Under-Secretary, Department of Internal Affairs, Wellington.

IV. REPORT OF THE ACTING-DIRECTOR, DOMINION MUSEUM.

30th June, 1921.

Owing to the absence of the Director, Dr. J. Allan Thomson, through illness, the duty devolves on me of submitting the report on the operations and activities of the Museum for the past year.

GENERAL.

Routine activities have been carried on as usual, but, apart from these, much important work bearing on the future has been accomplished by the Director and his staff. The Director attended the first pan-Pacific scientific conference in Honolulu last year, and on the return journey visited Samoa and other islands. Following his return to the Dominion he visited and inspected the volcanic areas of the North Island. Since then a breakdown in his health has necessitated a complete rest from official duties. He has furnished the following statement on his visit to Honolulu and Samoa, and on the proposed volcanic observatory for New Zealand:—

"Pan-Pacific Science Congress.—In August, 1920, I attended the meetings of the first pan-Pacific Congress in Honolulu, as representative of the Government. This congress was initiated by the pan-Pacific Union, an association with headquarters in Honolulu, for developing the common interests of countries lying in or on the shores of the Pacific. The majority of the delegates came from the United States and the Hawaiian Islands, but there were representatives of Canada, Japan, Philippines, Australia, and New Zealand, so that, except for the absence of delegates from South America, the name of 'pan-Pacific' was well justified.

"The subjects discussed covered most branches of science having any regional aspect, and a large number of resolutions setting forth the needs for further research in the Pacific region were passed. These have already been issued in printed form in the preliminary report of the congress, and copies have been supplied to all the Government Departments in New Zealand interested, and to the principal scientific libraries. The full report of the congress will be somewhat in the nature of a gazetteer of scientific work in the Pacific, as for many sciences it will set forth what agencies have been at work, what progress has been accomplished, and what remains to be done. It should therefore prove a useful work of reference, and help to guide future work in the Pacific region into the most desirable channels.

"It was resolved that future congresses should be held at intervals not exceeding three years, and a committee, on which Professor C. Chilton, of Canterbury College, is the New Zealand member, was set up to arrange for future congresses. The first congress necessarily dealt with Pacific problems in a general manner, in the attempt to cover the whole ground. Future congresses may be expected to devote themselves more to particular problems affecting the country or part of the Pacific in which the congress is held. It is desirable that New Zealand should, for its own sake, take a prominent part in future congresses.

"Volcano Observatory, Kilauea, Hawaii.—Opportunity was taken during my presence in the Hawaiian Islands to visit the Volcano Observatory situated near the volcano of Kilauea, and to study the volcano problems presented by the Hawaiian system, and the methods adopted by the Observatory for their solution. This institution was commenced by a private association, but during the war came under the control of the United States Weather Bureau. The scientific staff consists of the Director, Dr. T. A. Jaggar, who is well known in New Zealand owing to his recent visit, and Mr. R. H. Finch, Physicist.

"Besides meteorological observations, the regular routine of the Observatory comprises the continuous recording of earthquake shocks and tremors, and measurement of the tilt of the ground, and periodical theodolite measurements of the height of the lava lake in the crater, together with the description of any unusual volcanic activity, and any changes in the ground. Besides throwing a flood of light on the nature of volcanic phenomena in general, the work of the Observatory has made the prediction of local eruptions possible, and the success of the predictions has already been established.

"*Proposed Volcano Observatory for New Zealand.*—As a consequence of the visit of Dr. Jagger to New Zealand in 1920, proposals outlined by him for a volcano observatory for New Zealand have been submitted to the Government. The New Zealand volcanic district, extending from Ruapehu to White Island, is in constant activity at one or other of the numerous vents. Disasters entailing loss of life have occurred at Tarawera, Waimangu, and White Island, and future disasters of a similar kind are at any time liable to occur. The Tarawera eruption was exceptional in that, although on the volcanic 'line' from Ruapehu to White Island, there had been no previous eruption in this vicinity for countless ages. Had an observatory recording local earthquakes existed in the district, possessed of the knowledge now acquired of volcanic phenomena, it is certain that both the place and time of the Tarawera eruption could have been predicted, and the serious loss of life been avoided. Viewed therefore merely as a policy of insurance, the erection and maintenance of a volcano observatory in this district is more than justified.

"The selection of the most suitable site is a matter of considerable difficulty, owing to the distance between the ends of the 'line' Ruapehu and White Island. It is possible that an observatory situated about the middle, near Tarawera, would fail to receive the minor shocks and tremors originating at either end of the line. Before any site is finally selected it is desirable that preliminary experiments should be made at two or more points, such as Waimarino and Rotorua, to determine the strength and character of the seismic phenomena and the centres of activity.

"*Western Samoa.*—On the return journey from Hawaii I spent six weeks in Western Samoa, during which I circumnavigated the Island of Upolu in a motor-launch, calling in at the chief villages, and also visited the eastern side of the Island of Savaii, and the crater of the recently extinct volcano Matavanu. Specimens of rocks and shells were secured for the Museum, but efforts to procure old Native artifacts were unavailing. The majority of the old weapons and implements of the Samoans appear to have been removed from the islands years ago.

"Consequent on my visit I prepared a paper on the geology of Western Samoa, which has been published in the *New Zealand Journal of Science and Technology* (Vol. iii, No. 2), and also furnished a report on the urgent scientific problems of Samoa, which is all under consideration by the Department of External Affairs."

MUSEUM BUILDING.

In former reports the urgent need of a new building to exhibit the valuable collections housed herein has been strongly emphasized. Serious attention must again be directed to the future. With the accumulation of collections the space for exhibiting them for the enjoyment and information of the people becomes a pressing problem—one, in fact, which cannot properly be solved under present conditions.

BOARD OF SCIENCE AND ART.

No meetings have been held during the past year. Prior to his departure for the Old Country and Europe Mr. H. F. von Haast tendered his resignation; and the loss by death of Mr. C. A. Ewen, who has always taken a keen interest in all matters relating to science and art, is recorded with regret. No new appointments have been made.

MUSEUM STAFF.

An addition to the staff was made in the appointment of Mr. W. R. B. Oliver, whose knowledge of zoology and botany materially strengthens these divisions, and enables work on the herbarium specimens to be proceeded with. The energies of the other members of the staff—Messrs. Best, Hamilton, and Phillipps, Miss Castle, Mrs. Phillips, and Miss Mestayer—have been devoted to their respective fields. Reports by officers are appended.

During the absence of Dr. Thomson I have filled the position of Acting-Director; and as Assistant Film-censor I have examined 456 films, totalling 1,028,000 ft. in length. Cuts ranging from a few feet to several hundred feet were made in seventy-seven, and sixteen were rejected as unsuitable for public exhibition.

NATIONAL HISTORICAL COLLECTION.

The papers, journals, books, and other historical material gathered since the establishment of this section have been transferred to the Turnbull Library.

NATIONAL WAR MUSEUM.

Four cases of Indian equipment, the "paying-off" pennant of H.M.S. "New Zealand," a number of trench-rattles, a small case of hand-grenades and bombs, &c., and sundry models of battlefield areas, were transferred to Trentham Military Camp for storage.

MUSEUM ART COLLECTIONS.

Authority was given for the painting of portraits of all New Zealand Expeditionary Force men awarded the Victoria Cross, and also for portraits of two New-Zealanders on service in the Imperial Force and Navy, and one in the Australian Expeditionary Force. So far six portraits have been received, and the others are reported to be nearing completion. It is hoped that at a later date a publication containing reproductions of the portraits and an account of the exploits of the officers and men who have gained the coveted Victoria Cross will be published for sale. Portraits of commanding officers, large canvases of famous battlefields, and the sketches made by the official New Zealand Expeditionary Force artist (Captain George E. Butler) have been received and are being framed. Eighty-four large lithographs of Imperial war activities, by eminent English artists, have also been received and framed. It is proposed to hold an exhibition in the Museum as soon as the Victoria Cross portraits are completed, pictures framed, and the collection of 100 war posters suitably mounted.

BOARD OF SCIENCE AND ART PUBLICATIONS.

Authority has recently been given for the publication of Manual No. 2, "Wild Life in New Zealand—Mammalia," and Bulletin No. 2, "The Portobello Marine Fish-hatchery," both by the Hon. G. M. Thomson, M.L.C. These are now in the hands of the Government Printer. The blocks for Professor C. A. Cotton's manual, "The Geomorphology of New Zealand," are nearing completion, and it is hoped that this work also will shortly be placed in the hands of the Printer.

New Zealand Journal of Science and Technology.—During Dr. Thomson's absence the office of Acting-Editor is being filled by Professor C. A. Cotton. The *Journal*, which has been slightly reduced in size on account of the paper-shortage, continues to fill an important place among the scientific publications of the world.

MUSEUM PUBLICATIONS.

Owing to paper-shortage and the high cost of production no issues of Museum bulletins have been made, but it is hoped that one or more, the copy for which has been prepared by Mr. Best, will be published during the ensuing year.

MUSEUM ETHNOGRAPHICAL EXPEDITION.

An expedition to the Whanganui River, for the purpose of collecting ethnographical data, photographs, and dictaphone records, was made in March and April last by Messrs. Elsdon Best, Johannes Andersen, and myself. My energies were devoted mainly to photographic work, and partly to securing dictaphone records. Over three hundred still photographs were taken, and between 5,000 ft. and 6,000 ft. of cinematograph-film exposed. On the work of the expedition Mr. Elsdon Best reports as follows :—

"The expedition undertaken by Messrs. J. McDonald, J. C. Andersen, and myself was a successful one. The field selected for operations was the Whanganui Valley, and several weeks were spent at Koriniti, Hiruharama, and Pipiriki in collecting ethnographical data. The result was gratifying, and is due to the extreme kindness displayed by the Natives towards us—they not only treated us with great hospitality, but also placed themselves at our disposal in regard to the obtaining of illustrations pertaining to old-time industries, &c.; also, they presented the Museum with a number of Native artifacts of an interesting nature. So helpful, indeed, were these folk that to insert a list of the names of those who afforded us generous aid would add seriously to the length of this report. Dr. P. Buck joined us at Koriniti and conducted further anthropometrical work, also investigating thoroughly the manufacture of baskets, mats, &c., in view of preparing monographs on these subjects. A very large number of photographs were taken of old Native games, industries, implements, &c., and also moving-pictures of a number of manufacturing processes and other activities of pre-European life. Dictaphone records of Native songs were obtained to the extent of over fifty cylinders, and some interesting data were obtained as pertaining to old tribal and racial lore. Since our return letters have been sent to many of the Natives thanking them for donations and much kindly assistance."

Mr. J. C. Andersen reports as follows :—

"During the expedition up the Whanganui Valley in March–April, 1921, a number of new string figures was secured. There were few of any great complexity; but among them were interesting parallels with Pacific and American figures, the results being the same, but the method of procedure different. A number of string tricks was also secured; some were the same as tricks known among Europeans, some were quite new. These and the figures will appear, with descriptions, in the *Journal of Science and Technology*. Many of the figures gathered at Gisborne and Rotorua were known to the Whanganui people, but their names were quite different, so a considerable addition has been made to the list of synonyms.

"Two typical songs connected with popular figures learned in other parts of the Island were secured, also two characteristic *tui* and *tarakihi* songs. A great many records of other songs were obtained, but they were not very varied in character; they form an important record, however, of the Whanganui dialect, and many were excellent examples of the characteristic and varied Maori rhythm."

ETHNOGRAPHICAL COLLECTIONS.

Maori.—Accessions during the year include gifts from the following :—Mrs. T. S. Adams, Nelson : Three stone adzes; one small flax cloak with taniko border. Mrs. J. H. Pope, Wellington : One *ko* (carved) with carved *teka* attached; one carved *ko* step or *teka*; one paddle (Waikato make). Mr. H. N. McLeod, Wellington : One flat whalebone implement. Mrs. Purvis Russell, Scotland : One short-handled *patiti* (carved); one *patu whitau* (stone); one bone *wahaika* (carved); three *taiaha*; two *teuhatewha*; one *kakaurua*; two carved walking-sticks; one model canoe; one *tatara* cloak; four *korowai*; two *paepaeroa*; one carved *waka huia*; one stone adze. Colonel Ward : Three stone adzes; one stone bowl. Miss Castle : One adze.

The Museum expedition to the Whanganui River received numerous gifts of various articles, all of which are now on exhibition in the Museum.

General Ethnographic Collections.—Accessions during the year include gifts from His Excellency the Administrator, Samoa; Mrs. T. S. Adams, Nelson; Mr. C. Mackley, Wellington; Dr. J. Allan Thomson, Wellington; Mr. Harrison, Savaii; Judge Vaif-usu, Upolu; and Mr. and Mrs. E. Tregear, Wellington. Purchases include sundry artifacts which help to fill gaps in our Melanesian collections.

On his ethnographical work Mr. Elsdon Best reports as follows :—

"The ethnographical work done during the past year consists of the completion of a work bearing the provisional title of 'The Maori as He Was,' the translation of original Maori matter, the compilation of monographs connected with the series of Museum bulletins, and a number of miscel-

laneous papers. Another ethnographical expedition was undertaken during the year, and with highly gratifying results. 'The Maori as He Was' has been written in order to provide a work very much wanted—viz., a small book on Native life and customs of former times that can be sold to tourists and others at a reasonable price. This work has long been completed, but so far no attempt has been made to print it—the usual fate of ethnographical matter prepared in this Department. Other branches of science are better served, but the science of man has apparently few followers or admirers. The series of Museum bulletins still in manuscript form support this statement.

"The preparation of a series of monographs to form a comprehensive work on Maori mythology and religion has been continued, and this work will, if ever printed, give readers a clear insight into Maori cosmogony and anthropogeny. It will, moreover, provide an explanatory view of archaic myths and mythopoetic personifications such as is urgently required in order to understand the concepts and mentality of a very interesting race. These are matters in which European and American anthropologists are deeply interested.

"The following papers have been prepared during the past year: 'The Lizard in Myth and Decorative Art'; 'The Homeland of the Polynesian Race'; 'Asiatic-Polynesian Parallels'; 'Polynesian Voyagers and the Settlement of New Zealand'; 'Spiritual Concepts of the Maori'; 'The Whare wananga—its Objects, Methods, and Ceremonial'; 'Comparative Anthropology—its Scope and Advantages.' A number of shorter papers were also prepared.

"In response to requests sixteen lectures on anthropology and Maori ethnography were delivered during the past year, and two papers read before the historical section of the local Philosophical Institute. On the other hand, a paper sent on request to the science congress at Palmerston North appears to have been rejected by the authorities without any explanation to the writer.

"The accumulation of a considerable quantity of manuscript matter, the result of many years' work, in such a decrepit wooden building as the Dominion Museum seems to be an unwise procedure—to employ a mild expression. Some safe place of deposit should be found for such records."

LIBRARIES.

New Zealand Institute.—The appointment of Miss Wood as assistant secretary and assistant librarian has relieved the Museum staff of the work of recording publications received.

Museum.—Since Mr. Oliver's appointment the recording and indexing of incoming publications and reference works has been in his hands. He has also superintended the distribution of publications received through the International Exchange Service. He reports as follows:—

"Additions to the library during the past year include a number of important works of reference in zoology and geology. Among them may be mentioned Goldfuss's 'Petrefacta Germaniæ,' Buckman's 'Type Ammonites,' Lydekker's 'Wild Life of the World,' and MacBride's and Kerr's 'Embryology.' The art department has also received many additions. But by far the most important addition was the library of the late Mr. Purvis Russell, forwarded through the High Commissioner. A fairly comprehensive series of books relating to the early history of New Zealand was thus acquired, including the works of Dieffenbach, Polack, Thomson, Taylor, Ellis, Nicholas, Nicholson, and Wakefield. Notwithstanding these additions the library is still deficient in works on systematic botany and zoology.

"A satisfactory feature to note in connection with the Museum library is the large number of periodicals now received, mainly by exchange for the *New Zealand Journal of Science and Technology*. A rough count of these, excluding about 30 annual reports of various institutions, gives about 140, which may be classed as follows: Zoology and botany, 47; geology and mining, 30; chemistry, physics, and technology, 22; meteorology, 12; ethnology, 10; agriculture, 7; art, 2; general, 10.

"Thirty-seven cases of literature were received through the International Exchange Service, Washington, U.S.A. Of these, six cases were delivered to the General Assembly Library, three cases to the Auckland Public Library, while the remainder comprised 2,800 parcels which were distributed to various recipients throughout the Dominion."

NATURAL-HISTORY COLLECTION.

Terrestrial Vertebrata.

Mr. H. Hamilton reports on the land-mammals, birds, and lizards as follows:—

"Since the production of the last annual report few changes have been made in the collections under my charge. As emphasized in previous reports, there is still the urgent necessity for securing fresh specimens of many of the commoner New Zealand birds. For comparative purposes a reference collection of bird-skins should contain a good series of each individual. When building up a collection for exhibition at some future date there should be ample stocks to draw upon. If our native birds are doomed to extinction or possible extinction notwithstanding our preventive measures, it is reasonable to wish that some of the remaining few should be secured for museum purposes.

"Reports have been made on matters connected with bird-sanctuaries and dealings under the Animals Protection Act. The need of further books of reference has been felt when considering acclimatization questions relative to birds.

"During the year the Wellington Zoological Society presented several specimens, including a peacock and a king penguin. Few additions have been made by purchase. Three short articles on zoological subjects have been contributed by me to the *Journal of Science and Technology*."

Marine Vertebrata.

Mr. W. J. Phillipps reports as follows:—

"*General.*—During the past year the fish collections in the Museum have been considerably augmented by the addition of representative collections of edible fishes from the coasts of the Auckland Province and from the west coast of the South Island.

"*Thermal Trout-fisheries Investigation.*—For some time I have been occupied continuing the study of practical problems relative to the inland fisheries. During a period spent in the thermal district an analysis was made of ninety-nine stomachs of trout from various streams, lakes, and rivers. A report on the subject of food-supply, deterioration, disease, and hybridism has been submitted.

"*Economic Investigation of Marine Edible Fishes.*—In September of last year a visit was made to Bay of Islands, and all fishes secured in the neighbourhood of Russell and vicinity were recorded and information collected regarding them. Through the courtesy of Mr. Deighton, manager of the municipal fisheries, I was enabled to accompany the trawler 'Cowan' on a short cruise in Hauraki Gulf, where much valuable information was gained in regard to the Auckland fishes. Later I visited French Pass, D'Urville Island, Nelson, Greymouth, and Hokitika, in the South Island; and while accompanying launches, fishing-boats, and on short excursions was able to collect notes on the species of fish caught, their distribution, migrations, spawning seasons, and habits. Part of the data collected will appear in the coming number of the *New Zealand Journal of Science and Technology*, in a paper entitled 'Notes on the Edible Fishes of New Zealand.'"

Mollusca.

Miss Mestayer reports as follows:—

"Work on the reference collection of New Zealand Mollusca has occupied a good deal of time during the year, and a number of additions have been made to it. Perhaps the most interesting were two specimens of a very rare *Chiton*, found among scrapings of oysters from Foveaux Strait. The larger specimen was rather badly damaged, but it was used to complete the technical description of the species, which, owing to the lack of material, the late Mr. Suter was obliged to leave incomplete in the 'Manual of New Zealand Mollusca, 1913.'

"A start is being made at the rearrangement of the show collection of New Zealand Mollusca, and I hope shortly to do the same with the foreign collection, at the same time increasing the exhibit.

"St. Mark's Church Day School and Scots College each requested to have the habitat groups case explained to a class, and the children evidently enjoyed it, the Scots College boys being particularly keen and ready to ask for information.

"Dr. Thomson brought back an interesting collection of Mollusca from Hawaii and Samoa. Other specimens have been obtained, either as donations or as exchanges, from Messrs. Doello-Yurando, W. R. B. Oliver, A. W. B. Powell, H. Hamilton, H. H. Vertrees, New Zealand Trawling and Fish-supply Company, and myself. Also, Mr. Hazelwood, of Island Bay, has given some really valuable specimens of echinoderms obtained while he was fishing in Cook Strait, and a large piece of bored rock covered with Mollusca and Brachiopoda, with some small specimens of another rather rare starfish. The echinoderms which he got this year were two species of a very rare sea-urchin, *Goniocidaris umbulacrum*, and two of an almost equally rare starfish, *Astrotoma waitei*.

"Since the last report I have published 'Notes on the Habits and Uses of the Toheroa,' 'On the Occurrence of *Cylichnella arachis* (Q. & G.) in New Zealand,' and 'Notes on New Zealand Mollusca' No. 1 and No. 2."

Insects.

Miss A. Castle reports on the entomological collections as follows:—

"The work of the past year has been of a general nature—mounting the season's captures, relining cabinet-drawers, overhauling collections, and exhibiting exotic collections at stated times.

"Owing to the congested state of the entomological collections, due to lack of proper accommodation, the work of rearranging is considerably hampered, and additional cabinets would be very welcome. When classes from various schools make periodical visits the library must of necessity be utilized.

"The Department is indebted to Miss M. E. Fountame for valuable assistance in the identification of exotic Lepidoptera and presentation of Rhopalocera. Mrs. F. Walsh, of Fiji, also presented a fine series of Fijian Heterocera. Special thanks are due to Messrs. G. V. Hudson, H. W. Simmonds, C. O'Connor, C. Clarke, C. Harris, and J. M. Campbell for specimens in all orders."

HERBARIUM.

Mr. W. R. B. Oliver reports as follows:—

"Besides several cases of specimens not unpacked, the Dominion Museum collection of plants consists mainly of the specimens gathered by Buchanan, Kirk, McKay, Hamilton, and Travers. For some years these collections have been housed in the Museum store, where they were contained in cardboard boxes, but not in any order. It was necessary, therefore, first to arrange them in systematic order, so that the work of classifying could be followed according to a definite plan. After thus rearranging the boxes the work of mounting and naming the specimens was begun, and has been continued to date, with the result that the following species have been classified and made available for reference: Fern and fern allies, 138; Coniferae, 13; grasses, 40. Of some of the species, especially among the ferns, there is a good series of specimens. Sheets of cartridge-paper similar to those in use in the large herbaria at Kew and the British Museum are being used to mount the specimens, which can thus be readily examined without risk of mixing specimens from different localities. The sheets thus completed are arranged in dust-proof cardboard boxes, in which is placed powdered naphthalene.

"The following additions have been made to the herbarium during the past year. (1) A large and valuable collection, including representatives of most of the flowering-plants and ferns of New Zealand, has been presented to the Museum by Mr. B. C. Aston, F.I.C., F.N.Z.Inst. This is a most important addition to the herbarium, as it includes many large series with exact localities. The determination of the species has been made by Mr. Aston, Mr. Petrie, Mr. Cheeseman, and other botanists. This donation ensures the Museum possessing a large and representative reference

collection of the indigenous vascular plants of the Dominion. (2) A collection, comprising about three thousand specimens, mainly of alpine plants from various localities in the South Island, purchased from Mr. H. H. Travers. (3) A number of specimens have been contributed by myself, besides many gathered during the past summer in the vicinity of Wellington and of the Barrier Island.

"Accommodation for the herbarium as the arrangement of specimens proceeds is being found in the Museum. This will suffice for some time, and allow for a fairly large reference collection. By this means encouragement should be given to the study of the New Zealand flora, as collectors will be able to make free use of the herbarium either by bringing in or sending specimens to be identified, while it is anticipated that the Museum in return will benefit by gifts of specimens. There is reason to believe that one or two large private collections will be acquired by the Museum as soon as arrangements are made to place them in systematic order. This will be possible when shelving is provided for the boxes now being used for the specimens.

"An essential part in the formation of a comprehensive national herbarium is the collection of specimens and the detailed investigation of selected localities. Each flowering season, therefore, besides local excursions, a collecting-trip of a few weeks' duration should be made to some district where a variety of plant communities is found. It is hoped also that collections from the Cook Islands and Samoa will be formed and placed in the Dominion Museum herbarium. Niue Island has never been visited by a botanist, and its vegetation is almost entirely unknown. The gain to the Museum by the accumulation of material is not to be measured simply by the quantity of such material, but also by exchanges which are thus enabled to be made, and the knowledge acquired and circulated. The Museum library contains very few general works on botany. The need of more literature has been felt on more than one occasion recently when exotic plants have been referred to me for identification.

"The following papers have been written by me during the past year, and will appear in the forthcoming Volume 53 of the 'Transactions of the New Zealand Institute': 'Notes on Specimens of New Zealand Ferns and Flowering-plants in London Herbaria'; 'Variation in *Amphineura*'; 'Occurrence of the Crab-eating Seal in New Zealand.'

BIRD-SANCTUARIES.

Mr. W. R. B. Oliver reports as follows:—

"Little Barrier Island and Pouto Point were visited in February–March last. A full description of these sanctuaries and a report on the bird-life has already been submitted. The following brief summary will therefore suffice here:—

"*Pouto Point*.—The principal part of the sanctuary consists of Lake Mokeno and the large swamp adjacent. For water-birds the food is abundant and the cover good, whilst the isolation of the area in an expanse of sand-dunes gives the seclusion necessary for a breeding-ground. The following species of birds are found in the sanctuary: Grey duck, white-eyed duck (widgeon), black swan, pukeko, dabchick (diver), bittern, pied stilt, shoveller-duck (spoonbill). In addition there occur several sea-birds on the coast, and a few land-birds in the manuka-scrub land.

"*Little Barrier Island*.—Almost entirely covered by bush, this island is fitted only for bush-birds. The cover is good, a variety of bush habitats being provided, while food is ample for a large bird population. Enemies are few, cats perhaps doing the most damage. The following birds breed on the island: Tui, bell-bird, stitch-bird, wax-eye, North Island wood-robin, North Island tomtit, grey warbler, pied fantail, ground-lark, whitehead, rifleman, kingfisher, kaka, red-fronted parakeet, yellow-fronted parakeet, pigeon, morepork, harrier, bush-hawk, brown-backed shearwater, allied shearwater, Cook's petrel, North Island mutton-bird, black petrel, pied shag, little blue penguin, dove petrel, black-backed gull. A number of other birds regularly visit the island, but have not been detected breeding. The brown kiwi and Haast's kiwi have been transferred from the mainland, and both appear to have thoroughly established themselves."

NATIONAL WAR-PORTRAIT COLLECTION.

Mrs. K. F. Phillips reports that during the year 216 portraits have been received, and 613, including those left over from the previous year, have been framed for exhibition.

Photographic Section.—The exhibition of official war photographs shortly after hostilities ceased was accompanied by numerous requests for prints, and the addition since of the original negatives has enabled us to supply orders. Arrangements are being made for a more general distribution of albums containing specimen prints, and a large increase of orders may be expected. Loans of lantern-slides have been made to lecturers. The negatives and cinematograph-films secured on the expedition to the Wanganui River add materially to our collection. The co-operation and kindly assistance of the older Natives, who were genuinely interested in the preservation in the Museum (to them the *whare wananga*, or house of learning and higher knowledge) of records of their arts and crafts, and the willingness of the younger ones to help, gave zest to our mission and enabled us to secure many pictures hitherto unobtainable. In addition to over three hundred still photographs, about 5,500 ft. of cinematograph-film was exposed. It is proposed to print positives of the films, and others secured on previous expeditions, and dispose of them to film-exchanges. Photographs to illustrate Mr. Best's paper on "The Lizard in Maori Carvings," and further papers by Mr. Andersen on "Maori String Games," have been completed. Over one thousand photographs of the visit of H.R.H. the Prince of Wales were prepared. Sets of photographs of selected war-memorial designs were also prepared and distributed for exhibition in outlying country districts. The official war films received during the war period have been safely stored in one of the outbuildings.

J. McDONALD, Acting-Director.

The Under-Secretary, Department of Internal Affairs, Wellington.

V. REPORT OF THE ADVISORY DIRECTOR AND LIBRARIAN, TURNBULL LIBRARY.

CATALOGUING, BINDING, ETC.

Good progress has been made during the year with the cataloguing and arranging of the library. By the 31st March, 1921, over thirteen thousand books had been classified, numbered, and placed on the shelves, one thousand of this number being bound pamphlets. This means that some eighty thousand cards have been prepared, some for the permanent card catalogue, some for the printed catalogue when issue of such a catalogue is contemplated.

Last year's estimate of fifteen thousand volumes as comprising the oceanic section of the library proves to have been a very moderate one, as the whole of the Australian and some of the New Zealand pamphlets, and all the newspapers and magazines, still remain to be catalogued, besides some thousands of unbound pamphlets.

Although some time must still necessarily elapse before a commencement is made with cataloguing the general-literature classes (outside the oceanic section), students are given reasonable access to the books in these classes, which include so may bibliophilic rarities and treasures, and which in years to come will serve as an inestimably valuable *corpus* of literary material, which university and other students of English literature generally should put to excellent use.

Out of the volumes classified, about eight hundred were sent to the Government Printer for binding or lettering.

ADDITIONS TO THE LIBRARY.

During the year some seven hundred and fifty volumes have been added to the library, but this number includes some six hundred volumes dealing with the history of the British stage, obtained from B. Quaritch, and reported last year. Few important works have been published in the sections in which the library is to specialize—viz., Pacific history, sociology, ethnology, &c.

DONATIONS TO THE LIBRARY.

The library has been fortunate in receiving several valuable donations during the year, among which are—

Donor.	Donation.
General Sir Ian Hamilton (through Hon. W. H. Triggs, M.L.C.)	Manuscript of part of the second Gallipoli despatch.
H. H. Bothamley (through A. T. Bothamley)	Some hundreds of old parchments and like legal documents dating back to the sixteenth century, and including the original charter of the Abbey St. Mary de Sallay, dated before 1197.
Church Missionary Society, London (through the Ven. Archdeacon Williams)	The Church Catechism, in Maori, 1830
Ven. Archdeacon Williams ..	Nine volumes in Maori, including works printed at Paihia in 1840; set of <i>Te Kopara</i> ; manuscript letter, dated April, 1731, written by Bentley, concerning his uncle's annotations on Milton.
Mrs. R. Coupland-Harding ..	Colenso's composing-stick (the first in New Zealand) and mission-press type; manuscript letters of Colenso.
Professor T. H. Easterfield ..	Cabinet of over four hundred medallions of kings, queens, scientists, literary men, &c., of the Old World, issued about a century ago.
His Honour Justice Chapman ..	Thirty-two maps, principally of Europe, dating from 1793 to the middle of the nineteenth century; also some fifty volumes of Provincial Ordinances and Gazettes, &c.
Captain Euan Dickson ..	Sparkling-plug used in pioneer aeroplane flight across Cook Strait, with signed statement.
R. Hogg ("Robin Blochairn") ..	Author's copies of "Singin' to the Weans," "A Ploughmen's Dream," "The Fireside Clime."
T. E. L. Roberts ..	Author's copy of "Rimu and Rata."
Miss Wickham ..	"Casual Ramblings Up and Down" (two series), by "A Tramp."
Mrs. C. M. Tripp ..	"My Early Days," by Mrs. E. S. Tripp.
G. Mitchelmore and Co., London ..	"The Doubleure."
Maggs Bros., London ..	Five morocco-bound volumes of their illustrated catalogues.
B. C. Aston ..	"A Compendium of Geography," 1807; Bowles's "Atlas Minor," 1791.
Oxford University Press ..	Scott, "A Short History of Australia," and other publications.
J. McDonald ..	Manuscript notes of S. Smith's account of the capture of Te Rauparaha.
E. N. Hogben ..	"The New Zealand Division," by Burton.
Dunedin Municipal Library ..	<i>The Crusader</i> , and other transport magazines.
J. P. Maxwell ..	Butler, "Hudibras," 1812; Carlyle, "On the Repeal of the Union," 1889.
H. Baillie ..	Water-colour drawing of iceberg seen from the "Brougham," 1841.
H. R. Butcher (through the Hon. Sir Robert Stout)	Milton, "History of England," 1818; Chatterton, "The Rowley Poems," 1777.

The thanks of the Government are due to these donors, and if like liberality continues the library will certainly become a repository rich in books, manuscripts, and articles of historic interest.

The old legal documents referred to above, presented through Mr. A. T. Bothamley, Clerk-Assistant of the Legislative Council, were received just after the 31st March, but mention of them is made here as they are of very great historic interest, and some at least are of great historic value. They include documents drawn up at various times from the reign of Queen Elizabeth and onwards. Some are in English, some in Latin. They form a fine collection, illustrating the evolution of English caligraphy during over three hundred years. A general description of the collection has already been made public in the Press.

The donation of the Church Missionary Society is of especial value, as it is a copy of the first book set up and printed in New Zealand, and only two other copies are known to exist.

HISTORICAL RECORDS.

In addition to the donations made direct to the library, a large quantity of books, manuscripts, pictures, &c., presented to the National Historical Collection have been handed over to the library, where they are to be housed. These form a considerable mass of material, and a still larger mass, comprising the Samoan records, has also been deposited in the library.

It has been impossible to do more at present than receive and house these valuable collections; to be of use to students it will, of course, be necessary to have the whole properly arranged and indexed, and until this is done their great value cannot be appreciated. There is, however, more than enough to do to keep the present staff fully employed in completing the classification and cataloguing of the Turnbull Collection; and, for the present at least, these historical materials must be allowed simply to accumulate.

A biographical section has been started, all newspaper notices of old settlers or people of note being preserved and arranged. To the notices, portraits—of which there are many hundreds in the library—will be added. It is hoped to make a similar topographical section, so that the place history of the Dominion may be put on record as details become available.

FIRE-PREVENTION.

Owing to the shortage of labour and material this important work is not yet finished, little advance having been made on the work reported last year. It is hoped that the completion of the work will not now long be delayed.

MISCELLANEOUS.

The library was formally opened by the Hon. G. J. Anderson, M.P., then Minister of Internal Affairs, on the 28th June, 1920, some forty-five gentlemen being present on invitations sent out by the Government.

Rules have been drawn up; and a considerable number of readers have taken advantage of the privileges afforded, among them being several permanent students. The hours have been fixed at from 10 a.m. till 4 p.m., Monday to Friday, and from 7 till 9 on Monday and Thursday evenings. Whilst the most assiduous workers so far have devoted themselves to New Zealand history, the majority of the readers have asked for English literature. There have been many inquiries for works on sociology generally, law, natural history, and other technical subjects, there being, it is evident, a considerable demand for a technological library in Wellington.

It should be understood that, primarily, the Turnbull Library must continue to specialize in oceanic history, topography, and ethnology. Under the generous recess-privilege system in existence in connection with the General Assembly Library, students of current sociology and politics have access during a large portion of the year to a mass of most valuable material; and it is desirable, for financial reasons alone, that duplication should be as far as possible avoided.

Permits have been issued to between fifty and sixty readers, and for the convenience of many who cannot come during the day the library has been opened on two evenings in the week, fair advantage being taken of this.

Over four hundred visitors have signed the visitors' book. The visitors have included many from Great Britain, America, Australia, the islands of the Pacific, besides residents in New Zealand.

The staff has worked exceedingly well, for, besides the routine work of classifying and arranging the books and attending to visitors and readers, there is a considerable and growing amount of correspondence not only from New Zealand, but from countries abroad. Many inquiries are received regarding prices and values of books, prints, &c., and there are promises of the library becoming a centre of great and very useful activity.

CHARLES WILSON, Advisory Director.
JOHANNES C. ANDERSEN, Librarian.

The Under-Secretary, Department of Internal Affairs, Wellington.

VI. REPORT OF THE ACTING OFFICER IN CHARGE, WAR FUNDS OFFICE.

War Funds Office, Wellington, 18th June, 1921.

The financial year ended 31st March, 1921, has been largely occupied by development of the comprehensive scheme designed with a view to the consolidation of patriotic funds, their conservation, and judicious administration at the hands of the executives of the provincial societies.

The principal functions of operating societies being to provide "relief and assistance to soldiers and sailors and their dependants," "the provision of extra comforts to men in hospital," "the maintenance of convalescent and veterans' homes, clubs, and hostels," and "the upkeep of memorial-park trusts," this has enabled the closing of numerous funds and the transfer of the moneys held to the provincial incorporated societies, which has been effected without detriment to the interests of those for whom the moneys were raised.

At the 31st March, 1920, there were 415 separate funds operating in the Dominion, and during the financial year ended 31st March, 1921, no less than 204 were closed, leaving 211 active at that date.

The latest figures available show the funds held by these societies to be—						£
In the hands of approved incorporated societies	..	..	..	..	..	1,100,000
New Zealand War Relief Fund	..	..	..	..	..	661
Convalescent Home Account	..	..	..	..	..	1,280
War Expenses Account	..	..	..	..	..	1,437
New Zealand Comforts Account	..	..	..	..	..	1,475
Sundry small accounts	..	..	..	..	..	86
New Zealand National War Funds Council	..	..	..	..	..	38,000
On transfer to the New Zealand National War Funds Council	..	..	..	..	..	55,000
In the hands of the High Commissioner, now the subject of reallocation	..	..	..	..	..	29,806
Total	..	..	..	..	..	<u>£1,227,745</u>

By mutual arrangements made with the representatives of the various social funds and the executive of the British Red Cross and Order of St. John, a working agreement was arrived at whereby the latter organization will in future be responsible for the care of soldiers in hospital, an agreed quota being paid to a central account operated by the Red Cross organization, and the balances of the social funds being transferred to the National War Funds Council for "relief and assistance to soldiers and sailors and their dependants." In practice the arrangement has worked most satisfactorily, being both effective and economical.

Claims for relief to "soldiers and their dependants" still largely occupy the attention of the executives of the various incorporated societies, and a good understanding exists whereby the needs of the men will be met in the future with a degree of uniformity covering the whole of the Dominion.

The whole of the funds at present available are safely invested in accordance with the provisions of the War Funds Act, 1915, and are sufficiently liquid to allow of all cases of necessity being promptly met.

NATIONAL WAR FUNDS COUNCIL.

At the close of the financial year 31st March, 1921, the National War Funds Council had, after providing for the maintenance of its bursars and for special grants, the sum of £38,000, the whole of which, with the exception of a small amount at current account to meet emergencies, is invested in accordance with the direction of the Council.

In addition, surplus funds from the Y.M.C.A., Salvation Army, St. John Ambulance, and other Church funds, together with a final payment of £1,500 from the War Cinematograph Council, London, and totalling £55,000, are in process of transfer to the National War Funds Account; and it is anticipated, as a result of the application of the scheme of closing war funds and concentrating in the incorporated societies and the National War Funds Council, that the latter body will shortly be able to directly control at least £100,000, and thus be able to ensure that "soldiers and their dependants" in the poorer and more sparsely settled districts of the Dominion will meet with equal consideration with those resident in the larger centres.

The scheme of granting bursaries to men who, through their military service, had their college careers interrupted has provided excellent results. A large proportion of the students have been enabled to complete their selected course, and those remaining at the universities will have their individual cases reviewed, in accordance with the conditions set out by the Council, on receipt of the professorial reports for the year.

The administration of the various advisory committees set up under the provisions of the War Funds Act, 1915, has been well maintained throughout the year, to the satisfaction of the Council.

GEO. DAVIES,

Acting Officer in Charge.

The Under-Secretary, Department of Internal Affairs, Wellington.

VII. REPORT OF THE GOVERNMENT ASTRONOMER AND SEISMOLOGIST.

BUILDINGS, GROUNDS, ETC.

20th June, 1921.

The Observatory buildings and grounds and the electrical equipment have been kept in good order, and all the storage batteries have been kept regularly charged. The electric current is supplied by the City Corporation, and is an alternating one of 100 volts, single-phase, 80 cycles. For charging the batteries a mercury arc-rectifier is used, and this has worked satisfactorily during the year. One interruption occurred in the supply of electric current during the coal-shortage, and urgent steps had to be taken to maintain the electric light for the seismograph by using the storage batteries until the supply was resumed by the city. A number of mercury contacts on the synchronizing circuit are in use, and these have given considerable trouble this year in spite of all care taken to eliminate sparking.

ADMIRALTY CHRONOMETERS.

Three marine chronometers and a chronometer-watch belonging to the Admiralty were returned to H.M.S. "Philomel." Subsequently one of the chronometers was lent to the Observatory, and is now in use there.

ASTRONOMICAL OBSERVATIONS.

Observations of meridian transits of stars and the sun have been made for the purpose of controlling the time service. The interval between observations is unduly long at times owing to unfavourable weather conditions, and to the circumstance that, unlike other astronomical observatories, there is no provision made for residences at the Observatory. Consequently, in the winter-time, unless the Astronomer resides at the Observatory it is not possible to take advantage of short intervals of clear sky at night.

THE TIME-SERVICE EQUIPMENT.

The astronomical clocks on which the time service depends are not sufficiently accurate for this duty, and the need of precision clocks has been recognized by the Government. Specifications have been prepared for the clocks, and it is expected that they will soon be obtained. The demand for them has been intensified by the inauguration of the provisional wireless time service, as without first-class clocks it is not possible to carry on accurate time over long intervals of bad weather.

THE TIME SERVICE.

The Observatory sends out the following time-signals. Most of them are automatically sent by the Observatory standard clock, which is usually kept accurate to the nearest second of time.

Automatic Time-signals.

- (1.) To the General Post Office, Wellington, by galvanometer daily, except Sundays and public holidays.
- (2.) To some of the watchmakers in Wellington, by galvanometer daily, except Sundays and public holidays.
- (3.) To ships and to the general public at Wellington, by electric lights at the Observatory daily, except Saturdays, Sundays, and holidays.
- (4.) To the Auckland Harbour Board, by electric lights at Auckland, on Tuesdays and Fridays.
- (5.) To the Lyttelton Harbour Board, by dropping the time-ball at Lyttelton, on Tuesdays and Fridays.
- (6.) To the South Island telegraph-offices, by galvanometer, on Tuesdays and Fridays.
- (7.) Wireless time-signals, through the Wellington Radio Station, on Tuesdays and Fridays.

All the automatic time-signals are sent at the exact hour of Greenwich mean time, and are automatically repeated at the first, second, fourth, and fifth minutes. Each signal begins at the 0 second, and lasts approximately one second.

Non-automatic Time-signals.

- (1.) To ships and watchmakers in Wellington, by telephone, on application to the Observatory.
- (2.) The Observatory time-signals sent to the General Post Office are distributed by telegraphic hand-signals to some 2,300 telegraph and telephone offices distributed all over New Zealand at 9 a.m. daily, except on Sundays and holidays.
- (3.) Similar hand-signals are also sent to all railway telegraph-offices in New Zealand at 9 a.m. daily, except on Sundays and holidays.
- (4.) The Wellington Telephone Exchange distributes time-signals by telephone to exchange subscribers, generally to the nearest minute of time: the clock in the exchange is checked by comparing it with the Observatory automatic time-signal, but the Observatory is not responsible for the accuracy of these time-signals.

The wireless time-signals sent from the Observatory have been received by many ships at considerable distances from New Zealand. The signals are transmitted by the Wellington Radio Station (latitude $41^{\circ} 16'$ south, longitude $174^{\circ} 46'$ east of Greenwich) on a wave-length of 600 metres, and are Telefunken quenched-spark signals. The maximum distance reported to the Observatory is over four thousand miles, when the R.M.S. "Marama" was on the San Francisco run, north of the Equator; while a report from the wireless operator on the s.s. "Tofua" is to the effect that the Observatory wireless time-signals were received right up to the Equator on the San Francisco run; and other reports have been received from ships over three thousand miles from Wellington.

The wireless time-signal service is provisional, pending the equipment of the Observatory for this service.

Reception of other Wireless Time-signals at the Observatory.

At present the Observatory is without any wireless receiving-gear. The gear lent to the Observatory from H.M.S. "Philomel" was returned to that ship. The equipment of the Observatory with a high-power wireless receiving-outfit is now under action. Additional office accommodation will be required for this purpose.

Wireless Time-signals for Longitude.

From 14th to 19th February inclusive a special series of wireless time-signals was sent from the Observatory through the Awanui Radio Station at 20 hours G.M.T. every night. The clock that automatically sent the signals was rated to gain about 1 second in 73 seconds sidereal time, and signals were sent from this clock for 6 minutes, beginning at 20 h. 6 m.

The complete programme included the usual series of mean-time signals sent at 20 h. 0 m., 20 h. 1 m., 20 h. 2 m., 20 h. 4 m., and 20 h. 5 m.; followed by the special signals referred to above. All signals were sent on a wave-length of 2,000 metres. A number of them were heard at the Samoan Observatory at Apia, and the precise results are being worked up. A similar series of wireless time-signals was sent to Tahiti for checking the longitude there.

ASTRONOMICAL SITES.

A preliminary inspection of proposed astronomical sites in Otago was made by me in November, 1920, and recommendations were made to the Hon. Minister that precise tests should be made at certain localities, selected during the inspection, as likely to prove good sites.

This important work is necessary in view of the offer* by the Yale University to present a large refracting telescope to New Zealand, and to provide some of the astronomical staff necessary to use the telescope to carry out researches on the southern stars.

OBSERVATORY ADVISORY BOARD.

An Observatory Advisory Board has been set up to advise the Hon. Minister on Observatory matters. The Board consists of the Engineer-in-Chief and Under-Secretary for Public Works (Chairman), the Under-Secretary for Internal Affairs, the Naval Adviser to the Government, the Surveyor-General, and the Government Astronomer and Seismologist.

ASTRONOMICAL EQUIPMENT.

The only astronomical telescope the Observatory has in use is the 3 in. transit telescope; and for observations out of the meridian no equatorial telescope is available. Accordingly it has been necessary to use private telescopes for other observations. The need for equipment is serious, and the lack of it continually hampers and restricts the scientific activities of the Observatory.

THE LUNAR ECLIPSE OF 21ST APRIL, 1921.

This eclipse was not visible in England; so requests were made to New Zealand astronomers to observe the occultations of a number of faint stars during the eclipse. Mr. L. J. Comrie forwarded the detailed predictions, which were supplied to New Zealand astronomers. In many places bad weather prevented observations, but at Wellington, Hawera, Stratford, and New Plymouth satisfactory observations were obtained.

STAFF.

The staff has remained the same as last year, and comprises one professional cadet and one clerical cadet.

NEW ZEALAND INSTITUTE SCIENCE CONGRESS.

At the New Zealand Institute Science Congress held at Palmerston North from the 25th to the 29th January, 1921, the following papers were read by me: (1) "The Horizontal Pendulum"; (2) "The Transit Micrometer"; (3) "The Earthquake of 20th September, 1920"; (4) "A National Observatory for New Zealand";* (5) "The New Zealand Astronomical Society."†

The following resolutions‡ relating to the Observatory were carried at the congress:—

1. "That this congress congratulates the Government on the beginning made to equip the Hector Observatory with improved seismological equipment, as urged at the last congress, and that owing to the importance of seismology to New Zealand the congress desires to urge the Government to add to the equipment of the Hector Observatory by providing another Milne-Shaw seismograph, so that both horizontal components may be determined, and that a vertical-component seismograph also be provided."

2. "That this congress urges upon the Government and people of New Zealand the great importance of accepting the generous offer to New Zealand of astronomical equipment and staff made by the Yale University Corporation, New Haven, Connecticut, U.S.A."

3. "That this congress urges upon the Government the importance of taking steps to participate in the determination of the longitude of the Hector Observatory by radio-telegraphy from the Greenwich and Paris Observatories, as recommended by the Bureau des Longitudes, Paris."

ASSOCIATES IN ASTRONOMY.

Mr. A. C. Gifford, M.A., F.R.A.S., was appointed Honorary Associate in Astronomy of the Hector Observatory.

Mr. C. E. Adams, D.Sc., F.R.A.S., was appointed Associate in Astronomy of the Yale University, New Haven, Connecticut, U.S.A.

PUBLICATIONS.

The following Observatory bulletins have been published:—

Bulletin 30—"Provisional Wireless Time-service Notice," by C. E. Adams.

Bulletin 31—"The Samoan Observatory," by C. E. Adams, D.Sc., F.R.A.S., Government Astronomer and Seismologist, and Professor E. Marsden, D.Sc., F.R.A.S.; "A New Zealand Department of Volcano Research," by T. A. Jaggard.

Bulletin 32—"Report of the Government Astronomer, 1920."

Bulletin 33—"Observations of Southern Variable Stars," by C. E. Adams; "A Brief Method of calculating Occultations of Stars by the Moon," by C. J. Westland, F.R.A.S.

Bulletin 34—"The Initial Radiation from a Nova," and "The Great Velocities of the Planetary Nebulae," both by A. C. Gifford.

Bulletin 35—"A National Observatory for New Zealand," and "The New Zealand Astronomical Society," both by C. E. Adams.

* Hector Observatory Bulletin No. 35, and *New Zealand Journal of Science and Technology*, Vol. iv, p. 91.

† *New Zealand Journal of Science and Technology*, Vol. iv, p. 95.

‡ *New Zealand Journal of Science and Technology*, Vol. iv, p. 44.

As in past years, the Observatory is again indebted to individuals and to institutions for valuable gifts of publications.

THE NEW ZEALAND ASTRONOMICAL SOCIETY.*

An interesting event of 1920 was the formation of the New Zealand Astronomical Society, just a century after the Royal Astronomical Society was formed in London.

HISTORICAL RECORDS.

In accordance with the policy of the Government to preserve historical records, the site used for the observations of the transit of Venus, 8th December, 1874, at Queenstown, has been reserved by the Government. Dr. C. H. F. Peters was in charge of the American astronomers who observed the transit, and he gave the position† of the station as $45^{\circ} 2' 7''$ south latitude, and 11 h. 14 m. 40.4 s. ($=168^{\circ} 40' 6''$) longitude east of Greenwich.

The Surveyor-General reported that the position of the brick pillar used for the observations is in Section 11, Block 36, Queenstown, 28 ft. from Melbourne Street and 41 ft. from the boundary of Section 12. The transfer of this astronomical observing-station has been registered, and the Crown's title deposited in the Head Office, Department of Lands and Survey, as Otago deed No. 1540.

It is recommended that a permanent pedestal containing a record of these facts should be erected on the site.

SEISMOLOGY.

The Milne seismograph No. 20 has been in use during the year. In January, 1921, it was overhauled and readjusted. The instrument records the E.-W. component.

The earthquake reports from the seismograph records are being distributed to other seismological stations, beginning with the month of January, 1921, and are also sent to the seismological committee of the British Association for the Advancement of Science.

In addition to these instrumental records, a system of non-instrumental records was inaugurated by the former Government Seismologist—the late Mr. George Hogben—with the officers of the Post and Telegraph Department. These officers receive a daily time-signal from the Observatory, and consequently their reports are usually accurate to the nearest quarter-minute. The reports are forwarded to the Observatory, and supplement the instrumental records.

A record is also kept of all newspaper reports of local earthquakes.

With a view to obtaining evidence of any tilting of the ground, sensitive levels are mounted on the concrete pier of the seismograph, and frequently show evidence of tilt.

The Milne-Shaw seismograph ordered last year has not arrived from England.

C. E. ADAMS,

Government Astronomer and Seismologist.

The Under-Secretary, Department of Internal Affairs, Wellington.

VIII. REPORT OF THE CONSERVATOR OF FISH AND GAME.

Rotorua, 22nd July, 1921.

I have the honour to submit my annual report on the work done in connection with the fresh-water fisheries for the season 1920-21.

Netting operations were not carried out during the season, on account of the unsettled state of commerce and the high cost of essential materials.

The work in connection with the hatchery was successfully performed from June to August, a total of 1,371,000 ova being collected. Of these, 491,000 were hatched and liberated in various North Island rivers, while the remaining 880,000 ova were disposed of to Fiji, Sydney, and local acclimatization societies, while a few small private orders were also fulfilled. Of the fry, 81,000 were supplied free.

For the purpose of improving the strain of rainbow trout in the rivers and lakes of the thermal district, especially in Lakes Taupo and Rotorua, a consignment of 250,000 rainbow-trout ova was received from Lake Hawea hatchery. They were successfully hatched out at the hatchery and liberated, and, together with subsequent consignments, should be the means of improving the local fish.

Alterations and additions to the hatchery building have been effected, and 10 chains of wooden piping have been laid to convey fresh clean water to the troughs. This work was absolutely necessary on account of the road-drainage polluting the former supply.

In January I visited the Fiords district for the purpose of submitting a report on the moose and wapiti herds, and also visited Wellington on departmental business.

Dr. Tillyard visited Rotorua during the hatchery season and reported on the means of increasing the food-supply for trout.

For the year ended 31st March, 1921, 645 shags have been destroyed at a cost of £80 12s. 6d.

F. MOORHOUSE,

Conservator of Fish and Game.

The Under-Secretary, Department of Internal Affairs, Wellington.

* *New Zealand Journal of Science and Technology*, Vol. iv, p. 95.

† "Observations of the Transit of Venus, December 8-9, 1874," Part i, p. 21. Edited by Simon Newcomb, Washington. Government Printing Office, 1880.

IX. REPORT OF INSPECTOR OF TOTALIZATORS.

30th September, 1921.

I have the honour to submit my third annual report on the inspection of totalizators for the racing-year which ended on the 31st July last.

The number of days on which the totalizator was used during the year was 288. Up to the time of the passing of the Gaming Amendment Act, 1920 (No. 2), the statutory number of days was limited to 281, but section 3 of the above-mentioned Act granted the sixteen hunt clubs in the Dominion the privilege of using the totalizator once every year instead of once every second year. The Woodlands Hunt Club, which has since ceased to exist, did not exercise its privilege. The 288 days were used as follows: Racing clubs, 214 days; hunt clubs, 15 days; trotting clubs, 59 days.

Although trotting clubs held only 59 days' trotting, there were 105 trotting events included in racing and hunt clubs' programmes, equal to over 13 full days' trotting.

Totalizator clubs have the right to run eight races, but on 26 days' racing, 3 days' hunting, and 4 days' trotting only seven races were held. Thus there were 2,271 races held, equal to just on 284 full days' racing. The sum of £10,121,212 10s. was passed through the totalizator during the year, as against £8,792,570 the previous year, an increase of £1,328,642 10s., equal to 15.11 per cent. During the previous year the increase was 53.38 per cent. The investors received back in dividends £8,834,203 7s. The difference of £1,287,009 3s. was disposed of as follows: The Government received £481,640 3s. 9d., of which £253,030 6s. 3d. represented 2½ per cent. on the total investments, £227,687 13s. was the dividend-tax of 6d. in the pound, and £922 4s. 6d. fractions for the month of July. The clubs received the balance of £805,368 19s. 3d., which is made up of £759,090 18s. 9d., being 7½ per cent. on the totalizator turnover and £46,278 0s. 6d. fractions.

Section 25 of the Finance Act passed last session provided that from the 1st July, 1921, all moneys received from investments on the totalizator at any race meeting and not disposed of pursuant to section 35 of the Gaming Act, 1908, shall, within seven days after the conclusion of the race meeting, be paid into the Public Account, and shall form part of the Consolidated Fund.

During the year racing clubs paid in stakes £485,170 and trotting clubs £125,505, making a total of £610,675, as compared with £502,225 for the previous year and £383,070 for the year before that. The average stake per race given by racing and hunt clubs was £269.09, and by trotting clubs £268.17, as compared with £229.58 and £206.77 respectively the previous year. In addition to the above figures, racing and hunt clubs gave cups, bracelets, plate, &c., to the value of £2,157 15s., and trotting clubs £675. The 1 per cent. tax paid to the Government on stakes amounted to £6,106 15s.

In addition to the £481,640 3s. 9d. totalizator-tax, dividend-tax, and fractions, and the £6,106 15s. tax on stakes, paid to the Government by racing and trotting clubs, those clubs also pay 2½ per cent. tax on gate receipts, sale of privileges, &c., also amusement-tax on gates and members' subscriptions, as well as land-tax and income-tax. What those amount to I am not in a position to say.

In my last report I commented upon the inadequate totalizator accommodation provided by many clubs, and it is with pleasure I now report that most of the clubs have attended to this important matter. Several clubs have during the year installed electric totalizators, and I would strongly urge all clubs having four days' racing or over to install electric totalizators. In my last report I purposely abstained from commenting on them, as I was not then satisfied as to their accuracy. During the past year, however, I have satisfied myself that although they are not absolutely accurate, the variations, owing to the improvements effected in them, are now so small as to be outweighed by the obvious advantages to the club and to the public of the use of such machines.

A few clubs—and I am pleased to say there are only a few—which have an inside and an outside totalizator still adhere to the antiquated system of showing the totals on each machine separately. This is not altogether fair to the investor, who should be able to determine on looking at the totalizator what his dividend will probably amount to. While, generally speaking, the investments on the outside machine on the different horses are in much the same ratio as on the inside machine, I regret to say that a few instances have come under my notice in which large single investments have been made on the outside machine. Whether such investments were made on the outside machine with the intention of misleading the public on the inside I am not prepared to say, but any system that permits of such a possibility should be abolished. The two totalizators can easily be synchronized by telephone and the same totals shown on each machine.

A totalizator inspector was present at every meeting held during the year, and I desire to thank the clubs sincerely for the many courtesies extended to myself and my deputies, and also for the manner in which clubs have accepted any suggestions made in regard to the working of the totalizator.

P. J. KELLEHER,
Inspector of Totalizators.

The Under-Secretary, Department of Internal Affairs, Wellington.

RETURN IN CONNECTION WITH LICENSES TO USE THE TOTALIZATOR ISSUED DURING THE RACING YEAR 1920-21.
Racing Clubs.

Name of Club.	Date of Meeting.	Number of Races.	Amount of Stakes.	1 per Cent. Government Tax on Stakes.		Totalizator Investments.	Percentage (7½ per Cent.) retained by Club.		Government Totalizator-tax (2½ per Cent.).		Government Tax on Dividends (2½ per Cent.).		Amount paid in Dividends.		Unpaid Fractions.	
				£	s. d.		£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Canterbury Jockey Club	1920. Aug. 10	8	3,700	37	0 0	72,844	5,463	6 0	1,821	2 0	1,639	2 0	63,622	11 9	297	18 3
"	" 12	8	3,450	34	10 0	72,528	5,439	12 9	1,813	4 3	1,632	0 0	63,318	1 6	325	11 6
"	" 14	8	2,440	24	8 0	68,102	5,107	13 9	1,702	11 3	1,532	8 0	59,328	3 6	431	13 6
North Taranaki Hunt Club	" 26	8	910	9	2 0	19,171	2,917	16 6	479	5 6	431	9 0	16,703	0 3	119	8 9
Marton Jockey Club	Sept. 1	8	1,515	15	3 0	38,858	2,914	7 0	971	9 0	874	7 6	33,972	9 0	125	7 6
Manawatu Hunt Club	" 8	8	805	8	1 0	24,509	1,838	3 6	612	14 6	551	11 0	21,436	9 0	70	2 0
Amberley Racing Club	" 18	8	1,000	10	0 0	12,648	948	12 9	316	4 3	284	14 0	11,022	9 6	76	9 6
Ashburton County Racing Club	" 24	8	1,055	10	11 0	13,839	1,037	18 6	345	19 6	311	8 6	12,072	8 6	71	5 0
Wanganui Jockey Club	" 25	8	1,015	10	3 0	13,846	1,038	9 0	346	3 0	311	13 0	12,058	18 6	90	16 6
"	" 25	8	1,900	19	0 0	46,086	3,456	9 9	1,152	3 3	1,037	1 0	40,217	17 6	222	18 6
Avondale Jockey Club	" 25	8	2,100	21	0 0	55,009	4,125	13 6	1,375	4 6	1,237	15 6	48,018	15 6	251	11 0
"	" 29	8	4,000	40	0 0	57,710	4,328	5 9	1,442	15 3	1,298	11 0	50,364	10 6	276	7 6
Otaki Maori Racing Club	Oct. 2	8	3,050	30	10 0	69,190	5,189	5 0	1,729	15 0	1,556	17 0	60,339	3 0	375	0 0
"	Sept. 27	8	1,710	17	2 0	39,547	2,966	0 6	988	13 6	889	17 6	34,564	6 0	138	2 6
"	" 28	8	1,340	13	8 0	27,781	2,083	11 6	694	10 6	625	3 6	24,251	6 0	126	8 6
Geraldine Racing Club	" 30	8	1,060	10	12 0	12,370	927	15 0	309	5 0	278	7 6	10,783	0 0	71	12 6
"	Oct. 1	8	990	9	18 0	15,947	1,196	0 6	398	13 6	358	18 6	13,933	3 9	60	3 9
Napier Park Racing Club	" 2	8	1,450	14	10 0	26,760	2,007	0 0	669	0 0	602	3 6	23,382	0 6	99	16 0
Hawke's Bay Jockey Club	" 6	8	2,300	23	0 0	38,501	2,887	11 6	962	10 6	866	7 6	33,577	12 6	206	18 0
Kurou Jockey Club	" 7	8	1,030	10	6 0	13,113	983	9 6	327	16 6	285	2 6	11,459	19 0	46	12 6
Whangarei Racing Club	" 13	8	1,400	14	0 0	39,729	2,979	14 3	993	4 9	894	0 6	34,686	10 6	176	0 0
"	" 18	8	1,350	13	10 0	47,381	3,553	12 3	1,184	10 9	1,066	3 6	41,387	11 0	189	12 6
Masterton Racing Club	" 14	8	1,890	18	18 0	27,670	2,075	5 0	691	15 0	622	13 0	24,143	14 6	136	12 6
"	" 16	8	1,855	18	11 0	28,263	2,119	15 3	706	11 9	636	0 6	24,612	19 0	188	3 6
Dunedin Jockey Club	" 15	8	2,525	25	5 0	26,234	1,967	11 9	655	17 3	590	7 0	22,871	9 6	149	4 6
"	" 16	8	2,350	23	10 0	33,273	2,495	10 3	831	16 9	748	15 6	29,030	13 0	166	14 6
Gore Racing Club	" 23	8	1,290	12	18 0	18,641	1,398	1 6	466	0 6	419	10 0	16,283	7 0	74	1 0
"	" 25	8	1,680	16	16 0	27,434	2,037	11 0	685	17 0	617	7 0	23,918	13 0	154	12 0
Wellington Racing Club	" 23	8	4,250	42	10 0	75,392	5,654	8 0	1,884	16 0	1,696	8 6	65,831	4 0	325	3 6
"	" 25	8	3,850	38	10 0	77,875	5,840	12 6	1,946	17 6	1,752	6 0	68,027	4 3	307	19 9
"	" 25	8	1,050	10	10 0	32,706	2,452	19 9	817	13 3	736	0 0	28,539	13 0	160	4 0
Waikato Hunt Club	" 25	8	1,050	10	10 0	20,153	1,511	10 3	503	16 9	453	11 6	17,556	8 0	128	3 6
North Canterbury and Oxford Jockey Club	" 25	8	1,350	13	10 0	41,953	3,146	10 3	1,048	16 9	944	0 6	36,625	11 6	188	11 0
Waverley-Waitotara Racing Club	" 25	8	800	8	0 0	11,924	894	6 0	298	2 0	268	8 0	10,412	16 0	50	8 0
Waipawa County Racing Club	" 28	8	1,500	15	0 0	22,811	1,710	16 6	570	5 6	513	6 6	19,924	7 0	92	4 6
Poverty Bay Turf Club	" 29	8	1,550	15	10 0	25,759	1,931	18 6	643	19 6	579	13 0	22,507	14 6	95	14 6
"	" 30	8	530	5	6 0	19,006	1,425	9 0	475	3 0	427	14 0	16,544	6 0	133	8 0
Poverty Bay Hunt Club	" 30	8	1,390	13	18 0	22,788	1,709	2 0	569	14 0	512	16 6	19,849	9 6	146	18 0
Taratahi-Carterton Racing Club	" 30	8	950	9	10 0	16,366	1,227	9 0	409	3 0	368	6 0	14,269	1 6	92	0 6
Otago Hunt Club	Nov. 6	8	6,200	62	0 0	97,000	7,275	0 0	2,425	0 0	2,182	11 6	84,685	17 6	431	11 0
Canterbury Jockey Club	" 10	8	5,500	55	0 0	79,666	5,974	19 9	1,991	13 3	1,792	12 0	69,449	8 0	457	17 0
"	" 13	8	4,550	45	10 0	66,808	5,010	12 0	1,670	4 0	1,503	5 0	58,382	4 6	241	14 6
"	" 13	8	4,200	42	0 0	90,666	7,249	19 9	2,416	13 3	2,175	1 6	84,387	10 0	437	5 6
Auckland Racing Club	" 6	8	5,000	50	0 0	76,863	5,764	15 3	1,921	11 9	1,729	10 6	67,095	18 9	351	13 9
"	" 10	8	4,300	43	0 0	75,505	5,662	17 6	1,887	12 6	1,698	19 0	66,012	19 0	242	12 0

Horowhenua Racing Club	Nov. 17	8	1,015	10	3	0	22,399	0	0	1,679	18	6	559	19	6	504	1	0	19,555	18	0	99	3	0
Winton Jockey Club	" 17	8	1,600	16	0	0	20,645	10	0	1,548	8	3	516	2	9	464	12	6	18,012	15	6	103	11	0
"	" 18	8	1,400	14	0	0	19,347	10	0	1,451	1	3	483	13	9	435	8	6	16,863	10	6	113	16	0
Takapuna Jockey Club	" 20	8	3,100	31	0	0	67,836	10	0	5,087	14	9	1,695	18	3	1,526	8	0	59,268	11	6	257	17	6
"	" 24	8	2,900	29	0	0	66,543	0	0	4,990	14	6	1,663	11	6	1,497	7	0	57,982	12	0	408	15	0
Ashurst-Pohangina Racing Club	" 24	8	1,375	13	15	0	26,172	0	0	1,962	18	0	654	6	0	588	19	0	22,835	10	0	130	7	0
South Canterbury Jockey Club	" 25	8	1,620	16	4	0	22,210	10	0	1,665	15	9	555	5	3	499	15	6	19,318	12	0	171	1	6
"	" 26	8	1,380	13	16	0	24,527	0	0	1,839	10	6	613	3	6	551	19	0	21,377	11	6	145	5	6
Feilding Jockey Club	" 30	8	2,850	28	10	0	44,740	0	0	3,355	10	0	1,118	10	0	1,006	15	0	39,068	4	6	191	0	6
"	Dec. 1	8	2,150	21	10	0	44,857	0	0	3,364	5	6	1,121	8	6	1,009	7	6	39,151	1	6	210	17	0
Methven Racing Club	" 2	8	955	9	11	0	13,453	0	0	1,008	19	6	336	6	6	704	12	6	11,739	5	6	65	13	0
Woodville District Jockey Club	" 9	8	2,000	20	0	0	31,312	0	0	2,348	8	0	782	16	0	733	18	0	27,408	8	6	67	15	0
"	" 9	8	1,750	17	10	0	32,613	0	0	2,445	19	6	815	6	6	733	18	0	28,535	16	0	82	0	0
Bay of Plenty Jockey Club	" 9	8	530	5	6	0	9,547	0	0	716	0	6	238	13	6	214	19	0	8,310	4	0	67	3	0
Dannevirke Racing Club	" 15	8	2,350	23	10	0	31,351	0	0	2,364	16	6	788	5	6	709	11	0	27,528	9	0	139	18	0
Taumarunui Racing Club	" 15	8	870	8	14	0	12,497	10	0	937	6	3	281	5	6	281	5	6	10,900	7	0	66	2	6
Waipa Racing Club	" 18	8	1,460	14	12	0	30,187	10	0	2,264	1	3	754	13	9	679	6	6	26,344	11	6	144	17	0
Porangahau Racing Club	" 27	8	340	3	8	0	4,368	0	0	327	12	0	109	4	0	98	7	6	3,811	11	6	21	5	0
Dunedin Jockey Club	" 27	8	3,100	31	0	0	38,623	0	0	2,896	14	6	965	11	6	869	2	0	33,627	4	6	264	7	6
"	" 28	8	2,400	24	0	0	36,806	0	0	2,760	9	0	920	3	0	828	5	0	32,089	2	6	208	0	6
Westland Racing Club	" 28	7	880	8	16	0	12,719	0	0	953	18	6	317	19	6	286	5	0	11,101	11	0	59	6	0
"	" 29	7	920	9	4	0	11,722	0	0	879	3	0	293	1	0	263	16	6	10,237	9	0	48	10	6
Taranaki Jockey Club	" 27	8	1,925	19	5	0	44,337	0	0	3,325	5	6	1,108	8	6	997	13	0	38,684	10	6	221	2	6
"	" 28	8	1,750	17	10	0	37,615	0	0	2,821	2	6	940	7	6	846	9	6	32,860	16	6	146	4	0
Manawatu Racing Club	" 27	8	3,750	37	10	0	78,930	0	0	5,919	15	0	1,973	5	0	1,776	0	6	68,980	6	0	280	13	6
"	" 28	8	3,100	31	0	0	55,874	0	0	4,190	11	0	1,396	17	0	1,257	4	6	48,799	14	6	229	13	0
"	" 30	8	2,800	28	0	0	64,190	0	0	4,814	5	0	1,604	15	0	1,444	7	0	56,043	19	0	282	14	0
Auckland Racing Club	" 27	8	8,300	83	0	0	154,188	10	0	11,564	2	9	3,854	14	3	3,469	7	0	134,540	2	6	760	3	6
"	" 29	8	4,950	49	10	0	106,255	10	0	7,969	3	3	2,656	7	9	2,390	16	6	92,866	17	9	372	4	9
" 1921.																								
"	Jan. 1	8	6,800	68	0	0	135,376	10	0	10,153	4	9	3,384	8	3	3,046	1	6	117,854	1	0	938	14	6
"	" 3	8	5,550	55	10	0	115,635	0	0	8,672	12	6	2,890	17	6	2,601	17	6	100,903	3	3	566	9	3
Greymouth Jockey Club	Dec. 30	8	900	9	0	0	10,940	10	0	820	10	9	273	10	3	246	5	0	9,554	1	0	46	3	0
"	1921.																							
"	Jan. 1	8	1,010	10	2	0	15,952	0	0	1,196	8	0	398	16	0	359	0	6	13,929	8	0	68	7	6
Wyndham Racing Club	" 1	8	870	8	14	0	13,440	10	0	1,008	0	9	336	0	3	302	10	6	11,725	18	0	68	0	6
Waikouaiti Racing Club	" 1	8	1,800	18	0	0	25,653	0	0	1,923	19	6	641	6	6	577	5	6	22,329	4	0	181	4	6
Wairarapa Racing Club	" 1	8	1,260	12	12	0	19,885	0	0	1,491	7	6	497	2	6	447	9	6	17,296	19	6	152	1	0
"	" 1	8	1,850	18	10	0	30,427	0	0	2,282	0	6	760	13	6	684	14	0	26,557	19	6	141	12	6
"	" 3	8	1,650	16	10	0	28,598	0	0	2,144	17	0	714	19	0	643	11	0	24,919	3	6	175	9	6
Stratford Racing Club	" 1	8	2,225	22	5	0	41,259	10	0	3,094	9	3	1,031	3	9	928	8	0	35,932	6	6	272	16	6
"	" 3	8	1,875	18	15	0	40,047	10	0	3,003	11	3	1,001	3	9	901	3	0	34,932	12	6	208	19	6
Hawke's Bay Jockey Club	" 1	8	1,750	17	10	0	34,552	0	0	2,591	8	0	863	16	0	777	10	6	30,105	4	6	214	1	0
"	" 3	8	1,700	17	0	0	33,268	0	0	2,495	2	0	831	14	0	748	12	0	29,040	1	0	152	11	0
Marton Jockey Club	" 1	8	2,395	23	19	0	53,789	0	0	4,034	3	6	1,344	14	6	1,210	6	6	47,030	9	6	169	6	6
"	" 3	8	2,120	21	4	0	48,377	0	0	3,628	5	6	1,209	8	6	1,088	11	0	42,278	11	6	172	3	6
Southland Racing Club	" 3	8	2,615	26	3	0	35,827	10	0	2,687	1	3	895	13	9	806	5	0	31,205	18	0	232	12	0
"	" 4	8	1,990	19	18	0	36,086	10	0	2,706	9	9	902	3	3	812	1	0	31,413	1	6	252	14	6
Reefton Jockey Club	" 7	8	890	8	18	0	11,874	0	0	890	11	0	296	17	0	267	4	6	10,342	18	0	76	9	6
"	" 8	8	840	8	8	0	10,644	0	0	798	6	0	266	2	0	239	11	6	9,292	13	6	47	7	0
"	" 8	8	400	4	0	0	3,347	0	0	251	0	6	83	13	6	75	8	6	2,913	15	0	23	2	6
Vincent Jockey Club	" 10	7	400	4	0	0	3,306	10	0	247	19	9	82	13	3	74	10	6	2,885	18	0	15	8	6

RETURN IN CONNECTION WITH LICENSES TO USE THE TOTALIZATOR ISSUED DURING THE RACING YEAR 1920-21—continued.

Racing Clubs—continued

Name of Club.	Date of Meeting.	Number of Races.	Amount of Stakes.		1 per Cent. Government Tax on Stakes.		Totalizator Investments.		Percentage (1/4 per Cent.) retained by Club.		Government Totalizator-tax (2 1/2 per Cent.).		Government Tax on Dividends (2 1/2 per Cent.).		Amount paid in Dividends.		Unpaid Fractions.	
			£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Kawakawa Racing Club	1921 Jan. 17	8	550	5 10 0			8,904	10 0 0	667	16 9	222	12 3	200	9 0	7,758	2 6	55	9 6
Wairoa County Racing Club	" 13	8	965	9 13 0			15,756	0 0 0	1,181	14 0	393	18 0	354	12 6	13,720	0 0	105	13 6
"	" 15	8	900	9 0 0			17,120	0 0 0	1,284	0 0	428	0 0	385	6 0	14,961	0 0	61	13 0
Rotorua Jockey Club	" 19	8	1,100	11 0 0			36,830	10 0 0	2,762	5 9	920	15 3	828	15 0	32,077	1 0	241	13 0
Cromwell Jockey Club	" 12	7	500	5 0 0			4,084	0 0 0	306	6 0	102	2 0	91	19 0	3,567	5 6	16	7 6
"	" 13	7	500	5 0 0			4,776	10 0 0	358	4 9	119	8 3	107	11 0	4,159	11 0	31	15 0
Northern Wairoa Racing Club	" 18	8	620	6 4 0			9,956	10 0 0	746	14 9	248	18 3	224	1 6	8,678	11 0	58	4 6
Cheviot Racing Club	" 15	8	705	7 1 0			2,856	10 0 0	214	4 9	71	8 3	64	7 0	2,487	12 6	18	17 6
Wairoa Jockey Club	" 19	8	1,025	10 5 0			12,822	0 0 0	961	13 0	320	11 0	288	12 0	11,150	4 6	100	19 6
Wellington Racing Club	" 20	8	6,150	61 10 0			71,234	10 0 0	5,342	11 9	1,780	17 3	1,602	17 6	62,211	15 6	296	8 0
"	" 22	8	4,650	46 10 0			102,783	0 0 0	7,708	14 6	2,569	11 6	2,312	14 0	89,784	12 3	407	7 9
"	" 24	8	4,450	44 10 0			83,124	0 0 0	6,234	6 0	2,078	2 0	1,870	7 6	72,597	10 0	343	14 6
Otautau Racing Club	" 21	8	880	8 16 0			10,942	0 0 0	820	13 0	273	11 0	246	5 6	9,520	0 0	81	10 6
Foxton Racing Club	" 22	8	2,050	20 10 0			36,536	0 0 0	2,740	4 0	913	8 0	822	2 6	31,955	10 6	104	15 0
"	" 24	8	1,650	16 10 0			32,195	0 0 0	2,414	12 6	804	17 6	724	9 0	28,109	13 6	141	7 6
Tapanui Racing Club	" 26	8	765	7 13 0			5,889	0 0 0	441	13 6	147	4 6	132	12 6	5,142	17 0	24	12 6
Takapuna Jockey Club	" 26	8	3,925	39 5 0			56,327	0 0 0	4,224	10 6	1,408	3 6	1,267	9 6	49,125	10 0	301	6 6
"	" 29	8	3,200	32 0 0			88,317	0 0 0	6,623	15 6	2,207	18 6	1,987	5 0	77,134	17 0	363	4 0
Pahiatua Racing Club	" 29	8	1,570	15 14 0			25,198	0 0 0	1,889	17 0	629	19 0	567	0 6	21,990	19 6	120	4 0
Canterbury Jockey Club	" 29	8	3,250	32 10 0			20,016	0 0 0	1,501	4 0	500	8 0	450	9 0	17,451	10 0	112	9 0
Taranaki Jockey Club	" Feb. 2	8	2,900	29 0 0			31,840	0 0 0	2,388	0 0	796	0 0	716	10 6	27,845	12 6	93	17 0
"	" 3	8	2,625	26 5 0			34,267	0 0 0	2,570	0 6	856	13 6	771	2 0	29,893	16 6	175	7 6
Gisborne Racing Club	" 3	8	1,585	15 17 0			20,999	0 0 0	1,574	18 6	524	19 6	472	11 6	18,331	16 0	94	14 6
"	" 5	8	1,385	13 17 0			26,064	0 0 0	1,954	16 0	651	12 0	586	10 6	22,816	1 6	55	0 0
Egmont Racing Club	" 9	8	3,750	37 10 0			44,659	0 0 0	3,349	8 6	1,116	9 6	1,004	18 6	39,043	2 0	145	1 6
"	" 10	8	3,100	31 0 0			46,366	0 0 0	3,477	9 0	1,159	3 0	1,043	6 0	40,556	10 6	129	11 6
Dunedin Jockey Club	" 9	8	4,025	40 5 0			45,320	10 0 0	3,399	0 9	1,133	0 3	1,019	16 0	39,539	18 0	228	15 0
"	" 12	8	3,250	32 10 0			49,617	0 0 0	3,721	5 6	1,240	8 6	1,116	10 0	43,324	9 6	214	6 6
Poverty Bay Turf Club	" 10	8	1,925	19 5 0			24,924	0 0 0	1,869	6 0	623	2 0	560	18 0	21,739	18 6	130	15 6
"	" 12	8	1,800	18 0 0			28,632	0 0 0	2,147	8 0	715	16 0	644	6 0	24,943	16 0	180	14 0
Te Kuiti Racing Club	" 12	8	1,505	15 1 0			33,169	0 0 0	2,487	13 6	829	4 6	746	7 6	28,934	1 0	171	13 6
Woodville District Jockey Club	" 16	8	2,000	20 0 0			27,704	0 0 0	2,077	16 0	692	12 0	623	8 6	24,216	18 0	93	5 6
"	" 17	8	1,750	17 10 0			27,922	0 0 0	2,094	3 0	698	1 0	628	7 0	24,353	3 0	148	6 0
Hamilton Racing Club	" 16	8	3,275	32 15 0			55,895	10 0 0	4,192	3 3	1,397	7 9	1,257	15 0	48,776	6 0	271	18 0
"	" 17	8	2,975	29 15 0			53,969	0 0 0	4,047	13 6	1,349	4 6	1,214	9 0	47,033	0 0	324	13 0
North Otago Jockey Club	" 17	8	1,580	15 16 0			16,903	0 0 0	1,267	14 6	422	11 6	380	8 0	14,713	0 6	119	5 6
"	" 18	8	1,440	14 8 0			15,303	10 0 0	1,147	15 3	382	11 9	344	8 6	13,347	7 6	81	7 0
Clifden Racing Club	" 23	8	550	5 10 0			5,456	0 0 0	409	4 0	136	8 0	122	17 0	4,766	13 6	20	17 6
Opotiki Jockey Club	" 24	8	545	5 9 0			5,264	0 0 0	394	16 0	131	12 0	118	11 0	4,578	11 6	40	9 6
Wanganui Jockey Club	" 24	8	4,200	42 0 0			59,478	0 0 0	4,460	17 0	1,486	19 0	1,338	6 6	51,967	9 3	224	8 3
"	" 26	8	3,400	34 0 0			62,763	0 0 0	4,707	4 6	1,569	1 6	1,412	5 0	54,760	16 0	313	13 0
Tolaga Bay Jockey Club	" 26	8	500	5 0 0			9,899	0 0 0	742	8 6	247	9 6	222	16 6	8,634	18 6	51	7 0
Thames Jockey Club	" 26	8	1,600	16 0 0			30,722	0 0 0	2,304	3 0	768	1 0	691	7 0	26,833	9 0	125	0 0
"	" 28	8	1,520	15 4 0			29,278	10 0 0	2,195	17 9	731	19 3	658	16 6	25,485	8 9	206	7 9

Dannevirke Racing Club	Mar	2	8	2,500	25	0	0	28,445	2,133	7	6	711	2	6	640	2	6	24,838	4	6	122	3	0
"	"	3	8	1,800	18	0	0	27,532	2,064	18	0	688	6	0	619	11	6	24,039	3	6	120	1	0
Gore Racing Club ..	"	2	8	1,590	15	18	0	16,100	1,207	10	9	402	10	3	362	7	6	14,053	1	6	75	0	0
"	"	3	8	1,270	12	14	0	12,999	974	18	6	324	19	6	292	11	6	11,329	13	0	76	17	6
Nelson Jockey Club..	"	3	8	1,275	12	15	0	16,641	1,248	1	6	416	0	6	374	10	6	14,515	6	6	87	1	0
"	"	5	8	1,225	12	5	0	20,566	1,542	9	0	514	3	0	462	16	6	17,926	19	6	119	12	0
Akaroa County Racing Club	"	5	8	1,310	13	2	0	30,167	2,262	10	6	754	3	6	678	0	6	26,297	4	6	175	1	0
Te Aroha Jockey Club	"	5	8	1,900	19	0	0	42,043	3,153	5	3	1,051	1	9	946	1	6	36,726	11	0	166	10	6
"	"	7	8	1,850	18	10	0	37,167	2,787	11	3	523	15	0	818	19	6	32,487	13	0	144	2	6
Southland " Racing Club	"	9	8	2,180	21	16	0	20,950	1,571	5	0	516	11	0	471	9	0	18,278	13	0	104	18	0
"	"	10	8	1,820	18	4	0	20,662	1,549	13	0	376	18	6	464	19	6	18,010	7	6	120	9	0
Marlborough " Racing Club	"	9	8	930	9	6	0	15,077	1,130	15	6	339	6	6	339	6	6	13,138	15	0	91	4	6
"	"	11	8	945	9	9	0	17,695	1,327	2	6	442	7	6	398	5	0	15,431	11	0	95	14	0
Napier Park " Racing Club	"	11	8	2,175	21	15	0	21,187	1,589	0	6	529	13	6	476	16	0	18,479	3	6	112	6	6
"	"	12	8	1,675	16	15	0	26,088	1,956	12	0	652	4	0	587	0	6	22,778	8	6	113	15	0
Ohinemuri Jockey Club	"	12	8	2,450	24	10	0	40,338	3,025	7	0	1,008	9	0	907	14	6	35,141	8	6	255	1	0
"	"	14	8	2,135	21	7	0	37,772	2,832	18	9	944	6	3	849	19	6	32,953	16	0	191	9	6
Waimate Racing Club	"	17	8	1,820	18	4	0	19,099	1,432	9	3	477	9	9	429	16	6	16,667	12	6	92	2	0
Opunake Racing Club	"	17	8	1,500	15	0	0	33,511	2,513	6	6	837	15	6	754	2	0	29,276	8	6	129	7	6
Lake County Jockey Club	"	17	7	415	4	3	0	1,747	131	0	6	43	13	6	39	8	0	1,526	0	0	6	18	0
"	"	18	7	395	3	19	0	2,640	184	10	0	61	10	0	55	8	6	2,141	14	0	16	17	6
Masterton Racing Club	"	19	8	1,680	16	16	0	16,176	1,213	4	0	404	8	0	364	1	0	14,073	18	9	120	8	3
Westport Jockey Club	"	19	7	480	4	16	0	5,435	407	12	6	135	17	6	122	8	0	4,698	12	0	70	10	0
"	"	21	7	500	5	0	0	7,089	531	13	6	177	4	6	159	12	0	6,137	9	6	83	0	6
Rangitikei " Racing Club	"	22	8	1,850	18	10	0	21,951	1,646	6	6	548	15	6	494	0	6	19,155	7	0	106	10	6
"	"	23	8	1,520	15	4	0	18,233	1,367	9	6	455	16	6	410	7	0	15,931	0	0	68	7	0
Tuapeka County Jockey Club	"	26	8	720	7	4	0	9,458	709	7	0	236	9	0	212	18	0	8,254	7	6	44	18	6
Auckland Racing Club	"	26	8	5,400	54	0	0	97,639	7,322	19	3	2,440	19	9	2,196	19	0	85,193	17	6	484	14	6
"	"	28	8	5,450	54	10	0	112,767	8,457	10	6	2,819	3	6	2,537	7	0	98,362	16	0	590	3	0
Riverton " Racing Club	"	28	8	1,960	19	12	0	19,821	1,486	12	3	495	10	9	446	2	0	17,284	14	6	108	10	6
"	"	28	8	1,790	17	18	0	18,593	1,394	10	3	464	16	9	418	8	0	16,186	13	6	129	1	6
Wairarapa " Racing Club	"	28	8	2,250	22	10	0	26,753	2,006	9	6	668	16	6	602	0	6	23,311	6	6	164	7	0
Waipukurau Jockey Club	"	28	8	2,100	21	0	0	29,776	2,233	4	0	744	8	0	670	1	0	25,867	16	0	260	11	0
Beaumont Racing Club	"	28	8	1,550	15	10	0	24,798	1,859	17	0	619	19	0	558	0	0	21,654	18	0	105	6	0
Kumara Racing Club	"	28	8	1,000	10	0	0	11,395	854	12	6	284	17	6	256	9	6	9,934	19	6	64	1	0
Canterbury Jockey Club	"	28	7	500	5	0	0	6,398	479	17	0	159	19	0	144	0	6	5,586	14	0	27	9	6
"	"	28	8	4,600	46	0	0	67,478	5,060	17	9	1,686	19	3	1,518	7	0	58,855	19	3	356	6	9
Feilding Jockey Club	"	29	8	4,900	49	0	0	46,977	3,523	6	3	1,174	8	9	1,057	2	6	40,973	10	9	249	1	9
Westland " Racing Club	"	29	8	3,150	31	10	0	51,641	3,873	1	6	1,291	0	6	1,162	0	0	45,179	15	0	135	3	0
Birchwood Hunt Club	"	29	8	2,400	24	0	0	45,016	3,376	4	0	1,125	8	0	1,012	19	0	39,318	10	0	182	19	0
Greyhound Jockey Club	"	30	8	700	7	0	0	11,031	827	6	6	275	15	6	248	6	0	9,630	18	0	48	14	0
Avondale Jockey Club	"	30	8	630	6	6	0	7,665	574	18	3	191	12	9	172	11	0	6,677	0	0	49	8	0
"	"	April 2	8	785	7	17	0	12,984	973	16	0	324	12	0	292	5	0	11,321	14	6	71	12	6
Reefton Jockey Club	"	2	8	2,900	29	0	0	67,154	5,036	11	0	1,678	17	0	1,511	1	0	58,659	5	0	268	6	0
Wellington Racing Club	"	6	8	2,300	23	0	0	62,751	4,706	7	3	1,568	15	9	1,412	0	6	54,753	13	6	310	13	0
"	"	6	8	735	7	7	0	11,837	887	15	6	295	18	6	266	8	6	10,335	19	6	50	18	0
Manawatu " Racing Club	"	7	8	4,950	49	10	0	56,923	4,269	4	6	1,423	1	6	1,280	17	6	49,660	18	3	288	18	3
"	"	9	8	5,200	52	0	0	82,217	6,166	5	6	2,055	8	6	1,849	19	6	71,844	14	3	300	12	3
"	"	13	8	3,900	39	0	0	41,908	3,143	2	0	1,047	14	0	943	0	0	36,625	11	0	148	13	0
"	"	14	8	4,000	40	0	0	46,634	3,497	11	0	1,165	17	0	1,049	7	0	40,763	16	6	157	8	6
Hororata Racing Club	"	16	8	680	6	16	0	9,651	723	17	3	241	5	9	217	5	0	8,408	6	0	60	16	0

RETURN IN CONNECTION WITH LICENSES TO USE THE TOTALIZATOR ISSUED DURING THE RACING YEAR 1920-21—continued.
Racing Clubs—continued.

Name of Club.	Date of Meeting.	Number of Races.	Amount of Stakes.	1 per Cent. Government Tax on Stakes.	Totalizator Investments.	Percentage ($\frac{1}{4}$ per Cent.) retained by Club.	Government Totalizator-tax ($\frac{1}{4}$ per Cent.).	Government Tax on Dividends ($\frac{1}{4}$ per Cent.).	Amount paid in Dividends.	Unpaid Fractions.
	1921.		£	£ s. d.	£	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Hawke's Bay Jockey Club	April 20	8	3,850	38 10 0	31,694 0 0	2,377 1 0	792 7 0	713 4 6	27,726 19 0	84 8 6
"	" 21	8	3,300	33 0 0	37,160 0 0	2,787 0 0	929 0 0	836 3 6	32,447 8 6	160 8 0
South Canterbury Jockey Club	" 21	8	1,840	18 8 0	21,772 10 0	1,632 18 9	544 6 3	489 19 6	19,000 18 6	104 7 0
"	" 22	8	1,560	15 12 0	23,179 0 0	1,738 8 6	579 9 6	521 13 0	20,241 12 6	97 16 6
Marlborough Racing Club	May 6	8	950	9 10 0	14,815 0 0	1,111 2 6	370 7 6	333 8 6	12,938 4 6	61 17 0
"	" 7	8	880	8 16 0	17,136 0 0	1,285 4 0	428 8 0	385 13 0	14,940 18 0	95 17 0
Egmont Racing Club	" 11	8	2,670	26 14 0	34,428 0 0	2,582 2 0	860 14 0	774 14 0	30,099 6 0	111 4 0
"	" 12	7	2,020	20 4 0	34,730 0 0	2,604 15 0	868 5 0	781 9 6	30,316 0 0	159 10 6
"	" 14	8	2,350	23 10 0	48,879 0 0	3,665 18 6	1,221 19 6	1,099 17 6	42,689 9 6	201 15 0
Pakuranga Hunt Club	" 12	8	1,610	16 2 0	16,839 10 0	1,262 19 3	420 19 9	378 19 6	14,659 6 0	117 5 6
Ashburton County Racing Club	" 13	8	1,500	15 0 0	15,966 10 0	1,197 9 9	399 3 3	359 6 6	13,951 16 0	58 14 6
"	" 13	8	1,500	15 0 0	15,966 10 0	1,197 9 9	399 3 3	359 6 6	13,951 16 0	58 14 6
North Otago Jockey Club	" 19	7	1,205	12 1 0	14,063 10 0	1,054 15 3	351 11 9	316 10 6	12,230 4 6	110 8 0
"	" 20	7	1,085	10 17 0	13,623 0 0	1,021 14 6	340 11 6	306 12 0	11,872 13 6	81 8 6
Wanganui Jockey Club	" 19	7	2,900	29 0 0	42,009 0 0	3,150 13 6	1,050 4 6	945 6 6	36,711 2 3	151 13 3
"	" 21	7	2,350	23 10 0	49,008 10 0	3,675 12 9	1,225 4 3	1,102 15 0	42,807 0 0	197 18 0
Egmont-Wanganui Hunt Club	" 25	8	820	8 4 0	22,490 0 0	1,686 15 0	562 5 0	506 2 6	19,611 3 0	123 14 6
Dunedin Jockey Club	June 1	8	3,450	34 10 0	28,114 10 0	2,108 11 9	702 17 3	632 14 0	24,496 15 0	173 2 0
"	" 3	8	2,850	28 10 0	46,889 10 0	3,516 14 3	1,172 4 9	1,055 2 0	40,915 4 0	230 5 0
"	" 4	8	2,850	28 10 0	41,051 10 0	3,078 17 3	1,026 5 9	923 14 6	35,717 19 6	304 13 0
Otagi Maori Racing Club	" 4	7	1,590	15 18 0	23,930 0 0	1,794 15 0	598 5 0	538 10 6	20,912 10 0	85 19 6
Auckland Racing Club	" 4	7	5,500	55 0 0	98,043 10 0	7,353 5 3	2,451 1 9	2,206 1 6	85,685 11 9	347 9 9
"	" 4	7	5,250	52 10 0	82,675 0 0	6,193 2 6	2,064 7 6	1,857 19 6	71,946 2 6	513 8 0
"	" 8	7	4,350	43 10 0	91,631 0 0	6,872 6 6	2,290 15 6	2,061 16 0	79,986 15 6	419 6 6
Napier Park Racing Club	" 17	7	2,080	20 16 0	18,090 0 0	1,356 15 0	452 5 0	407 1 6	15,773 11 6	100 7 0
Hawke's Bay Jockey Club	" 22	7	1,850	18 10 0	23,513 0 0	1,763 9 6	587 16 6	529 2 6	20,534 5 6	98 6 0
"	" 23	7	2,055	20 11 0	23,118 0 0	1,733 17 0	577 19 0	520 5 0	20,206 8 0	79 11 0
"	" 25	7	1,925	19 5 0	24,912 0 0	1,868 8 0	622 16 0	560 12 0	21,697 19 0	162 5 0
"	" 25	7	1,605	16 1 0	28,868 0 0	2,165 2 6	721 14 0	649 12 0	25,227 15 0	103 17 0
Hawke's Bay Hunt Club	" 25	8	875	8 15 0	9,695 0 0	727 2 6	242 7 6	218 5 0	8,457 9 0	49 16 0
Brackenfield Hunt Club	" 29	7	850	8 10 0	13,552 0 0	1,016 8 0	338 16 0	305 0 0	11,812 3 6	79 12 6
Dannevirke Hunt Club	" 6	8	1,095	10 19 0	16,185 0 0	1,213 17 6	404 12 6	364 5 0	14,113 16 0	88 9 0
Rangitikei Hunt Club	" 13	8	4,150	41 10 0	63,976 10 0	4,798 4 9	1,599 8 3	1,439 12 0	55,918 3 0	221 2 0
Wellington Racing Club	" 16	8	4,400	44 0 0	85,416 0 0	6,406 4 0	2,135 8 0	1,921 18 6	74,660 18 0	291 11 6
"	" 16	7	630	6 6 0	5,339 10 0	400 9 3	133 9 9	120 4 6	4,655 4 0	30 2 6
Waimate District Hunt Club	" 16	8	805	8 1 0	11,509 0 0	863 3 6	287 14 6	257 12 6	10,038 0 0	62 9 6
Christchurch Hunt Club	" 23	8	1,925	19 5 0	15,960 10 0	1,159 10 9	386 10 3	347 18 6	13,481 7 0	85 3 6
South Canterbury Hunt Club	" 28	7	1,450	14 10 0	15,484 0 0	1,198 16 0	399 12 0	359 14 0	13,950 5 6	75 12 6
Gisborne Racing Club	" 30	7	1,350	13 10 0	17,912 0 0	1,343 8 0	447 16 0	403 1 6	15,650 0 6	67 14 0
Totals, racing	229 days	1,803	485,170	4,851 14 0	7,977,619 10 0	598,321 9 3	199,440 9 9	179,497 9 0	6,962,367 5 9	37,992 16 3

RETURN IN CONNECTION WITH LICENSES TO USE THE TOTALIZATOR ISSUED DURING THE RACING YEAR 1920-21—continued.

Trotting Clubs.

Name of Club.	Date of Meeting.	Number of Races.	Amount of Stakes.	1 per Cent. Government Tax on Stakes.	Totalizator Investments.	Percentage retained by Club.	Government Totalizator-tax (2½ per Cent.).	Government Dividends (2½ per Cent.).	Amount paid in Dividends.	Unpaid Fractions.
			£	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
N.Z. Metropolitan Trotting Club	1920.	8	3,100	31 0 0	36,887 0 0	2,766 10 6	922 3 6	830 0 6	32,203 1 6	165 4 0
"	Aug. 9	8	3,350	33 10 0	59,469 10 0	4,460 4 3	1,486 14 9	1,338 3 0	51,894 11 0	289 17 0
"	" 11	8	3,700	37 0 0	63,038 10 0	4,727 17 9	1,575 19 3	1,418 9 6	55,023 16 6	292 7 0
Greymouth Trotting Club	Oct. 23	8	690	6 18 0	10,530 0 0	789 15 0	263 5 0	235 16 0	9,194 0 0	47 4 0
"	" 25	8	740	7 8 0	12,365 0 0	927 7 6	309 2 6	278 6 6	10,768 1 0	82 2 6
Oamaru Trotting Club	" 25	8	1,300	13 0 0	24,986 10 0	1,873 19 9	624 13 3	562 6 6	21,809 17 0	115 13 6
N.Z. Metropolitan Trotting Club	Nov. 9	8	5,400	54 0 0	90,296 10 0	6,772 4 9	2,257 8 3	2,031 15 6	78,907 11 6	327 10 0
"	" 11	8	4,000	40 0 0	76,966 0 0	5,772 9 0	1,924 3 0	1,731 16 6	67,192 9 6	345 2 0
"	" 12	8	4,850	48 10 0	91,813 10 0	6,886 0 3	2,295 6 9	2,065 18 0	80,170 10 6	395 14 6
Otahuu Trotting Club	" 27	8	2,025	20 5 0	46,785 0 0	3,508 17 6	1,169 12 6	1,052 15 6	42,944 14 6	251 17 6
Forbury Park Trotting Club	Dec. 1	8	1,875	18 15 0	46,785 0 0	3,508 17 6	1,169 12 6	1,052 15 6	40,852 16 6	200 18 0
"	" 2	8	1,965	19 13 0	28,163 0 0	2,112 4 6	704 1 6	633 15 0	24,584 11 0	128 8 0
"	" 4	8	2,035	20 7 0	46,322 10 0	3,474 3 9	1,158 1 3	1,042 7 0	40,505 7 6	142 10 6
New Brighton Trotting Club	" 16	8	1,535	15 7 0	36,039 10 0	2,702 19 3	900 19 9	810 19 6	31,456 3 0	168 8 6
"	" 18	8	2,125	21 5 0	41,887 10 0	3,141 11 3	1,047 3 9	942 11 6	36,521 13 0	234 10 6
Ashburton Trotting Club	" 27	8	2,050	20 10 0	26,917 0 0	2,018 15 6	672 18 6	605 14 6	23,468 16 6	150 15 0
Gore Trotting Club	" 27	8	1,700	17 0 0	21,690 10 0	1,626 15 9	542 5 3	488 2 6	18,947 3 0	86 3 6
Westport Trotting Club	" 27	8	840	8 8 0	9,516 10 0	713 14 9	237 18 3	214 4 6	8,305 15 6	44 17 0
"	" 28	8	775	7 15 0	10,816 10 0	811 4 9	270 8 3	243 10 0	9,427 12 6	63 14 6
Auckland Trotting Club	" 31	8	4,700	47 0 0	74,910 0 0	5,618 5 0	1,872 15 0	1,685 7 6	65,390 7 9	343 4 9
"	1921.									
"	Jan. 4	8	3,200	32 0 0	57,289 0 0	4,296 13 6	1,432 4 6	1,289 2 0	50,082 0 6	188 19 6
"	" 5	8	3,200	32 0 0	58,443 10 0	4,383 5 3	1,461 1 9	1,315 1 0	51,109 9 6	174 12 6
Greymouth Trotting Club	1920.	8	930	9 6 0	14,911 10 0	1,118 7 3	372 15 9	335 12 0	13,021 16 0	62 19 0
"	Dec. 31									
Canterbury Park Trotting Club	1921.	8	1,040	10 8 0	17,605 0 0	1,320 7 6	440 2 6	396 4 0	15,358 8 6	89 17 6
"	Jan. 3	8	2,775	27 15 0	49,333 0 0	3,699 19 6	1,233 6 6	1,110 1 6	43,117 19 6	171 13 0
"	" 3	8	2,720	27 4 0	50,634 0 0	3,797 11 0	1,265 17 0	1,139 7 0	44,181 3 6	250 1 6
Westland Trotting Club	" 5	7	600	6 0 0	10,438 0 0	784 7 0	261 9 0	235 7 6	9,115 12 0	61 4 6
Inangahua Trotting Club	" 10	8	750	7 10 0	9,613 0 0	720 19 6	240 6 6	216 7 6	8,391 18 6	43 8 0
Wellington Trotting Club	" 21	8	1,500	15 0 0	22,435 10 0	1,682 13 3	560 17 9	504 18 6	19,565 19 6	121 1 0
Waikato Trotting Club	" 21	8	1,500	15 0 0	25,688 10 0	1,926 12 9	642 4 3	578 1 6	22,414 15 6	126 16 0
Winton Trotting Club	" 2	8	1,300	13 0 0	14,544 10 0	1,090 16 9	363 12 3	327 7 0	12,713 0 6	49 13 6
Forbury Park Trotting Club	Feb.	8	2,550	25 10 0	40,755 10 0	3,056 13 3	1,018 17 9	917 1 6	36,484 15 0	278 2 6
"	" 7	8	2,575	25 15 0	37,041 0 0	2,778 1 6	926 0 6	812 5 6	32,300 17 0	223 15 6
Poverty Bay Trotting Club	" 11	8	1,230	12 6 0	15,624 0 0	1,171 16 0	390 12 0	351 12 0	13,639 13 0	70 7 0
N.Z. Metropolitan Trotting Club	" 12	8	3,200	32 0 0	44,427 10 0	3,332 1 3	1,110 13 9	999 14 6	38,721 12 0	263 8 6
Otahuu Trotting Club	" 19	8	2,425	24 5 0	48,481 10 0	3,636 2 3	1,212 0 9	1,090 18 6	42,329 14 0	212 14 6
"	" 23	8	2,275	22 15 0	44,316 0 0	3,323 14 0	1,107 18 0	997 4 6	38,690 14 6	196 9 0
Wanganui Trotting Club	" 25	8	1,615	16 3 0	24,599 0 0	1,844 18 6	614 19 6	553 12 0	21,486 17 0	98 13 0
"	" 28	8	1,525	15 5 0	24,082 0 0	1,806 3 0	602 1 0	541 18 6	21,032 13 6	99 4 0
Nelson Trotting Club	Mar. 4	8	780	7 16 0	14,897 0 0	1,117 5 6	372 8 6	335 5 0	13,013 17 0	58 4 0

RETURN IN CONNECTION WITH LICENSES TO USE THE TOTALIZATOR ISSUED DURING THE RACING YEAR 1920-21—continued.

Trotting Clubs—continued.

Name of Club.	Date of Meeting.	Number of Races.	Amount of Stakes.	1 per Cent. Government Tax on Stakes	Totalizator Investments.	Percentage (7½ per Cent.) retained by Club.	Government Totalizator-tax (2½ per Cent.).	Government Tax on Dividends (2½ per Cent.).	Amount paid in Dividends.	Unpaid Fractions.
Marlborough Trotting Club ..	1921. Mar. 10	8	765	£ s. d. 7 13 0	£ s. d. 13,741 0 0	£ s. d. 1,030 11 6	£ s. d. 343 10 6	£ s. d. 309 5 0	£ s. d. 12,016 2 6	£ s. d. 41 10 6
N.Z. Metropolitan Trotting Club ..	" 26	8	3,300	33 0 0	59,715 10 0	4,478 13 3	1,492 17 9	1,343 14 0	52,239 14 6	160 10 6
Waimate Plains Trotting Club ..	" 30	8	3,100	31 0 0	57,457 0 0	4,309 5 6	1,436 8 6	1,292 17 0	50,150 18 6	267 10 6
Timaru Trotting Club ..	" 28	8	1,895	18 19 0	22,925 0 0	1,719 7 6	573 2 6	515 18 6	20,029 0 0	87 11 6
Kaikoura Trotting Club ..	April 7	8	1,650	16 10 0	25,211 10 0	1,890 17 3	630 5 9	567 7 6	22,043 5 0	79 14 6
Manawatu Trotting Club ..	" 14	8	1,350	3 10 0	2,940 10 0	220 10 9	73 10 3	66 4 6	2,561 11 6	18 13 0
Auckland Trotting Club ..	" 15	8	1,350	13 10 0	23,222 0 0	1,741 13 0	580 11 0	522 11 0	20,314 6 6	62 18 6
"	" 16	8	2,550	25 10 0	45,773 10 0	3,433 0 3	1,144 6 9	1,030 0 0	39,970 8 6	195 14 6
New Brighton Trotting Club..	" 20	8	2,550	25 10 0	39,447 0 0	2,958 10 6	986 3 6	887 13 0	34,447 14 6	166 18 6
Forbury Park Trotting Club ..	" 28	8	1,905	19 1 0	30,925 10 0	2,319 8 3	773 2 9	695 19 6	27,038 10 0	98 9 6
"	" 30	8	2,540	25 8 0	42,560 10 0	3,192 0 9	1,064 0 3	957 14 0	37,114 5 6	232 9 6
South Wairarapa Trotting Club ..	May 5	8	2,350	23 10 0	30,984 10 0	2,323 16 9	774 12 3	697 4 6	27,051 17 0	136 19 6
Canterbury Park Trotting Club ..	" 7	8	2,350	23 10 0	46,111 10 0	3,458 7 3	1,152 15 9	1,037 12 0	40,293 17 0	168 18 0
"	June 6	7	650	6 10 0	8,880 0 0	666 0 0	222 0 0	199 17 6	7,762 4 6	29 18 0
"	" 3	8	2,495	24 19 0	47,779 10 0	3,583 9 3	1,194 9 9	1,075 3 0	41,753 4 0	173 4 0
"	" 4	8	2,160	21 12 0	41,523 0 0	3,114 4 6	1,038 1 6	933 9 0	36,303 1 0	134 4 0
Ashburton Trotting Club ..	" 11	8	2,300	23 0 0	27,767 10 0	2,082 11 3	694 3 9	602 7 0	24,281 16 6	106 11 6
Auckland Trotting Club ..	" 25	7	2,400	24 0 0	44,337 0 0	3,325 5 6	1,108 8 6	997 13 0	38,743 18 6	161 14 6
"	" 29	7	2,400	24 0 0	48,484 10 0	3,636 6 9	1,212 2 3	1,090 19 0	42,378 10 0	166 12 0
Totals, trotting ..	59 days	468	125,505	1,255 1 0	2,143,593 0 0	160,769 9 6	53,589 16 6	48,190 4 0	1,871,836 1 3	9,207 8 9
Totals, racing ..	229 days	1,803	485,170	4,851 14 0	7,977,619 10 0	598,321 9 3	199,440 9 9	179,497 9 0	6,962,367 5 9	37,992 16 3
Grand totals ..	288 days	2,271	610,675	6,106 15 0	10,121,212 10 0	759,090 18 9	253,030 6 3	227,687 13 0	8,834,203 7 0	47,200 5 0

Approximate Cost of Paper.—Preparation, not given; printing (550 copies), £52 10s.

By Authority : MARCUS F. MARKS, Government Printer, Wellington.—1921.

Price 1s.]