

1919.
NEW ZEALAND.

MENTAL HOSPITALS OF THE DOMINION

(REPORT ON) FOR 1918.

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

The Hon. the MINISTER IN CHARGE OF DEPARTMENT FOR THE CARE OF MENTAL DEFECTIVES to His
Excellency the GOVERNOR-GENERAL.

MY LORD,

Wellington, 1st October, 1919.

I have the honour to submit to Your Excellency the report of the Inspector-General of Mental Defectives for the year 1918.

I have, &c.,

F. H. D. BELL,

Minister in Charge of Department for the Care of
Mental Defectives.

The INSPECTOR-GENERAL to the Hon. Sir FRANCIS BELL, the Minister in Charge of the Department
for the Care of Mental Defectives.

SIR,—

Wellington, 1st September, 1919.

I have the honour to inform you that my report addressed to the Hon. G. W. Russell was completed before he relinquished and you assumed the administration of the Department. Under the circumstances I now present the report to you, together with an appendix of later date dealing with soldier patients from the beginning of the war to the 4th August, 1919.

I have, &c.,

FRANK HAY.

The INSPECTOR-GENERAL to the Hon. G. W. RUSSELL, the MINISTER IN CHARGE OF THE DEPARTMENT
FOR THE CARE OF MENTAL DEFECTIVES.

SIR,—

Wellington, 28th June, 1919.

I herewith present the report for the year ended 31st December, 1918.

A summary and analysis of the statistical tables in the appendix shows that the number of patients on the register at the beginning of the year was 4,515 (m., 2,611 ; f., 1,904) ; at the end 4,546 (m., 2,603 ; f., 1,943)—a decrease of 8 males and an increase of 39 females. The total number under care during the year was 5,408 (m., 3,093 ; f., 2,315), being 148 (m., 31 ; f., 117) more than in 1917, while the average number resident, 4,501 (m., 2,602 ; f., 1,899,) was 133 (m., 59 ; f., 74) in excess.

The ratio of patients on the register to population, exclusive of Maoris, was 40·46 per 10,000 (m., 47·30 ; f., 33·9), or 1 patient in 247 (m., 211 ; f., 295) ; including Maoris—their number on the register is 61 only—the figures are 39·26 per 10,000 (m., 45·79 ; f., 32·95), or 1 in 255 (m. 218 ; f., 303).

The admissions (excluding transfers—m., 45 ; f., 9) numbered 839 (m., 437 ; f., 402) ; the male admissions were 33 lower and the female 28 higher than in the previous year. Among these admissions are included 7 immigrants (1 with a history of previous attacks) who had been here for less than a year, and 35 New-Zealanders were admitted after return from abroad (2 with a history of previous attacks).

Of the 839 cases admitted, one-sixth were of patients who had previously been treated to recovery in our institutions, leaving the number of first admissions 704 (m., 381 ; f., 323), a decrease of 30 males and an increase of 25 females compared with 1917.

The ratio of admissions to population (excluding Maoris) was 7·37 per 10,000, and for first admissions 6·23, or, in other words, every 1,357 persons in the general population contributed an admission, and every 1,606 a first admission. The previous decennial average was 7·57 and 6·26.

The total number of patients discharged (excluding transfers) was 360 (m., 171; f., 189), of which 283 (m., 142; f., 141) were discharged as recovered. The remaining 77 (m., 29; f., 48), though not recovered, were sufficiently well to be placed under the care of relatives or friends.

The percentage proportion of recoveries on admissions was 33.73 (m., 32.49; f., 35.07), as against 38.27 (m., 36.38; f., 40.64) in the previous year, and 39.38 (m., 36.92; f., 42.97) in the average for all years since 1876.

The deaths numbered 448 (m., 274; f., 174), giving a percentage of deaths on the average number resident of 9.95 (m., 10.53; f., 9.16), and on the total number (general register) under care during the year of 8.28 (m., 8.86; f., 7.51). The corresponding percentages for the previous year were 7.28 (m., 8.06; f., 6.19) and 6.05 (m., 6.59; f., 5.14) respectively.

As usual, some persons whose condition was doubtful as regards certification as mentally defective have been received for observation at the instance of the Magistrate. At the beginning of the year there were 10 (m., 5; f., 5) such, and 110 (m., 70; f., 40) were received during the year. Of this number, 70 (m., 48; f., 22) were discharged, 39 (m., 18; f., 21) had to be placed under ordinary reception orders, one woman elected to remain on as a voluntary boarder on the completion of the period of observation, 3 men died, and 7 (m., 6; f., 1) were under observation at the end of the year. These cases do not figure in the statistics, nor do the voluntary boarders, of whom there was a daily average of 34 in the State institutions. At the beginning of the year there were 29 (m., 10; f., 19), and 75 (m., 28; f., 47) were admitted during the year. Five (m., 1; f., 4) had ultimately to be placed on the register of patients, 4 (m., 2; f., 2) died, and 44 (m., 15; f., 29) were discharged, leaving 51 (m., 20; f., 31) resident at the end of the year.

The results in the case of persons remanded for observation and in the treatment of voluntary boarders, whereby many are saved from being committed as patients, are distinctly encouraging. Altogether 114 such inmates recovered or left much improved without formal admission as patients. This means a reduction of the recovery-rate in our statistics in the appendix, a factor which should be kept in mind in making comparisons with former years before the present system was established. The above figures disclose an increasing desire to utilize at an early stage of the disorder the improving resources of our mental hospitals, and in not a few instances ex-patients have returned for a period as voluntary boarders.

The recovery-rate is also reduced by the inclusion in the statistics of the mentally deficient, where recovery is manifestly impossible. It is hoped in the near future to segregate younger mentally deficient persons in a separate institution and deal with their statistics apart from those of patients labouring under acquired mental disease. This segregation will be an advantage from all points of view, and will enable these deficient to be classified and trained according to their capacity for improvement. Some can merely be cared for, others, by the exercise of infinite patience, can be taught to dress and feed themselves, others will progress as far as to assist in the work of the ward, and those of higher grade can be taught to be farm and garden workers or domestics, while the best can be taught to pursue some trade. Whether those with sufficient capacity should after training be allowed to compete in the labour-market is another matter and need not be considered now.

A further factor prejudicing the recovery-rate is the undue proportion of senile cases admitted. A large number of these patients could with little difficulty be managed in a properly administered Old People's Home. Over 20 per cent. of the admissions in the year under review were contributed between the congenitally deficient and persons mentally infirm through advancing age. At the present time there are about three hundred patients who could be cared for in some simpler and less expensive institution than a mental hospital.

Yet another source of reduction in the recovery-rate is due to the carelessness of convalescent patients permitted out on probation. Under the Act, such persons should provide a medical certificate of recovery before the expiry of the period of absence on leave, otherwise they must be entered in the register as "not recovered." Some, of course, have not recovered but are harmless and continue well enough to remain in the care of their friends, but in the case of others the Medical Superintendent knows that recovery is almost certain, and frequently the certificate as required by the Act which should convey this information, furnished after making inquiries and appeals, comes too late to permit the recovery being recorded.

For the average of six years ending with the introduction of the Act of 1911 recoveries calculated on the admissions were 37.91 per cent., and the proportion of those discharged unrecovered 5.28, while for the last six years the proportions are 39.84 and 9.21 per cent. respectively. Some part of the higher proportion of "unrecovered" is due to recoveries unacknowledged, because we have been keeping to the letter of the law. These matters are brought forward not because one is dissatisfied with the recovery-rate, but to indicate that it is really higher than represented, and justifies—if such justification were needed—the higher expenditure on our buildings, amenities, and resources for some years past.

Analysing the table of causation, one has to bear in mind that the principal assigned cause is stated, and where no definite conclusion has been come to the cause is stated to be unknown. Heredity is difficult to ascertain, and is therefore inadequately expressed in the table. The inherited tendency to nervous and mental disorders stands in inverse ratio to the stress factor, whatever it may be. Take, for example, such stresses as are associated with puberty, adolescence, and the climacteric, critical periods of adjustment to altering consciousness to which all are subjected in the ordinary course of life, but which prove too great for only a few, the mentally unstable. Another example may be found in the toxic effect of influenza, which large numbers of the community experienced during the epidemic, and in the case of thirty-eight persons only led to mental disorder.

Other factors may be adduced to explain the selective affinity, but undoubtedly the most potent is inherited mental instability. Hereunder Table XIII is restated in percentage proportions of the principal causes :—

	Male.	Female.	Total.
Heredity	7.55	11.19	9.29
Congenital and mental deficiency	9.39	13.18	11.20
Predisposed by previous attack	6.87	12.19	9.43
Critical periods	4.12	7.71	5.84
Senility	12.13	11.19	11.68
Mental stress	11.90	9.20	10.61
Alcohol	9.61	2.49	6.20
Syphilis	10.07	0.75	5.60
Epilepsy	5.72	2.74	4.29
Influenza	3.44	5.72	4.53
Other assigned causes	6.61	12.94	9.65
Unknown	12.59	10.70	11.68
	100.00	100.00	100.00

Such statistical returns tend to be fairly uniform, the ups and downs of one year being balanced by the figures of the next. The above proportions, compared with the average, show a marked reduction in the incidence ascribed to heredity and alcohol, and an increase in congenital cases and to mental disorder associated with syphilis. There is also an increase of about 2 per cent. in the incidence of mental stress, which is very little during a period of economic unrest and when it is remembered that this factor includes the special anxieties and worries incidental to the war, whether direct or indirect, and whether on the part of the soldier or the civilian.

The influenza epidemic which visited the country towards the latter end of the year did not spare the mental hospitals. None escaped, but the epidemic manifested itself in varying extent and severity in different institutions. For easy reference the facts are placed hereunder in tabular form, and in studying these, while still a lively recollection exists of the visitation as a disturbing element in the general community, some conception may be possible of the anxieties of those controlling the smaller and special communities resident in mental hospitals. In this connection I wish to record my appreciation of the faithful services of the staffs during a very trying time.

INFLUENZA.—MENTAL HOSPITALS.

Table showing the Daily Average Number of Patients and Staff (respectively), the Number attacked, and the Proportion in which the Malady proved fatal.

Mental Hospital.	Patients. Daily Average Number of Patients (and Boarders) resident during Epidemic.			Number attacked by Influenza.			Number died from Influenza.			Percentage of Deaths of those attacked.
	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Auckland	657	397	1,054	46	56	102	0	1	1	1.00
Christchurch	319	359	678	52	146	198	1	0	1	0.5
Seacliff	617	447	1,064	153	106	259	10	8	18	6.95
Hokitika	195	71	266	2	14	16	..	..	..	..
Nelson	97	109	206	0	1	1	..	..	..	..
Porirua	578	448	1,026	306	104	410	16	6	22	5.36
Tokanui.. .. .	114	43	157	41	0	41	4	0	4	9.75
Totals	2,577	1,874	4,451	600	427	1,027	31	15	46	4.47
	Staff. Daily Average Number of Staff during Epidemic.									
	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Auckland	70	37	107	36	25	61	0	1	1	1.64
Christchurch	75	54	129	28	32	60	1	0	1	1.66
Seacliff	109	70	179	75	42	117	3	1	4	3.42
Hokitika	23	12	35	7	5	12	1	0	1	8.33
Nelson	22	19	41	2	2	4	..	..	..	..
Porirua	88	52	40	54	29	83	..	..	..	..
Tokanui.. .. .	28	11	39	22	7	29	1	0	1	3.45
Totals	415	255	670	224	142	366	6	2	8	2.16

Table showing Date upon which Epidemic Influenza first manifested itself in each Mental Hospital, and whether first among the Staff or Patients; also the Numbers (Staff and Patients together) under Treatment on each Saturday thereafter, together with some Explanatory and Supplementary Notes.

Mental Hospital	..	Auckland.	Christ- church.	Dunedin.		Hokitika.	Nelson.	Porirua.	Tokanui.
				Seacliff.	Waitati.				
Date First Case	, ..	28th Sept.	4th Oct.	5th Nov.	8th Nov.	8th Nov.	11th Nov.	First Week Nov.	6th Nov.
Patient or Staff	..	Patient.	Nurse.	Attendant.	Gardener.	Nurse.	Nurse.	Staff.	Mail- Messenger.
Number under treat- ment on---		M. F. T.	M. F. T.	M. F. T.	M. F. T.	M. F. T.	M. F. T.	M. F. T.	M. F. T.
October	5 ..	4 0 4	0 1 1	..	..	..	..	..	..
„	12 ..	4 1 5	4 2 6	..	..	..	..	..	..
„	19 ..	10 2 12	22 88 110	..	..	..	..	..	..
„	26 ..	23 20 43	41 47 88	..	..	..	..	..	..
November	2 ..	18 8 26	21 65 86	..	..	..	..	..	..
„	9 ..	18 8 26	11 51 62	3 2 5	2 0 2	2 3 5	..	6 4 10	1 0 1
„	16 ..	18 8 26	4 20 24	10 5 15	9 0 9	5 16 21	0 1 1	194 35 229	6 0 6
„	23 ..	15 12 27	3 8 11	66 33 99	20 0 20	4 8 12	2 3 5	235 61 296	39 2 41
„	30 ..	3 27 30	4 4 8	104 48 152	18 0 18	2 0 2	..	139 30 169	21 7 28
December	7 ..	0 21 21	2 0 2	60 54 114	15 0 15	..	..	13 34 47	9 4 13
„	14 ..	0 12 12	2 0 2	25 47 72	7 0 7	..	..	7 15 22	..
„	21 ..	1 4 5	..	9 8 17	3 0 3	..	..	4 10 14	..
„	28 ..	0 1 1	..	6 7 13	2 0 2	..	..	4 10 14	..
January	4 ..	0 1 1	..	..	..	..	..	3 0 3	..
„	11 ..	..	..	..	..	..	..	2 0 2	..

NOTES.

Auckland.—The first cases were regarded as sporadic. The epidemic did not spread in a regular way, but as isolated cases in different wards. About half were of severe type. Among female staff 2 cases were complicated by delirium and 2 (1 died) by pneumonia. Pneumonia supervened among a few female patients (with 1 death) and in 2 cases there was severe hæmoptysis. One male attendant had pleurisy and pneumonia. The male cases were singularly free from complications.

Christchurch.—First and last cases among the staff. Epidemic mild. Not included in above are 3 sporadic cases in August and September. Appeared simultaneously in many wards and followed no regular course. One male patient, admitted in an advanced stage of pneumonic influenza from Christchurch General Hospital, died. One male attendant died (pneumonic type) in his own house, 22nd November.

Seacliff.—The first cases were among the staff, no patients being attacked till 15th November. Confined to one ward on male side at first: those attacked were isolated as completely as possible. The spread to separate-building wards was a week later. On the female side isolation was similarly carried out with similar results. The spread was more rapid among patients disturbed mentally who could not be so effectually isolated. Nature of epidemic—severe.

Waitati.—First the gardener, then the cook in the main building was attacked. The epidemic was then in the main building and passed to the Epileptic Cottage, where 18 out of 23 patients were attacked. The Retreat (a separate cottage for parole patients) escaped, and so did the large women's ward, which was strictly isolated. No nurse or female patient was attacked. Nature of epidemic—severe.

Hokitika.—Epidemic started with the female staff, and some members of the male staff were the next victims. It was confined to the patients on the women's side till 16th November, when 2 male patients were attacked in separate wards. There was no further cases among patients on the male side, but altogether 2 of the male staff were affected and 1 died.

Nelson.—No male patients affected and only 1 female, a voluntary boarder. No deaths.

Porirua.—Began among the staff, and believed to be first cases in district; then started in one ward, and within three days had spread to three others. The incidence was higher among the males, and the outside workers were first attacked. The rapid spread and rapid decline were remarkable. There were practically no new cases after 7th December. The type was on the whole severe.

Tokanui.—On 17th September there was a sporadic case on the women's side (patient), and again on the 9th October a nurse was attacked. There were no further cases till 6th November, when the mailman contracted it after visiting a picture-show at Te Awamutu. It was at first confined to one ward for five days. There were no cases among the women patients, but 7 members of the female staff were attacked. The type was severe, 6 males having pneumonic complications. Among the 5 who died, 1 was alcoholic.

Under section 38 of the Appropriation Act, 1918, the maximum chargeable for the maintenance of patients was increased to £2 2s. per week, and higher payments can be received under special circumstances.

The average cost of the maintenance of patients during 1918 was £55 6s. 4½d., exclusive of any allowance for accommodation. Taking this as equivalent to 5 per cent. on Public Works expenditure, £9 14s. would have to be added, making a total of £65 in round figures. Against the factor of depreciation is the expenditure on upkeep, both out of our own vote and the Public Works Consolidated Fund.

The various main items of expenditure are detailed in Table XXI. They vary in different institutions according to the number of patients and local conditions. The Department recognizes that economies in food-supply and in little comforts which largely sum up the pleasures in the life of a mental hospital patient were not admissible, and the energies of our officers have been in saving waste and by keenness in buying to advantage whenever opportunity offered. An exceptional deal in any commodity at one institution has been circularized to others, permitting their participation.

Some years ago I advocated standardization throughout the Public Service of various things commonly used by many Departments, their purchase under the increased advantage of a larger and definite order, and their distribution by a special Stores Department, which would exercise itself to keep supplies in stock at the lowest level compatible with efficiency. The Department would be affiliated with the stores branches of certain Departments specializing in particular lines. The experience of the last few years has confirmed me in the opinion that a great advance could be made in simplification of methods, together with an all-round reduction of cost, both initial and supplemental, and an improvement in quality and suitability, if a properly organized Stores Department, knowing the requirements of the Public Service and fixing a common standard for each item, undertook its purchase or manufacture and distribution.

This statement will be more convincing if one take an example or two—say, cloth for uniforms. Uniforms are supplied annually in the Public Service, requiring some thousands of yards of cloth, and there must be a particular fabric which is the all-round best for the purpose. Where there are not good reasons advanced for making an exception this cloth should be adopted for all Public Service uniforms, the distinctions between one Department and another being in the make-up. Take another example—sanitary fittings. We have standardized these to some extent, and, though the supply of standard patterns of recent years has been interrupted, our experience has demonstrated the enormous advantage of replacing one article by a facsimile, both in regard to ease of requisitioning and the saving of time and labour of plumbing.

Not a little proud of buying well and eliminating waste it is amusing to reflect that such economies may recoil on one. It has been seriously advanced that, as we manage to provide for patients at an average cost of £65 per head for everything, we should not charge more than that sum, otherwise well-to-do patients are paying a special tax. The trustee or the person liable for the maintenance of a well-to-do patient should remember that an average cost of £65 per annum means an expenditure of two guineas a week or more on certain patients—those who need more medical and nursing attention, or who are more destructive, or otherwise require more supervision or care than the average, a class not confined to but including for the most part all recent admissions. The expenditure on the average patient will approximate the average cost as stated, while robust, clean patients, requiring little supervision, are obviously at the other extreme and cost less than the average. But, whatever the cost, and apart from the nature of the case, the rise and fall is largely governed by the numbers dealt with, and in no case could a patient be privately managed—given the same medical attention, food, clothing, recreation, &c.—for anything like the amount charged. The poorer patient, by his mere presence, is lessening the cost to the better-off, and there is no hardship or injustice in charging an amount which in some particular case may be in excess of the actual cost—an excess which, if it exist, would be applied to a reduction in the appropriation for the upkeep of mental hospitals.

Another fact which is often lost sight of is that the grounds, gardens, and general amenities of the institutions have been improved in the course of years, and that present-day patients are getting the great advantage of all this past work, an advantage which does not appear in the table of average cost, except to a fractional extent for annual upkeep. If any of our improved estates were capitalized at what would be their selling-value rather than at what was originally paid for them, a maximum charge of 6s. a day for maintenance, medical treatment, &c., of persons who were too troublesome or destructive, or what not, to be kept at home leaves little ground for complaint on the part of those in a position to pay the full amount. Of course, it need not be pointed out that there are some patients who are not paid for at all, and that all assessments are made strictly according to the means of the persons liable to contribute.

In 1918 the total amount collected for maintenance was £52,657, equal to £11 14s. 4½d. per head on the average number of patients and voluntary boarders resident.

You, Sir, have from time to time received letters from persons wishing to pay more adequately to have their relatives cared for in some special institution. We now have buildings at each of the larger institutions admirably suited for reception-houses which are centres of treatment, dealing with a maximum of twenty-five patients in a ward; but the request made was for something more exclusive—for something which would be more a home than a hospital—and as the desire expressed was backed by offers to pay five guineas a week or more you were impressed by the sincerity of your correspondents, and, acting on instructions, the Department considered, to begin with, the question of building near one of the centres, provided some land could be acquired, suitably laid out, and conveniently placed for visitation by our expert medical staff—a *sine qua non*. At this time our attention was drawn to a property near Hornby Station, which fulfilled our initial requirements, and permitted of extensions with a minimum of alteration. The house, which is well placed in regard to sun and light, stands in 50 acres of land—lawns, gardens, orchard, and grass paddocks—and is well sheltered from prevailing winds. The outlook is cheerful and extensive. Negotiations were entered into for purchase, and we hope to enter into possession in September next. Among the manifest advantages of this situation is the fact of its being on the road between Sunnyside and our farm property at Templeton, where it can be visited in the ordinary round of the Medical Superintendent of Sunnyside, though completely separated from that institution. It is not contemplated that male patients will be admitted to begin with.

Among other items reducing the cost of maintenance are our farming operations. The produce supplied from our farms for the use of patients, totalling in value £19,734, is not included in Table XXI under “provisions.” The actual cash receipts for sales of stock and produce (£10,588) and by-products (£3,526) totalled £14,114, and there were sundry other receipts. All these have been collected together in Table XXA in the appendix, and show a total of £69,195.

A statement of farm expenditure and receipts will be found on pages 6 and 7.

STATEMENT OF EXPENDITURE AND RECEIPTS, ETC., IN CONNECTION WITH THE FARMS AT THE MENTAL HOSPITALS.

	Dr.			Cr.		
	£	s.	d.	£	s.	d.
To Salaries and wages	7,036 14 7	By cash sales of produce, &c. ....	..	10,588 0 5
Feed	5,146 13 7	Value of produce grown on farms and consumed in the mental hospital..	..	19,734 9 6
Seeds, &c., manures	2,044 19 7			
Implements, harness, repairs, &c.	1,288 7 1			
Stock	1,324 17 8			
Rent, rates, &c.	1,103 8 5			
Fencing, roading, &c.	497 14 1			
Harvesting, threshing, &c.	820 9 3			
Railages	348 18 7			
Buildings	104 1 1			
Sundries	510 14 3			
Balance	10,095 11 9			
			<u>£30,322 9 11</u>			<u>£30,322 9 11</u>

STATEMENT OF EXPENDITURE.

	Auckland.			Christchurch.			Seacliff.			Hokitika.			Nelson.			Porirua.			Tokanui.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Salaries and wages	260 0 0	..	..	1,275 0 0	..	..	3,035 10 0	..	..	481 17 9	..	..	360 0 0	..	..	405 0 0	..	..	1,219 6 10	..	..	7,036 14 7
Feed	267 5 11	..	..	227 14 0	..	..	2,758 1 2	..	..	19 9 9	..	..	165 5 9	..	..	1,648 10 10	..	..	60 6 2	..	..	5,146 13 7
Seeds, &c., manures	255 10 1	..	..	326 16 11	..	..	541 7 7	..	..	22 12 6	..	..	154 19 11	..	..	446 5 9	..	..	297 6 10	..	..	2,044 19 7
Implements, harness, repairs, &c	79 19 11	..	..	580 8 2	..	..	217 11 3	..	..	13 17 6	..	..	33 5 5	..	..	85 4 11	..	..	277 19 11	..	..	1,288 7 1
Stock	49 9 6	..	..	1,205 1 2	..	..	54 0 0	..	..	..	..	..	4 0 0	..	..	9 16 0	..	..	2 1 0	..	..	1,324 17 8
Rent, rates, &c.	794 4 11	..	..	193 16 0	..	..	..	..	..	..	..	..	115 7 6	..	..	..	..	..	1,103 8 5
Fencing, roading, &c.	2 18 0	..	..	449 0 1	..	..	..	..	..	22 16 4	..	..	..	..	..	..	..	..	22 19 8	..	..	497 14 1
Harvesting, threshing, &c.	649 19 9	..	..	49 12 10	..	..	..	..	..	68 7 6	..	..	..	..	..	52 9 2	..	..	820 9 3
Railage	1 13 10	..	..	27 3 4	..	..	185 19 11	..	..	..	..	..	3 16 0	..	..	..	..	..	130 15 6	..	..	348 18 7
Buildings	65 2 10	..	..	..	..	..	..	..	..	4 2 5	..	..	..	..	..	34 15 10	..	..	104 1 1
Sundries	66 15 9	..	..	24 13 2	..	..	411 9 2	..	..	..	..	..	..	..	..	..	..	..	7 16 2	..	..	510 14 3
Totals	983 13 0	..	..	5,625 4 4	..	..	7,447 7 11	..	..	560 13 10	..	..	793 17 0	..	..	2,710 5 0	..	..	2,105 17 1	..	..	20,226 18 2

STATEMENT OF RECEIPTS.

The statement of receipts is extended in the following table :—

Mental Hospital.	Produce sold for Cash.	Value of Produce consumed.	Total.
	£ s. d.	£ s. d.	£ s. d.
Auckland	1,045 8 0	2,978 1 4	4,023 9 4
Christchurch	2,859 15 6	5,172 7 10	8,032 3 4
Seacliff	3,281 7 4	5,322 16 5	8,604 3 9
Hokitika .. .. .	.. .. .	786 14 6	786 14 6
Nelson	353 5 9	1,605 11 0	1,958 16 9
Porirua	1,449 11 2	3,230 11 7	4,680 2 9
Tokanui	1,598 12 8	638 6 10	2,236 19 6
Totals	10,588 0 5	19,734 9 6	30,322 9 11

The purchases of stock do not include cattle or sheep bought for more or less immediate consumption, where we provide our own meat-supply. With regard to such stock a grazing-rate is credited to the farm and charged against the cost of meat. Where stock reared on the estate is taken to the abattoir the farm is credited with the value. We are now supplying meat at Seacliff, Sunnyside, Hokitika, and Tokanui, and successfully, as the patients are getting prime quality and the cost to the Department is less than it would be under contract. Even if it were a fraction more it would be justified by the uniform excellence of quality. Balance-sheets have been drawn up to demonstrate the year's work in this direction, and as they are interesting a sample (that furnished by Sunnyside) is reproduced hereunder. Here the sheep and cattle are purchased at the Addington Market and killed at the City Abattoir.

STATEMENT OF BEEF AND MUTTON TRANSACTIONS FOR 1918.

Christchurch Mental Hospital.

On hand, 1st January, 1918—	£ s. d.	On hand, 1st January, 1918—	£ s. d.
Beef, 1,264½ lb. at 4-96d.	26 2 8	Beef	26 2 8
Mutton, 288 lb. at 5-67d.	6 16 1	Mutton	6 16 1
On farm, 1st January, 1918—	£ s. d.	Returned from abattoir during	
Cattle, 10 at £14 12s.	146 0 0	1918—	
Sheep, 74 at 26s. 6-8d.	98 6 0	Beef, 160,572 lb. at 5-25d. ...	3,513 19 1
Cattle bought, 207 at £19 6s. 7-1d.		Mutton, 93,850 lb. at 4-87d. ..	1,904 8 10
(insurance included)	4,001 5 6		
Sheep bought, 1,668 at 32s. 3-6d. ..	2,693 15 3		
Grazing on mental hospital farm—			
Cattle, at 4d. per day	62 9 4		
Sheep, at 4d. per week	90 13 6		
Abattoir charges—			
Cattle	61 5 0		
Sheep	64 2 6		
Cartage of beef from abattoir	25 18 10		
Cartage of mutton from abattoir	17 12 2		
Proportion butcher's salary (£75+£75)	150 0 0		
Proportion incidentals at sales (50s.+50s.)	5 0 0		
Proportion upkeep of freezer (£50+£50)	100 0 0		
	7,516 8 1		
	7,549 6 10		
Less,			
Cattle sold at auction, 3 at £16 7s. 6d.			
(average)	49 2 6		
Sheep sold at auction, 20 at 33s. 9d. ..	33 15 0		
On farm, 31st December, 1918—			
Cattle, 6 at £18 10s.	111 0 0		
Sheep, 43 at 33s. 7d.	72 4 1		
Hides sold at auction, 188	472 16 7		
Skins sold at auction	796 12 6		
Hides on hand (20), valued at	40 0 0		
Skins on hand (20), valued at	7 19 6		
Fat sold (£62 3s. 11d.+£101 13s. 3d. ..	163 17 2		
Fat sold after refining (half each)	276 1 7		
Fat, 2,203 beef and 2,202 mutton at 3d.			
—refined and made into soap at			
Mental Hospital	55 1 3		
Fat, 780 lb. beef and 780 mutton at 3d.			
—refined in Mental Hospital and			
used for baking	19 10 0		
	2,098 0 2		
	£5,451 6 8		£5,451 6 8

Cattle slaughtered, 208; average dressed weight, 771-98 lb.; average consumption per diem, 437-93 lb.
 Sheep slaughtered, 1,679; average dressed weight, 55-89 lb.; average consumption per diem, 254-38 lb.
 On hand, 1st January, 1919: Beef, 1,974½ lb.; mutton, 1,288 lb.

The staff has not yet approached its normal numbers after the severe depletion caused by the war. In the Head Office we elected to carry on understaffed rather than introduce temporary clerks where so much of the work is confidential, but at the institutions the shortage of the nursing staff had to be made up the best way it could, and there is no denying the fact that many of the stop-gap appointments have been a source of anxiety, and that we shall be greatly relieved when the transition period is over. The responsible and senior officers must be complimented on their loyal co-operation, especially on distributing the duties so as to make the best use of the more promising probationers. The shortage among the attendants is easily explained, but the shortage was and is more felt among the female staff. This complaint is not confined to mental hospitals. Naturally the avenues for women's work were widened on the withdrawal of the fittest men, and the wages earned by them were so much above the usual average that one must expect some time to elapse before the vacancies are suitably filled. Meantime the Public Service Commissioners have raised the salaries in a classification about to be gazetted, which should prove very satisfactory to the nursing staff, who, except in the case of married attendants, are affected very little by the increased cost of living, being provided with free residence and certain emoluments, and are charged for board a sum that is actually under cost. Certain officers—*e.g.*, medical officers, clerks, engineers, farm-managers—were in the past given a salary of so-much cash and found (themselves and families). The system had been in operation *ab urbe condita*, but was manifestly unequal, and the opportunity was taken of commuting the allowances for a cash payment absorbed in the new salary and requiring these officers to find themselves, providing, however, free residence, fire, and light because of the advantage to the institution to have them resident on the estate. On the estimates it will appear that these officers are having their salaries unduly increased, but in point of fact they are not, for a considerable portion of the increment they are getting in money was paid to them heretofore in food, which we purchased with that money and gave to them. These officers are given the privilege of purchasing supplies from the institution stores. We should like to be in a position to extend this principle to all employees, but there are grave difficulties in the way. The Public Service Association has, I understand, made arrangements for getting its members a reduced tariff at certain hotels, and would be fulfilling a helpful function in extending the principle by getting tenders from certain firms for the supply of goods to its members at special rates. This would be more satisfactory than the Government providing advantages to one Department over another. In the absence of some generally applicable scheme it may be possible for us to arrange with our contractors to supply our employees at reduced rates, if they combined to send orders sufficiently adequate to make it worth while for the contractor. The matter would not have arisen had we not done away as far as possible with the old system and allowed the officers who hitherto drew their supplies from our stores to substitute buying from the stores. In course of time the origin of this privilege will be lost sight of, and officers not possessing it will tend to consider that they have a grievance.

I have touched on the subject of certain officers—happily only a few—being unsatisfactory, and when these by effluxion of time are placed on the permanent staff there is a difficulty in dispensing with their services unless they acknowledge their offence when charged. Proof frequently needs the evidence of patients, and we are not going to subject patients to cross-examination or the odium of sympathisers, and therefore unsatisfactory officers have to be retained until a charge of inefficiency is supported by flagrant neglect of duty. This is very unfair to the Superintendents, who are responsible for the care and control and general well-being of the patients, the real sufferers when discipline slackens; and it is also unfair to the charges or other senior officers, of whose devotion to duty and to their patients I cannot speak too highly. In the interests of the patients the least I can suggest is an extension of the probationary period, so that the inefficient and otherwise unsuitable may be weeded out and pass on to some employment for which they are temperamentally fitted.

The number of patients and extent of accommodation in the different institutions at this date is stated below, the patients being classified according to the nature of their mental disorder or deficiency in terms of the definition of "mentally defective person" in the Act.

Mental Hospital.	Mentally Defective Persons.												Accommodation.		
	Class I. Unsound Mind.		Class II. Mentally Infirm.		Class III. Idiots.		Class IV. Imbeciles.		Class V. Feeble-minded.		Class VI. Epileptics		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
Auckland ..	297	220	170	35	8	4	67	24	47	74	61	35	650	392	1,042
Christchurch ..	171	212	64	68	6	2	35	37	20	26	30	35	326	380	706
Dunedin (Seacliff and Waitati)	472	325	44	37	10	3	39	31	7	9	57	35	629	440	1,069
Hokitika ..	148	42	20	14	2	1	7	2	4	8	14	5	195	72	267
Nelson ..	25	32	35	41	13	7	10	10	6	6	9	7	98	103	201
Porirua ..	474	353	27	18	4	3	25	21	16	18	40	30	586	443	1,029
Tokanui ..	109	39	..	..	0	1	1	2	1	0	1	1	112	43	155
Totals ..	1,696	1,223	360	213	43	21	184	127	101	141	212	148	2,596	1,873	4,469
													2,543	1,807	4,350

Analysing the classification above, it may be stated that all persons in Class I would have been included under the old term "lunatic"; that of Class II a proportion would come under the same term, but a fair number could be treated in Old Persons' Homes as senile patients did these institutions possess the requisite simple nursing facilities. Classes III, IV, and V include persons exhibiting mental deficiency in different degrees. Nearly all these patients should be segregated from the other classes,

It is noteworthy that some higher-grade imbeciles and feeble-minded persons managed to get into military camps and the Expeditionary Forces before their condition was discovered. Class VI includes those epileptics who, on account of their mental condition, require oversight, care, and control. The mental condition of some patients of this class is at times the most disturbed and dangerous of any, and at other times, or in other cases, the mental disturbance is relatively mild.

With regard to accommodation, the usual transfers are in contemplation for adjusting balances, and certain works are in progress to make up the deficiencies and augment the resources in respect to classification. Auckland will be relieved by Tokanui; but the increase of population in Auckland District has to be anticipated, and additions are planned for 60 males and 80 females, mostly to classify the semi-disturbed; but one small ward on the female side will be for patients of faulty habits. At Tokanui another male unit for 50 has been opened, and a similar unit for females is nearing fitness for occupation. This unit, together with one for 20 working patients on a remote part of the estate, have been delayed by the workmen being lent to the Public Works Department because of the extreme urgency of providing accommodation at Motuihi Quarantine Island.

It has been decided to begin the direct admission of patients at Tokanui, and for this purpose suitable blocks for 23 males and 27 females have been planned and approved. These buildings completed, patients from the Waikato district will be admitted here, instead of going to Auckland. Tokanui is also an outlet for the relief of Porirua. The extensions at Tokanui necessitate a properly equipped laundry: heretofore we have got on with hand washing and an improvised drying-chamber.

At Porirua during the current year the excess on the women's side will be met by transfer, and additions will need to be made next year.

Tenders are about to be called for a reception-house at Nelson suitably planned to meet local requirements, and to be an instalment in the rebuilding of this hospital. At the present time one of the women's wards is occupied by mentally deficient boys.

At Hokitika provision has been made for a Medical Superintendent's residence. The lay Superintendent's house will be adapted for patients, and I trust that a block for boiler-house, bakery, kitchen, and laundry will soon be started as a nucleus for the gradual rebuilding of the institution.

At Christchurch the preparation of the Receiving and Hospital Block is proceeding. I reported to you the faulty plaster, and you visited the building and saw the work we had carried out since the building was handed over to us. I trust that it will soon be ready for occupation, and that there will be an official opening, as was the case at Porirua, when a parliamentary party inspected buildings of similar general design. Plans have been prepared for extending the day-room and dining-room for the more disturbed women patients, who require as much space as possible in their living-rooms, which are cramped at present. Without materially adding to the cost these extensions will be carried out in a style architecturally fitting the main building, of which they will form a part. A small ward is also necessary for patients with faulty habits.

At Seacliff accommodation has been added to take the patients from The Camp, who were being maintained there at a high cost, with no compensating benefit, and a unit for 56 patients has been authorized and will be placed at Waitati.

Taking generally the question of accommodation and classification, the main desiderata at present are the segregation of juvenile deficient, and a small institution for the few patients we have or are likely to have of the criminal class. For the first the Nelson District would be the most convenient for our purpose, especially if the Stoke institution were handed over to us; for the second some spot near the boundary of our Tokanui Estate with the Waikeria Reformatory property. This project I have discussed with the Inspector of Prisons, and he agrees that it would be a suitable site from his point of view also.

VISITS OF INSPECTION.

I am glad to have this opportunity to express my thanks to the District Inspectors and Official Visitors for their helpful co-operation in advancing the welfare of the patients; to my colleagues Miss Maclean and Dr. Gow for their reports of visits, and to the latter especially for doing relief duty at Seacliff for five weeks, including February this year. Mr. Ewington, after long and faithful service, resigned his position as Official Visitor at Auckland Mental Hospital. He wrote paying a tribute to the improvements that had been carried out, and thanking you, the Department, and the officers of the Hospital for the sympathy and support he had always received, stating that he relinquished the office on medical advice. Mr. Ewington's understanding of the patients, and his tact in dealing with them, acquired after many years of intimate association, and his willingness at all times to make special visits for his own satisfaction or at the instance of the Department, made his services particularly valuable and will make his loss the more felt.

A serious loss to Sunnyside was sustained by the death in February last of Mr. Smail, who, as patients' friend, visited the institution for about three hours or so daily. He accepted his duties as a serious charge, and his joyous presence in the wards was looked forward to by the patients and staff. Every week I had a report from him of his visits—reports which exhibited his enthusiasm for the work in hand, the well-being of the patient. Taking him all in all we shall not look on his like again.

Auckland.—Visited in February, March, August, 1918, and in January and June, 1919. The male infirmary is now completed and in occupation. The main kitchen has been remodelled, and suitable mess-rooms for the staff are ready for occupation. Shelter-sheds are about to be erected in connection with the Women's Annexe. Renovations, repainting, and decorations, largely suspended during the war, are to be undertaken now, so as to restore as soon as possible the cheerful aspect of the wards.

Questions regarding additional buildings, the influenza outbreak, and the staff difficulties have been mentioned in other sections of this report. The war depletion and the indifferent probationers was perhaps felt here more than elsewhere, but Dr. Beattie, in indifferent health, battled on with the assistance of Dr. Tizard and the senior staff, putting his outlook tersely in his last report, thus: "We fully realize the insignificance of our difficulties in the face of the immensity of our national crisis."

Sunnyside.—Visited in February and September, 1918, and in January, February, and May, 1919. I have mentioned elsewhere the additions about to be carried out and the Reception Block being fitted for occupation. The laundry cannot now do the work, and extension will need to be undertaken. Meanwhile a proportion of the washing is sent to Mount Magdala. The temporary adjustments in the kitchen permit of its working fairly satisfactorily, but we hope to get the new kitchen-pans and make the kitchen thoroughly efficient. On the farm a building to house implements is badly wanted. Dr. Gribben will doubtless mention in his report the satisfactory working of the home farm and that at Templeton. It remains for us to add the term "creditabile," knowing the personal interest he has taken in the matter.

Owing to the slackening off of repairs and renovations during the war a lot will need to be done, especially on the male side, where the old plaster is disintegrating and patching has proved unsatisfactory. The problem will need to be tackled and replastering carried out ward by ward, and until this is done money spent in decoration is wasted. The different departments of this Hospital are working well. The cinema entertainments are much appreciated, and the conduct of the patients viewing the pictures in large numbers has been uniformly good. The shortage of the female staff is remarkable, considering that few will ever have been better off than they are in the Nurses' Home.

Seacliff.—Visited in February and September, 1918, and in February, 1919, when Dr. Cow, the Deputy Inspector-General, was doing relief duty at the Hospital. The ground-slip mentioned in my last report, together with the indifferent water-supply at Seacliff proper, has determined additions which would have been put up in the slip area being transferred to Waitati. The laundry also requires considerable extension, and this also should be transferred to Waitati, where there is a sufficient water-supply, leaving a small laundry at Seacliff for urgent work. With the facilities provided by motor traction the main laundry could be economically worked at Waitati. The central bathroom is about to be started. A new water-reservoir has been erected above Simla, where the sanitary arrangements have been remodelled.

The staff shortage has been least felt at this Hospital, and the work of the year has been up to its usual standard. Dr. Jeffreys is still acting for Dr. King, whose leave has been extended to complete the special work he is doing in England.

A number of minor works are to be carried out at Seacliff and Waitati, in addition to those enumerated elsewhere in this report.

Hokitika.—Visited in February and September, 1918, and in February and June, 1919. It was decided to place this institution under a Medical Superintendent, but owing to the absence of medical officers at the front the appointment has been delayed. It will be made during the current year, on the retirement of Mr. Sellers, the return of Dr. King, and other contingencies permitting the readjustment of the medical staff. There are few admissions here, and every now and then the vacant accommodation is filled to relieve other institutions. The institution is old, and will need to be rebuilt bit by bit. The institution is most scrupulously clean, and in spite of its age and shortcomings is comfortable.

Nelson.—Visited in January and December, 1918, and in June, 1919. Everything working smoothly. Another instalment to the rebuilding is about to be gone on with. The patients are comfortable, because the old building is kept fresh and clean. Dr. McKillop is Acting Superintendent in the absence of Dr. Jeffreys.

Porirua.—Visited in February, July, September, and December, 1918, and in March and April, 1919. The new Reception Hospital is evidently filling a need, and we have had many appreciative letters from patients and their relatives. Dr. Hassell has had the assistance of Drs. Prins and Macpherson in carrying on the administration of this large institution through another successful year. There is an excess of patients on the female side, which in due course will be relieved by transfer to Tokanui. The drainage system has been completed; the septic-tank effluents are now piped into the harbour. We lease some Maori land in connection with the farm, and, as the leases are running out, we should consider the question of purchase. The buying of stock and doing our own killing for meat-supply is contemplated.

Under the will of the late Mr. R. C. Bruce a sum of £500 was left to Porirua. This considerate and kindly legacy is much appreciated. I discussed its application with the trustees, and it was decided to purchase a first-class cinematograph outfit for the patients' recreation.

Tokanui.—Visited in February, August, November, 1918, and in January, 1919. The development which was set back owing to the war is now to be pushed on, and in anticipation we are erecting a building for twenty working patients and staff at an end of the estate remote from the present institution buildings. The Prisons Department have completed a well-graded road through the property past the proposed site of the ultimate main institution. The many works in progress or contemplated this year are mentioned elsewhere in the report. Some uneasiness has been caused by the fact that the water (which is otherwise pure and a good potable sample) shows a marked tendency to attack the boiler-plates. The Dominion Analyst is giving every assistance to solve the problem.

Ashburn Hall.—Visited in February and September, 1918, and in January and February, 1919. This private mental hospital, placed in beautiful surroundings, continues to fulfil the function of a comfortable home-like institution for patients able to appreciate it.

As it will be some time before this report can be presented to Parliament in the ordinary course it is intended to add a special note regarding the work of the Department in relation to soldiers from the beginning of the war to as late a date as possible.

In conclusion, Sir, I have to thank you for your support and encouragement, to congratulate the administrative heads of the different institutions and those associated with them on the successful conclusion of another year's work, and to express my indebtedness to the Head Office staff for their loyal co-operation.

I have, &c.,

FRANK HAY.

MEDICAL SUPERINTENDENT'S REPORTS.

AUCKLAND MENTAL HOSPITAL.

DR. BEATTIE reports —

The total number of patients under our care during the year was 1,306—782 males and 524 females. The number admitted was 245—129 males and 116 females.

Nine males and 15 females were admitted as a consequence of the influenza epidemic. The other chief causes were senility, congenital and hereditary conditions, and syphilis.

The recovery-rate was 44.22 per cent. In addition to those discharged recovered 11 patients were discharged unrecovered and were placed under the care of responsible relatives.

The death-rate was much heavier than usual, being 13.20 per cent. of the average number of patients resident during the year. This is accounted for by the large number due to senile decay (28), chronic brain-disease (28), phthisis (20), and general paralysis (14).

A large number of influenza cases were treated with only one death. In this case, too, influenza was a secondary rather than a primary cause.

Although our drainage system is now apparently quite satisfactory we still have occasional attacks of enteric fever: one death occurred from this cause during the year. As our Maori patients have in many cases been found to be carriers, we are unable to attribute the attacks to any other source of infection.

The general work of the Hospital has progressed with varying degrees of efficiency. With few exceptions the best of our young men left on active service, and we have unfortunately been unable to replace them. We are still unable to do so, and one cannot but feel dissatisfied with the general condition of affairs. I cannot dissociate myself from the impression that part of the lack of discipline and the general air of disinterestedness, if not actual negligence, at present existing is to be accounted for by the operation of the Public Service Act, which, in its application to a mental hospital, where the conditions obtaining are so totally different from those in any other public institution, leads to a subordination of the authority of the controlling officers, and is consequently prejudicial to the recovery and general well-being of the patients.

Where patients are so mentally helpless and therefore so entirely dependent upon those in charge of them, and when their evidence is almost invariably totally discounted in a Court of law, it is surely necessary to provide us with a staff whose natural qualifications justify their tenure of office. Any conditions which hamper the superior authorities in the proper regulation and control of the staff is bound to be reflected sooner or later in the decline of the patients' interests and the rude awakening of the public mind to the gravity of the position.

I have to thank Dr. Tizard and the senior officers, chiefly, for their loyal service to myself and to the Hospital, also the District Inspector and the Official Visitors for their interest and readiness to help at all times.

We have to thank the *Herald* for newspapers supplied daily, and Miss Fleming and various city bands for continued generosity.

SUNNYSIDE MENTAL HOSPITAL.

DR. GRIBBEN reports:—

At the beginning of the year 1918 there were 748 patients on the register, of whom 362 were males and 386 females. During the year there were admitted 59 males and 63 females, and at the end of the year there were remaining 744 patients, a decrease of 4 for the year. There were 58 deaths (32 males and 26 females), giving a death-rate of 8.17 per cent. on the average number resident. There were 29 recoveries (15 males and 14 females), giving a rate of 23.97 per cent. on the admissions.

The health of the patients on the whole was good. The difficulties consequent upon the committal of persons who are suffering from physiological senile changes are in no way diminished, and in this connection I would like to repeat the suggestion in my report of last year that some definite action should be taken in amending the law so that these unfortunate old people could be cared for under conditions specially adapted to their needs.

The matter of repairs and renovation in the buildings generally, which it has not been possible to effectively deal with during the war, is now one of urgency, and it will be necessary to put in hand a general scheme throughout practically all the wards, at all events of the old buildings. There is also immediate need of extension to improve the accommodation and conditions of patients at present resident and to make necessary provision for increases.

The work on the farm has gone on satisfactorily, and the season promises to be a fruitful one. Another year's experience in the killing of our own meat has still further convinced me of the advisability of adopting this system where it is at all possible. For the year the cost of beef was 5.25d. per pound and that of mutton 4.87d. per pound. Apart from the economy of the system, the quality of the meat that it is possible to secure, combined with the opportunity given by variations in the patients' dietary, strongly commends this system.

The shortage of staff and the increased proportion of junior members incidental to the war have combined to increase the responsibilities of the seniors, whose loyalty and enthusiasm have done much to ease the difficulties consequent upon the situation.

The patients' entertainments have been continued as before, and the acquisition of a picture outfit of our own will now enable us to give entertainments for odd hours during the winter evenings.

PORIRUA MENTAL HOSPITAL.

DR. HASSELL reports:—

In referring to the statistical tables for the year 1918 it will be noted that the total number of patients under care at this mental hospital was 1,240 (697 males and 543 females), while the average number resident was 1,012. 251 were admitted, of whom 46 were readmissions, and 100 died (66 males

and 34 females). The total number under care was only 1 more than in the previous year; the number admitted for the first time (205) was the same as in the previous year (1917).

The recovery-rate was low, the percentage on admissions being 29.80. This is largely due to the exceptional number of incurables admitted, including 20 suffering from general paralysis, 37 from congenital mental defect, and 21 from senility. The percentage of deaths was unusually high, the ratio to the average number resident being 9.88 per cent. It may be noted that in the 100 deaths, 21 were due to senile decay, 20 to general paralysis of the insane, and 22 to influenza.

I have already reported to you on the severe epidemic of influenza as it affected the population of this Hospital, but I may be allowed to recall some of its more salient features. Altogether nearly 500 were prostrated by the disease—viz., 306 male patients, 104 female patients, 54 attendants and officers, and 29 nurses. The epidemic lasted a little over a month, starting at the end of October. Early in November it attacked patients in several wards, and rapidly spread notwithstanding various precautions taken. On the 23rd November 296 patients were confined to bed with the disease. Then there was a rapid decline in the number of new cases. On the 7th December there were only 44 cases confined to bed, and after this date scarcely any new cases occurred. It is remarkable that the first cases to contract the disease were outdoor workers employed in the garden or on the farm. The young and strong seemed to be more readily infected; the old and infirm escaped altogether or were mildly attacked. The women seemed to be less readily infected than the men. The most serious complication of influenza was pneumonia, which occurred in about 10 per cent. of the cases, and accounted for all the deaths except one, which was due to rapid heart-failure. Other complications were bronchitis and pulmonary congestion and bleeding from the nostrils. Most of the deaths occurred in the young (under age 35). With a serious epidemic prevalent in the wards, and a large proportion of the staff also incapacitated with the disease, the institution passed through the most trying time in its history. Those who were able had to work longer hours. Many of the usual activities had to be stopped, and our energies concentrated on the nursing of the sick. To tide over the emergency we were fortunate in obtaining the assistance of a number of R.H.M.C. orderlies. The whole staff deserve much credit for their devotion to duty at a most trying time.

The work of diverting the Hospital sewage from the neighbouring stream carrying it past the township and discharging it into the harbour has taken longer to accomplish than I anticipated. It involved the construction of a tunnel over 300 ft. long under the ridge at the top of the orchard, and this took many months. The work is now complete, and the new sewers are in commission. With one exception the sewage from all the buildings is now discharged directly into the harbour, the exception being that from the piggeries, which still discharges into the neighbouring stream. This drainage should be linked up with the new system.

I have gratefully to acknowledge the consideration of the authorities in permitting me to exchange duties with Dr. Jeffreys, the Mental Superintendent at Nelson, thus allowing me a rest and change from the more arduous work at Porirua for nearly eight months during the year.

There have been few changes in the higher grades of the staff. Dr. Prins joined the medical staff early in January, and his years of previous experience as medical officer in the London County Asylums and elsewhere enhances his value. Dr. Macpherson joined in June in succession to Dr. W. Simpson. Dr. Macpherson's interest in his professional work and his enthusiasm have always been noticeable, and were greatly appreciated during the influenza epidemic.

There has been difficulty in procuring sufficient attendants and nurses. Even now, months after the war, the nursing staff is very seriously reduced, but I am hopeful that the recent increase of salary offered by the Department may attract more candidates for vacancies.

SEACLIFF MENTAL HOSPITAL.

DR. JEFFREYS reports:—

At the beginning of the year there were 1,034 patients (605 males and 429 females) in the institution. Exclusive of transfers from other institutions, 170 patients were admitted—89 males and 81 females. Fifty-nine patients were discharged recovered (27 males and 32 females), 2 males and 6 females discharged relieved. There is no doubt that a number of our patients who have actually recovered while on trial have had to be written off as unrecovered under section 80, subsection (8), owing to their failure to report themselves.

At the beginning of the year there were 8 voluntary boarders. During the year 23 voluntary boarders (7 males and 16 females) were admitted; 8 were discharged recovered, 6 relieved, and 3 were placed under reception orders, leaving 14 remaining.

The general health of the patients has been good if we exclude the influenza epidemic. There were 97 deaths, the majority being among patients between sixty and ninety years of age. Five of the male patients died of general paralysis, and 1 male patient committed suicide. During the influenza epidemic 10 male and 8 female patients died, and we also lost 3 of the male staff and 1 nurse. I should like here to record my appreciation of the work of the staff and voluntary workers during this most trying period.

The Camp Mental Hospital, Otago Peninsula, was definitely closed in October, and the patients now occupy a new ward built for their reception here. I trust that a purchaser may be found for this place.

The plans have been prepared for building the new wards at Waitati, and this work will be gone on with as soon as possible. The plans for the new central baths at Seacliff have also been completed, and it is only owing to stress of other work that this has not been commenced.

I have to gratefully acknowledge the good and conscientious work done by Drs. Gray and Macpherson and by officers of the various departments of the institution. I also wish to record our indebtedness to Mr. Cumming, Patients' Friend, for his very real interest in the welfare of the patients and ex-patients, and for his organizing of recreations.

APPENDIX.

APPENDIX I.

TABLE I.—SHOWING THE ADMISSIONS, READMISSIONS, DISCHARGES, AND DEATHS IN MENTAL HOSPITALS DURING THE YEAR 1918.

						M. F. T.			M. F. T.		
						M.	F.	T.	M.	F.	T.
In mental hospitals, 1st January, 1918	..	..	..	..	..	..	..	..	2,611	1,904	4,515
Admitted for the first time	..	..	..	..	..	381	323	704	}	482	411
Readmitted	..	..	..	..	..	56	79	135			
Transfers..	..	..	..	..	..	45	9	54			
Total under care during the year	..	..	..	..	..	..	..	..	3,093	2,315	5,408
Discharged and died—											
Recovered	..	..	..	..	..	142	141	283			
Relieved	..	..	..	..	..	17	36	53			
Not improved	..	..	..	..	..	12	12	24			
Transferred	..	..	..	..	..	45	9	54			
Died	..	..	..	..	..	274	174	448	490	372	862
Remaining in mental hospitals, 31st December, 1918	..	..	..	..	..	..	..	..	2,603	1,943	4,546
Increase over 31st December, 1917	..	..	..	..	..	..	..	..	8*	39	31
Average number resident during the year	..	..	..	..	..	..	..	..	2,602	1,899	4,501

* Decrease.

TABLE II.—ADMISSIONS, DISCHARGES, AND DEATHS, WITH THE MEAN ANNUAL MORTALITY AND PROPORTION OF RECOVERIES, ETC., PER CENT. ON THE ADMISSIONS, ETC., DURING THE YEAR 1918.

Mental Hospitals.	In Mental Hospitals on 1st January, 1918.			Admissions in 1918.									Total Number of Patients under Care.		
				Admitted for the First Time.			Not First Admission.			Transfers.					
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Auckland	653	408	1,061	107	99	206	21	15	36	1	2	3	782	524	1,306
Christchurch	362	386	748	54	47	101	2	18	20	3	..	3	421	451	872
Dunedin (Seacliff)	605	429	1,034	77	64	141	12	17	29	17	5	22	711	515	1,226
Hokitika	186	67	253	12	15	27	..	1	1	20	..	20	218	83	301
Nelson	100	114	214	5	8	13	3	..	3	1	..	1	109	122	231
Porirua	557	427	984	119	86	205	18	28	46	3	2	5	697	543	1,240
Tokanui	123	46	169	..	..	..	..	..	..	..	..	..	123	46	169
Ashburn Hall (private mental hospital)	25	27	52	7	4	11	..	..	..	..	..	..	32	31	63
Totals	2,611	1,904	4,515	381	323	704	56	79	135	45	9	54	3,093	2,315	5,408

Mental Hospitals.	Patients discharged and died.												In Mental Hospitals on 31st December, 1918.		
	Discharged recovered.			Discharged not recovered.			Died.			Total discharged and died.					
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Auckland	52	55	107	5	8	13	77	62	139	134	125	259	648	399	1,047
Christchurch	15	14	29	35	6	41	32	26	58	82	46	128	339	405	744
Dunedin (Seacliff)	27	32	59	7	6	13	62	35	97	96	73	169	615	442	1,057
Hokitika	4	4	8	2	1	3	17	5	22	23	10	33	195	73	268
Nelson	3	3	6	5	4	9	7	8	15	15	15	30	94	107	201
Porirua	40	33	73	15	27	42	66	34	100	121	94	215	576	449	1,025
Tokanui .. ..	..	..	..	..	..	..	8	2	10	8	2	10	115	44	159
Ashburn Hall (private mental hospital)	1	..	1	5	5	10	5	2	7	11	7	18	21	24	45
Totals	142	141	283	74	57	131	274	174	448	490	372	862	2,603	1,943	4,546

Mental Hospitals.	Average Number resident during the Year.			Percentage of Recoveries on Admissions during the Year.			Percentage of Deaths on Average Number resident during the Year.			Percentage of Deaths on Total under Care.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Auckland	654	399	1,053	40.62	48.25	44.22	11.77	15.54	13.20	9.84	11.83	10.64
Christchurch	332	378	710	26.79	21.54	23.97	9.64	6.88	8.17	7.60	5.76	6.65
Dunedin (Seacliff)	617	444	1,061	30.34	39.51	34.71	10.05	7.88	9.14	8.72	6.50	7.91
Hokitika	190	68	258	25.00	33.33	28.57	8.95	7.35	8.53	7.80	6.00	7.09
Nelson	96	106	202	37.50	37.50	37.50	7.29	7.55	7.43	6.42	7.46	6.49
Porirua	576	436	1,012	29.20	28.95	29.80	11.46	7.80	9.88	9.47	6.26	8.06
Tokanui	114	43	157	..	..	..	7.02	4.65	6.37	6.50	4.35	5.91
Ashburn Hall (private mental hospital)	23	25	48	14.29	..	9.09	21.74	8.00	14.58	15.62	6.45	11.11
Totals	2,602	1,899	4,501	32.49	35.07	33.73	10.53	9.16	9.95	8.86	7.51	8.28

TABLE III.—AGES OF ADMISSIONS.

Ages.	Auckland.			Christchurch.			Dunedin (Seacliff).			Hokitika.			Nelson.			Porirua.			Tokanui.			Ashburn Hall (Private Mental Hospital).			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.			
Under 5 years ..	1	1	2	0	..	1	0	1	1	..	..	..	0	..	..	..	..	..	..	..	..	1	1	2
From 5 to 10 years ..	1	2	3	0	1	1	3	0	3	..	..	..	3	0	1	..	..	1	..	..	..	2	4	6
" 10 " 15 " ..	0	3	3	0	1	1	4	3	7	..	..	2	..	..	..	..	3	5	..	..	..	7	7	14
" 15 " 20 " ..	4	5	9	6	1	7	19	9	28	1	0	1	1	2	3	8	5	13	..	..	..	23	15	33
" 20 " 30 " ..	23	18	41	5	10	15	19	17	36	2	4	6	1	2	3	23	17	40	..	..	1	73	61	134	
" 30 " 40 " ..	29	20	49	15	12	27	19	17	36	1	3	4	1	2	3	38	32	70	..	..	2	105	87	192	
" 40 " 50 " ..	15	27	42	6	21	27	14	21	35	6	3	9	1	1	2	33	23	56	..	..	1	76	97	173	
" 50 " 60 " ..	18	11	29	6	9	15	10	15	25	..	..	..	3	0	3	14	21	35	..	..	2	53	56	109
" 60 " 70 " ..	11	16	27	11	6	17	3	3	6	1	0	1	1	2	3	8	8	16	..	..	2	35	35	70	
" 70 " 80 " ..	8	6	14	7	2	9	13	7	20	0	2	2	1	0	1	7	5	12	..	..	2	38	22	60	
" 80 " 90 " ..	4	2	6	0	1	1	3	1	4	0	3	3	..	..	..	1	1	2	..	..	0	8	9	17
" 90 " 100 " ..	..	..	..	..	..	..	3	1	4	..	..	..	..	..	..	1	0	1	..	..	1	1	0	1
Unknown ..	14	3	17	0	1	1	1	4	5	..	..	..	..	..	..	3	2	5	..	..	..	15	8	23
Transfers ..	1	2	3	3	0	3	17	5	22	20	0	20	..	..	1	..	..	..	..	..	..	45	9	54
Totals ..	129	116	245	59	65	124	106	86	192	32	16	48	9	8	17	140	116	256	..	..	7	482	411	893	
Totals ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE IV.—DURATION OF DISORDER ON ADMISSION.

—	Auckland.			Christchurch.			Dunedin (Seacliff).			Hokitika.			Nelson.			Porirua.			Tokanui.			Ashburn Hall (Private Mental Hospital).			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
First Class (first attack and within 3 months on admission)	87	74	161	26	30	56	41	28	69	6	8	14	1	5	6	85	57	142	..	..	..	5	3	8	251	205	456
Second Class (first attack above 3 months and within 12 months on admission)	9	12	21	9	4	13	10	9	19	1	3	4	0	1	1	5	5	10	..	..	..	0	1	1	34	35	69
Third Class (not first attack, and within 12 months on admission)	8	2	10	12	20	32	19	21	40	1	1	2	6	0	6	22	35	57	..	..	..	..	..	..	68	79	147
Fourth Class (first attack or not, but of more than 12 months on admission)	24	26	50	9	10	19	19	23	42	4	4	8	1	2	3	25	17	42	..	..	..	2	0	2	84	82	166
Unknown ..	..	..	..	0	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	1	1
Transfers ..	1	2	3	3	0	3	17	5	22	20	0	20	1	0	1	3	2	5	..	..	..	..	..	..	45	9	54
Totals ..	129	116	245	59	65	124	106	86	192	32	16	48	9	8	17	140	116	256	..	..	..	7	4	11	482	411	893

TABLE VII.—CONDITION AS TO MARRIAGE.

						Admissions.			Discharges.			Deaths.		
						M.	F.	T.	M.	F.	T.	M.	F.	T.
AUCKLAND—						69	43	112	28	22	50	37	18	55
Single ..	..	..	..	..	..	51	49	100	25	35	60	35	28	63
Married ..	..	..	..	..	..	8	22	30	2	6	8	5	16	21
Widowed ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	1	2	3	2	0	2	..	..	..
Transfers ..	..	..	..	..	..	129	116	245	57	63	120	77	62	139
Totals ..	..	..	..	..	..				
CHRISTCHURCH—						27	27	54	13	9	22	17	6	23
Single ..	..	..	..	..	..	25	29	54	5	9	14	11	11	22
Married ..	..	..	..	..	..	4	9	13	3	0	3	3	9	12
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	3	0	3	29	2	31	1	0	1
Transfers ..	..	..	..	..	..	59	65	124	50	20	70	32	26	58
Totals ..	..	..	..	..	..				
DUNEDIN (Seacliff)—						50	33	83	12	18	30	38	7	45
Single ..	..	..	..	..	..	31	39	70	18	18	36	19	20	39
Married ..	..	..	..	..	..	8	9	17	2	2	4	5	8	13
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	17	5	22	2	0	2	..	..	..
Transfers ..	..	..	..	..	..	106	86	192	34	38	72	62	35	97
Totals ..	..	..	..	..	..				
HOKITIKA—						8	8	16	5	1	6	13	2	15
Single ..	..	..	..	..	..	3	4	7	1	2	3	1	0	1
Married ..	..	..	..	..	..	1	4	5	0	2	2	3	3	6
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	20	0	20	..	..	..	..	..	..
Transfers ..	..	..	..	..	..	32	16	48	6	5	11	17	5	22
Totals ..	..	..	..	..	..				
NELSON—						4	3	7	5	2	7	5	3	8
Single ..	..	..	..	..	..	4	4	8	1	4	5	2	3	5
Married ..	..	..	..	..	..	0	1	1	..	..	..	0	2	2
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	1	0	1	2	1	3	..	..	..
Transfers ..	..	..	..	..	..	9	8	17	8	7	15	7	8	15
Totals ..	..	..	..	..	..				
PORIRUA—						74	38	112	21	21	42	43	14	57
Single ..	..	..	..	..	..	54	64	118	27	34	61	18	11	29
Married ..	..	..	..	..	..	9	12	21	1	3	4	5	9	14
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	3	2	5	6	2	8	..	..	..
Transfers ..	..	..	..	..	..	140	116	256	55	60	115	66	34	100
Totals ..	..	..	..	..	..				
TOKANUI—						..	..	..	..	..	..	6	0	6
Single ..	..	..	..	..	..	..	..	..	..	..	..	2	2	4
Married ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Transfers ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	..	..	..	..	..				
ASHBURN HALL—						1	1	2	1	1	2	3	0	3
Single ..	..	..	..	..	..	4	2	6	..	..	..	1	1	2
Married ..	..	..	..	..	..	2	1	3	1	0	1	1	1	2
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	..	..	..	4	4	8	..	..	..
Transfers ..	..	..	..	..	..	7	4	11	6	5	11	5	2	7
Totals ..	..	..	..	..	..				
TOTALS—						233	153	386	85	74	159	162	50	212
Single ..	..	..	..	..	..	172	191	363	77	102	179	89	76	165
Married ..	..	..	..	..	..	32	58	90	9	13	22	22	48	70
Widowed ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown ..	..	..	..	..	..	45	9	54	45	9	54	1	0	1
Transfers ..	..	..	..	..	..	482	411	893	216	198	414	274	174	448
Totals ..	..	..	..	..	..				

TABLE VIII.—NATIVE COUNTRIES.

Countries.	Auckland.			Christchurch.			Dunedin (Seacliff).			Hokitika.			Nelson.			Porirua.			Tokanui.			Ashburn Hall (Private M.H.).			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
England ..	142	76	218	86	94	180	104	61	165	33	14	47	4	9	13	169	97	266	28	6	34	3	6	9	569	363	932
Scotland ..	30	17	47	22	17	39	99	73	172	12	5	17	1	4	5	55	30	85	4	0	4	5	2	7	228	148	376
Ireland ..	66	44	110	47	50	97	72	50	122	39	11	50	8	7	15	59	68	127	15	7	22	1	0	1	307	237	544
Wales ..	3	2	5	..	..	..	3	1	4	2	0	2	1	1	2	..	..	..	2	1	3	1	0	1	12	5	17
New Zealand ..	238	211	449	155	217	372	261	227	488	72	38	110	62	61	123	213	212	425	51	30	81	11	12	23	1,063	1,008	2,071
Australian States ..	34	12	46	10	10	20	24	23	47	11	4	15	1	4	5	32	15	47	3	0	3	0	4	4	115	72	187
France ..	2	0	2	..	..	..	11	1	12	5	0	5	1	0	1	4	7	11	1	0	1	..	..	..	4	0	4
Germany ..	6	2	8	1	1	2	1	1	0	1	..	..	1	0	1	0	1	1	4	0	4	..	..	..	29	11	40
Austria ..	21	1	22	0	1	1	4	0	4	1	1	2	1	0	1	0	1	1	1	0	1	..	..	..	28	3	31
Norway ..	3	1	4	0	1	1	4	0	4	1	1	2	..	..	..	1	0	1	1	0	1	..	..	..	10	3	13
Sweden ..	5	1	6	4	0	4	3	0	3	5	0	5	1	0	1	6	3	9	1	0	1	..	..	..	25	4	29
Denmark ..	2	0	2	2	1	3	2	1	3	..	..	..	..	..	..	7	0	7	1	0	1	..	..	..	14	2	16
Italy ..	4	0	4	..	..	..	1	0	1	7	0	7	1	0	1	3	0	3	..	..	..	..	..	..	16	0	16
China ..	1	0	1	2	0	2	11	0	11	5	0	5	..	..	..	2	0	2	1	0	1	..	..	..	22	0	22
Maoris ..	24	13	37	0	2	2	4	0	4	..	..	..	2	1	3	8	6	14	1	0	1	..	..	..	39	22	61
Other countries ..	24	5	29	9	11	20	6	2	8	1	0	1	1	0	1	16	10	26	2	0	2	..	..	..	59	28	87
Unknown ..	43	14	57	..	..	..	9	3	12	2	0	2	9	20	29	..	..	..	..	..	..	..	..	..	63	37	100
Totals ..	648	399	1,047	339	405	744	615	442	1,057	195	73	268	94	107	201	576	449	1,025	115	44	159	21	24	45	2,603	1,943	4,546

TABLE IX.—AGES OF PATIENTS ON 31st DECEMBER, 1918.

Ages.	Auckland.			Christchurch.			Dunedin (Sea-cliff).			Hokitika.			Nelson.			Porirua.			Tokanui.			Ashburn Hall (Private M.H.).			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.			
From 1 to 5 years	1	1	2	1	2	3	0	2	2	..	..	..	1	0	1	3	3	6	..	..	..	2	3	5
" 5 " 10 "	1	2	3	3	8	11	1	1	1	..	..	..	1	0	1	5	9	14	..	..	..	7	8	15
" 10 " 15 "	2	9	11	8	9	17	4	1	1	0	0	0	10	2	12	3	9	17	..	..	..	24	30	54
" 15 " 20 "	8	7	15	26	37	63	7	11	18	1	0	1	10	3	13	12	17	29	3	..	3	49	47	96			
" 20 " 30 "	66	47	113	81	84	165	57	42	99	10	6	16	11	7	18	95	59	154	15	6	21	280	205	485			
" 30 " 40 "	133	77	210	72	91	163	137	92	229	42	10	52	14	13	27	150	109	259	29	6	35	587	391	978			
" 40 " 50 "	164	95	259	59	88	147	147	111	258	39	19	58	13	23	36	119	99	218	37	14	51	593	457	1,050			
" 50 " 60 "	128	83	211	59	88	147	110	86	196	42	11	53	17	22	39	101	79	180	18	7	25	483	386	869			
" 60 " 70 "	77	49	126	55	45	100	88	52	140	28	8	36	8	19	27	69	50	119	8	8	16	340	236	576			
" 70 " 80 "	29	19	48	22	31	53	46	32	78	20	11	31	5	5	10	20	22	42	5	1	6	149	123	272			
" 80 " 90 "	9	2	11	12	8	20	15	12	27	3	3	6	1	1	2	2	2	4	..	..	..	43	29	72
Upwards of 90	..	..	..	..	..	..	3	0	3	..	..	..	..	..	..	..	..	..	..	..	..	3	0	3
Unknown ..	30	8	38	0	2	2	..	..	..	10	4	14	3	12	15	..	..	..	0	2	2	43	28	71
Totals ..	648	399	1,047	339	405	744	615	442	1,057	195	73	268	94	107	201	576	449	1,025	115	44	159	21	24	45	2,603	1,943	4,546

TABLE X.—LENGTH OF RESIDENCE OF PATIENTS WHO DIED DURING 1918.

Length of Residence.	Auckland.			Christchurch.			Dunedin (Seacliff).			Hokitika.			Nelson.			Porirua.			Tokanui.			Ashburn Hall (Private M.H.).			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.			
Under 1 month	10	5	15	5	3	8	5	5	10	0	2	2	1	1	2	6	5	11	2	2	0	2	29	19	48		
From 1 to 3 months	10	9	19	1	0	1	9	2	11	0	2	2	1	1	2	2	3	5	5	..	..	22	16	38	
" 3 " 6 "	12	5	17	3	1	4	3	0	3	0	1	1	..	..	..	5	2	7	..	..	..	23	9	32
" 6 " 9 "	6	1	7	3	1	4	4	1	5	..	..	..	1	1	2	3	2	5	..	..	..	17	6	23
" 9 " 12 "	3	2	5	4	0	4	1	2	3	..	..	..	..	..	..	7	5	12	..	..	0	1	1	15
" 12 " 2 years	7	6	13	4	4	8	11	2	13	3	0	3	0	1	1	10	3	13	..	..	..	35	16	51
" 2 " 3 "	3	4	7	1	0	1	3	2	5	..	..	..	1	0	1	6	1	7	..	..	0	1	1	14
" 3 " 5 "	4	3	7	3	4	7	1	4	5	..	..	..	1	1	2	7	4	11	..	..	..	16	16	32
" 5 " 7 "	8	4	12	3	1	4	4	3	7	7	0	7	1	0	1	5	1	9	1	0	1	32	9	41			
" 7 " 10 "	6	4	10	1	4	5	7	2	9	0	2	2	0	2	2	8	3	8	2	0	1	21	15	36			
" 10 " 12 "	0	3	3	1	1	2	1	3	4	1	0	1	1	0	1	1	0	1	2	0	2	7	7	14			
" 12 " 15 "	1	1	2	1	0	1	4	3	7	..	..	..	..	..	..	1	1	2	0	2	2	8	7	15
Over 15 years	5	14	19	2	5	7	8	6	14	5	1	6	1	2	3	5	4	9	4	0	4	31	32	63			
Died while absent on trial	2	1	3	0	2	2	1	0	1	1	1	2	..	..	..	..	..	..	..	..	..	4	4	8
Totals	77	62	139	32	26	58	62	35	97	17	5	22	7	8	15	66	34	100	8	2	10	5	2	7	274	174	448

TABLE XI.—LENGTH OF RESIDENCE OF PATIENTS DISCHARGED "RECOVERED" DURING 1918.

Length of Residence.	Auckland.			Christchurch.			Dunedin (Seacliff).			Hokitika.			Nelson.			Porirua.			Tokanui.			Ashburn Hall (Private M.H.).			Total.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.			
Under 1 month	2	1	3	0	1	1	2	1	3	1	0	1	0	2	2	10	6	16	15	9	24	15	9	24			
From 1 to 3 months	13	12	25	6	5	11	9	14	23	1	1	2	0	2	2	7	7	14	35	40	75	35	40	75			
" 3 " 6 "	15	22	37	1	3	4	2	4	6	1	1	2	1	0	1	9	6	15	29	36	65	29	36	65			
" 6 " 9 "	4	9	13	4	3	7	5	2	7	..	..	..	..	..	..	8	7	15	21	21	42	21	21	42
" 9 " 12 "	3	2	5	..	..	3	3	3	6	..	..	..	..	..	..	1	3	4	..	..	..	..	..	..
" 1 " 2 years	11	3	14	2	1	3	3	5	8	0	1	1	1	0	1	3	4	7	20	14	34	20	14	34			
" 2 " 3 "	3	4	7	2	0	2	1	1	2	1	1	2	..	..	..	2	0	2	8	5	13	8	5	13
" 3 " 5 "	1	2	3	0	1	1	1	1	2	..	..	..	0	1	1	..	..	..	0	1	1	0	1	1
" 5 " 7 "	..	..	..	..	..	..	0	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" 7 " 10 "	..	..	..	..	..	..	..	1	1	1	0	1	..	..	..	..	..	..	1	0	1	1	0	1
" 10 " 12 "	..	..	..	..	..	..	0	1	1	..	..	..	..	..	..	..	..	..	0	1	1	1	1	1
" 12 " 15 "	..	..	..	..	..	..	1	0	1	0	1	1	..	..	..	..	..	..	1	1	1	1	1	1
Over 15 years ..	..	..	..	..	..	..	1	0	1	..	..	..	1	0	1	..	..	..	2	0	2	2	0	2
Totals	52	55	107	15	14	29	27	32	59	4	4	8	3	3	6	40	33	73	142	141	283	142	141	283			

TABLE XII.—CAUSES OF DEATH.

Causes.	Auckland.	Christchurch.	Dunedin (Seacliff).	Hokitika.	Nelson.	Portra.	Tokanui.	Ashburn Hall (Private Men- tal Hospital).	Total.
I. GENERAL DISEASES.									
Tuberculosis—	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
General .. .. .	.. ..	1 1	1 0	.. ..	0 1	.. ..	.. ..	.. ..	2 2
Of bowels .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Of peritoneum .. ..	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	1 0
Of lungs	10 10	1 1	3 1	.. ..	1 0	5 2	0 1	.. ..	20 15
Pyæmia .. .. .	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Septicæmia	2 0	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	3 0
Influenza	0 1	.. ..	10 8	.. ..	.. ..	16 6	2 0	.. ..	28 15
Carcinoma .. .. .	.. ..	.. ..	3 0	.. ..	0 1	0 1	.. ..	.. ..	3 2
Sarcoma .. .. .	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Leukæmia .. .. .	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Pernicious anæmia .. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	1 0
Enteric fever.. ..	1 2	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 2
II. DISEASES OF THE NERVOUS SYSTEM.									
Mania, exhaustion from ..	1 1	1 2	2 2	.. ..	.. ..	.. ..	.. ..	.. ..	4 5
Melancholia, exhaustion from ..	2 5	.. ..	3 0	.. ..	.. ..	.. ..	.. ..	.. ..	5 5
General paralysis of insane ..	12 2	2 0	5 0	.. ..	.. ..	20 0	.. ..	.. ..	39 2
Organic brain-disease	11 17	3 2	0 1	1 0	.. ..	.. ..	.. ..	.. ..	15 20
Cerebral hæmorrhage	2 3	.. ..	1 1	.. ..	0 1	2 0	.. ..	2 1	7 6
Meningeal hæmorrhage .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Cerebro-spinal sclerosis .. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Epilepsy	5 3	1 2	6 1	1 0	.. ..	1 6	.. ..	1 0	15 12
Cerebral congestion	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Cerebral softening .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	0 1	.. ..	.. ..	0 1
Abscess on brain .. .. .	.. ..	0 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0 1
III. DISEASES OF THE RESPIRATORY SYSTEM.									
Broncho-pneumonia .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	2 2	.. ..	.. ..	2 2
Pneumonia	1 1	0 1	.. ..	1 0	.. ..	1 1	2 0	.. ..	5 3
Pleurisy .. .. .	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Bronchitis	0 1	.. ..	.. ..	.. ..	0 1	.. ..	.. ..	.. ..	0 2
Goitre .. .. .	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	1 0
Pulmonary congestion .. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	1 0	2 0
IV. DISEASES OF THE CIRCULATORY SYSTEM.									
Valvular disease of the heart ..	4 3	4 6	0 3	5 0	0 2	3 5	3 0	.. ..	19 19
Endocarditis .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	1 0
Pericarditis	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Congenital malformation	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Heart-failure.. .. .	.. ..	.. ..	2 0	1 1	.. ..	1 0	.. ..	1 0	5 1
Arterio-sclerosis .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	1 0
V. DISEASES OF THE DIGESTIVE SYSTEM.									
Hæmatemesis	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Diarrhœa .. .. .	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	1 0
Peritonitis .. .. .	.. ..	.. ..	.. ..	1 0	1 0	.. ..	.. ..	.. ..	2 0
Intestinal obstruction	1 0	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	2 0
Acute enteritis	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
VI. DISEASES OF THE GENITO-URINARY SYSTEM.									
Chronic nephritis .. .. .	.. ..	1 0	.. ..	.. ..	.. ..	0 1	0 1	.. ..	1 2
Cystitis .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	1 0
VII. OLD AGE.									
Senile decay	17 11	14 10	22 18	2 3	3 2	12 9	1 0	.. ..	71 53
VIII. EXTERNAL CAUSES.									
Suicide	1 1	.. ..	1 0	.. ..	.. ..	.. ..	.. ..	0 1	2 2
Dislocation of cervical vertebræ caused by a fall .. .. .	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	.. ..	1 0
IX. DIED WHILE ABSENT ON TRIAL									
.. .. .	2 1	.. ..	.. ..	1 1	.. ..	.. ..	.. ..	.. ..	3 2
Total	77 62	32 26	62 35	17 5	7 8	66 34	8 2	5 2	274 174

TABLE XIII.—PRINCIPAL ASSIGNED CAUSES OF INSANITY.

Causes.	Auckland.	Christ-church.	Dunedin (Seagcliff).	Hokitika.	Nelson.	Porirua.	Tokanui.	Ashburn Hall.	Totals.
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.
Heredity	12 12	2 6	14 23	3 1	2 3	.. ..	.. ..	.. ..	33 45
Congenital	16 13	4 0	7 12	1 2	0 2	13 24	.. ..	.. ..	41 53
Previous attack	6 10	4 17	7 5	.. ..	2 0	11 17	.. ..	.. ..	30 49
Puberty and adolescence ..	1 3	0 2	7 1	.. ..	0 1	10 3	.. ..	.. ..	18 10
Climacteric	0 6	0 2	0 8	.. ..	.. ..	0 4	.. ..	0 1	0 21
Senility	16 16	7 4	15 9	1 4	1 2	11 10	.. ..	2 0	53 45
Pregnancy .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	0 1	.. ..	.. ..	0 1
Puerperal state	0 2	0 1	0 6	.. ..	.. ..	0 8	.. ..	0 1	0 18
Lactation .. .. .	.. ..	0 1	0 1	.. ..	.. ..	.. ..	.. ..	.. ..	0 2
Mental stress—									
Sudden	0 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0 1
Prolonged (including war strain)	16 12	1 2	10 6	0 3	1 0	22 13	.. ..	2 0	52 36
Privation .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	1 0
Solitude	0 1	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	1 1
Sexual excess	1 2	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 2
Masturbation	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Insomnia	1 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 0
Alcohol	7 5	8 2	6 0	2 0	.. ..	18 3	.. ..	1 0	42 10
Drug habit .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	0 2	.. ..	.. ..	0 2
Syphilis	13 1	2 0	10 0	.. ..	.. ..	18 2	.. ..	1 0	44 3
Toxæmia	2 0	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 0
Traumatic	4 0	.. ..	1 0	1 0	.. ..	1 0	.. ..	.. ..	7 0
Post operative	0 2	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0 2
Organic brain-disease .. ..	.. ..	.. ..	.. ..	0 1	.. ..	0 1	.. ..	.. ..	0 2
Epilepsy	5 0	4 4	6 3	3 1	1 0	6 3	.. ..	.. ..	25 11
Apoplexy .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	1 1	2 1
Arterio-sclerosis	1 2	3 0	.. ..	.. ..	.. ..	0 3	.. ..	.. ..	4 5
Sunstroke .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	1 0	.. ..	.. ..	1 0
Chorea .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	0 1	.. ..	.. ..	0 1
Cancer .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	0 1	.. ..	.. ..	0 1
Cardiac disease .. .. .	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Graves' disease	0 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	0 1
Phthisis	1 0	.. ..	.. ..	.. ..	.. ..	0 1	.. ..	.. ..	1 1
Ill health	1 1	.. ..	3 2	.. ..	.. ..	1 4	.. ..	0 1	5 8
Influenza	9 15	.. ..	1 1	0 2	.. ..	5 5	.. ..	.. ..	15 23
Cerebral hæmorrhage	1 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 1
Overstudy	1 2	.. ..	0 1	.. ..	.. ..	.. ..	.. ..	.. ..	1 3
Unknown	13 6	21 24	2 3	1 2	1 0	17 8	.. ..	.. ..	55 43
Transfers	1 2	3 0	17 5	20 0	1 0	3 2	.. ..	.. ..	45 9
Totals	129 116	59 65	106 86	32 16	9 8	140 116	.. ..	7 4	482 411

TABLE XV.—SHOWING THE ADMISSIONS, DISCHARGES, AND DEATHS, WITH THE MEAN ANNUAL MORTALITY AND PROPORTION OF RECOVERIES PER CENT. OF THE ADMISSIONS, FOR EACH YEAR SINCE 1ST JANUARY, 1876.

Year.	Admitted.			Discharged.			Died.			Remaining 31st December in each Year.			Average Numbers resident.			Percentage of Recoveries on Admissions.			Percentage of Deaths on Average Numbers resident.		
	Recovered.			Relieved.																	
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1876	221	117	338	17	8	25	12	36	48	519	264	783	491	257	748	54.53	66.01	57.56	8.21	3.58	6.70
1877	250	112	362	20	9	29	21	42	63	581	291	872	541	277	818	49.20	50.80	49.72	7.76	7.58	7.70
1878	247	131	378	18	14	28	17	51	68	638	319	957	601	303	904	48.98	51.90	50.00	8.48	5.61	7.52
1879	248	151	399	15	13	28	16	55	71	695	361	1,056	666	337	1,003	45.16	50.33	47.11	8.25	4.74	7.07
1880	232	147	378	16	17	27	20	54	74	729	396	1,125	703	371	1,074	43.66	44.96	44.17	7.68	5.39	6.89
1881	229	129	359	17	10	26	14	49	63	769	406	1,175	747	388	1,135	40.08	51.10	44.01	6.29	3.60	5.55
1882	267	132	419	13	20	33	19	60	79	827	442	1,269	796	421	1,217	35.58	38.81	36.75	7.53	4.51	6.49
1883	255	166	421	10	32	33	18	65	93	892	483	1,375	860	475	1,335	40.00	46.98	42.75	7.55	3.78	6.21
1884	238	153	391	17	9	26	24	68	84	938	514	1,452	911	497	1,408	37.39	50.32	42.45	7.46	4.82	6.53
1885	294	160	454	11	5	15	22	73	95	981	542	1,523	965	528	1,493	32.31	47.50	37.66	7.56	4.16	6.36
1886	207	165	372	11	17	28	19	57	76	1,009	604	1,613	984	559	1,543	47.82	36.36	42.74	5.79	3.39	4.91
1887	255	161	416	17	10	27	26	70	101	1,033	648	1,681	1,045	641	1,686	53.95	63.01	57.62	7.56	4.05	6.16
1888	215	146	361	31	28	59	26	78	104	1,074	687	1,761	1,045	660	1,707	40.43	32.92	37.34	6.69	4.54	5.86
1889	230	161	391	30	30	61	27	74	100	1,095	702	1,797	1,078	685	1,763	42.61	55.00	47.69	7.05	5.11	6.29
1890	230	160	390	23	17	40	35	76	111	1,115	734	1,849	1,089	694	1,789	37.61	36.82	37.24	7.25	5.86	6.71
1891	234	201	435	24	24	57	44	79	120	1,154	768	1,917	1,125	714	1,839	38.53	48.10	42.42	6.58	4.76	5.97
1892	231	158	389	21	17	38	34	74	108	1,239	810	2,039	1,172	758	1,930	39.63	49.72	41.30	6.66	3.33	5.23
1893	281	179	460	17	12	29	23	78	101	1,308	860	2,168	1,241	812	2,053	39.63	45.18	41.03	5.16	4.31	4.82
1894	320	256	576	15	11	26	35	93	130	1,329	885	2,214	1,313	849	2,162	41.27	46.66	43.40	7.69	4.94	6.61
1895	379	302	681	24	16	41	42	101	143	1,390	925	2,315	1,347	882	2,229	37.41	44.02	39.82	6.38	3.93	5.29
1896	296	170	466	26	32	58	43	105	148	1,440	990	2,430	1,411	973	2,411	35.92	37.82	36.69	7.44	4.55	6.28
1897	300	244	544	23	23	36	60	148	148	1,472	1,008	2,480	1,438	944	2,355	44.88	51.89	48.07	6.12	6.17	6.14
1898	355	258	613	14	110	224	43	114	157	1,512	1,045	2,557	1,487	1,004	2,491	32.31	44.33	37.58	7.67	4.28	6.30
1899	264	247	511	15	25	40	46	114	143	1,581	1,091	2,672	1,534	1,049	2,583	30.74	36.50	33.27	6.45	4.38	5.61
1900	335	263	598	39	40	79	46	145	174	1,654	1,119	2,773	1,622	1,094	2,716	39.06	46.64	42.17	6.29	6.58	6.41
1901	373	224	597	104	229	333	72	174	242	1,715	1,133	2,848	1,671	1,114	2,785	38.35	51.56	43.01	7.18	4.94	6.38
1902	352	192	544	135	99	234	55	175	242	1,771	1,188	2,959	1,741	1,160	2,901	40.56	44.69	42.17	7.41	3.79	5.96
1903	454	237	691	144	101	245	44	173	242	1,801	1,237	3,038	1,780	1,198	3,078	46.18	44.17	45.34	6.74	5.84	6.38
1904	340	240	580	157	106	263	70	190	242	1,836	1,276	3,112	1,796	1,232	3,028	41.39	48.21	44.19	8.18	5.44	7.07
1905	399	280	679	149	121	270	67	214	231	1,900	1,306	3,206	1,823	1,265	3,088	39.75	47.73	42.94	8.01	6.71	7.48
1906	401	277	678	157	136	293	85	231	231	1,909	1,331	3,240	1,851	1,285	3,136	44.29	57.68	49.67	9.08	4.98	7.39
1907	421	279	700	160	139	299	64	232	242	1,997	1,417	3,414	1,894	1,346	3,240	42.25	45.91	43.82	7.81	5.50	6.85
1908	434	325	759	180	146	326	74	232	242	2,083	1,465	3,548	1,970	1,404	3,374	42.72	57.24	48.74	6.90	4.84	6.00
1909	447	376	823	179	170	349	68	204	242	2,160	1,510	3,670	2,028	1,445	3,473	38.40	46.18	41.50	9.17	6.71	8.15
1910	439	371	810	182	145	327	97	283	242	2,230	1,536	3,756	2,105	1,496	3,601	36.38	53.00	43.27	9.41	7.02	8.41
1911	455	322	777	163	168	331	105	303	242	2,273	1,640	3,913	2,146	1,551	3,697	40.17	37.01	38.74	8.99	5.61	7.57
1912	598	394	992	184	141	325	87	280	242	2,332	1,632	3,964	2,252	1,597	3,849	37.55	50.94	42.98	8.70	6.96	7.98
1913	543	349	892	175	162	337	88	281	242	2,408	1,703	4,111	2,309	1,641	3,950	40.67	45.12	42.51	8.36	5.36	7.11
1914	526	365	892	207	162	369	123	309	242	2,448	1,752	4,200	2,391	1,703	4,094	44.89	43.21	44.27	7.19	6.58	6.94
1915	461	419	880	202	157	359	173	312	284	2,555	1,820	4,375	2,483	1,768	4,251	30.89	47.37	37.66	8.42	4.52	6.80
1916	568	367	935	160	171	331	80	289	242	2,611	1,904	4,515	2,543	1,825	4,365	36.38	40.64	38.27	8.06	6.19	7.28
1917	507	378	885	171	152	323	113	318	242	2,603	1,943	4,546	2,602	1,899	4,501	32.49	35.07	33.73	10.53	9.16	9.95
1918	482	411	893	142	141	283	174	274	448	2,603	1,943	4,546	2,602	1,899	4,501	32.49	35.07	33.73	10.53	9.16	9.95
	15,008	10,296	25,304	5,541	4,424	9,965	1,093	4,838	7,123	987	2,080	1,415	961	2,376	4,838	2,985	7,123				

In mental hospitals, 1st January, 1876
In mental hospitals, 1st January, 1919

M. 482
F. 254
T. 736
2,603 1,943 4,546

TABLE XVI. — SHOWING THE ADMISSIONS, READMISSIONS, DISCHARGES, AND DEATHS FROM THE 1ST JANUARY, 1876, TO THE 31ST DECEMBER, 1918.

						M.	F.	T.	M.	F.	T.
Persons admitted during period from 1st January, 1876, to 31st December, 1918						11,982	7,846	19,828			
Readmissions						3,026	2,450	5,476			
Total cases admitted									15,008	10,296	25,304
Discharged cases—											
Recovered						5,541	4,424	9,965			
Relieved						1,093	937	2,030			
Not improved						1,415	961	2,376			
Died						4,838	2,285	7,123			
Total cases discharged and died since January, 1876									12,887	8,607	21,494
Remaining, 1st January, 1876									482	254	736
Remaining, 1st January, 1919									2,608	1,943	4,546

TABLE XVII.—SUMMARY OF TOTAL ADMISSIONS: PERCENTAGE OF CASES SINCE THE YEAR 1876.

				Males.	Females.	Both Sexes.
Recovered				36·92	42·97	39·38
Relieved				7·28	9·10	8·02
Not improved				9·43	9·33	9·39
Died				32·24	22·19	28·15
Remaining				14·13	16·41	15·06
				100·00	100·00	100·00

TABLE XVIII.—EXPENDITURE, OUT OF PUBLIC WORKS FUND, ON MENTAL HOSPITAL BUILDINGS, ETC., DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1919, AND LIABILITIES AT THAT DATE.

Mental Hospitals.		Net Expenditure for Year ended 31st March, 1919.	Liabilities on 31st March, 1919.
		£	£
Auckland	..	1,171	..
Tokanui ..	..	8,105	630
Porirua ..	..	2,462	50
Christchurch	..	1,288	78
Seacliff ..	..	966	..
Waitati ..	..	498	..
Nelson ..	..	200	..
Totals ..	..	14,640	758

TABLE XIX.—TOTAL EXPENDITURE, OUT OF PUBLIC WORKS FUND, FOR BUILDINGS AND EQUIPMENT AT EACH MENTAL HOSPITAL FROM 1ST JULY, 1877, TO 31ST MARCH, 1919.

Mental Hospitals.		1877-1910.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	Total Net Expenditure, 1st July, 1877, to 31st March, 1919.
		£	£	£	£	£	£	£	£	£	£	£
Auckland	..	108,529	463	105	135	8,908	23,434	2,774	76	1,048	1,171	146,643
Reception-house at Auckland	..	2,318	2,531	105	105	..	..	..	..	..	..	5,059
Motuhi Island ..	..	..	..	..	..	561	..	..	..	..	..	561
Tokanui ..	..	..	166	4,303	21,935	8,874	10,379	10,640	5,639	6,188	8,105	76,229
Wellington	..	29,656	..	..	..	..	..	..	..	..	..	29,656
Wellington (Porirua)	..	135,762	8,121	1,762	9,550	1,951	6,552	17,518	11,723	10,399	2,462	205,799
Christchurch	..	122,391	1,063	412	4,867	616	5,107	15,157	24,346	7,647	1,288	182,844
Seacliff ..	..	154,813	4	1,480	5,382	3,257	7,413	6,721	997	597	966	181,630
Waitati ..	..	660	..	442	4,007	1,634	911	671	24	88	498	8,935
Dunedin (The Camp)	..	4,891	..	..	..	..	..	..	..	..	..	4,891
Napier ..	..	147	..	..	..	..	..	..	..	..	..	147
Hokitika	..	3,721	6	..	..	..	..	..	..	..	..	3,727
Richmond	..	1,097	..	..	..	..	..	..	..	..	..	1,097
Nelson ..	..	20,942	353	200	200	200	200	1,417	1,798	585	200	26,045
Totals ..	..	584,927	12,707	8,809	46,181	26,001	53,996	54,898	44,602	26,502	14,640	873,263

TABLE XX.—SHOWING THE EXPENDITURE FOR THE YEAR 1918.

Items.	Auckland.	Christchurch.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua.	Tokanui.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Inspector-General*	..	..	..	..	..	..	..	1,000 0 0
Deputy Inspector-General and Assistant Inspector*	..	..	..	..	..	..	..	750 0 0
Clerks*	..	..	..	..	..	..	..	1,136 1 1
Medical fees*	..	..	..	..	..	..	..	935 6 7
Contingencies*	..	..	..	..	..	..	..	555 7 11
Official Visitors	50 8 0	11 11 0	46 4 0	11 11 0	..	48 6 0	..	168 0 0
Superintendents	700 0 0	700 0 0	543 15 0	200 0 0	645 7 9	604 15 10	700 0 0	4,093 18 7
Assistant Medical Officers	631 18 10	348 5 4	554 12 8	..	..	663 0 5	..	2,197 17 3
Visiting Medical Officers	..	..	..	225 0 0	..	..	..	225 0 0
Clerks	422 16 8	541 13 10	622 12 9	103 19 3	172 17 6	506 5 6	..	2,266 6 3
Matrons	169 10 0	292 10 0	219 11 8	103 19 3	137 10 0	179 10 8	..	1,102 11 7
Attendants	13,758 11 4	16,337 2 3	23,790 11 3	4,165 0 2	4,405 10 9	16,979 6 4	5,881 10 9	85,317 12 10
Rations	15,030 15 9	11,697 12 8	14,885 7 6	4,365 1 7	3,560 8 3	14,319 6 2	3,303 7 10	67,161 19 9
Fuel, light, water, and cleaning	2,477 13 0	3,923 14 2	4,195 8 8	134 16 0	801 19 4	3,408 10 7	806 11 0	15,748 12 9
Bedding and clothing	4,571 14 0	4,148 6 7	6,596 17 4	774 3 6	1,041 7 10	5,332 13 6	642 4 8	23,197 7 5
Surgery and dispensary	267 17 6	634 16 9	416 3 4	24 2 10	44 13 2	247 14 5	51 3 3	1,686 11 3
Wines, spirits, ale, and porter	26 11 0	31 10 0	40 17 2	2 17 6	..	6 5 0	..	108 0 8
Farm	721 17 11	3,494 5 10	4,454 9 1	40 16 2	433 17 0	2,910 12 9	959 17 11	13,015 16 8
Buildings and repairs	488 8 3	572 7 3	1,818 7 10	115 14 10	793 7 2	508 15 4	253 2 2	4,550 2 10
Necessaries, incidental, and miscellaneous	2,557 18 11	6,060 16 6	7,363 7 4	270 1 5	974 11 4	4,955 12 0	1,300 8 5	23,482 15 11
Totals	41,876 1 2	48,794 12 2	65,548 5 7	10,433 4 3	13,011 10 1	50,670 14 6	13,898 6 0	248,609 9 4
Repayments, sale of produce, &c.	13,755 10 1	13,703 9 6	18,240 14 9	2,492 4 2	2,485 5 6	15,144 11 1	3,373 4 6	69,194 19 7
Actual cost	28,120 11 1	35,091 2 8	47,307 10 10	7,941 0 1	10,526 4 7	35,526 3 5	10,525 1 6	179,414 9 9

* Not included in Table XXI.

TABLE XXA.—SHOWING DETAILS OF CREDITS.

Credits.	Auckland.	Christchurch.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua.	Tokanui.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Receipts for maintenance	12,344 0 8	8,500 8 4	13,257 1 0	2,018 12 10	2,196 10 4	13,227 5 9	1,113 6 1	52,657 5 0
For sales of stock, produce, &c.*	1,078 1 5	4,817 17 4	4,108 3 9	419 3 11	274 13 3	1,497 17 9	1,918 14 8	14,114 12 1
Other receipts†	333 8 0	385 3 10	875 10 0	54 7 5	14 1 11	419 7 7	341 3 9	2,423 2 6
Totals	13,755 10 1	13,703 9 6	18,240 14 9	2,492 4 2	2,485 5 6	15,144 11 1	3,373 4 6	69,194 19 7

* Not included—£19,734, value of farm produce and stock consumed in the institutions.

† Not included—£788 15s. 2d. received in repayment of medical fees for certificates

TABLE XXI.—AVERAGE COST OF EACH PATIENT PER ANNUM.

Mental Hospital.	Provisions.	Salaries.	Bedding and Clothing.	Light, Fuel, Water, and Cleaning.	Surgery and Dispensary.	Farm.	Wines, Spirits, Ale, and Porter.	Buildings and Repairs.	Necessaries, Incidentals, and Miscellaneous.	Total Cost per Patient.		Repayments for Maintenance.	Total Cost per Head, less Receipts of all kinds previous Year.	Total Cost per Head, less Receipts of all kinds previous Year.	Decrease in 1918.	Increase in 1918.
										f	s. d.		f	s. d.		
Auckland ..	14 3 0 ³ / ₄	14 16 3 ¹ / ₄	4 6 1 ¹ / ₄	2 6 8	0 5 0 ¹ / ₄	0 13 7 ¹ / ₄	0 0 6	0 9 2 ¹ / ₄	2 8 2	39 8 7 ¹ / ₄	11 12 5 ¹ / ₄	27 16 2	26 9 7	22 2 11	f	s. d.
Christchurch ..	16 6 9	25 9 3	5 15 10 ³ / ₄	5 9 7 ¹ / ₄	0 17 8 ¹ / ₄	4 17 7 ¹ / ₄	0 0 10 ³ / ₄	0 16 0	8 9 3 ¹ / ₄	68 2 11 ³ / ₄	11 17 5 ¹ / ₄	56 5 6 ¹ / ₄	49 0 2 ¹ / ₄	42 9 5 ¹ / ₄	..	..
Dunedin (Seacliff) ..	13 17 5 ¹ / ₄	24 0 5 ³ / ₄	6 2 11 ¹ / ₄	3 18 2 ¹ / ₄	0 7 9	4 3 0 ¹ / ₄	0 0 9 ¹ / ₄	1 13 10 ³ / ₄	6 17 3	61 1 9 ¹ / ₄	12 7 1 ¹ / ₄	48 14 8	44 1 9 ¹ / ₄	40 8 10 ¹ / ₄	..	..
Hokitika ..	16 18 4	18 4 9 ¹ / ₄	3 0 0 ¹ / ₄	0 10 5 ¹ / ₄	0 1 10 ¹ / ₄	0 3 2	0 0 3	0 8 11 ¹ / ₄	1 0 11 ¹ / ₄	40 8 9 ¹ / ₄	7 16 5 ¹ / ₄	32 12 3 ¹ / ₄	30 15 7	26 2 7	..	..
Nelson ..	17 2 4 ¹ / ₄	25 15 6	5 0 1 ¹ / ₄	3 17 1 ¹ / ₄	0 4 3 ¹ / ₄	2 1 8 ¹ / ₄	..	3 16 3 ¹ / ₄	4 13 8 ¹ / ₄	62 11 1 ¹ / ₄	10 11 2 ¹ / ₄	52 0 1 ¹ / ₄	50 12 4 ¹ / ₄	38 13 2 ¹ / ₄	..	..
Porirua ..	14 0 9 ¹ / ₄	18 12 2 ¹ / ₄	5 4 6 ³ / ₄	3 6 10	0 4 10 ¹ / ₄	2 17 0 ¹ / ₄	0 0 1 ¹ / ₄	0 9 11 ¹ / ₄	4 17 2	49 13 6 ¹ / ₄	12 19 4 ¹ / ₄	36 14 2 ¹ / ₄	34 16 7	31 6 11 ¹ / ₄	..	..
Tokanui ..	21 0 9 ¹ / ₄	41 18 5	4 1 9 ¹ / ₄	5 2 9	0 6 6 ¹ / ₄	6 2 3 ¹ / ₄	..	1 12 3	8 5 7 ¹ / ₄	88 10 5 ¹ / ₄	7 1 9 ¹ / ₄	81 8 8	67 0 9 ¹ / ₄	56 14 8 ¹ / ₄	..	..
Averages ..	14 18 10 ³ / ₄	21 4 5 ¹ / ₄	5 2 10	3 10 1	0 7 6	2 17 11 ¹ / ₄	0 0 5 ³ / ₄	1 0 3	5 4 6 ¹ / ₄	54 6 11 ¹ / ₄	11 14 4 ¹ / ₄	42 12 7	38 19 0	34 2 7 ¹ / ₄	..	..

TABLE XXIA.

Including first five items in Table XX	55 6 4 ³ / ₄	39 18 5 ¹ / ₄	35 2 1 ³ / ₄	..	4 16 3 ³ / ₄
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TABLE XXIB.

Patients on probation at The Camp	16 10 1 ¹ / ₄	34 7 6 ³ / ₄	1 2 10 ¹ / ₄	2 4 10	0 4 9 ¹ / ₄	3 2 0	..	0 5 6 ¹ / ₄	6 17 1 ¹ / ₄	64 14 9 ¹ / ₄	64 14 9 ¹ / ₄	81 12 2 ³ / ₄	16 17 5 ¹ / ₄	..
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APPENDIX II.

A NOTE ON THE WORK OF THE DEPARTMENT WITH RESPECT TO SOLDIER PATIENTS FROM THE BEGINNING OF THE WAR TO THE 4TH AUGUST, 1919.

We had no reason to believe that a disproportionate number of men of average mental stability would, as a result of the stress of military service, become mentally deranged. The anticipation happily proved correct. Past experience has demonstrated that a man of sound mind, fighting honestly for a cause, will face dangers and undergo great privations without losing his mental balance. He may pass through terrible anxieties, but they are seldom for himself, and he is maintained by a normally reacting mental and moral exaltation, which sweeps away petty vanities and vexations, widens his horizon to include his comrades, and directs his thoughts and energies for the general good. It is different with those predisposed to mental disorder. Even with the best of intentions on their part, one expected, especially where this predisposition was marked, that the adjustment to unexpected changes of environment, possibly short of service at the front, would prove a disturbing factor. With instability of lesser degree many may come through all right, but they are playing with gun-powder. Furthermore, there are often feeble-minded persons, who pass muster to begin with, but who would be rejected subsequently, either at the camp or actually at the front, when their limitations became revealed under a more complex order of things than that to which they had become accustomed in civilian life. This group we expected would come under our care to be refitted for and placed in their old surroundings, and we also regarded it as inevitable that ex-patients, falsely confident of their mental and emotional stability, would, suppressing their past history, enlist, and that a proportion would be returned to our care. One recognized the soldier as the selected of the community between certain age-limits, and, though under peace conditions some who looked physically strong would have proved mentally infirm and come to us as patients in the ordinary course, yet from an equal number of soldiers passing through war conditions and of civilians of the same age rejected as soldiers we estimated a much larger proportion of mental patients from the civilians, and undoubtedly the estimate has proved correct.

On the other hand, one naturally looked for a larger proportion of allied nervous disorders indirectly and directly resulting from war conditions, and also that these, in some cases, would prove to be the incipient stage of mental disease.

It was absolutely necessary that all such cases should have the best expert medical skill available, and it was arranged with the Defence authorities that we would specialize at Seacliff, where we could treat the soldiers in three divisions, practically apart from other patients or only with a few civilian patients in a like mental condition and companionable. The divisions were: For the last mentioned nervous group a house at Karitane belonging to Dr. Truby King was placed at our disposal, and this was strictly reserved for soldiers. Next, for the best mental patients received under Magistrate's order the Reception Home was to be used. This building is known as Clifton House, and is beautifully situated on the Seacliff Estate. The next best patients were to be treated in the Library Ward at Seacliff. This was our admission ward before Clifton House was built. For patients whose mental condition debarred them from admission to any of these three divisions the environmental factor would be negligible; but when, upon improvement, a change could be appreciated, a change would be made, according to the mental condition of the patient, to one of the special divisions. Keeping in view the necessity for expert medical attention and nursing, of which we had the monopoly, and bearing in mind that our own staff was depleted by the war, this arrangement offered incomparably the best advantage to the soldier.

Once the system was started there were importunate and insistent demands to have the soldiers treated near their relatives. Patients were transferred, and later admitted direct to some of the other institutions to satisfy the natural desire of friends and kinsfolk. This meant that, though Seacliff maintained the ascendancy, the patients were scattered among all the institutions, and their number at any one time at any other institution was so small, and the forms of mental disorder so varied, that any attempt to treat them apart from civilian patients was futile. There was one exception besides the Anzac House Hospital, Karitane—namely, the Wolfe Bequest Hospital at Auckland, which was for a time strictly set aside for soldiers who could be treated without the necessity of a Magistrate's order. Forty-five such patients passed through this special institution, thirty-seven of whom recovered, and of the remainder six had to be placed under Magistrate's order. In each of these cases there was well-marked mental disorder on admission, and they were placed in the Wolfe Home experimentally.

The cases of individual military patients at Karitane and Wolfe Home are classed in one tabular statement hereunder, and in another the cases of all soldier patients treated under Magistrate's order. To this second table is added the number in which heredity or other predisposition to mental disease was ascertained. There are other cases in which such predisposition was suspected, but the facts have not been communicated to us. Cases received from camps or home service are differentiated from those of returned soldiers.

Received as Voluntary Boarders or Military Patients.

	From Camps.	As Returned Soldiers.	Total.
Number of individuals admitted	14	152	166
Number placed under reception order	3	28	31
Number discharged recovered	10	100	110
Number discharged unrecovered	1	9	10*
Number died .. .. .	..	2	2
Number of individuals remaining .. .. .	..	13	13
Number readmitted and remaining .. .. .	..	5	5
Total remaining on 4th August, 1919 .. .. .	..	18	18

* At the date of the last published return some patients had progressed sufficiently to be tried on probation, but as that return did not include patients on probation they were entered provisionally as "unrecovered." When reported to us by the examining Military Board that recovery had taken place the figures in the return were amended.

Received under Magistrate's Order.

				From Camps.	As Returned Soldiers.	Total.
Number of individuals admitted	..	..	..	56	112	168
Number discharged recovered ..	..	..	..	29	30	59
Number discharged unrecovered	..	..	..	3	8	11
Number died ..	..	..	..	3	5	8
Number of individuals remaining	..	..	..	21	69	90
Number readmitted remaining	..	..	..	2	5	7
Total remaining on 4th August, 1919 ..	..	..	..	23	74	97
Individuals classed as imbecile or feeble-minded and those who had history of mental disorder before joining Army	..	..	..	11	24	35
Individuals predisposed to mental disorder by heredity or personal habits before joining Army	28	31	59
Of 168 patients, total predisposed to mental disorder	39	55	94

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