SESSION II.
1918.
NEW ZEALAND.

PUBLIC HEALTH
AND
HOSPITALS AND CHARITABLE AID.

REPORT THEREON BY THE INSPECTOR-GENERAL OF HOSPITALS AND CHARITABLE INSTITUTIONS AND CHIEF HEALTH OFFICER.

Presented in pursuance of Section 76 of the Hospitals and Charitable Institutions Act, 1918.

REPORT.

The INSPECTOR-GENERAL OF HOSPITALS to the Hon. MINISTER OF PUBLIC HEALTH.

Department of Public Health, Hospitals, and Charitable Aid,
Wellington, 30th October, 1918.

SIR,—

I have the honour to lay before you the report of the Department for the year ending 31st March, 1918.

BIRTHS AND DEATHS.

The number of births registered in the Dominion during 1917 was 28,239, or 25·69 per 1,000 of the mean population, as against 28,509 in 1916, or 25·94 per 1,000 of the mean population.

The deaths numbered 10,528, or 9·58 per 1,000 of the mean population, as against 10,596 in 1916, or 9·64 per 1,000 of the mean population.

Deaths from the more prevalent infectious diseases were as follows:—

Disease.	Number of Deaths.		Proportion per 10,000 of Mean Population.	
	1917.	1916.	1917.	1916.
Typhoid fever	41	37	0·37	0·34
Scarlet fever	30	52	0·27	0·47
Diphtheria	237	163	2·16	1·48
Pulmonary tuberculosis	597	591	5·43	5·38

The deaths of children under one year of age were as follows:—

Cause.	Number of Deaths.		Percentage of Total.	
	1917.	1916.	1917.	1916.
Whooping-cough	29	63	2·13	4·36
Convulsions	56	74	4·12	5·12
Bronchitis and pneumonia	96	123	7·06	8·50
Diarrhœa and enteritis	146	164	10·74	11·34
Malformations	120	108	8·82	7·47
Premature birth	380	381	27·94	26·35
Congenital debility	208	215	15·29	14·87
Other causes	325	318	23·90	21·99
Total	1,360	1,446	100·00	100·00

Rates of Infantile Mortality in New Zealand and Four Chief Centres (Deaths under One Year of Age per 1,000 Births), each Year 1908–17.

Year.	New Zealand.	Auckland and Suburban Boroughs.	Wellington and Suburban Boroughs.	Christchurch and Suburban Boroughs.	Dunedin and Suburban Boroughs.
1908 ..	67·89	81·87	81·67	67·82	74·54
1909 ..	61·60	61·85	84·21	62·78	48·52
1910 ..	67·73	79·02	84·59	69·40	79·08
1911 ..	56·31	63·02	73·36	62·90	43·42
1912 ..	51·22	56·95	61·32	60·03	38·11
1913 ..	59·17	80·81	60·23	63·49	73·42
1914 ..	51·38	57·62	82·57	68·15	54·28
1915 ..	50·05	71·67	57·17	54·24	72·26
1916 ..	50·70	59·21	65·13	66·71	54·74
1917 ..	48·16	60·96	56·55	49·32	40·16

PUBLIC HEALTH ACT.

Infectious Diseases.

The following table shows the number of cases of infectious diseases notified throughout the Dominion during the year 1917 in comparison with the two previous years:—

Disease.	Number of Cases.			Rate of Incidence per 10,000 of the Population.		
	1917.	1916.	1915.	1917.	1916.	1915.
Scarlet fever	2,755	4,278	2,301	25·06	39·45	20·91
Diphtheria	5,458	2,376	1,404	49·65	21·86	12·76
Enteric	653	806	820	5·94	7·42	7·45
Tuberculosis	1,521	950	1,001	13·83	8·73	9·10
Cerebro-spinal meningitis	42	135	85	0·39	1·24	0·77
Poliomyelitis	54	1,018	10	0·49	9·37	0·09
Ophthalmia neonatorum	25	17	*	0·23	0·16	..
Actinomycosis	2	..	..	0·01	..	..
Trachoma..	10	†	†	0·09	..	..
Puerperal fever	81	174 (Puerperal fever, Erysipelas, Tetanus, Unclassified septicæmia)	140 (Puerperal fever, Erysipelas, Tetanus, Unclassified septicæmia)	0·73	1·60	1·27
Erysipelas	112			1·01	..	..
Tetanus	5			0·04	..	..
Unclassified septicæmia	10			0·09	..	..
Hydatids	27	25	17	0·24	0·23	0·15
Smallpox	..	..	1	..	..	..
Chicken-pox	‡	‡	354	..	..	3·22
	10,755	9,779	6,133	97·80	90·06	55·72

* Not notifiable prior to 1916. † Not notifiable prior to 1917. ‡ Not now notifiable.

During the year, by direction of the Hon. the Minister of Public Health, the Department commenced the publication monthly of the *Journal of Public Health*. The *Journal* is intended chiefly for the benefit of Hospital Boards, and is much appreciated. It is also circulated to the Health authorities of other countries. This publication, together with the issue of a weekly Bulletin of Infectious Diseases, gives those interested or responsible for needful measures for checking the spread of infectious diseases full particulars as to the incidence of these diseases in the Dominion. Full details as to the incidence of infectious diseases for the year 1917 appeared in the January and February numbers of the *Journal*.

Diphtheria.

The figures disclose a widespread epidemic. The science of hygiene is as yet unable to explain why epidemics are at times suddenly revived, and why infections always present in a community—perhaps but a few cases at any one time—assume unusual gravity or exceptional mildness. Enthusiastic hygienists of thirty years ago—and the young medical officers of health of to-day—maintain that the outcome of public health precautions in their widest sense would be to entirely eliminate those cyclical changes—that is, a wave of diminishing cases of infection followed after a lapse of some years by a pronounced rise—which the historical past discloses. New Zealand, in the matter of diphtheria, has again experienced one of those cyclical exacerbations—unexplainable and despite the undoubtedly advanced position she holds in so far as generally sound and effective sanitation is concerned.

Time was when a diagnosis of diphtheria was made upon the presence or absence of the characteristic lesion—the membrane. To-day most reliance is placed upon the bacteriological determination of the presence of the bacillus to which the production of the membrane and the other symptoms of the disease are ascribed. It is at least probable that some of the increase in notifications is attributable to more accurate diagnosis, to the extent that in past years cases now notified as diphtheria would have escaped notice.

The need for bacteriological examinations of suspected throats has made more pronounced the need for extending the bacteriological side of the Department's activities. It will be recognized that at present the bacteriological needs of the Dominion do not warrant such an extension by means of registered medical practitioners specially skilled in bacteriology. Provided the four centres are supplied with bacteriologists of standing and experience to whom special investigations or problems can be referred, and with whom technical consultations can be had, it should be sufficient to secure for the other centres, next greatest in population, persons adequately trained and experienced in the determination of the more common infections. A scheme has now been evolved whereby it is intended to send out to the hospitals graded next to those of the four centres fully competent bacteriological assistants. These officers will, when attached to such hospitals, bear the title "Hospital Bacteriologist." In so far as public-health work is concerned they will be under the direction of the District Health Officer, and in technical matters they will be guided by the Government Bacteriologist for their district. Their services, under carefully drawn conditions, will be available for private practitioners, thus widening the scope of the State's health activities.

The problem of the persistent "diphtheria-carrier" still gives rise to anxiety and to the trial of one and all of the many remedies for his suppression from time to time lauded—and, alas! just as often exploded. If it were known by what natural processes a person who has been inhabited by the diphtheria bacillus becomes free from it, or, in bacteriological terms, becomes "negative for diphtheria," doubtless the artificial application of equally effective means would be speedily evolved. We do not, however, yet know why some persons—"diphtheria-carriers"—continue to retain the bacillus in the exudates of the throat and nose for even months after all signs and symptoms of the active disease have disappeared, and why, on the other hand, some patients become "negative" almost forthwith upon recovery. The frequent observance of enlarged tonsils in "diphtheria-carriers" and the suppression of those "carriers" by tonsilectomy points to at least an effective surgical remedy being available. Much was hoped for the elimination of "carriers" by the use of chloramine T. in steam spray: this medicament, however, has now proved wanting. On the other hand, trials made with chloramine T. and other medicaments in steam spray in the prevention of the spread of diphtheria in schools has given hopeful results. The practice is to pass the whole of the infected school—scholars and teachers—through a small room so as to cause the nasal and oral mucous membrane to be exposed for a definite time to the medicinal spray. One satisfactory outcome of this school treatment is that the parents' fears are to some extent allayed by the fact that something is being done to prevent the spread of the disease beyond the principal measure heretofore adopted—the exclusion of the infected child and of the same household from attendance. Arising out of this it is worthy of the attention of Boards of Education that a special room should be provided at each school for this purpose.

Tuberculosis.

Casual observance of the figures would tempt the conclusion that phthisis—tuberculosis of the lungs—had markedly increased. Such a depressing pronouncement can readily be mollified by the explanation that by reason of war activities cases have been notified *en bloc*, as it were, rather than over an extended number of years. For the first time in New Zealand's history every single man of military age, and many married men, have been submitted to medical examination, not because of existing illness, but for the determination of physical fitness. Consequently cases of commencing phthisis—colloquially "lungs slightly touched"—are discoverable and have been notified, which under other circumstances might only have been recorded in the years to come. To this extent there is no real increase in the numbers of cases of phthisis. On the other hand, it cannot be denied that there is some actual increase by reason of the number of returned soldiers in whom the climatic hardships of war-campaigning has sought out a weak lung with unerring certitude, or in whom the same circumstances have diminished the natural resistance to tubercular infection.

Poliomyelitis.

The figures go to show that the number of cases of infantile paralysis notified in the past epidemic were an instance of that cyclical variation to which reference is made in the paragraph on diphtheria. Nevertheless, every District Health Officer is closely on the watch for any evidence of recrudescence and ready to exercise all possible measures for the prevention of its spreading.

Cerebro-spinal Meningitis.

A writer on infectious diseases in regard to past history of infections says: "During the warlike periods of humanity infections reigned as a result of traumatism, overwork, and crowding. During the periods of naval conquests we transported beyond the seas the maladies of our continent and imported various exotic infections." All this may be said of cerebro-spinal fever. A very prominent feature of the epidemics in the nineteenth century is the association of its presence and spread with camps and campaigning. The virus of cerebro-spinal meningitis is probably always existent in some member of any extensive community. When conditions, such as war, tend to bring about a lowering of individual resistance it can well be imagined, though there be no positive proof, how the hitherto

harmless "carrier" becomes potent for evil. This is demonstrated by the figures for this disease in a country like New Zealand, heretofore unafflicted by this insidious infection. The disease in question may be generally regarded as due to aggregation of population (see histories of epidemics of cerebro-spinal meningitis in prisons, asylums, &c.). Wherever civilians have become affected it has in almost every case been traced to contact with military patients. Every care has been taken by the Department to deal with civilian cases and thus prevent its spread amongst the general population.

Extension of Notifiable Infectious Diseases.

The diseases trachoma and bilharziosis have been made notifiable because of the closer relationship of New Zealand through her troops with eastern parts, especially Egypt, where diseases of the conjunctiva of the eye and hæmaturia are endemic.

Hospital Accommodation for Infectious Diseases.

This is a matter which does not always receive the attention that it should by Hospital Boards. In his annual report for the Auckland Health District the District Health Officer (Dr. Hughes) says: "For the city I regard the accommodation available for cases of infectious disease as insufficient. At the Auckland Hospital there are a total of ninety beds for cases of infectious disease other than tuberculosis, and of these thirty-four are for diphtheria cases and forty-four for scarlet fever. There are also twelve observation beds. At times several phthisis cases are accommodated on verandas of the main General Hospital building; but there is no proper accommodation available. Such cases as are put up at the Hospital are awaiting vacancies at Cambridge or elsewhere. As regards the accommodation for the infectious diseases other than phthisis, the population of Auckland requires at least 120 to 150 beds at the present time. The fact that the infectious-disease wards are in the same grounds and adjacent to the main buildings is in itself, I consider, unsatisfactory. Overcrowding occurs practically on each occasion when an epidemic occurs, and at times it has been necessary for the Hospital Board to obtain further accommodation by renting a large house. I feel that the time has arrived when provision should be made for sufficient accommodation to deal with the present requirements, and am of opinion that such accommodation should be built on a suitable site entirely outside the present hospital grounds. Up to the present time the Hospital has not even had a steam sterilizer available for disinfecting infected clothing, &c., although one has been recently installed, but is not yet available for use. During the year there was much overcrowding of the infectious-disease wards, and at one time there were as many as seventy-one diphtheria patients in the institution. Additions to the block were carried out, two sun-rooms and an operating-theatre being added to the infectious-disease ward—each sun-room to accommodate ten to twelve patients. The cost was between £500 and £600. At Point Chevalier the isolation hospital will accommodate about forty patients—twenty males and twenty females. This building I do not consider a satisfactory one for nursing such cases, owing to its construction and poor sanitary arrangements."

In contradistinction to this it is satisfactory to read the remarks of the District Health Officer, Christchurch (Dr. Chesson), regarding the provision made by the North Canterbury Board. He says: "The alterations to the Infectious-diseases Hospital at Burwood referred to in my last year's report were completed early in the year, giving absolutely ideal accommodation for as least 110 cases. 150 cases can be accommodated without undue cramping. The site has been regraded, top-dressed with soil, and planted, converting what had been once a sandy waste into a well-laid-out garden, and providing clean playing-grounds for convalescent children. Diphtheria and other infectious diseases are amply provided for in the isolation block of the Christchurch Hospital."

At Wellington a new scarlet-fever block to contain fifty-eight beds, with administrative and nurses block, is being erected. The existing scarlet-fever block, consisting of thirty-eight beds, with administrative and nurses block, is to be used for diphtheria after alterations. In Dunedin the extreme cost of construction has delayed the erection of much better and more modern facilities than at present exist. Generally speaking, the smaller Boards have all made adequate provision for the accommodation of infectious cases, or are taking steps to do so.

Accommodation for Phthisical Patients.

There are four consumptive sanatoria in the Dominion—two in the North and two in the South Island. The Department has recently taken over from the Wellington Hospital Board the Sanatorium at Otaki, and thus the two sanatoria in the North Island are Government institutions, Te Waikato Sanatorium being used for male patients and Otaki for female patients. The separation of the sexes has made the administration an easier matter, and removed many causes of petty troubles and friction. The accommodation at Te Waikato Santorium now affords room for a total of ninety-three patients. The Sanatorium has been practically reserved for soldiers, most of the civilian patients (including all women) having been removed to Otaki. There has not been any congestion at the Otaki Sanatorium of thirty-four beds.

The only sanatorium for consumptives in the Canterbury District is on Cashmere Hills, under the North Canterbury Hospital Board. The present accommodation at the Sanatorium proper is for seventy-two patients. In this is included the shelters put up by the Grey Hospital Board (four), Wairau Board (two), and Westland Board (three); leaving sixty-three beds for North Canterbury.

Owing to the termination of the agreement between the South Canterbury Board and the Ashburton Board with the Palmerston South Sanatorium, these Boards at present have no arrangements for sanatorium treatment. A movement has been on foot to get all the Boards in the South Island north of the Waitaki River to combine with the North Canterbury Board for the erection of further accommodation at Cashmere Hills. The Boards invited to participate were Ashburton, South Canterbury, Westland, Grey, Inangahua, Buller, Nelson, Picton, and Wairau.

The Otago Hospital Board's Sanatorium at Pleasant Valley, near Palmerston, with accommodation for forty-six early cases, having proved too small for requirements, quarters for an additional eight patients have been erected. Cases from the hospital districts of Waitaki and Maniototo are still being admitted to Pleasant Valley by arrangement with the Boards concerned, but owing to the lack of accommodation cases from Southland and other hospital districts are to be excluded. The Southland Board has built a small sanatorium of twenty beds on its Kew property, near Invercargill. Advanced cases will continue to be treated at the various local hospitals throughout the health district. The Otago Hospital Board is proceeding with the erection of a large hospital for consumptives on its Waikari property, on the outskirts of Dunedin, including provision for thirty-six cases, and sixteen in emergency wards, to relieve the Dunedin Hospital of such cases as quickly as possible.

General Sanitary Conditions.

The reports of all the District Health Officers go to show that there has been little tendency on the part of local authorities to undertake works of any magnitude during the war, and the extension of existing sewerage schemes and the institution of new ones has had to be delayed in any but minor undertakings.

Sanitary Conditions of the Maoris.

The notifiable epidemic diseases to which the Maoris are in any degree prone are enteric fever and tuberculosis. Enteric fever is more or less endemic, but during the year there were seventeen outbreaks, fifteen being in the Auckland Health District and two in the Wellington. In six of the cases is was necessary to establish temporary hospital camps under the charge of the local district nurse for Maoris. This was followed by a house-to-house inspection by the District Inspectors of the settlements concerned, with the result that a large number of old and dirty buildings were pulled down and many insanitary conditions remedied.

Out of the total number of cases of typhoid (351) occurring in the Auckland Province some 155 cases are known to have occurred amongst the Natives or half-castes. In the Auckland country districts a total of 219 cases were reported: only about sixty-six of these occurred amongst Europeans.

The work of the Inspectors and nurses to Natives in dealing with outbreaks of disease and supervising the sanitation amongst the Natives is bearing fruit, although in some districts it is still a most difficult matter. In many parts the provision of proper privies has been enforced, and the supervision of water-supplies has been carried out. The Maoris are showing themselves more amenable to carrying out instructions and advice of nurses and Inspectors, but still require constant supervision. The nurses have assisted greatly in impressing upon the Natives the need for cleanliness and the enforcing of ordinary rules of hygiene. In the parts under constant observation of Inspectors and nurses the general sanitation of the Natives has improved considerably. As regards the Bay of Islands District, it is interesting to compare the infectious diseases occurring this year with 1916. They are as follows: Diphtheria—number of cases in 1916, 18; in 1917, 5; enteric fever—number of cases in 1916, 258; in 1917, 18. The constant supervision of the Native pas and kaingas in the Native settlements by the departmental nurses and Inspectors has no doubt greatly assisted in obtaining these results, and bettering the sanitary conditions under which the Natives now live. Climatic conditions have also, no doubt, had their influence in connection with typhoid. The rainfall has been so heavy during the past twelve months that streams, springs, &c., have been thoroughly cleansed. The Natives will always make use of small streams, even one which there is reason to believe is infected, but the great increase of rainfall has benefited these by giving them a thorough washing-out.

Hotel-inspection.

The usual annual inspection of licensed hotels was undertaken before the annual licensing meetings, with the exception of the Otago District, in which the work was not able to be specially undertaken. In all 563 hotels were inspected by the Department's Sanitary Inspectors in conjunction with the police, and in 201 cases alterations were recommended and carried out.

Offensive Trades.

Various applications for permits to establish offensive trades were considered, and in those cases where no nuisance was likely to result were granted. The usual inspections were also made of existing premises, and any nuisances arising therefrom remedied. These industries generally will always be a source of justifiable complaint when conducted in closely settled localities. The only remedy, even thus late in the day, is to set apart restricted areas in each district within which all new offensive trades must be established, and to compel the older works in and near towns to conform to strict regulations made uniform throughout the Dominion. To this end reports were obtained from the District Health Officers on the advisability of proclaiming a special area in or near each of the four chief centres, wherein all offensive trades should be located.

Port Health Inspections.

During the year 520 oversea vessels were inspected, as follows: Kaipara, 1; Auckland, 227; Onehunga, 3; Tauranga, 3; Napier, 6; New Plymouth, 8; Wanganui, 22; Wellington, 147; Picton, 1; Nelson, 1; Greymouth, 1; Westport, 4; Lyttelton, 39; Timaru, 7; Oamaru, 1; Port Chalmers, 25; Dunedin, 9; Bluff, 15. Fortunately no quarantining of vessels was necessary, as three of the four quarantine-stations are temporarily occupied by the Defence Department on condition that they shall be vacated if required.

Hospitals and Charitable Institutions Act.

Owing to the usual delays on the part of some Boards to furnish their annual returns it is not possible to comment upon increase and expenditure in regard to hospitals and charitable aid, but it is hoped shortly to furnish full and complete returns on this subject in the form of an appendix. It is strange the apathy of some Boards in regard to the preparation of their accounts. It would be imagined that those who are business men would be as desirous as the Department to be furnished with their statement of accounts for the year, and would take steps to see that their officers furnish them without delay.

In January, 1917, a conference of representatives of Hospital Boards was called by the Wellington Hospital Board for the purpose of considering the question of establishing or formulating a co-operative scheme for purchasing hospital supplies. The Hon. the Minister attended by invitation, and at his suggestion the conference adopted the following resolutions:—

"1. That each Hospital Board's Secretary be requested to prepare a schedule of the supplies obtained for the past year under the following headings: (*a*) Drugs and surgical requisites; (*b*) furniture and hospital equipment; (*c*) other recurring items. It is not considered possible at present to apply the scheme to provisions in any form. The extension to the scheme of articles of food which are imported may be matter for consideration later on.

"2. That a Committee of Management be established, to consist of—

"(*a*.) The Inspector-General of Hospitals, or such delegate as he may appoint to attend meetings;

"(*b*.) Other members of the Public Service whose Departments are large purchasers of stores;

"(*c*.) The Chairman of the Wellington, Christchurch, Dunedin, and Auckland Boards, or other delegates.

"3. That in the first place purchases be confined to those lines which are most largely used in all hospitals, leaving to the Boards the purchase in the ordinary way of those drugs and necessities which do not bulk largely in the annual expenditure.

"4. That in connection with requisites under the heading of "Furniture" an examination and report be made as to what are suitable standards of purchases (for example) of—(*a*) Bedsteads; (*b*) blankets; (*c*) sheetings and material; (*d*) crockeryware and similar classes of goods.

"5. That on the compilation of the probable orders for the year's supply tenders be invited by the High Commissioner for those goods that must be imported, and by the secretary of the bureau for those goods which can be manufactured in New Zealand; and that similar tenders be open to the importers of New Zealand, whose prices, including all charges, shall be compared with the tenders received from Great Britain, with charges added.

"*Finance.*—That upon receipt from each Board of its list of requisites for the year, together with a statement showing the amount paid by the Board for the goods scheduled during the previous year, the Board forward to the Inspector-General a cheque representing one-half the cost of the year's supplies, it being clearly understood that in no case will the cost under this scheme exceed what the Board has paid for the same goods during the previous year. It will be the business of each Board to see that its account is in credit with the bureau."

The matter, however, was not followed up by the conveners of the conference, owing, no doubt, to difficulties arising as a result of the war; but recently steps have been taken by the Department and the Wellington Board to endeavour to make a commencement, with the aid of the Munitions Department, for the purchase of certain lines, and it is hoped that this will enable the scheme to be successfully launched.

The need of a systematic and periodical inspection of the lay or business side of Board's administration has long been felt, and the Minister has decided that a Lay Inspector of Hospitals shall be appointed. This officer's duty will be to inspect and report upon methods of purchase and use of supplies; to report upon the stores system in vogue, test the same, and, where necessary, make a stores audit. He will report upon any waste or extravagance, and suggest methods whereby economy can be ensured, obtaining the necessary information to enable comparative costing statistics to be prepared. He will investigate and report upon the use made of institutional grounds, more especially as regards Old People's Homes, with a view to ensuring that they are being sufficiently utilized for the raising of produce for consumption in the Boards' institutions. He will also investigate and report on the office organization and accounts, and see that up-to-date methods are followed, and will thoroughly investigate the staffing on the domestic side of the institutions. The methods pursued in connection with charitable aid also require looking into, and it will be a duty of the Inspector to ascertain the necessity for relief given, the adequacy of the same, the methods in vogue to ensure that the relief is not granted beyond the necessary period, and that other steps are being taken to remove the cause of distress so as not to permanently pauperise the recipient of such relief. A matter, moreover, that is frequently neglected is the collection of patients' accounts. The Minister has on several occasions drawn the attention of Boards thereto, and articles have also appeared in the Department's *Journal* suggesting methods for collecting these fees. It will be an important duty of the Inspector to see that this work is not neglected but is being energetically and efficiently carried out. The appointment of this officer should do much to promote efficient and economical administration of hospitals and charitable aid.

Sale of Food and Drugs Act.

During the year 1917, 173 charges under the Sale of Food and Drugs Act were dealt with in the Magistrates' Courts, resulting in 162 convictions, eleven cases being dismissed. Fines were imposed in 158 cases, and in four cases the defendants were convicted and discharged. Ninety-two of the

convictions were for selling adulterated milk, twenty-four for selling light-weight bread, and twelve for selling light-weight butter. During the year 1917, 2,655 analyses were made by the Department's Analysts, 2,456 being milk-samples. Samples of bread to the number of 3,925 were weighed, and of these 160 were found to be short-weight.

The total fines and costs were legal proceedings resulted from sampling or weighing amounted to £1,412 15s. 11d. for the year.

Regulations have been gazetted which, while still prohibiting the importation into New Zealand of brandy, whisky, or rum of a less strength than 25 per cent. under proof, and prohibiting the sale in bottles and jars of these spirits at a less strength, allow the spirits in question to be sold otherwise at a strength of not less than 35 per cent. The object of these regulations was to prevent inferior brands being dumped in New Zealand from other countries in which the regulations differ from ours, and to ensure that the dilution permissible under the regulations is done in New Zealand, so that in view of the limited shipping-space freight should not be incurred on added water.

The data furnished under the Sale of Food and Drugs Act year by year pleasurably demonstrate the increasing steps being taken to maintain the standards for food-stuffs. The possibility of short-weight practices being adopted to secure greater profits in these war-times caused steps to be taken to make sure that the foods of the breakfast-table—if it may so be put—were sold true to the weight asked for, expected, and paid for by the purchaser. It is satisfying to be able to report that no general evidences of this means of increasing the cost of living were demonstrated.

Quackery Prevention Act.

The preventive steps from time to time taken under this Act make clear the need for something more of the nature of a comprehensive crusade against all "cure-alls" and other more or less fraudulent medicaments than the taking of action against individual quack remedies. A movement in the aforesaid direction will be taken in hand so soon as existing pressure on the medical staff from other causes is relieved.

Poisons Act.

That nothing really effective can be hoped for in the administration of an Act over forty years old and never in any way brought into line with the modern needs of the Dominion, must be self-evident. Attempts in recent past sessions of Parliament have been made to bring about not only a more businesslike measure, but also—what is still more the essence of a Poisons Act—means by which the sale of potent poisons may be reserved to the fewest possible persons under stringent conditions. There is no value whatever in a Poisons Act if the sources through which homicidal poisons can be obtained are multiplied beyond reason. There must be restriction of sale, or, better perhaps, no Act at all, for then a false sense of security would be removed.

Venereal Disease and the Social Hygiene Act.

Little progress has been made by the Department in the administration of the above Act owing to the fact that the Act is deficient in its machinery clauses. This requires to be remedied this session by an amendment to cover such matters as are outside the scope of regulations under the present Act.

Plumbers Registration Act, 1912.

Four meetings of the Plumbers' Board constituted under the above Act were held during the year.

The Board held examinations under the Act in June and December, 1917. Ninety-three candidates presented themselves, the result being as follows: Seven candidates qualified in the theoretical part, thirteen in the practical part, and thirty qualified or completed in both parts of the examination and were duly granted registration. In addition, one other plumber was admitted to registration during the year under section 7 (1) (*c*) of the Act.

To date, the names of 1,249 have been entered in the register. Out of this total twenty-seven names have been removed—fourteen through death in civilian life, and thirteen through death on active service.

During the year 920 pocket certificates of registration have been issued.

Medical Practitioners Act.

Three meetings of the Medical Board constituted under this Act were held during the year, and registration was granted to twenty-nine applicants, twenty-three of whom were recent graduates of the New Zealand University, and the remainder qualified men from overseas. The Board declined registration to one applicant on the ground that he was not of good fame or character, and an appeal to the Supreme Court by the applicant against the Board's decision was not sustained. Two other applications for registration were declined on the ground that the qualifications of the applicants did not entitle them to registration.

The shortage of medical practitioners is still felt, especially in outlying districts. About one-third of the medical men practising in New Zealand are engaged, either at the front or in New Zealand, entirely on military duties. The result has been, for example, that a local medical association has had to offer as much as £1,000 a year in an endeavour to induce a medical man to settle in its district. As regards the more settled districts the difficulty has been overcome by an arrangement between the Director-General of Medical Services and the Chief Health Officer, under which the former does not call up any medical man if the latter is of opinion that he cannot be spared from his district, until arrangements have been made temporarily to fill such practitioner's place. This arrangement prevented serious dislocation of the medical service of New Zealand, and has ensured as little inconvenience as possible to the civilian population.

Returned Sick and Wounded Soldiers.

Subsequent to the year under review the sole control of the special military hospitals which were established by the Department—viz., King George V at Rotorua and Queen Mary at Hanmer—have been handed over to the Defence Department; but the Hospital Boards of the Dominion still continue to afford treatment to returned discharged men. In some cases the accommodation at the Board's institutions has been so taxed that it has been necessary to build additional wards, and in these cases it has been considered only right that the Defence Department should bear some of the expense incidental thereto. With a view to assisting the dependants of those at the front, it was decided that the Department should afford free treatment at the St. Helens Maternity Hospitals to the wives of soldiers on active service. The Department also pays the fees charged by the Hospital Boards for treatment in hospital of the wives and children of men on active service outside New Zealand. Free treatment at the Department's expense is also given to the brothers, sisters, and parents of such men if such are solely dependent upon the soldiers in question.

Changes in Staff.

Dr. T. H. A. Valintine (Chief Health Officer and Inspector-General of Hospitals) and Dr. R. H. Makgill (District Health Officer, Auckland) have been granted indefinite leave to take up duties in the Defence Department. During such leave Dr. J. P. Frengley (Deputy Chief Health Officer) has been appointed Acting Chief Health Officer and Acting Inspector-General. Dr. A. W. T. O'Sullivan has been appointed Assistant District Health Officer at Auckland; Dr. I. E. Faris, recently returned from military service, has been appointed Acting District Health Officer at Dunedin, *vice* Dr. O'Sullivan. There has been a great increase in the work of the Department, and the temporary transfer of the Chief Health Officer and of Dr. Makgill has thrown a great deal of work upon the shoulders of the remaining administrative officers. In order to assist the Acting Chief Health Officer by relieving him of as much work as possible of a non-professional nature, Mr. E. A. S. Killick, Chief Clerk of the Department, has been promoted to the position of Secretary. It was also decided to appoint a Consulting Engineer to the Department to advise the Inspector-General and Hospital Boards on matters in connection with machinery and heating arrangements. Mr. J. H. Anderson, Chief Engineer to the Porirua Mental Hospital, was appointed to the position, and his inspections and reports have shown the necessity for such an appointment. Owing to the great amount of hospital building being undertaken it has been proposed to appoint an architect to assist the Chief Health Officer in relieving him of much work in connection with plans prior to their submission by him to the Minister for approval.

The frequent changes in the staff during the year caused by officers of the Department going on active service, combined with the difficulty in temporarily replacing them with suitable men, and the increase in the work of the Department, has made the year an arduous one to the remainder of the staff.

I have, &c.,

J. P. Frengley, M.D., F.R.C.S.I., D.P.H.,

Acting Chief Health Officer and Acting Inspector-General of Hospitals.

NURSES REGISTRATION ACT, MIDWIVES ACT, MATERNITY HOSPITALS, AND PRIVATE HOSPITALS.

Miss Maclean (Assistant Inspector and Deputy Registrar of Nurses and Midwives) reports as follows:—

Nurses Registration Act.

During the year 1917–18 two examinations of nurses were held by the State. 193 candidates sat for examination, of whom 161 were successful in passing, and their names were placed on the register. Fifteen nurses were registered from overseas. There are now 2,195 nurses on the register. 490 nurses have joined the Army Nursing Service, and (with a few exceptions for home service only) have been sent to England, while twelve nurses were sent as reinforcements to Egypt, where twenty-five nurses were still working in Imperial hospitals and ships. Although recalled to join the New Zealand Forces, it had been found inadvisable to send these nurses from Egypt, and a few have returned to New Zealand. The number of members now enlisted on military service is 511. Of these, twenty-one are masseuses only, and are enrolled on that branch of the service. Nineteen have returned invalided during the year, and thirteen have been granted pensions. Other have had sick-leave and later returned to duty at the camp hospitals.

The hospital ships have been recommissioned and staffed early in the year. Orders were received from the War Office that sisters, owing to the submarine danger, were not to proceed on hospital ships, and that male orderlies only were to carry out the work of nursing the sick and wounded. This was found so unsatisfactory, not only in New Zealand ships but in all hospital ships, that the sisters were allowed again to share the risks from which they themselves had never shrunk. The number of volunteers for active service is continually being added to, but only small reinforcing drafts are now being sent.

The shortage of nurses for civil hospital work has much decreased, and there has been little call for staff nurses and sisters from outside the hospital training-schools. A few of the smaller hospitals have had difficulty in obtaining suitable Matrons, and the Department has usually been able to help

in securing the needed officer. The resignation of Miss Orr, for five years Matron of Auckland Hospital, has been the most important event in connection with the nurses' training-schools. Miss Orr was an excellent Matron, and organized the very successful massage Department which has been of very great advantage to the large number of returned soldiers treated in the Hospital.

The various branches of district nursing work, though not extended as might be desired, have continued to do good service. It is unlikely while the war lasts that many nurses will be found willing to take up work in isolated districts, owing to the spirit of unrest and longing to be serving the sick and wounded soldiers.

The Plunket nursing work has also continued without much progress or alteration.

It is now desired to have as many trained nurses with a post-graduate massage course as possible for the staffs of the hospital ships and transports, to carry on the treatment commenced in the hospitals in England. So far the Auckland Hospital is the only one in which a properly arranged course is given to the nurses in their fourth year after State registration, but it is hoped that the other chief hospitals will establish a similar course in the near future.

Midwives Act.

During the year there have been two examinations of midwives. Eighty-five candidates sat for examination; seventy passed and are now registered. Five were registered from overseas. The lack of qualified midwives in the country districts is still keenly felt. Without a State service it is difficult to know how this lack can be supplied. Qualified midwifery nurses can find so much work in the large towns that they naturally remain where they are certain of a livelihood. I would like to emphasize my belief that, provided there is reasonably comfortable accommodation in the homes of the expectant mothers, the large majority of confinement cases do not need to come into hospital, and that the provision of maternity wards and hospitals should be made only where there is a large working population without comfortable surroundings. The expense of having to pay a doctor's fee as well as that of a nurse who frequently is untrained is what the less well-to-do class feel the greatest burden.

I think the Government, by continuing to train in the St. Helens Hospitals, established where they are really needed, a sufficient number of midwives to admit of the country districts being supplied, each according to its needs, with trained women who will go into the homes and carry out the function for which they are trained (that is, to take normal cases without a doctor), will better meet the wants of the people than in any other way. Hitherto the intention of the Midwives Act has not been fully carried out. Competent midwives have been trained in large numbers—over five hundred during the twelve years—and the number increases each year, but they have not acted as *midwives*, merely as maternity nurses working under doctors. One reason of this is reluctance on the part of many to take the responsibility of acting without a doctor, and fear that by so doing they would alienate the medical profession, which so far has strongly discouraged women from working independently.

Midwives have not to any extent settled in country districts. Few after completion of training have the necessary capital to pay expenses and wait for work. The only way in which to provide country districts is for the Government, either directly, or indirectly through the Hospital Boards, to pay the salaries and living-expenses of the midwife, and, where necessary, of an assistant. The fees charged the patients should go a long way towards paying expenses, and the midwife herself would be in a secure financial position, and so be able to take cases whether they can pay her or not.

A recent instance, where at the urgent instance of the residents a midwife on the staff of a St. Helens Hospital was sent to reside in a country town, emphasizes the above. For two months this nurse, though warmly received and welcomed, had no cases. Had she not been receiving a salary and board she could not have remained to wait for cases.

We have now three District Midwives established, and if they prove a success and are made good use of I should recommend largely increasing this branch of Public Health work, which can include not only actual obstetric work, but ante-natal and infant-welfare work as well.

The stationing of midwives from the St. Helens Hospitals in various parts of the country with pay and allowances equivalent to what they could earn privately in town appears the best means of bringing the benefits of the State maternity hospitals within the reach of those who are too far away to become in-patients or whose family ties prevent their doing so. By so providing skilled help at a minimum rate—the fees charged by these District Midwives are based on the scale of the St. Helens Hospitals and go towards the expenses of each district established—the Government will remove one at least of the alleged causes of the too-low birth-rate.

State Maternity Hospitals.

In the St. Helens Hospitals, Auckland, Wellington, Dunedin, Christchurch, Gisborne, Invercargill, 1,248 cases were confined during the year; 1,223 children were born alive, and twenty-six still-births. There were seven maternal deaths and twenty-seven deaths of infants. There were also attended 530 outdoor cases; no deaths of mothers or infants. Seventy-two pupils have been trained during the year; forty are now in training.

The new St. Helens Hospital at Invercargill was opened on the 22nd March, 1918. Prior to the official opening, from July to March, 1918, there were forty-nine births. The work of alterations and additions was proceeding, and the nursing was therefore carried on under difficulties. The alterations of the house necessary to make it fit for hospital work have resulted in a convenient and easily worked institution, home-like and comfortable for both patients and staff. If it continues to be patronized as well as it has commenced it is likely additions will soon be required. It has, unfortunately, through

the war, been found impossible to make an appointment of medical officer, and the Matron, Miss Stubbs, has had to carry on, calling in a doctor for abnormal cases. So far there has not been a frequent need.

The St. Helens Hospital, Christchurch, has been much overtaxed for accommodation several times during the year. It has now been decided to build hospital wards on the present site, and additional land has been acquired for that purpose. The present building will then form the Nurses' Home. The same additions and alterations projected at Auckland are still not carried out, owing to lack of funds on account of war necessities.

At Dunedin also the needed additions are still in the future. A cottage has been rented near this hospital for the purpose of an ante-natal clinic, and has been fairly well attended. Generally speaking, this ante-natal work, established 1916-17, has undoubtedly resulted in the saving of maternal and infantile life, although probably the advice and treatment offered has not been taken advantage of as much as was hoped, yet week by week women do come who really need advice. The addition of a staff of nurses to each hospital to visit the patients booked to come in and those who have been discharged has also been useful, and as it develops will do much good.

Hospital Board Maternity Hospitals.

The Batchelor Maternity Hospital, Dunedin: 172 cases were confined during the year; of these 156 were married women and sixteen single women. There was one maternal death, and two deaths of infants. Six nurses were trained during the year, and five are now in training.

The Linwood Refuge, Christchurch: The Board is now altering the scope of this hospital, and under the name of the "Essex Home" married women are to be admitted as well as single girls.

The MacHardy Home, Napier, was opened in December, 1917. Since the opening fourteen cases have been admitted, and fourteen babies born. Two trained nurses from the General Hospital have gone through their course of midwifery training. The Home is most comfortable and, since the extensive alterations required by the Department have been carried out, well adapted for the work.

The Wairau Maternity Hospital, Blenheim, which was opened in a small private house, has already been overtaxed for accommodation, and the Board intends to make better provision.

The Picton Maternity Hospital provides for the patients in the more isolated Sounds districts, and is a very useful and well-conducted institution.

The maternity wards attached to the three hospitals, Mangonui, Rawene, and Kawakawa, controlled by the Bay of Islands Board, are doing useful work.

The Tauranga Hospital Board has established a small Home at Te Puke for maternity cases, with a small ward for emergency cases.

The various charitable institutions for maternity cases, such as the Alexandra Home, Wellington; the St, Mary's Home, Otahuhu, Auckland; the Bethany Home, Napier; and the Salvation Army Homes in the chief centres, continue to do excellent work, and to meet the need of accommodation for single women.

Private Hospitals.

There have been no changes in the administration of Part III of the Hospitals and Charitable Institutions Act.

Since the outbreak of war no new private hospitals of any importance have been established, partly owing to many senior nurses being away, and partly to the increased cost of living and the prohibitive price of building and alterations.

Approximate Cost of Paper.—Preparation, not given; printing (1,300 copies), £13 10s.

By Authority: Marcus F. Marks, Government Printer, Wellington.—1918.

Price 6d.]